



WORCESTER
STATE
UNIVERSITY

UNDERGRADUATE STUDIES CATALOG
2024-2025

NOTICE

The rules, regulations, policies, fees and other charges, courses of study, and academic requirements that appear in this catalog were in effect at the time of its publication. Like everything else in this catalog, they are published for informational purposes only, and they do not constitute a contract between Worcester State University and any student, applicant for admission or other person.

Whether noted elsewhere in this catalog or not, Worcester State University reserves the right to change, eliminate, and add to any existing (and to introduce additional) rules, regulations, policies, fees and other charges, courses of study and academic requirements. Whenever it does so, Worcester State University will give as much advance notice as it considers feasible or appropriate, but it reserves the right in all cases to do so without notice.

TABLE OF CONTENTS

Undergraduate Catalog	8	First-Year Student Admission	26
General Information	9	GED/HiSET Recipients	27
Accreditation	9	International Applicants	27
Campus	9	International Baccalaureate (IB) Credit	28
Change of Catalog Information	11	Mass Transfer	28
Community Relations	11	Non-Traditional Applicants	29
Family Educational Rights and Privacy Act	12	Post-Baccalaureate Pre-medical and Health Professions Program	29
Institutional Learning Outcomes	14	Additional Admission Criteria for Selective Majors	30
Mission	14	Public Health - Pre-Nursing Program	31
Policy on Nondiscrimination	14	Pre-entrance Immunization Requirements	32
TITLE IX/Policies and Inquiries	15	Second Baccalaureate Degree	32
Academic Programs	16	Special Admission	32
Admissions	18	Special Non-Matriculated Students	32
Admission Following Withdrawal from Worcester State or Leave of Absence	18	Student Right-to-Know Act	32
Admission to Non-Degree Programs	19	Transfer Student Admission	32
Advanced Placement (AP) Guidelines	19	Transferring Credit from Other Institutions	32
Alternatives for Individual Development (A.I.D.)	20	Veteran/Military Applicants (VALOR Act Academic Credit Evaluation Policy)	33
American Council on Education (ACE) College Credit Recommendation Service	20	Academic Policies and Procedures	34
Application Process	21	Academic Achievement Awards Ceremony	35
College Level Examination Program (CLEP)	22	Academic Advising	35
Commonwealth Commitment	24	Academic Honesty	35
Delayed (deferred) Enrollment	24	Academic Reprieve Policy	35
DHE Massachusetts High School Unit Requirements (Academic Courses)	24	Academic Support Services	35
Documentation of High School Diploma or Equivalency	25	Certificate	35
Evening Undergraduate Course Offerings	26	Concentration	35
Exceptions	26	Course Formats	35
		Dean's List Criteria	35
		Electives	35

General Requirements for the Baccalaureate Degree	35	Transcripts	60
Good Student Policy	36	Undergraduate Grade Appeal Procedure	60
Graduation Honors	36	Withdrawal from Worcester State University/Leave of Absence	60
Intent to Graduate	36	Enhanced Learning Opportunities	60
International Programs	36	Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science	61
Laptop and Technology Requirement	37	American Antiquarian Society Seminar	61
Liberal Arts and Sciences Curriculum WSU - Pathways to Discovery	37	College Academic Program Sharing (CAPS)	62
Constitutions (CON)	38	Department Challenge	62
Creative Arts (CA)	39	Higher Education Consortium of Central Massachusetts (HECCMA)	62
Diversity (DIV)	40	Internships and Professional Experiences	63
First-Year Seminar (FYS)	41	New England Regional Student Program	63
Global Perspectives (GP)	42	Off-Campus Courses	64
Human Behavior and Social Processes (HBS)	44	Pre-Law Program	64
Individual and Community Well-being (ICW)	46	Pre-Medical, Pre-Dental, Pre-Veterinary and Pre-Pharmacy Advisory Program	64
Natural Systems and Processes (LAB)	48	Reserve Officer Training Corps (ROTC)	65
Natural Systems and Processes (NSP)	49	Summer Programs	65
Quantitative Reasoning (QR)	50	The Washington Center for Internships and Academic Seminars	65
The United States and Its Role in the World (USW)	51	Services for Students	66
Thought, Language, and Culture (TLC)	53	Athletics and Recreation	66
Writing (WR1 & WR2)	56	Bookstore	66
MajorPlus	56	Career Services	67
Matriculation	57	Counseling Services	67
Multicultural Affairs	57	Dining Services	68
Prior Learning Portfolio Program	58	Health Forms and Immunization	68
Program	60	Health Services	69
Registration and Course Information	60	LGBTQIA+ Resource Center	70
Seal of Bilingualism	60		
Standards of Progress	60		
Student Conduct	60		

Office of Student Involvement and Leadership Development	70	Tuition Payment Plan	88
Residence Life and Housing	71	Academic Calendar	88
Spiritual Life	71	Office of Academic Affairs	90
Student Accessibility Services	72	Library	91
The Binienda Center for Civic Engagement	72	Lt. Col. James F. Sheehan '55 Honors Program	91
University Police Department	72	Addictions Counseling	92
Veterans Service	72	Certificate in Addictions Counseling	95
Financial Information	75	Minor in Addictions Counseling	96
Affordability/Accessibility Disclosure Statement	75	Forensic Science Minor	96
Evening Undergraduate, Graduate, and Summer Programs	76	Journalism	99
General Worcester State Refund Policy	76	Education, Liberal, and Interdisciplinary Studies	100
Return of Title IV Funds	77	African and African Diaspora Studies Minor	101
Room and Board	79	Asian Studies Minor	101
Student Health Insurance	80	Education	104
Tuition and Fees	80	4+ Initial License and M.Ed in Middle School Education	111
Tuition Surcharge	82	4+ Initial License and M.Ed in Secondary School Education	113
Undergraduate State-supported Programs	82	4+ Initial License in English as a Second Language	115
Financial Aid	82	4+ Initial License in Middle School Education	116
Academic Scholarships for Returning Students	83	4+ Initial License in Secondary School Education	117
Application Process	83	Early Childhood Education Major	118
Federal Grants and Benefits	83	Early Education and Care Program	121
Financial Aid Application Deadlines	83	Education Studies Major	123
Grants and Waivers for Massachusetts Residents	84	Education Studies Minor	124
Merit Scholarships for Entering Students	85	Elementary Education Major	125
Satisfactory Academic Progress Policy	86	Middle School Education	128
Sources of Financial Aid	87	Secondary School Education	130
Student and Parent Loans	87	Environmental and Sustainability Studies	133
Student Employment	88		

Ethnic Studies	135	Major in Biotechnology and prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science University	188
Gerontology Minor	139	Major in Biotechnology, Concentration in Bioinformatics	189
Global Studies	139	Chemistry	190
Concentration in Global Studies	150	Chemistry Major	194
Minor in Global Studies	151	Chemistry Honors Program	196
Human Rights and Social Justice Minor	153	Major in Chemistry and prerequisites for the Accelerated Pharmacy Program	197
Interdisciplinary Studies	153	Major in Chemistry, Concentration in Medicinal Chemistry	197
Liberal Studies	154	Minor in Chemistry	198
Women's, Gender, and Sexuality Studies	157	Minor in Chemistry for the Medical Professions	199
School of Science, Technology and Health	163	Minor in Pharmaceutical Science	199
Biology	164	Minor in STEM	199
Bioinformatics Minor for Biology/ Biotechnology Majors	171	Communication Sciences and Disorders	201
Bioinformatics Minor for Chemistry Majors	172	Communication Sciences and Disorders Major	204
Bioinformatics Minor for Computer Science Majors	172	Communication Sciences and Disorders Honors Program	206
Bioinformatics Minor for non-Biology, Biotechnology, Chemistry, or Computer Science Majors	173	Communication Sciences and Disorders Minor	207
Biology Major	174	Interdisciplinary Minor in Disabilities Studies	207
Cellular & Molecular Biology Minor	176	Normal and Disordered Speech, Language and Hearing Minor	208
Ecology Minor	177	4+1 Masters in Communication Sciences and Disorders	209
Honors Program in Biology	177	Computer Science	214
Major in Biology and prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science	178	Computer Science Major	217
Psychobiology Minor	179	Computer Science Major, Concentration in Big Data Analytics	219
Biotechnology	182	Computer Science Major, Concentration in Software Development	221
4+1 BS/MS Program in Biotechnology	184		
Biotechnology Major	185		
Honors Program in Biotechnology	188		

Computer Science Minor	223	Mathematics Major: Concentration in Secondary Education	265
Data Science Minor	224	Mathematics Major: Concentration in Statistics and Modeling	267
Environmental Science	225	Mathematics Major: Concentration in Traditional Mathematics	268
Environmental Science Honors Program	229	Mathematics Minor	270
Environmental Science Major	229	Middle School Mathematics Minor	270
Environmental Science Minor	231	Nursing	271
Geography and Earth Sciences	231	Fast-Track Program (RN-to-MS)	279
Geography Honors Program	236	Track One (Undergraduate BS Program)	279
Geography Major: Earth Science Education Concentration	237	Track Two (RN-to-BS Program)	282
Geography Major: Earth System Science Concentration	238	Track Three (LPN-to-BS Program)	283
Geography Major: Environmental Studies Concentration	240	Occupational Studies	286
Geography Major: General Geography Concentration	241	Bachelor of Science Occupational Studies Program	289
Geography Major: Geographic Information Systems Concentration	243	Physics	291
Geography Minor	244	Astronomy Minor	293
Geoscience Minor	245	Physics Minor	293
Geospatial Information Science Minor	245	Pre-Medical Concentrations	294
Health Sciences	246	Major in Biology, Concentration in Pre- Medicine	294
Public Health - Pre-Nursing Program	251	Major in Biotechnology, Concentration in Pre-Medicine	297
Public Health Major	253	Pre-Medical Courses For Non-Biology, Biotechnology, or Chemistry Majors	299
Public Health Major, Concentration in Health Education	257	School of Humanities and Social Sciences	300
Public Health Minor	257	Business Administration	301
Mathematics	258	4+1 Program	306
Actuarial Mathematics Minor	262	Business Administration Major	308
Applied Mathematics Minor	262	Business Administration Major, Concentration in Accounting	310
Mathematics for Elementary Education	262		
Mathematics Major: Concentration in Actuarial Studies	264		

Business Administration Major, Concentration in Entrepreneurial Studies and Small Business Management	310	Literature Minor	360
Business Administration Major, Concentration in Finance	311	Narrative Studies of Health and Body Minor	361
Business Administration Major, Concentration in International Business	312	Writing Minor	361
Business Administration Major, Concentration in Management	313	History	363
Business Administration Major, Concentration in Marketing	314	4+1 Program in History and Political Science / MS in Nonprofit Management	376
Business Administration Minor	314	4+1 Program in History and Political Science / Master of Public Administration and Policy (MPAP)	377
Communication	316	4+1 Program in History and Political Science / Master of Public Management (MPM)	379
Communication Education Minor	320	History Major	380
Communication Major	320	History Major Track for History Educators	382
Communication Major, Concentration in Advertising and Public Relations	322	History Minor	382
Communication Major, Concentration in Digital Media Production	323	Public History Minor	382
Communication Minor	325	Music	384
Master's of Science in Communication (MSC) Program	325	Music Minor	384
Criminal Justice	326	Composition and Music Technology Minor	385
Criminal Justice Major	333	Visual and Performing Arts	385
Criminal Justice Minor	334	Philosophy	397
Homeland Security Minor	335	Philosophy Minor	402
Economics	337	Ethics Minor	403
Economics Major	340	Political Science	405
Economics Minor	343	Civic Engagement Minor	412
English	344	Political Science Major	413
English Major	354	Political Science Minor	413
English Major, Concentration in Journalism	356	Pre-Law Minor	414
English Major, Concentration in Writing	358	Psychology	415
English Minor	359	Human Development Minor	421
		Minor in Mental Health Services	421
		Psychobiology Minor	422
		Psychology Major	423

Psychology Major, Concentration in Mental Health Services	425	Art Minor	462
Psychology Major, Interdisciplinary Concentration in Women's Studies	425	Music Minor	384
Psychology Minor	426	Composition and Music Technology Minor	385
Sociology	427	Theatre Major	463
4+1 Bachelor of Science in Sociology/ Masters in Non-Profit Management	431	Theatre Minor	464
Social Inequalities Minor	432	World Languages	465
Sociology Major	432	Arabic	474
Sociology Major - Social Inequalities Concentration	433	French	474
Sociology Minor	434	Latin American and Latinx Studies Minor	475
Urban Studies	435	Spanish	476
4+1 Bachelor of Science in Urban Studies / Master of Science in Non- Profit Management	441	Spanish Translation Major	484
4+1 Program in Urban Studies / Master of Public Administration and Policy (MPAP)	442	Spanish Major, Concentration in Spanish for the Professions	485
4+1 Program in Urban Studies / Master of Public Management (MPM)	443	Spanish Major, Concentration in Spanish/Education	487
Public Policy and Urban Planning Minor	444	Spanish Minor	489
Social Work and Social Policy Minor	444	Spanish Minor for Health Professionals	489
Urban Studies Major	445	Professors Emeriti	491
Urban Studies Major, Concentration in Public Administration and Planning	446	Officials of Worcester State University	496
Urban Studies Major, Concentration in Social Work and Social Policy	446	Alumni Association and Foundation Board	497
Urban Studies Minor	447	Administrative Offices	499
Visual and Performing Arts	385	Directions to Campus	506
Visual and Performing Arts Major	458	Discipline Information	507
Visual and Performing Arts and Education, Double Major	459	Faculty A-Z	509
Art Major	461	Index	517

UNDERGRADUATE CATALOG

Worcester State University
486 Chandler Street
Worcester, MA 01602-2597
508-929-8000
<http://www.worcester.edu>

The listing of a course in this catalog is not a guarantee that the course will be offered in any particular semester. Course offerings are subject to change in response to student enrollment, faculty availability, changes in program requirements and other circumstances. The rules, regulations, policies, fees and other charges, courses of study, and academic requirements that appear in this catalog were in effect at the time of its publication. Like everything else in the catalog, they are published for informational purposes and do not constitute a contract between Worcester State University and any student, applicant for admission, or other person.

Whether noted elsewhere in this catalog or not, Worcester State University reserves the right to change, eliminate, and add to any existing (and to introduce additional) rules, regulations, policies, fees or other charges, courses of study, and academic requirements. Whenever it does so, Worcester State University will give as much notice as it considers feasible or appropriate, but it reserves the right in all cases to do so without notice.

Publication date of this catalog: 8/31/24.

Graduate information is available in the Graduate School Catalog.

General Information

From its founding in 1874, Worcester State University has been dedicated to educational programs that lead to self-enrichment and to careers in the professions, government, business, and industry.

As a public, state-supported university governed by a local Board of Trustees under the direction of the Massachusetts Department of Higher Education, Worcester State University is empowered to award baccalaureate and master's degrees in education and in the arts and sciences. While continuing its tradition of serving the residents of the Commonwealth, Worcester State University has earned a reputation for quality teaching by dedicated faculty in classes of moderate size, and for programs responsive to its students' and society's changing needs.

Accreditation

Worcester State University is accredited by the New England Commission on Higher Education, Inc. (NECHE), formerly the New England Association of Schools and Colleges (NEASC). NECHE is a non-governmental, nationally recognized, regional accreditation agency for colleges and universities in the six New England states.

Accreditation of an institution by NECHE indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer group review process. An accredited institution is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by NECHE applies to the institution as a whole. As such, it is not a guarantee of the quality of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance of the quality of opportunities available to students who attend the institution.

Inquiries regarding the status of an institution's accreditation by NECHE should be directed to the administrative staff of the school or college. Individuals may also contact the Commission at:

New England Commission of Higher Education
3 Burlington Woods Drive, Suite 100
Burlington, MA 01803-4514
781-425-7785

<https://www.neche.org/>

The following graduate programs are accredited by their respective professional organizations:

- Nursing, The Commission on Collegiate Nursing Education
- Speech-Language Pathology, the American Speech-Language-Hearing Association
- Occupational Therapy, Accreditation Council for Occupational Therapy Education
- Education, Massachusetts Department of Elementary and Secondary Education
- Education-School Psychology, The Department of Elementary and Secondary Education (DESE), National Association of School Psychologists (NASP)

Please refer to department chapters for addresses and telephone numbers of the accrediting organizations.

Campus

Worcester State University's 58 acre campus is nestled in the residential west side of Worcester, the second largest city in Massachusetts and New England and a dynamic college city with over 30,000 students. The campus is a short drive from tranquil forests, hiking trails and beautiful vistas and an even shorter distance from a vibrant city life that offers popular entertainment venues, award-winning restaurants, cultural museums, historic parks, and so much more. Directions are available on the website at <http://www.worcester.edu/directions>. The physical facilities of the campus include the following:

Helen G. Shaughnessy Administration Building

The Helen G. Shaughnessy Administration Building combines modern convenience and efficiency with much of the charm of the old Teachers College. It houses streamlined student services in an "academic mall" on the first floor as well as the Enrollment Management Division and Admissions Welcome Center. On the second floor are the President's Office and Conference Room, the Fuller Theater, Office of

Communications and Marketing, and Institutional Advancement. The third floor is home to Academic Affairs, Administration and Finance, Institutional Research and Assessment, Human Resources, Payroll and Benefits, Diversity and Affirmative Action. The Division of Graduate and Continuing Education and the Intensive English Language Institute are located on the fourth floor.

Kalyan K. Ghosh Science and Technology Building

The Science and Technology Building is a state-of-the-art building designed to house the sciences including: Academic Computing, Communication Sciences and Disorders, Occupational Therapy, Computer Science, Biology, Biotechnology, Chemistry, Geography and Earth and Environmental Science, Geology, Natural Science and Physics, Health Science and Nursing. The building contains 30 science, therapy and computer labs, offices for faculty and staff, conference/seminar rooms, and student discussion areas. This facility also houses a 200-seat multimedia classroom, the Worcester State University's Mary Cosgrove Dolphin Art Gallery, and the Imoigele P. Aisiku, M.D. STEM Center.

Learning Resource Center

The Learning Resource Center (LRC) brings together an impressive array of campus learning resources including the library, the WSU Archives and Special Collections, Information Technology, academic offices (Communication, Criminal Justice, Visual and Performing Arts, the Honors Program, and the Office of Multicultural Affairs), and more than twenty classrooms and music practice rooms. The LRC also features the Mail Center, Central Receiving, and Publications and Printing Services.

The LRC is the hub for the complex of modern telecommunications and electronic learning facilities provided by the Information Technology department. The campus-wide computer network provides wired and wireless Internet connections for student devices, and for the fully equipped computer lab with Help Desk on the 3rd floor. In addition, the LRC houses WSU's television studios and production facilities, multimedia laboratories, and an instructional center to support the use of multimedia resources in teaching and learning.

Outdoor Facilities

Worcester State University has the advantage of naturally attractive surroundings. Among its outdoor facilities are an artificial turf athletic field and an eight-lane synthetic track, baseball and softball diamonds, and tennis courts.

Residence Halls

Residence Halls at Worcester State University provide housing to full-time undergraduate students.

Chandler Village is a unique living area with 63 apartments in 26 interconnected townhouses. The apartments accommodate four, five, eight, nine, ten, or eleven persons and include furnished common living and kitchen areas.

Dowden Hall, more traditional in style, is a five-story residence hall that includes single, double, and triple rooms with study and recreational lounges. There are multipurpose rooms, laundry facilities, and a convenience store.

Sheehan Hall is a facility that accommodates 400 students and features the main campus dining hall overlooking the John F. Coughlin Field. Each unit consists of two double or four single rooms sharing a private bathroom. In addition to housing students, this residence hall contains Health Services, the Office of Residence Life and Housing, a multifunctional room, game room, small fitness center, student lounges, and a communal kitchen.

Wasylean Hall, named for Phillip M. Wasylean II '64, is a six-story, suite-style building with multiple study and common rooms throughout. The suites are designed to accommodate four and six people. Each unit has single and double occupancy bedrooms with furnished common living and kitchen areas. Wasylean Hall is also home to the University Police.

Several housing opportunities exist which offer students the opportunity to live together, take classes together and participate in activities that focus on various special interests (See 'Services for Students' section for more information).

Sagamore Road Studios

Worcester State University forged an affiliation with the Worcester Center for Crafts in 2009, a center that offers public instruction in Ceramics/Glass/Metals/Photography, in the art and aesthetics of craft and

creativity, and in the appreciation of the hand-made aesthetic object. The Worcester Center for Crafts is located in two locations: the main Sagamore Road Studios building at 25 Sagamore Road, Worcester, MA 01605 and on the campus of Worcester State University where a Darkroom Photography program is sited.

The WSU Visual & Performing Arts Department art areas are housed at the Sagamore Road Studios in the same building as the Worcester Center for Crafts. VPA offers two craft center courses as part of its Division of Graduate and Continuing Education curriculum.

Student Center

The Student Center is available as a resource for the entire Worcester State community and is conveniently situated at the geographical center of the campus. The first floor of the Student Center contains the following resources: Food Court and dining area, Worcester State bookstore, Information Desk, and the Print Center. The first floor also has several meeting/programming spaces including the North/South Auditorium, Blue Lounge, Exhibit Area and One Lancer Place. The second floor houses the Student Center/Student Activities Office, Conference and Event Services, and Commuter Services/Weekend Programming. Small meeting rooms, WSCW Radio Station and Student Government offices, and the Charter Business TV Lounge - a lounge for commuters and residents with pool tables, ping-pong, video games and several TV's - are also located on this floor. The third floor holds several Student Affairs offices including the Vice President of Student Affairs, Career Services, Counseling Office, Dining Services, Judicial Affairs and Veteran's Affairs. Student organization offices including the Student Senate, Student Events Committee, Third World Alliance, the student newspaper, yearbook and more are also located on this floor as well as the Lancer Loft dining area and additional meeting space.

Sullivan Academic Center

Named for Eugene A. Sullivan, Worcester State president from 1947 to 1970, the Sullivan Academic Center is a primary instructional center on campus. It contains faculty and academic department offices, a large lecture hall (Eager Auditorium), classrooms, and a large attached auditorium. The Sullivan Auditorium provides the setting for a number of formal ceremonies including the annual Senior

Capping. Also located in the Sullivan Academic Center are the Center for the Study of Human Rights and the Center for Teaching and Learning.

Wellness Center

Worcester State University constructed a 100,000 square-foot Wellness Center which opened in 2016. The complex features a competition gymnasium, two-court, multi-purpose gymnasium, walking track, two-floor fitness center, three multi-functional exercise rooms, golf simulator and community space.

Additional Locations of WSU Study

Sagamore Road Studios
25 Sagamore Road
Worcester, MA 01605

Worcester Idea Lab
50 Franklin Street
Worcester, MA 01608

Sever Street Building
51 Sever Street
Worcester, MA 01609

Change of Catalog Information

This catalog was prepared in the summer of 2024, and published on August 31, 2024, with information available at the time of preparation. Provisions of this catalog are subject to change by order of the Massachusetts Department of Higher Education or the Worcester State University Board of Trustees. It is the policy of Worcester State University to provide advance notice of changes whenever it is reasonable and practical to do so. Changes to the catalog need to be approved by the Vice President for Academic Affairs.

Community Relations

Worcester State University values its connections with the greater community, which include partnerships with numerous individuals and organizations. The professional staff participates in events sponsored by the Commonwealth of Massachusetts, the City of Worcester, and the local Chamber of Commerce; hosts conferences, legislative meetings, and community breakfasts;

sponsors seminars, lectures, and workshops; and supports a variety of initiatives in the arts and multi-cultural events. Worcester State University's calendar includes numerous programs and events to which the public is welcomed.

Campus Communications and Marketing

The Office of Communications and Marketing (MARCOM) handles strategic communications, media and public relations, and serves as the chief spokesperson for the University. The office works closely with other administrative departments to disseminate campus-wide notifications, and invitations to the President's Campus Conversations, a periodic open forum to share updates and to dialogue with the campus community on specific topics important to students, faculty and staff.

The University's marketing team supports integrated marketing campaigns to engage the public and to distinguish Worcester State as the premier public university in Central Massachusetts. Updates to the University's website, advertising, print and digital marketing presence, videography and social media are under their charge. They work closely with the Office of Publications and Printing for consistency in brand management standards for design, print and large-format printing services of the university.

University Advancement

The Office of University Advancement is responsible for fundraising to support the university's mission, donor relations, and alumni relations. A number of special events and activities are coordinated annually for Worcester State University alumni including Reunion Weekend, Homecoming, and chapter events. Fundraising campaigns provide an array of benefits and services to current students, faculty, and the entire university community. Contributions are used primarily for scholarships, academic awards, laboratory and classroom equipment, educational seminars, faculty research grants, and other support services to retain and promote students on their educational journey. The office publishes an annual donor report and monthly alumni newsletter, manages an online alumni community, and works in partnership with the Office of Communications and Marketing to produce the *Worcester Statement*.

Family Educational Rights and Privacy Act

Worcester State University complies fully with the provisions of the Family Educational Rights and Privacy Act (FERPA) of 1974 as amended. This federal law protects the privacy of education records and establishes the rights of students to:

1. Inspect and review their education records within 45 days of the day Worcester State receives a request for access.
Students should submit to the Registrar, dean, head of the academic department or other appropriate official, written requests that identify the record(s) they wish to inspect. The Worcester State University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the Worcester State University official to whom the request was submitted does not maintain the records, that official shall advise the student of the correct official to whom the request should be addressed.
2. Request the amendment of the education records that the student believes are inaccurate or misleading.
Students may ask Worcester State University to amend a record that they believe is inaccurate or misleading. They should write to the Worcester State University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading.
If Worcester State University decides not to amend the record as requested by the student, Worcester State University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. To file a complaint with the U.S. Department of Education concerning the alleged failures by Worcester State University to comply with the requirements of FERPA, the name and address of the office that administers FERPA is:

Family Policy Compliance Office • Department of Education

Independence Avenue, SW • Washington, DC
20202-4605

Worcester State University accords all the rights under the law to students who are declared independent. No one outside the institution shall have access to nor will the institution disclose any information from students' educational records without the written consent of students with the exception of the following:

- Worcester State University officials within the institution
- officials of other institutions in which students seek to enroll
- persons or organizations providing students' financial aid
- accrediting agencies carrying out their accreditation function
- persons in compliance with a judicial order
- persons in an emergency in order to protect the health or safety of students or other persons.

All these exceptions are permitted under the Act. A Worcester State University official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. A Worcester State University official is:

- a person employed by Worcester State University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff)
- a person or company with whom Worcester State University has contracted (such as a consultant, contractor, volunteer or other party to whom Worcester State University has outsourced institutional services or functions)
- a person serving on the Board of Trustees
- a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

According to the law, a person becomes a student for purposes of FERPA when they are "in attendance" at an institution. This includes attendance in person or remotely by videoconference, satellite, internet or other electronic and telecommunication technologies. At WSU, a student is defined as someone currently or previously enrolled in any

academic offering of the University. This does not include prospective students or applicants to any academic program of the University. A student is an individual who has paid an admission deposit (acceptance fee), registered for classes, or otherwise entered into a contractual relationship with the university to receive instruction. FERPA becomes effective on the first day of classes for those newly admitted students who have scheduled at least one course. A student who accepted an admission offer but did not schedule at least one course, or newly admitted student who cancelled his/her registration either before or after the semester begins, is not covered by FERPA.

At its discretion the institution may provide directory information in accordance with the provisions of the Act to include:

- student's name
- address
- photograph
- date and place of birth
- major field of study
- grade level
- degree
- recent school attended
- enrollment status
- dates of attendance
- weight and height of athletic teams
- honors/awards
- participants in officially recognized activities and sports

Directory information does NOT include a student's social security number or student identification number.

Currently enrolled students may withhold disclosure of directory information by notifying the Registrar in writing of the request prior to the end of the first week of classes in the Fall. Such requests will be honored for the duration of the academic year—September through August; therefore, authorization to withhold directory information must be filed annually with the Registrar. Worcester State University assumes that failure on the part of the student to specifically request the withholding of categories of directory information indicates individual approval of disclosure.

A request to withhold the above data in no way restricts internal use of the material by Worcester State University.

In compliance with the Family Educational Rights and Privacy Act of 1974, as amended, Worcester State University reserves the right to disclose information to parents of a student under 18 and/or the parents of a student who is dependent upon such parents for federal income tax purposes.

Institutional Learning Outcomes

Worcester State students:

- Demonstrate effective writing, reading, speaking, and listening skills to communicate across different contexts and audiences.
- Critically evaluate information, make connections across disciplines and perspectives, and apply knowledge gained in one situation to new situations.
- Respectfully interact, communicate, and learn from diverse peoples to work towards equity and justice.
- Demonstrate the skills necessary to effectively engage in a diverse workforce and global community including: technological literacy, information literacy, leadership, and adaptability.
- Develop the skills necessary for life-long learning including: curiosity, independence, initiative, and reflection.

Mission

Worcester State University champions academic excellence in a diverse, student-centered environment that fosters scholarship, creativity, and global awareness. A Worcester State education equips students with knowledge and skills necessary for lives of professional accomplishment, engaged citizenship, and intellectual growth. - See more on our Mission, Vision, & Core Values page.

Policy on Nondiscrimination

The University is committed to a policy of nondiscrimination, equal employment opportunity, and affirmative action in its educational programs, activities, and employment practices.

The University is dedicated to providing educational, working, and living environments that value the diverse backgrounds of all people. The University does not unlawfully discriminate in admission or access to, or treatment or employment in, its educational programs and activities on the basis of race, color, religion, national origin, age, disability, gender, sexual orientation, gender identity, gender expression, genetic information, marital or parental status, or veteran status.

The University prohibits unlawful discrimination or discriminatory harassment on all of those bases. Such behaviors violate the University's Non-Discrimination, Harassment, and Retaliation Policy, will not be tolerated, and may result in disciplinary action up to and including termination or expulsion. It is also the policy of the University to provide each student, employee, and other persons having dealings with the institution an environment free from unlawful sexual violence and all forms of misconduct on the basis of gender. The University prohibits rape, statutory rape, sexual assault, sexual exploitation, incest, sexual harassment, gender-based harassment, domestic violence, dating violence, stalking, and retaliation. These behaviors violate the University's Sexual Violence Policy, will not be tolerated, and may result in disciplinary action up to and including termination or expulsion.

The University Non-Discrimination, Discriminatory Harassment, and Retaliation Policy and Sexual Violence Policy applies in all University programs and activities, including, but not limited to athletics, instruction, grading, housing, and employment. They apply to all members of the campus communities, including, but not limited to students, faculty, librarians, staff, visitors, contractors, and applicants for employment or admission. They also apply to off-campus conduct that negatively affects a community member's experience in the University environment.

The University has appointed an Equal Opportunity Officer ("EO Officer") to oversee its compliance with this plan as well as the state and federal non-discrimination and equal opportunity laws. Anyone with questions, concerns or complaints regarding discrimination, discriminatory harassment, or retaliation may contact the EO Officer. Any person with questions or concerns about any form of

sexual violence, sexual harassment, gender-based harassment, domestic violence, dating violence, stalking, and/or retaliation may also contact:

Discrimination: Dr. Edgar Moros, Executive Director of Affirmative Action and Equal Opportunity (EO Officer): 508-929-8784

Student Accessibility: Rachel Graddy, OTD, OTR/L Assistant Dean and Director, Student Accessibility Services: 508-929-8733

Title IX / Sexual Violence: Jennifer Quinn, Assistant Dean of Student Affairs/Title IX Coordinator: 508-929-8243

The U.S. Department of Education Office for Civil Rights, 33 Arch Street 9th Floor, Boston, MA 02119-1424; (617) 289-0111, Fax (617) 289-0150, TDD (877) 521-2172; OCR.Boston@ed.gov or the university's Title IX coordinator. The Title IX coordinator at each university is responsible for the university's compliance with Title IX and the administration of the university's sexual violence policy.

TITLE IX/Policies and Inquiries

Worcester State University is committed to creating and maintaining an academic and work environment that is free from sex discrimination (including discrimination on the basis of sex, sexual orientation, gender identity, and gender expression) and sexual misconduct (including sexual harassment, sexual assault, domestic violence, dating violence, and stalking).

Adherence to this commitment is ensured by University policies against discrimination and compliance with The U.S. Department of Education's Office for Civil Rights (OCR) Title IX of the Education Amendments of 1972. Title IX protects people from discrimination based on sex in education programs or activities that receive federal financial assistance.

Title IX states:

No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.

Title IX Scope:

Title IX prohibits sex discrimination in all university programs and activities including but not limited to admissions, recruiting, financial aid, academic programs, student services, counseling and guidance, discipline, treatment of pregnant and parenting students, class assignment, grading, recreation, athletics, housing, and employment.

The Title IX coordinator is charged with managing the University's response to reports of sex discrimination, which includes reports of sexual assault, sexual harassment, gender-based harassment, dating violence, domestic violence, stalking, and retaliation. Guided by University and federal procedures, the Title IX coordinator aims to ensure that the University's response promptly, effectively, and equitably addresses the incident, prevents its recurrence, and remedies the effects of all forms of such prohibited conduct. In some instances, Title IX issues may impact a student's academic performance. Eligible recipients of academic accommodations will be determined and coordinated by the Title IX coordinator.

Inquiries regarding Title IX may be referred to the Title IX coordinator, Jennifer Quinn, at Jquinn@worchester.edu, wsu_titleix@worchester.edu, 508-929-8243, or in-person in the Student Center, room 344. A report may also be filed at this link: https://cm.maxient.com/reportingform.php?WorcesterStateUniv&layout_id=7

Reports may be submitted at any time, even during non-business hours, but please note the Title IX coordinator does not monitor email on a 24-hour basis and may not review on weekends and evenings. Therefore, contact may not be available during non-business hours except by referral from University Police. If you are not safe, please contact University Police immediately at 508-929-8911.

Undergraduate Academic Programs

Worcester State University offers Bachelor of Arts (BA) and Bachelor of Science (BS) degrees, as well as numerous minors, at the undergraduate level.

A list graduate level programs can be found at catalog.worcester.edu/graduate/programs/.

Program	Major	Minor	Sponsoring Department
Actuarial Mathematics		X (p. 262)	Mathematics
Addictions Counseling		X (p. 96)	Interdisciplinary Program
African and African Diaspora Studies		X (p. 101)	Interdisciplinary Studies
Art	BA (p. 461)	X (p. 462)	Visual & Performing Arts
Asian Studies		X (p. 101)	Interdisciplinary Program
Astronomy		X (p. 293)	Earth, Environment, and Physics
Biology	BS (p. 174)		Biology
Biotechnology	BS (p. 185)		Biology
Business Administration	BS (p. 308) ¹	X (p. 314)	Business Administration & Economics
Cellular and Molecular Biology		X (p. 176)	Biology
Chemistry	BS (p. 194)	X (p. 198)	Chemistry
Civic Engagement		X (p. 412)	History & Political Science
Communication	BA (p. 320) ¹	X (p. 325)	Communication
Communication Education		X (p. 320)	Communication
Communication Sciences & Disorders	BS (p. 204)	X (p. 207)	Communication Sciences & Disorders

Composition and Music Technology		X (p. 385)	Visual & Performing Arts
Computer Science	BS (p. 217)	X (p. 223)	Computer Science
Criminal Justice	BS (p. 333) ¹	X (p. 334)	Criminal Justice
Data Science		X (p. 224)	Computer Science
Disabilities Studies		X (p. 207)	Communication Sciences & Disorders
Early Childhood Education	BS (p. 118)		Education
Early Education and Care	BS (p. 121)		Education
Ecology		X (p. 177)	Biology
Economics	BS (p. 340)	X (p. 343)	Business Administration & Economics
Education Studies	BS (p. 123)	X (p. 124)	Education
Elementary Education	BS (p. 125)		Education
English	BA (p. 354) ¹	X (p. 359)	English
Environmental Science	BS (p. 229)	X (p. 231)	Earth, Environment & Physics
Environmental and Sustainability Studies		X (p. 133)	Interdisciplinary Studies
Ethnic Studies		X (p. 135)	Interdisciplinary Program
Forensic Science		X (p. 96)	Interdisciplinary Studies
Geography	BS (p. 241)	X (p. 244)	Earth, Environment & Physics
Geospatial Information Science		X	Earth, Environment & Physics
Global Studies		X (p. 139)	Interdisciplinary Program

History	BA (p. 380) ¹	X (p. 382)	History & Political Science	Occupational Studies	BS (p. 289)		Occupational Therapy
Human Development		X (p. 421)	Psychology	Pharmaceutical Science		X (p. 199)	Chemistry
Human Rights and Social Justice		X	History & Political Science	Philosophy		X (p. 402)	Philosophy
Intergeneration: Studies and Community Service		X	Urban Studies	Physics		X (p. 293)	Earth, Environment & Physics
Journalism		X (p. 99)	Interdisciplinary Studies	Political Science	BA (p. 413)	X (p. 413)	History & Political Science
Latin American and Latinx Studies		X (p. 475)	World Languages	Pre-Law		X (p. 414)	Political Science
Liberal Studies	BA/BS (p. 154) ¹		Interdisciplinary Program	Psychology	BS (p. 423) ¹	X (p. 426)	Psychology
Literature		X	English	Psychobiology		X (p. 422)	Psychology & Biology
Mathematics	BS (p. 268)	X (p. 270)	Mathematics	Public Health	BS (p. 253) ¹	X (p. 257)	Health Sciences
Mathematics for Elementary Education	BS (p. 262)		Mathematics	Public Health (WSU)/Nursing (MCPHS University)	BS/BSN (p. 251)		Health Sciences/ MCPHS University
Medicinal Chemistry		IC (p. 197)	Chemistry	Public History		X (p. 382)	History & Political Science
Middle East Studies		X	History & Political Science	Secondary Education		X (p. 130)	Education
Middle School Education		X (p. 128)	Education	Social Work and Social Policy		X (p. 444)	Urban Studies
Middle School Mathematics		X (p. 270)	Mathematics	Sociology	BS (p. 432) ¹	X (p. 434)	Sociology
Music		X (p. 384)	Visual & Performing Arts	Spanish	BA (p. 477)	X (p. 489)	World Languages
Narrative Studies of Health and Body		X (p. 361)	English	Spanish for Health Professionals		X (p. 489)	World Languages
Normal and Disordered Speech, Language and Hearing		X (p. 208)	Communication Sciences & Disorders	Spanish Translation	BA (p. 484)		World Languages
Nursing	BS (p. 274)		Nursing	STEM		X (p. 199)	Chemistry
				Theatre	BA (p. 463)	X (p. 464)	Visual & Performing Arts
				Urban Studies	BS (p. 445) ¹	X (p. 447)	Urban Studies

Visual & Performing Arts	BA (p. 385)	Visual & Performing Arts
Women's, Gender, and Sexuality Studies	X (p. 157)	Interdisciplinary Program
Writing	X (p. 361)	English

¹ Majors that are also offered in the evening.

Admissions

Worcester State University seeks to enroll students who will succeed academically, thrive socially, and contribute meaningfully to the campus community. More information can be found in this section of the catalog.

- Admission Following Withdrawal from Worcester State or Leave of Absence (p. 18)
- Admission to Non-Degree Programs (p. 19)
- Advanced Placement (AP) Guidelines (p. 19)
- Alternatives for Individual Development (A.I.D.) (p. 20)
- American Council on Education (ACE) College Credit Recommendation Service (p. 20)
- Application Process (p. 21)
- College Level Examination Program (CLEP) (p. 22)
- Commonwealth Commitment (p. 24)
- Delayed (deferred) Enrollment (p. 24)
- DHE Massachusetts High School Unit Requirements (Academic Courses) (p. 24)
- Documentation of High School Diploma or Equivalency (p. 25)
- Evening Undergraduate Course Offerings (p. 26)
- Exceptions (p. 26)
- First-Year Student Admission (p. 26)
- GED/HiSET Recipients (p. 27)
- International Applicants (p. 27)
- International Baccalaureate (IB) Credit (p. 28)
- MassTransfer (p. 28)
- Non-Traditional Applicants (p. 29)

- Post-Baccalaureate Pre-medical and Health Professions Program (p. 29)
- Pre-entrance Immunization Requirements (p. 32)
- Seal of Bilingualism (p. 60)
- Second Baccalaureate Degree (p. 32)
- Special Admission (p. 32)
- Special Non-Matriculated Students (p. 32)
- Student Right-to-Know Act (p. 32)
- Transfer Student Admission (p. 32)
- Transferring Credit from Other Institutions (p. 32)
- Veteran/Military Applicants (VALOR Act Academic Credit Evaluation Policy) (p. 33)

Admission Following Withdrawal from Worcester State or Leave of Absence

Matriculated students who fail to take a course during a calendar year will be administratively withdrawn from Worcester State. Students who wish to permanently withdraw from Worcester State or take a temporary leave of absence must complete appropriate forms in the Academic Success Center. If the withdrawal or leave of absence is filed prior to the last day to withdraw from courses for the term, "W" will be recorded on the student's record. Students who file for leave of absence or withdrawal after the last day to withdraw from courses for the term may petition if they feel circumstances warrant the recording of "W" for all courses enrolled for that term. Normally, a leave of absence is for one semester; however, a student may have up to one year to return to Worcester State. Failure to return at the specified time will result in an administrative withdrawal from Worcester State.

Re-activation of Degree Status

There are two procedures in which students can reactivate their matriculation status at Worcester State after withdrawal/non-continuous attendance/dismissal: readmission and reinstatement.

Readmission

If students have accumulated any undergraduate, college-level credits at a regionally accredited college/university prior to seeking reactivation of the degree status and are not applying for the Nursing

and Occupational Studies majors, they should apply for readmission through the Admissions Office.

Applications are available in the Admissions Office (Administration Building, Room 248) and online at <http://www.worcester.edu/apply>.

Reinstatement

If students have not accumulated any undergraduate, college-level credits at a regionally accredited college/university prior to seeking reactivation of their degree status and are not applying for Nursing and Occupational Studies majors, they should apply for reinstatement directly through the Registrar's Office (Administration Building, Room 107). Deadline for Fall-August 1; Spring-January 1; Summer-April 1. It is each student's responsibility to supply and update the following documents if not already on file.

- final high school transcript
- completed proof of residency form
- official transcript of all courses completed at each post-secondary institution attended (excluding Worcester State).

Upon completion of any missing data, the student's file will be reviewed and a plan for academic persistence and success will be developed. Students then must meet with an advisor in the declared major to register for classes.

Academic Progress after reinstatement/readmission

It is expected that students must attain a minimum GPA of 2.0 for each semester following their return. Failure to maintain a 2.0 overall average will result in a second separation from Worcester State not subject to appeal.

All reinstated students follow the degree, program, and graduation requirements from the catalog in effect at the time of their reactivation, not those in effect at the time of their withdrawal. Students need to attend Worcester State for at least one semester prior to graduation certification.

Admission to Non-Degree Programs

Applicants who have already earned a bachelor's degree and wish to complete a second major, including all education license programs, should

specifically request an undergraduate application form. Applicants who have completed a Non-Licensure program in Early Childhood Education may apply for a Non-Degree Licensure Education program. Such applicants must have a minimum of three (3) years teaching experience and have completed the equivalent of a second major in liberal arts and sciences.

Advanced Placement (AP) Guidelines

AP Exam	Score	WSU Course Equivalent	Credits
African American Studies	3, 4, 5	HI-221 & HI-222	6
Art History	3, 4, 5	AR-118	3
Art 3D Design	3, 4, 5	AR-123	3
Biology	3, 4, 5	Biology, no specific classes; LASC NSP credit	6
Calculus AB	3, 4, 5	MA-200	4
Calculus BC	3, 4, 5	MA-201	4
Calculus AB Subscore (score given with Calculus BS exam)	3, 4, 5	MA-200	4
Chemistry	3, 4, 5	CH-120	4
Computer Science A	3, 4, 5	CS-140	4
Computer Science Principles	3, 4, 5	CS-101	3
English Language/Composition	3, 4, 5	EN-101 & EN-102	6
English Literature/Composition	3, 4, 5	EN-132	3
Environmental Science	3, 4, 5	Environmental Science Elective; LASC NSP credit	3
European History	3, 4, 5	HI-1XX	6
Government & Politics of the US	3, 4, 5	PO-110	3
Government & Politics Comparative	3, 4, 5	PO-220	3

Human Geography	3, 4, 5	GE-102	3
French	3, 4, 5	FR-101 & FR-102	6
German	3, 4, 5	World Language Elective	6
Italian	3, 4, 5	WL-210 & WL-211; LASC TLC credit	6
Spanish	3, 4, 5	SP-210 & SP-211	6
Spanish Lit	3, 4, 5	SP-1XX	3
Microeconomics	3, 4, 5	EC-110	3
Macroeconomics	3, 4, 5	EC-120	3
Music Theory	3, 4, 5	MU-101	3
Physics B ¹	3, 4, 5	PY-221 & PY-222	8
Physics 1 - Algebra based sequence	4, 5	PY-221	4
Physics 2 - Algebra based sequence	4, 5	PY-222	4
Physics C - Mechanics	4, 5	PY-241	4
Physics C - Electricity & Magnetism	4, 5	PY-242	4
PreCalculus	4,5	MA-190	4
Psychology	3, 4, 5	PS-101	3
Statistics	3, 4, 5	MA-150	3
Studio Art	3, 4, 5	AR-140	3
Studio Art 2D Design	3, 4, 5	AR-123	3
United States History	3, 4, 5	HI-111 & HI-112	6
World History	3, 4, 5	HI-103 & HI-104	6

¹ Discontinued Exam

Updated April 2024

Alternatives for Individual Development (A.I.D.)

The Alternatives for Individual Development Program (A.I.D.) is an alternative admissions program at WSU that provides educational assistance to under-represented prospective students who demonstrate the desire to succeed in college, including those who are ALANA/BIPOC (African, Latine, Asian, Native American and/or Black, Indigenous, People of Color), low income, and/or would be the first in their families to attend college.

To be eligible, students must be incoming first-year students, meet the minimum admissions requirements, be a Massachusetts resident, and a U.S. Citizen and/or permanent resident. To apply, complete an undergraduate application and select "Yes" to the A.I.D. question on the application. Letters of recommendation from a school counselor and a high school teacher are required to complete the application.

American Council on Education (ACE) College Credit Recommendation Service

Training programs in professional settings, industry, the armed forces and other institutions, offer educational opportunities that may be similar in content to Worcester State University courses. Transfer credit may be awarded for professional training programs through credit recommendations made by organizations that have evaluated such programs on the basis of college-level learning. The American Council on Education is the largest organization that evaluates training programs. Students who have completed ACE-evaluated programs, including military service, are encouraged to request an official ACE Transcript for evaluation. Students may not receive transfer credit for professional training if they have already received transfer credit for similar learning at colleges previously attended. Information on professional trainings that have been evaluated and transcript services can be found at <http://www.acenet.edu/credit>.

Application Process

Directions for First-Year Applicants

Students may apply using the Common Application or Worcester State application at <http://www.worcester.edu/apply>.

Applications may be obtained from the Admissions Office, Worcester State University, 486 Chandler Street, Worcester, MA 01602-2597, 508-929-8040.

Each applicant must submit the following materials:

- A completed Common Application or Worcester State application form
- Payment of an application fee: \$50 for all applicants*
- An official copy of the high school transcript including first-quarter senior grades (Transcripts are deemed official only when sent directly to the Admissions Office from the high school)
- An official copy of an SAT or ACT score report, if not applying as a first-year test-optional applicant**. Student's whose language of instruction is not English, must submit TOEFL, IELTS or a comparable exam score report. Test results should be submitted directly to the Worcester State Admissions Office from the testing agency.

*The undergraduate application fee is waived for students who complete an official on-campus visit through the Admissions Office.

Worcester State will accept **unofficial SAT or ACT scores as part of the admissions process from applicants who have attended high school in the United States. The essay/writing scores are not required. Official SAT or ACT scores will be required (if available) as part of the enrollment process. Students may self-report their test scores on the application or by providing a screen shot of their score report. Official test scores include those sent directly by the testing agency or by a school counselor.

NOTE: First-year applicants may opt-out from submitting SAT or ACT scores. Refer to our test-optional policy at <http://www.worcester.edu/test-optional>.

High school students must request an official high school transcript that includes at least the first three years of high school. Also, a final high school transcript must be requested at the time of graduation that indicates successful completion of the requirements to graduate from high school. The Admissions Office must receive this official, final high school transcript before registration for courses and the final award of financial aid is approved. All transcript materials requested by the applicant become the property of Worcester State and cannot be released to the applicant or to other institutions, agencies, or individuals.

First-Year Priority Application Filing Dates

All materials should be submitted as early as possible. Preferred postmarked filing dates are as follows:

Fall Semester Early Action (first-year applicants only)	November 15
Nursing (BSN) - Fall only	January 15 (firm)
Fall Semester Regular Decision (September entrance)	March 1
Spring Semester (January entrance)	November 15

After these dates, contact the Admissions Office to determine if applications are still being accepted. Please note that certain majors may not be available to students completing their applications after the priority filing dates.

All pertinent non-refundable deposits and the orientation fee are due on or before May 1 for those students who meet the priority deadlines.

No Spring applications will be accepted for Nursing (BSN - track I) or Occupational Studies (BSOS).

Directions for Transfer Student Applicants

Transcripts from colleges or universities previously attended are the primary factor in determining acceptance to Worcester State. To be considered a transfer applicant, a student must have successfully

completed the requirements at a regionally accredited college or university. The following materials must be supplied:

- A completed Common Application or Worcester State application form.
- Payment of an application fee: \$50 for all applicants*.
- An official final high school transcript, indicating proof of graduation from an accredited high school or a high school equivalency certificate indicating the test scores received. These must be received by the Admissions Office before clearance for registration or the award of financial aid is approved (required of all students excluding those who've already earned an Associate's or Bachelor's degree).
- An official transcript of all courses completed at each post-secondary institution attended (transcripts are deemed official only when sent directly to the Admissions Office from the previous colleges or universities)**.
- Transcripts and other documents submitted in languages other than English must be accompanied by an English translation and course-by-course evaluation (if applicable) from a recognized agency or organization. For a list of approved evaluating agencies please contact the Admissions Office. Students wishing to transfer in credit completed at a non-U.S. institution must be prepared to submit a course description and/or syllabus to the Admissions Transfer Center in order to be granted Worcester State equivalent course credit.
- TEAS exam scores for students applying into Nursing - Track 1 (BSN) only. The TEAS is waived for second degree applicants.
- Three NACE I exam scores for students applying into Nursing - Track III (RN-to-BSN) only: Foundations of Nursing, Nursing Care of the Child, and Nursing Care for the Childbearing Family.

*The undergraduate application fee is waived for MassTransfer applicants and students who complete an official on-campus visit through the Admissions Office.

**Failure to disclose any prior college/university experience during the admissions process could be considered a misrepresentation of a student's academic history, and - if accepted - could result in an admission offer being rescinded.

Transfer Priority Application Filing Dates

All materials should be submitted as early as possible. Preferred postmarked filing dates are as follows:

Spring Semester (January)	November 15
Fall Semester (September)	June 1
Track I Nursing (BSN) (Fall only - limited space into the first-year level)	January 15 (firm)
Track III LPN to BSN (Fall only)	June 1
Track II RN to BSN (Fall only)	May 1

After these dates, contact the Admissions Office to determine if applications are still being accepted. Please note that certain majors may not be available to students completing their applications after the priority filing dates.

All pertinent non-refundable deposits and the orientation fee are due on or before May 1 for those students who meet the priority deadlines.

College Level Examination Program (CLEP)

Subject	Passing Score	WSU Course Equivalent(if Equivalent)	Credits
Business			
Financial Accounting	50	BA-210	3
Information Systems & Computer Applications	50	CS-101	3
Introductory Business Law	50	BA-320	3
Principles of Accounting ¹	50	BA-210 & BA-220	6

Principles of Management	50	BA-200	3
Principles of Marketing	50	BA-318	3
Composition & Literature			
American Literature with Essay	50	LASC TLC - Thought, Language, Culture (p. 53) English Humanities Elective Not accepted for English major/minor	6
Analyzing & Interpreting Literature with Essay	50	LASC TLC - Thought, Language, Culture (p. 53) English Humanities Elective Not accepted for English major/minor	6
College Composition	50	EN-101	3
English Composition with Essay ¹	50	EN-101	3
College Composition Modular		Not Accepted	NONE
English Literature with Essay	50	LASC TLC - Thought, Language, Culture (p. 53) English Humanities Elective Not accepted for English major/minor	6
Freshman College Composition		Not Accepted	NONE
Humanities	50	LASC TLC - Thought, Language, Culture & Creative Arts (p. 37) General Elective	6
Foreign Languages			
French Language, Level 1	50	FR-101 & FR-102	6
French Language, Level 2	62	FR-101, FR-102, FR-210, & FR-211	12
German Language, Level 1	50	Foreign Language Elective WL-XXX	6
German Language, Level 2	62	Foreign Language Elective WL-XXX	12

Spanish Language, Level 1	50	SP-101 & SP-102	6
Spanish Language, Level 2	63	SP-101, SP-102, SP-210, & SP-211	12
History & Social Science			
American Government	50	PO-110	3
History of the US 1: Early Colonization to 1877	50	HI-111	3
History of the US 2: 1856 to Present	50	HI-112	3
Human Growth & Development	50	PS-210	3
Introduction to Educational Psychology	50	ED-250 ²	3
Introductory Psychology	50	PS-101	3
Introductory Sociology	50	SO-100	3
Principles of Macroeconomics	50	EC-120	3
Principles of Microeconomics	50	EC-110	3
Social Sciences & History	50	LASC GP - Global Perspectives (p. 42) LASC - USW - US & Its Role in the World General Elective	6
Western Civilization I: Ancient Near East to 1648	50	LASC GP - Global Perspectives (p. 42) History Elective	3
Western Civilization II: 1648 to Present	50	LASC GP - Global Perspectives (p. 42) History Elective	3
Science & Mathematics			
Biology	50	LASC NSP - Natural Systems & Processes (p. 49) Biology Elective	6
Calculus	50	MA-200	4
Chemistry	50	LASC NSP - Natural Systems & Processes (p. 49) General Elective	4
College Algebra	50	MA-180	3

College Mathematics	50	LASC QR/MA - Quantitative Reasoning (p. 50) Mathematics Elective Not accepted for Math major/minor	3
Pre-calculus	50	MA-190	4
Natural Sciences	50	LASC NSP - Natural Systems & Processes (p. 49) General Elective	3

¹ No longer available but credits can be accepted
² 10 hrs clinical fieldwork per department guidelines are required

Commonwealth Commitment

This program allows students to earn an Associate’s Degree in specific academic programs at any of the Massachusetts community colleges and transfer to complete a Bachelor’s Degree from Worcester State University. Students earn an Associates and Bachelor’s degree in four and a half years with the possibility of a tuition and fee rebate. To qualify, students must be full-time, non-residential, in-state residents, college-ready, and maintain continuous enrollment and a cumulative 3.0 grade point average. For more information, visit <http://www.worcester.edu/commonwealth-commitment> or email transfer@worchester.edu.

Reverse Transfer

Through Reverse Transfer, students who made progress toward an associate degree at a Massachusetts community college prior to transferring may apply credit earned at a Massachusetts state university or University of Massachusetts campus back to their community college to complete associate degree requirements. Massachusetts community college students are eligible if they have earned at least 30 college-level credits with a minimum cumulative GPA of 2.00 without earning an associate degree. For more information, including additional eligibility requirements, please visit <http://www.mass.edu/reversetransfer>.

Delayed (deferred) Enrollment

A student may apply for admission and, if accepted, decide to delay their enrollment. Students must submit a request in writing to the Admissions Office specifying which start term they intend to enroll (which may not to exceed one year from the original accepted start term). Students who request to delay their admission forfeit any merit scholarship, financial aid, and/or housing offered with the original acceptance. Requesting a delayed enrollment does not guarantee a student’s later acceptance for the deferred start term. A student’s application will be reviewed in the context of the newer applicant pool. More selective admission standards may apply. Students are encouraged to supply a statement explaining their activities while not enrolled in a post-secondary institution. As part of the re-evaluation process, students will be reconsidered for merit scholarships (Fall start only), financial aid, and housing.

DHE Massachusetts High School Unit Requirements (Academic Courses)

Subject	Units
English	4
Mathematics	4 (Algebra I & II and Geometry or Trigonometry, or comparable coursework and math in the senior year)
Natural Science	3 (including 3 with lab)
Social Science	2 (including U.S. History)
Foreign Language	2 (in a single language)
Electives	2

Minimum Grade Point Average in Required Courses

The grades earned in academic courses are re-calculated into a grade point average (GPA). In re-calculating GPA, extra weight is received for honors (0.5) and Advanced Placement (1.0) courses. Non-

academic courses are not included; therefore, the GPA calculated by Worcester State may be different than the GPA calculated by a high school.

Grades will be converted to a 4.0 scale, where “A” = 4.0, “B” = 3.0, “C” = 2.0, and “D” = 1.0. On this scale, a 3.0 GPA is equal to a “B” average. No applicant with a recalculated high school GPA less than 2.00 will be admitted to a state university.

SAT or ACT Test Requirement

Worcester State University no longer requires the submission of SAT or ACT scores. First-year applicants may opt-out from submitting SAT or ACT scores. Refer to our test-optional policy at <http://www.worcester.edu/test-optional>. The decision to not submit SAT or ACT scores will not negatively impact a student’s consideration for admission, merit award or an honors invitation.

For students who choose to submit test scores, Worcester State will accept **unofficial** SAT or ACT scores as part of the admissions process from applicants who have attended high school in the United States. The essay/writing scores are not required. Official SAT or ACT scores will be required (if available) as part of the enrollment process. Students may self-report their test scores on the admissions application or by providing a screen shot of their score report. Official test scores include those sent directly by the testing agency or by a school counselor. For students with a recalculated high school grade point average above a 3.0, no minimum SAT or ACT score is needed. However, for those applicants whose recalculated high school grade point average below a 3.0, the following table may be used in determining eligibility for admission:

GPA	SAT ¹	ACT
2.51-2.99	990	19
2.41-2.50	1030	20
2.31-2.40	1070	21
2.21-2.30	1110	22
2.11-2.20	1140	23
2.00-2.10	1180	24

¹ Based on highest Evidenced-based Reading and Writing (EBRW) and Math (M) Score.

NOTE: The Massachusetts Department of Higher Education Scale is subject to change. Students who have graduated from high school more than three years ago and have never attended college should apply as non-traditional students (see section on next page) and may present SAT/ACT scores at their option.

Documentation of High School Diploma or Equivalency

All new incoming matriculating students* must provide proof of completing high school by providing documentation of a high school diploma or equivalency. The University will accept any of the following:

- An official high school transcript sent directly from the high school stamped with the date of graduation.
- An official GED or HiSET score reports sent directly from the issuing agency.
- Original high school diploma or original GED certificate brought to the Admissions Office (photocopy retained).
- For records that are unobtainable or destroyed, applicants may submit a letter from the school superintendent (on official letterhead and with high school seal) indicating date of graduation and/or completion of high school or home school education.
- If a letter from a school superintendent is not available for missing or destroyed records, students may submit a signed statement explaining lack of availability to the Director of Admissions for consideration.
- Those documents awarded from a country outside of the U.S. must be translated and evaluated to U.S. standards through a credential evaluating agency.
- The acceptability of a high school diploma is determined by an evaluation of the institution’s accreditation and curriculum. A high school diploma may be accepted if recognized by the state in which it was issued as offering a curriculum consistent with state law. Certificates of completion and diplomas representing non-academic curriculum will not be accepted.

*Students who have already earned an Associates or Bachelors degree are exempt from submitting an official final high school transcript.

Evening Undergraduate Course Offerings

Continuing Education undergraduate course offerings are available for matriculated and non-matriculated students. Matriculated students have the ability to register for evening Continuing Education classes during regular pre-registration periods for Fall and Spring semesters but may incur additional costs in tuition and fees. The Student Accounts Office can assist in determining if additional costs will be incurred. During the Summer and Winter sessions, Continuing Education offers a wide variety of face-to-face and online classes. Matriculated students looking to "catch up" on credits or wanting to accelerate degree completion may take classes during these additional terms by registering and paying for classes. Continuing Education classes are available to all non-matriculated students. Instruction in Continuing Education courses is provided by Worcester State faculty and qualified adjunct faculty.

Exceptions

Documented Learning Disability

Students with a documented learning disability, do not have to submit test scores such as the SAT or ACT for admission to Worcester State. However, they must submit educational testing and assessment completed within the last three years and a copy of the Individual Education Plan (IEP) Students with learning disabilities must still complete the required 17 academic units with a minimum GPA of 3.0. First-year student applicants with a language-based learning disability may substitute two alternate academic electives for the foreign language course requirements. Applicants on a Section 504 Plan must meet all Department of Higher Education requirements.

English as a Second Language (ESL) Students

ESL students are eligible for exceptions to the admission requirements. For example, they may substitute two course electives for the two required foreign language courses. They must also take the Test of English as a Foreign Language (TOEFL) or

IELTS and SAT* and should contact their school counselor or the Admissions Office for more information.

*students applying for fall 2023 admission may be waived from submitting SAT or ACT scores

Vocational-Technical Students

Vocational-technical students must complete 17 academic courses, distributed in the same manner and with the same minimum grade point averages required of other high school graduates, with the following exceptions:

- Two vocational-technical courses may be used to fulfill the two required electives.
- Vocational-technical high school graduates who do not complete the two required academic foreign language courses must complete an additional elective college academic for a total of three such courses, and satisfy one of the following options:
 1. Complete at least one Carnegie unit of foreign language;
 2. Complete a fourth Carnegie unit of mathematics or science, which need not be a laboratory course; or
 3. Complete one Carnegie unit of computer science.

Note: A Carnegie unit represents a full academic year of study or its equivalent in a specific subject.

This requirement will remain in effect until the Department of Education (DOE) implements its requirements regarding foreign language study for vocational-technical students. At that time, vocational-technical applicants for admission to Worcester State University will be required to meet DOE requirements for foreign language study.

First-Year Student Admission

A student's high school academic record is the single most important factor in WSU's evaluation process for first-year student admission. The quality and level of courses, grade point average, and grade trends are all important factors. The submission of SAT and/or ACT scores are optional. Refer to <http://www.worcester.edu/test-optional> for policy guidelines. Work experience and extracurricular activities may strengthen overall credentials for admission. A personal essay and recommendation

letters are not required but may add support to an application. The TOEFL, IELTS or a comparable exam score report is required for students who are not native speakers of English. Specific requirements for competitive majors such as Nursing and Occupational Studies and Public Health/Pre-Nursing are described in the selective majors section.

Worcester State determines first-year and transfer student admission eligibility in accordance with the published standards established by the Massachusetts Department of Higher Education (MDHE). Meeting these minimum standards does not guarantee admission to Worcester State.

GED/HiSET Recipients

Candidates for admission who have completed the high school diploma requirement by earning the General Equivalency Diploma (GED) or the High School Equivalency Testing Program (HiSET) must submit official score reports and an official copy of their high school transcript showing work completed and/or attempted with grades earned.

Minimum recommended scores on the HiSet are a 15 on each sub-test and for the GED a 75% percentile rank.

International Applicants

Worcester State welcomes qualified international applicants. No international applicants will be considered for the Spring semester unless:

- They are currently enrolled in an ESL program in the U.S.
- They are currently attending a U.S. college or university.
- They currently have a visa status that legally allows them to change to F-1.
- They were accepted for a previous semester but deferred attendance due to being refused a visa.

All of the documents listed below must be submitted before April 1 for the Fall semester (January 15 for Fall only Nursing - BSN and Occupational Studies Majors) and before November 15 for the Spring semester.

- Official high school/secondary school transcripts or national exam reports accompanied by formal evaluation by a professional evaluating agency. Transcripts not in English must be accompanied by a notarized English translation.
- Official college or university transcripts accompanied by a course-by-course formal evaluation by a professional evaluating agency in the U.S. (for courses taken outside the U.S.).
- Official English proficiency examination results must be submitted to Worcester State University directly from the testing agency, for all applicants who have studied in a country where English is not the native language. Examinations and minimum scores accepted by Worcester State University can be found below. For additional information, please contact the WSU Admissions Office at 508-929-8040.

• IBT TOEFL	71
• IELTS	6.0
• Pearson PTE	50
• Duolingo	100
• DAAD	B2
• EIKEN	Pre-1
• iTEP	3.5
- Applicants who have earned an Associate of Arts or Associate of Science degree from a regionally accredited U.S. college or university are not required to submit a TOEFL, IELTS, or a comparable test score report.
- Standardized test scores like the SAT or ACT are no longer required. Students may opt-in to our test optional policy, in which it is highly recommended to submit a personal essay to support your application.
- Completed and notarized WSU Financial Affidavit form with appropriate backup documentation, all educational expenses incurred while at Worcester State for one academic year (currently a minimum of \$32,200 U.S. dollars¹).
- A copy of the identification page of the student's passport.

- International applicants, who have attended another college or university or secondary school in the U.S., must forward a copy of their Form I-20 with their application.

Transcripts and other documents submitted in languages other than English must be accompanied by an English translation and course-by-course evaluation (if applicable) from a recognized agency or organization. For a list of approved evaluating agencies, please contact the Admissions Office. Students wishing to transfer in credit completed at a non-U.S. institution must be prepared to submit a course description and/or syllabus to the appropriate department chair in order to be granted credit.

Worcester State will not issue a Form I-20 to international applicants until the admissions deposit is paid. The admissions deposit deadline for the Fall semester is May 1st. There will be no exceptions to this deadline.

¹ Subject to change

International Baccalaureate (IB) Credit

The following equivalencies have been established for High-Level IB exams. Students who receive an IB Diploma and meet minimum honors admission criteria will be invited to participate in WSU's Honors Program.

Exam	Score 4	Score 5-7
Biology	BI-101 (4)	BI-101 (4)
Business & Management	BA-1XX (3) (elective)	BA-200 (3)
Chemistry	CH-110 (4)	CH-120 (4)
Computer Science	CS-101 (3)	CS-101 (3)
Economics	No Credit	EC-110 (3) and EC-120 (3)
English A1 (HL)	EN-105 (3)	EN-105 (3)
Film	CM-241 (3)	CM-241 (3) and CM-2XX (3)
Geography	GE-102 (3)	GE-102 (3)
History	HI-2XX (European elective) (3)	HI-2XX (European elective) (3)

Information & Technology for a Global Society (ITGS)	No Credit	UR-230 (3)
Mathematics	MA-200 (4)	MA-200 (4) and MA-201 (4)
Modern Languages	SP-101/FR-101/ WL-101 (3) and SP-102/FR-102/ WL-102 (3)	SP-210/FR-210/ WL-210 (3) and SP-211/FR-211/ WL-211 (3)
Music	MU-100 (3)	MU-100 or MU-101 or MU-115 (3) ¹
Philosophy	PH-100 (3)	PH-100 (3) and PH-110 (3)
Physics	No Credit	PY-105 (3)
Social & Cultural Anthropology	SO-110 (3)	SO-110 (3) and SO-2XX (3)
Theatre Arts	TH-191 (3)	TH-191 (3)
Visual Arts	AR-100 (3)	AR-100 (3) or AR-112 or AR-113 (3) ¹

¹ Consult with department.

MassTransfer

MassTransfer is a collaboration between the Commonwealth's community colleges, state universities, and the University of Massachusetts. System-wide resources and policies allow for students to transfer seamlessly, stay on track and minimize the time it takes to earn a bachelor's degree. For more information, please visit <http://www.mass.edu/masstransfer>.

Benefits for students who complete associate's degrees under MassTransfer are:

Minimum Final GPA	Benefits
2.00 GPA	No admission fee or essay
2.00 GPA	Guaranteed full transfer of a minimum of 60 credits applied to the bachelor's degree, if admitted

2.00 GPA	Satisfaction of the general education/distribution/core requirements at the receiving institution, with the receiving institution able to add no more than six additional credits/two courses, if admitted
2.50 GPA	Guaranteed admission, plus all of the above benefits
3.00 GPA	A 100% tuition discount, plus all of the above benefits (must be used within one year after date of graduation)

A2B Linked Degrees

Beginning a college career at a community college can be a good choice. MassTransfer seeks to reward community college students who complete associate degrees at Massachusetts community colleges before they enroll in linked bachelor’s programs at Massachusetts state universities or University of Massachusetts campuses. Not only does MassTransfer guarantee full transfer of a minimum of 60 credits but, depending on their final GPA and/or prerequisite coursework, students who complete A2B Linked Degrees (Associate to Bachelor’s) may also receive guaranteed admission and tuition discounts.

A2B Mapped Degrees

Students who complete A2B Mapped Degrees are guaranteed that courses listed and taken as major requirements will be accepted as major requirements at the receiving institution. Full-time students who follow A2B Mapped agreements and who earn a 3.00 GPA or higher also have the opportunity to participate in the Commonwealth Commitment. The Commonwealth Commitment (available in A2B Mapped majors only) further rewards students with a freeze on tuition & fees for all four years, and 10% end-of-semester rebates.

General Education Foundation

MassTransfer provides any student in the Massachusetts public higher education system who completes the General Education Foundation with the benefit of satisfying the general education/distribution/core requirements at any other public high education institution (with the receiving institution able to add no more than six additional

credits or two courses). Worcester State University asks students to complete two general education courses of the student’s choice.

English Composition/Writing	6 credits
Behavioral and Social Sciences	9 credits
Humanities and/or Fine Arts	9 credits
Natural or Physical Science	7 credits
Mathematics/Quantitative Reasoning	3 credits
Total Credits	34 credits

Stipulations:

- The General Education foundation can be completed without finishing an associate degree
- Students enrolled in a specific major or degree program may be required to take additional courses if these courses are specifically required for the major or program and are required of native students.
- Completion of the General Education Foundation does not guarantee admission to the college or university

Non-Traditional Applicants

When students apply to Worcester State more than three years after high school graduation and have never attended a college or university, they do not need to meet the admission standards for first-year students. Instead, they must show they are capable of succeeding at Worcester State based upon their high school transcript grades. Other factors may be used as part of the admission process. A current resume or personal statement outlining life experience, career goals and specific reasons for applying to Worcester State may be submitted with the application.

Post-Baccalaureate Pre-medical and Health Professions Program

This is a part-time certificate program offered through the WSU Division of Graduate and Continuing Education (DGCE) that is expected to meet the needs of students interested in medical, dental and veterinary school as well as those interested in pharmacy, physician assistant, physical therapy, and optometry programs. Each student’s history

is evaluated, and appropriate courses are advised based upon their specific needs. Students have access to Worcester State's Pre-Medical and Health Professions Advisory Committee and, if necessary for a program, the committee recommendation letter process.

Students who complete thirty credits of the basic core sciences and/or other elective pre-health courses at Worcester State University will receive a certification of completion of the program. Up to eight transfer credits will be allowed to contribute to the thirty credit total. Students will be required to maintain a 3.0 GPA to remain eligible for the program.

This program is designed for students who need the basic science curriculum either as new courses (career changers) or as repeat attempts (GPA enhancement). A GPA of 2.75 overall is required for admission to the program along with two letters of recommendation (no test scores required). Students wishing to take an advanced curriculum are advised to seek a second baccalaureate degree through the undergraduate school. The basic courses are offered throughout the academic year, primarily in the evening. Summer courses are also available. Interested students should contact the DGCE Office or the coordinator of the program at premed@worchester.edu. Additional information and application materials are available at <http://www.worchester.edu/premed>.

Below is a list of the basic core courses and available electives. Since health professions programs differ in their requirements, students should contact the Pre-Med Advisor prior to registration to make sure they are taking the correct courses.

The Basic Core

Code	Title	Credits
CH-120	General Chemistry I (including lab)	4
CH-121	General Chemistry II (including lab)	4
BI-140	Introduction to Organismal Biology (including lab)	4
BI-141	Intro to Cellular and Molecular Biology (including lab)	4
CH-201	Organic Chemistry I (lecture)	3
CH-202	Organic Chemistry II (lecture)	3

CH-203	Organic Chemistry Laboratory I (lab)	2
CH-204	Organic Chemistry Laboratory II (lab)	2
PY-221	General Physics I (including lab)	4
or PY-241	Physics I (Mechanics)	
PY-222	General Physics II (including lab)	4
or PY-242	Physics II (Electricity, Magnetism and Optics)	

Science and Math Elective Courses

Code	Title	Credits
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-150	Statistics I	3
BI-203	Genetics	4
CH-410	Biochemistry I (including lab)	4
BI-161	Human Anatomy and Physiology I	4
BI-162	Human Anatomy and Physiology II	4
BI-204	Microbiology	4

Additional Admission Criteria for Selective Majors

Nursing (BSN Track 1) and Occupational Studies (BSOS) are selective majors and have rigorous admission criteria and firm application deadlines which students must meet in order to be considered eligible to apply. Meeting minimum criteria and application deadlines does not guarantee a student's admission. First-year and transfer applications are processed through the Undergraduate Admissions Office. External transfers to Occupational Studies are not accepted. Current Worcester State students are not able to change their major to Nursing (BSN Track I) or Occupational Studies (BSOS). Students who are competitive for admission to a selective major will have completed all appropriate pre-requisite courses and have an outstanding academic record.

NOTE: First-year students applying to the Occupational Studies or Nursing (track I) majors for Fall 2025 admission may participate in the University's test-optional admission policy. Students who apply to these majors as test-optional candidates will be evaluated

based on their academic record, including course selection, rigor of curriculum, and grades earned. Students eligible for admission to the major should have a minimum re-calculated high school GPA of a 3.0 for occupational therapy and 3.2 for Nursing (Track I). Meeting this minimum re-calculated high school GPA does not guarantee admission to the major. Students who choose not to submit test scores will not be negatively impacted for consideration.

The following is used, along with other criteria, in considering applications to selective majors:

First-Time Applicants to Nursing (BSN Track 1)

First-time Applicant Early Action Deadline: November 15

First-time Applicant Application Deadline: January 15

First-time Applicants must have a re-calculated High School GPA equal to 3.2 or greater (on a 4.0 weighted scale) and SAT scores equal to a combined evidence-based reading and writing (EBRW) and math (M) score of 1130 or greater or ACT Composite score equal to 23 or greater, if not applying as a test-optional applicant.

Transfer Applicants to Nursing (BSN Track 1)

Transfer Application Deadline: January 15

Transfer applicants into Nursing (BSN Track 1) must complete all prerequisite courses and submit official TEAS exam scores. To be eligible for admission, students must complete English Composition I and II, Anatomy and Physiology I and II, General Microbiology or Medical Microbiology, 4-credit lab-based Chemistry course, Statistics I, and Introduction to Psychology and Sociology (in progress coursework will not be considered) and score a 78 or higher for the Test of Essential Academic Skills (TEAS) exam. Students must have a minimum cumulative college GPA of a 3.0 or greater and grades of B- or better in all pre-requisite courses. Meeting minimum standards does not guarantee admission which is based on space availability. Students are considered for admission into the first-year cohort.

The application and all required supporting documents including official final high school transcript(s) and official college transcript(s) must be received by the January 15 firm deadline for transfer applicants. All required courses for transfer must be completed by December 31st of the current fall semester when applying for admission.

Transfer Applicants to Occupational Studies

Due to lack of space availability, external transfer applications are not accepted for Occupational Studies.

Transfer applicants with questions should contact the Admissions Transfer Center at 508-929-8018.

Current Worcester State students may not change their major to Nursing (BSN) or Occupational Studies. Students are encouraged to meet with their academic advisor.

Public Health - Pre-Nursing Program

The Public Health - Pre-Nursing Program is a dual-degree based on a formal affiliation agreement that admits a limited number of students into an articulated program that begins with 83 credits at WSU in the Public Health/Pre-Nursing program and ends with the accelerated Bachelor of Nursing program at the Massachusetts College of Pharmacy and Health Sciences University (MCPHS University) Worcester or Manchester, NH campus. At the completion of the appropriate 37 credits (of the 63 required) at MCPHS University, the student transfers those credits back to WSU, and earns a Bachelor of Science in Public Health. The student then completes the additional number of appropriate credits (26) at MCPHS University to earn the B.S. in Nursing. Students should see the advisor in the Health Sciences department assigned to the program. *Please see entrance requirements in this catalog.*

The Bachelor of Science in Public Health requires 83 credits at WSU followed by the 63 credits in Nursing which will be taken at the MCPHS University campus in either Worcester or Manchester, NH.

Pre-entrance Immunization Requirements

New first-year and transfer students must submit required health forms (p. 68) before registering for courses. For additional information refer to the Health Services (p. 69) section of this catalog.

Second Baccalaureate Degree

Applicants who have already earned a bachelor's degree may apply for a second baccalaureate, excluding Early Childhood Education, Elementary Education, Occupational Studies (BSOS) and Undeclared. Requirements for this degree can be found in this catalog.

Special Admission

If standards for first-year, transfer or non-traditional students are not met, acceptance may still be possible based upon other signs of potential for academic success in a four-year college or university program. Possible signs of success include steadily improving high school grades, high school class ranking, special talents, and strong recommendations.

Special Non-Matriculated Students

Students classified as Senior Citizens, College Academic Program Sharing (CAPS) and Higher Education Consortium of Central Massachusetts (HECCMA) may enroll as Special Students. Others may enroll up to a maximum of 11 credit hours in day classes, on a space available basis at a time designated by the Registrar. Others who wish to enroll for more than 11 credit hours in state-supported courses must be admitted to Worcester State through the Admissions Office before taking courses. Non-matriculated students may register for evening classes through the Division of Graduate and Continuing Education during their registration periods.

Student Right-to-Know Act

The Student Right-to-Know Act of 1990 requires Worcester State to make available to prospective and enrolled students the graduation or persistence rates of selected groups of students. This information is

available for review through either the Enrollment Management or the Undergraduate Admissions Offices.

Transfer Student Admission

Students who do not enroll as first-year students may attend a community college or other college or university and then transfer to Worcester State. To do so, one of the following requirements must be met:

1. 12-23 transferable college credits and a minimum 2.5 college GPA;
2. Up to 23 transferable college credits, a minimum 2.0 college GPA, and a combination of high school grades and SAT/ACT scores that meet the admission standards for first-year applicants; OR
3. 24 or more transferable college credits and a minimum 2.0 college GPA.

If college credits have been earned while enrolled in high school, the admission standards outlined above for first-year student applicants must be met.

Previously attended college/university:

Complete, official transcripts of all work taken at any other institution must be submitted as part of the application process, whether or not credit for such work is desired or expected. Students who fail to acknowledge attendance at any college or university in which they have been enrolled automatically waive the right to have that work considered for transfer credit. They may also be subject to denial of admission, loss of course credit, and/or suspension from Worcester State.

Transferring Credit from Other Institutions

Worcester State University determines transferability of credits from other colleges and universities based on best practices as outlined by the American Association of Collegiate Registrar's and Admission Officers (AACRAO), the American Council on Education (ACE), and the Council for Higher Education Accreditation (CHEA). Transfer and allocation of credit is determined based on the sending institution's regional accreditation, the comparability of the learning experience to WSU, and the applicability of the learning experience to the student's selected major/minor at WSU.

Stipulations that apply to transfer credit include:

1. College-level courses completed at colleges and universities accredited by the New England Commission of Higher Education (NECHE), or similar regional associations, are acceptable for transfer to Worcester State University.
2. Coursework completed at non-regionally accredited institutions is considered on an individual basis, through a thorough examination of course content, syllabi, and/or learning objectives. Students may appeal the denial of transfer of credit from non-regionally accredited institutions to the Admissions Transfer Center.
3. Transferability and allocation of courses to Liberal Arts and Sciences Curriculum (LASC) and/or free electives must be approved by the Admissions Transfer Center and Academic Success Center, according to established LASC transfer policies (p. 37).
4. Substitutions of transfer credit in the requirements of the major/minor must be approved by the department in which the major/minor is housed.
5. The completion of the MassTransfer General Education Foundation at any Massachusetts community college, satisfies the WSU general core/LASC requirements, with the addition of two courses (6 credits) of the student's choice selected from two different LASC Content Areas and stamped with MassTransfer Block Complete or MassTransfer Gen Ed Foundation Complete. The completion of a Bachelor's Degree from any regionally accredited institution of post-secondary education satisfies the WSU general core/LASC requirements. Completion of the Bachelor's Degree is confirmed upon receipt of an official transcript from a regionally accredited college or university with a degree completion graduation date.

Transfer students without the MassTransfer General Education Foundation or a Bachelor's Degree can transfer a maximum of 40 credits into LASC.
6. The maximum number of credits that can be transferred from a community or junior college to WSU is 72. The maximum number of credits that can be transferred from a four-year institution to WSU is 90. If a student has attended a combination of two-year and four-

year institutions, a maximum of 90 credits, including no more than 72 credits from the two-year college(s), can be transferred.

7. A residency requirement at WSU exists, which includes completion of at least 30 of the last 40 credits of any degree program and completion of more than half of the major/minor courses while matriculated at WSU.
8. All transfer courses must be college-level. WSU does not accept remedial or developmental coursework in transfer.
9. Courses earned with grades of C- or better will be considered for transfer.
10. Life experience credit, internships, practica, colloquia, and cooperative education experiences at another college generally do not transfer to WSU. Credit for such experiences may be offered to adult learners through the Prior Learning Portfolio Program or through a review with the American Council of Education (ACE) College Credit Recommendation Service.
11. A transfer credit evaluation is prepared for new transfer students upon their acceptance to WSU. The transfer credit evaluation summary and estimated number of transfer credits to WSU is attached to the student's acceptance email sent by the Admissions Transfer Center.

Veteran/Military Applicants (VALOR Act Academic Credit Evaluation Policy)

The WSU Veteran/Military VALOR Act Academic Credit Evaluation Policy is designed to:

- Assist veteran/military applicants through the admission processes, which may require different standards and practices from the traditional freshman/transfer admission procedures.
- Assist with specific challenges and concerns as well as provide additional support in the applicant's re-acclimation to civilian life.
- Provide additional support structures to maximize success in a degree program.
- Maximize benefits students may qualify for, based on their years of service.

The Worcester State University Veteran/Military VALOR Act Academic Credit Evaluation Policy allows academic credit to be awarded for students' previous military occupation, military training, coursework and experiences towards degrees and certificates. The awarding of academic credit shall be determined by the Worcester State Admission Office and Academic Success Center, as defined by WSU policy and national best practices. Eligible students shall receive accurate and complete academic counseling in regards to the policy when they are admitted.

Admissions may use multiple methods for evaluating military occupation, training, experience and coursework for academic credit, including the ACE Guide to the Evaluation of Educational Experiences in the Armed Services, CLEP, DANTES Subject Standardized Tests, and other methods. The appropriate method for evaluation is determined by Worcester State University, based on the type of military occupation, training, experience and coursework.

Once Admissions has posted credit to the student's academic record, the Academic Success Center will review the student's credit along with his/her program of study to determine the allocation of military credit in appropriate areas. All inquiries regarding the specific allocation of military credit should be directed to the Academic Success Center.

To Request Military Transcripts:

Military members and veterans (except the Air Force) can obtain military transcripts from the Joint Services Transcript system. Air Force Transcripts are available from The Air University.

To Request Military Medical Records:

To attend WSU, students must provide medical documentation. Military and veteran medical records are available from the U.S. Department of Veterans Affairs.

Admissions Contact:

Christopher Dooley, Assistant Director of Admissions
Administration Building, Office 241
cdooley@worchester.edu
508-929-8793

Academic Success Center Contacts:

Tammy Tebo, Assistant Dean of Academic Services
Administration Building, Office 130
TTebo1@worchester.edu
508-929-8933

Academic Supports, Policies, and Procedures

- Academic Achievement Awards Ceremony (p. 35)
- Academic Advising (p. 35)
- Academic Honesty (p. 35)
- Academic Reprieve Policy (p. 35)
- Academic Support Services (p. 35)
- Certificate (p. 35)
- Community Standards (p. 60)
- Concentration (p. 35)
- Course Formats (p. 35)
- Dean's List Criteria (p. 35)
- Electives (p. 35)
- General Requirements for the Baccalaureate Degree (p. 35)
- Good Student Policy (p. 36)
- Graduation Honors (p. 36)
- Intent to Graduate (p. 36)
- International Programs (p. 37)
- Laptop and Technology Requirement (p. 37)
- Liberal Arts and Sciences Curriculum WSU - Pathways to Discovery (p. 37)
- MajorPlus (p. 56)
- Matriculation (p. 57)
- Multicultural Affairs (p. 57)
- Prior Learning Portfolio Program (p. 58)
- Program (p. 60)
- Registration and Course Credit Information (p. 60)
- Standards of Progress (p. 60)
- Transcripts (p. 60)
- Undergraduate Grade Appeal Procedure (p. 60)
- Withdrawal from Worcester State University/ Leave of Absence (p. 60)

Academic Achievement Awards Ceremony

Conducted annually, the Academic Achievement Awards Ceremony gives special recognition to Worcester State University students who excel academically. Students so honored include the top academic performers in each class year, the ranking students in individual disciplines, and other high-achieving students.

Academic Advising

All incoming first-year students are assigned an academic advisor in the Academic Success Center and a faculty advisor in their major department. Faculty and Academic Success advisors work together to advise students in their first year at Worcester State. After the first year, students remain with their faculty advisor for the duration of their degree. Students who have an Undeclared major will remain with their ASC advisor until they declare a major. Students can locate their advisor's information in Self-Service.

Students must have their faculty advisor approve course schedules for preregistration, as well as all courses taken off-campus, using appropriate forms available in the Office of the Registrar. A student should contact their faculty advisor whenever information or an opinion on an academic matter is needed. Academic Success Center advisors have regular hours and students can contact their advisor directly to make an appointment. All faculty advisors have hours set aside for students each week during the normal fall and spring academic semesters.

Academic Honesty

Academic Reprieve Policy

Academic Support Services

Academic Success Center

The Academic Success Center is located in the Administration Building, Room 130. The work of this office focuses on:

- First semester advising (for new first-year students and transfer students)
- Testing services CLEP administration
- Academic Advising for Undeclared and Liberal Studies students
- Academic support services for new students
- Registration assistance for students who are on academic probation

Math Center

The Worcester State University Math Center provides peer tutoring for all courses with mathematical content. These courses include those offered by the Business and Economics, Computer Science, Chemistry, Nursing, Psychology, and Physics departments. Tutoring is also available for math courses starting from MA-098 / MA-099 Developmental Math through MA-201 Calculus 2, as well as, math placement test preparation for students taking or retaking the placement exam. The Math Center is a resource free of charge to all students and is located in Sullivan 140.

Writing Center

Worcester State University's Writing Center is located in Sullivan 306. Staffed by friendly, knowledgeable peer consultants, the Writing Center is a space where students have productive conversations about their writing. All services at the Writing Center are offered free of charge. For more information about how to schedule an appointment and about the kind of work you will be doing with our trained consultants, visit our main page.

Certificate

Concentration

Course Formats

Dean's List Criteria

Electives

General Requirements for the Baccalaureate Degree

Good Student Policy

Graduation Honors

Intent to Graduate

The degree and diploma will be granted within 60 days of the final day of examinations for the semester in which degree requirements have been met providing that students have adhered to the following deadlines for filing an Intent to Graduate Form:

Date of Completion	Deadline
December completion:	Last Friday of October
May completion:	Last Friday of December
August completion:	Last Friday of May

International Programs

International Students

Worcester State University is authorized to host both F-1 and J-1 international students, scholars, and professors. The Office serves the Worcester State University international community in a variety of ways, including pre-attendance visa advising, on-campus orientation and comprehensive support services throughout the duration of students' academic programs at Worcester State University.

All international students must have a valid student visa to travel to the U.S. and are required to pursue a full course of study at all times. Under the policy of the US Department of Homeland Security, all international students must report to the Office of International Programs after their initial entry into the U.S. and at the start of each semester thereafter. Additional information on international applicants can be found on the Admissions page.

Education Abroad

Worcester State University strongly encourages students to participate in some form of study abroad experience during their time as an undergraduate. To participate, students must have a minimum GPA of 2.0 and sophomore standing. To facilitate such opportunities, Worcester State University offers an array of domestic and international exchange opportunities. Worcester State University students can earn academic credit on both short and long-term programs throughout the year. All major

courses must be approved with the assistance of academic departments in advance of travel for credits to transfer back to Worcester State University. LASC requirements must be approved by the LASC coordinator. The grades earned for study abroad will be posted as letter grades which will not factor into the student's GPA. Interested students are strongly advised to communicate their intention to study abroad early in their academic career.

International Exchange Opportunities

Worcester State University has entered into multiple exchange and university partnership agreements with institutions in a variety of locales including the U.K., China, South Korea, and the Czech Republic. Courses are offered in English and students have the opportunity to learn the native language as well. Per the conditions of the exchange agreements, Worcester State University students pay Worcester State University tuition and fees to Worcester State University and accommodation fees to the host institution.

The National Student Exchange

The National Student Exchange (NSE) offers students the opportunity to participate in exchange opportunities with nearly 200 institutions in the U.S., Canada, and the U.S. territories enabling participating students to attend another NSE school at either the home or host school in-state tuition rate. Reciprocal tuition exchanges are available in 48 states including Alaska and Hawaii and in the three U.S. territories of Guam, Puerto Rico and the U.S. Virgin Islands. NSE offers students the opportunity to live and learn in a different academic and geographical setting for up to one academic year. The NSE requires a minimum GPA of 2.5 and sophomore standing to participate.

Short-Term Programs

Worcester State University offers a variety of short-term, one to four weeks, programs each academic year. Popular destinations include: the U.K., Ireland, Spain, Portugal, and the Dominican Republic. These programs are offered over January Break, Spring Break, and during the summer semesters. These faculty-led credit-bearing overseas learning experiences are focused and affordable and are designed to provide greater accessibility to students and to cover a breadth of academic interests and

geographical destinations. All students are eligible for participation provided they meet the minimum program requirements.

Laptop and Technology Requirement

Liberal Arts and Sciences Curriculum WSU - Pathways to Discovery

An education in the liberal arts and sciences enables students to understand their world, and it equips them to analyze, appreciate, and affect that world.

With these aims in mind, the faculty at Worcester State University have designed the University's Liberal Arts and Sciences Curriculum (LASC) to ensure breadth both in the range of subjects that students will encounter and in the range of approaches to that material. In addition, the Liberal Arts and Sciences Curriculum emphasizes the fundamental abilities and attitudes that make it possible to benefit fully from a liberal education.

While the specialization provided by major and minor fields of study is essential to a college education, the breadth and integration provided by the Liberal Arts and Sciences Curriculum supply an invaluable context for understanding the wider world.

Given the crucial importance of languages other than English in today's global society, the University strongly encourages the study of world languages, through the majors and minors, and also through combining the requirements in Global Perspectives and Thought, Language, and Culture. Students may also choose to study languages through their elective courses.

The Liberal Arts and Sciences Curriculum is aimed at achieving the following student learning outcomes. Having completed courses in the Liberal Arts and Sciences Curriculum, students will:

- Demonstrate effective oral and written communication.
- Employ quantitative and qualitative reasoning.
- Apply skills in critical thinking.
- Apply skills in information literacy.
- Display an appreciation for the interrelations among global and cross-cultural communities.
- Develop a critical understanding of the U.S. experience.
- Understand the roles of science and technology in the modern world.
- Demonstrate and value personal creative expression.
- Understand how scholars in various disciplines approach problems and construct knowledge.
- Display socially responsible behavior and act as socially responsible agents in the world.
- Make connections across courses and disciplines.
- Develop as healthy individuals – physically, emotionally, socially, ethically, and intellectually.

Core Course Requirements

Core courses may not double with content area course requirements.

- Writing (WR1, WR2) (p. 56)
- Constitutions (CON) (p. 38)
- First-Year Seminar (FYS) (p. 41)

Content Area Course Requirements

Students will complete courses in nine content areas.

- Creative Arts (CA) (p. 39)
- Diversity (DIV) (p. 40)
- Human Behavior and Social Processes (HBS) (p. 44)
- Individual and Community Well-being (ICW) (p. 46)
- Global Perspectives (GP) (p. 42)
- Natural Systems and Processes (NSP) (p. 49)
 - Natural Systems and Processes (LAB) (p. 48)
 - Non-approved LASC lab (NLL) courses do not meet the requirement for a LASC LAB course
- Quantitative Reasoning (QR) (p. 50)
- Thought, Language, and Culture (TLC) (p. 53)
- The United States and Its Role in the World (USW) (p. 51)

LASC Transfer Policies

The following are the default transfer equivalences.

When courses transfer into specific Worcester State courses, they carry specific LASC designations, however, the transferred courses will meet LASC requirements in the same way as the courses into which they have transferred.

- Mathematics courses will be transferred as QR for maximum of six credits in LASC.
- Science courses in Physics, Chemistry, Biology, and GeoSciences transfer as NSP for a maximum of seven credits. A lab science course transfers as a NSP lab course.
- Psychology, Economics, Political Science, Anthropology, Cultural Geography, Sociology, and Education courses transfer as HBS for a maximum of three credits.
- Philosophy, Literature, Religion, Communication (theory), and Language courses transfer as TLC for a maximum of three credits.
- Art, Communication (applied), Music, and Theatre courses transfer as CA for a maximum of three credits.
- Health and Nutrition courses transfer as ICW for a maximum of three credits.
- History courses transfer as USW, GP or TLC for a maximum of six credits.
- All other transfer courses will be reviewed individually by the LASC Program Coordinator, in consultation with appropriate academic departments, the LASC Advisory Board, or the Associate Vice President for Academic Affairs.

Major and Minor Courses Counting Toward LASC

- For students who entered WSU prior to Fall 2021, courses in the Liberal Arts and Sciences Curriculum may not be used to meet the primary requirements of a first major, but may be used to satisfy the requirements of a second major or a minor.
- Student who entered WSU in Fall 2021 or later, that is, those under MajorPlus, may apply up to three courses approved for different LASC requirements from their first major toward LASC

requirements. All courses in a second major or any minor that meet LASC requirements are eligible for LASC credit.

Constitutions (CON) (3 credits)

Students must complete one course that teaches the constitutions of the United States and the Commonwealth of Massachusetts. Courses which meet this requirement will:

- Require students to study the Constitutions of the Commonwealth of Massachusetts and of the United States.
- Consider the historical context, addressing
 - antecedents in English law
 - the idea of written fundamental law
 - the context of colonial history
 - failed predecessors (e.g., the 1778 constitutions and the Articles of Confederation)
 - mechanism of drafting, ratification, and amendment
 - influence of the Massachusetts Constitution on the U.S. Constitution.
- Consider political thought in contemporary society, addressing
 - how each constitution shapes modern life
 - differing interpretations, including by the courts
 - current issues related to each constitution
 - basic national, state and/or local political processes, and the rights and obligations of citizenship.

Code	Title	Credits
HI-111	US History to 1877	3
HI-112	US History 1865 to the Present	3
HI-140	We the People: Writing the Constitution (writing I)	3
HI-218	US Constitutional History I	3
HI-219	US Constitutional History II	3
HI-268	American Revolutionary Period	3
HI-320	Citizen Nation	3
PH-151	Race, Gender, and the Law	3
PH-231	Philosophy of Law	3

PH-335	Animal Law & Policy	3
PO-110	American Government	3
PO-150	Foundations of Legal Studies	3
PO-217	The U.S. Congress	3
PO-318	Constitutional Law of Government Powers And Constraints	3
PO-319	Constitutional Law of Civil Rights and Liberties	3
PO-320	Citizen Nation	3
PO-380	American Foreign Policy Since the Cold War	3

Creative Arts (CA) (3 credits)

Students must complete one course.

Courses in this area:

- Encourage recognition that artistic expression varies from one society and culture to another.
- Explore different traditions, styles and historical periods in the arts.
- Promote freedom of expression and tolerance of divergent viewpoints.
- Consider the importance of aesthetics and instill an awareness of how the arts improve the quality of life.
- Enable each student to cultivate his/her/their creative potential.
- Teach the terminology, techniques and skills that comprise the arts in order to provide the framework for informed creativity.

Code	Title	Credits
AR-100	Cross Media Studio	3
AR-118	Global Art History	3
AR-123	Design Fundamentals	3
AR-130	Painting I	3
AR-140	Drawing Fundamentals	3
AR-150	Life Studio I	3
AR-165	Creating Cultural Forms	3
AR-210	Drawing and Painting Studio	3
AR-215	Art Theory and Practice	3
AR-221	The Work of Art	3
AR-225	Art Since Mid-20th Century	3
AR-230	Printmaking	3

AR-235	3D Sculpture Studio	3
AR-240	Watercolor	3
AR-260	Visual Arts in the Schools	3
AR-270	Driftwood to Dumpsters	3
AR-285	History of Photography	3
AR-308	Thesis Seminar	3
AR-312	Methods and Materials in Studio Art	3
AR-313	Illustration	3
CM-150	Photography I	3
CM-151	Introduction to Digital Photography	3
CM-160	Introduction to Digital Imaging	3
CM-241	Understanding Movies	3
CM-242	Understanding Video Games	3
CM-244	Graphic Design I	3
CM-259	Television Production	3
CM-260	Introduction to Video	3
CM-285	History of Photography	3
CM-315	Social Media	3
CM-360	Television Production II	3
CM-396	Video Editing	3
ED-348	Teaching Children's Literature	3
EN-165	The Art of Storytelling	3
EN-168	Film and Literature	3
EN-230	Environmental Literature	3
EN-256	Creative Writing: Fiction	3
EN-257	The Power of Memoir	3
EN-258	Creative Writing: Nonfiction	3
EN-260	Creative Writing: Poetry I	3
EN-262	Creative Writing: Poetry II	3
EN-268	Journalism: Feature Writing	3
EN-353	Narrative Journalism	3
HE-140	Creative Arts and Health	3
HI-227	American Popular Art and Architectural History	3
HI-375	Popular Music and Performance in Modern Africa	3
MU-101	Fundamentals of Music and Aural Skills	3
MU-104	Class Piano	1
MU-115	Music Appreciation	3
MU-125	Jazz Appreciation	3
MU-140	World Music	3
MU-185	Composition I	3

MU-205	Music Theory I	3
MU-215	Chorus and Music Theory	3
MU-220	Chorus	0.5-1
MU-222	African Drumming	0.5-3
MU-223	African Drumming II	3
MU-228	Piano Ensemble	1
MU-231	Women in Music	3
MU-237	Music in the Elementary School	3
MU-250	Music of the Cinema:Spectacle, Splendor, And Spielberg	3
MU-280	History of Music	3
MU-300	Chorale	0.5-1
MU-305	Music Theory II	3
MU-321	Small Ensemble	0.5-1
MU-326	Chamber Orchestra	0.5-3
NH-257	The Power of Memoir for Narratives of Health and Medicine	3
NH-260	Creative Writing: Poetry I for Narratives of Health and Medicine	3
PH-262	Philosophy of Art	3
PY-110	Astrophotography	3
SO-235	Music and Social Change	3
SP-331	Spanish Civilization	3
TH-126	Script Analysis	3
TH-145	Acting I	3
TH-175	Introduction to Stagecraft	3
TH-191	Introduction to the Theatre	3
TH-263	Concepts of Theatre Design	3
TH-270	History of American Entertainment I	3
TH-271	History of American Entertainment II	3
TH-272	History of Costume	3
TH-274	Stage Management	3
TH-290	Theatre for Young Audiences	3
TH-292	Applied Theatre and Community Engagement	3
TH-321	Rehearsal and Performance	3
TH-348	Stage Combat	3
TH-360	Scenic Design for Theatre	3
TH-370	Costume Design for Theatre	3
TH-390	Lighting Design for Theatre	3

UR-275	Urban Art	3
VP-200	Critical Thinking in the Arts	3
VP-210	Contemporary Dance Styles I	3

Diversity (DIV) (3 credits)

Students must complete one course in the diversity area. Courses which meet this requirement will:

- Compare/contrast intersectional structural inequalities within society, including those that maintain privilege.
- Examine the ways structural inequality, including privilege, has shaped/continues to shape the lived experiences of the individual and/or multiple groups within society.
- Discuss materials written or co-written by members of diverse groups that explain their lived experience in their own voices.
- Compare/contrast materials written or co-written by members of diverse groups that explain their lived experiences in their own voices with materials written by majority group members.
- Describe the contributions of diverse individuals within the area of study.
- Examine how one's multiple social identities, including privileged identities, inform/impact one's interactions with others.
- Critically apply the language and methodologies used by scholars of diversity within the respective field.
- Distinguish facts from opinion regarding diversity within the field and society broadly.
- Describe the need for a social justice and equity-based approach to the field.

Code	Title	Credits
CM-213	Gender and the Media	3
CM-384	Media Criticism	3
ED-270	Diversity & Multicultural Ed	3
ED-304	Best Practices for English Language Learners	3
ED-339	Children's Literature: Multicultural Literature for PK-9	3
EN-115	LGBTQ+ Narratives	3
EN-120	Race in Comics	3
EN-132	World Literature	3

EN-164	Fairy and Folk Tales From Around the World	3	PH-327	Feminist Medical Ethics	3
EN-167	Literature and Human Rights	3	PO-120	Global Politics	3
EN-170	Search for Identity	3	PO-203	Gender, War and Peace	3
EN-210	U.S. Literature (Beginnings-1865)	3	PO-204	Women in Politics	3
EN-211	U.S. Literature (1865-Present)	3	PO-205	Poverty and Development	3
EN-322	Community Writing	3	PO-243	City Politics	3
EN-358	Disability Stories, Disability Studies	3	PO-264	American Political Thought	3
EN-370	Antislavery Literature	3	PO-320	Citizen Nation	3
HC-202	Introduction to Global Health	3	PO-327	Global South Leadership in the United Nations	3
HI-155	World History Through Film	3	SO-190	Sport and Society	3
HI-178	A History of Ghana	3	SO-200	Contemporary Social Problems	3
HI-205	Native America	3	SO-201	Prejudice, Privilege, and Power	3
HI-217	US Social History	3	SO-228	Latinx Experiences in the U.s. and the World	3
HI-252	Civil War and Reconstruction	3	SO-303	Environmental Sociology	3
HI-263	The Modern Middle East, 1900-present	3	SO-307	Puerto Rican Diaspora	3
HI-274	The History of Gender and Sexuality in America	3	SO-312	Youth, Race, and Public Space	3
HI-278	African History Before 1800	3	SO-318	Worcester and Its Discontents	3
HI-279	African History Since 1800	3	SO-320	Sociology of Race and Ethnicity	3
HI-320	Citizen Nation	3	SO-350	Wealth, Poverty, and Power	3
HI-327	Out of Place: Displacement, Refugeehood, Migration in or of the Middle East	3	SO-360	Urban Sociology	3
HI-336	Race, Sex, and Power in the American South	3	UR-201	Introduction to Urban Policy	3
IS-100	Introduction to African and African Diaspora Studies	3	UR-214	Urban Demography	3
LA-357	Latinx Podcasts	3	UR-220	Immigrant City	3
NU-340	Nursing Science II: Pediatrics (Track I)	4.5	UR-280	The Queer City	3
NU-346	Nursing Science II: Pediatrics (Track III)	3.5	UR-312	Worcester: A City & Its People	3
NU-432	Advanced Nursing Perspectives in Chronic Illness (Track II)	3	WO-100	Introduction to Women's, Gender, and Sexuality Studies	3
PH-151	Race, Gender, and the Law	3	WO-115	Intro to Queer Theory	3
PH-231	Philosophy of Law	3	WO-302	Women of Color in Media	3
PH-240	Political Theory	3			
PH-241	Genocide and Human Rights	3			
PH-242	Race, Nation, Class, Gender and Sexuality	3			
PH-251	Mass Violence Against Women	3			
PH-254	Feminist Theory	3			

First-Year Seminar (FYS)

(3 credits)

All first-time, first-year students and students transferring with fewer than 15 credits will be enrolled in and must complete a First-Year Seminar. The first-year seminar is a three-credit course taught exclusively to first-year students in a small seminar format. First-year seminars are listed with the department prefix, followed by the number 193

(i.e., XX-193). Any make-up of the first-year seminar requirement must be successfully completed within the first 60 credits of study.

In first-year seminars:

1. Students will explore and engage in university opportunities that support transition, academic growth, and cultivate a sense of belonging.
2. Students will formulate solutions to solve problems and negotiate within the institution and the world around them.
3. Students will formulate solutions to problems involving time management, organizational planning, conflict resolution,deliberation.
4. Students will formulate solutions to problems involving academic skills including critical thinking, technological and information literacy, and effective written and oral communication.
5. Students will explore faculty-driven, innovative topics chosen to specifically engage first-year students.

Each first year seminar will have four components:

Faculty-Driven Content (25%)

Faculty-driven, innovative topics chosen specifically to engage first year students.

Application/Assessment of Content (25%)

Faculty-driven assessment assignments designed to help students develop key skills (e.g., quantitative skills, how to write a research paper in this particular discipline, how to read an academic paper, how to evaluate a source, how to critique a film, and how to do a presentation).

Transition Topics (25%)

These are topics relevant to any student transitioning into college and will include some selection of study strategies, how to interact with faculty, executive functioning development, independent functioning, mental and physical well-being, health and wellness, career planning, financial literacy, self-advocacy, resilience/grit, goal-setting, life-long learning skills, diversity/equity/inclusion, and basic research skills.

WSU-Specific Topics (25%)

This aspect of a first-year seminar focuses on topics specific to Worcester State, including some selection of the following: the Liberal Arts and Sciences (LASC) general education curriculum, advising, major and minor selection and changes, how to connect with professors and advisors, library skills,

career resources, support services, IT information and basic computer skills assessment, navigating life at WSU as a commuter or residential student, engagement of WSU speaking events and other campus activities, volunteer opportunities and civic/ community engagement, scholarships, research and travel fund opportunities, student leadership opportunities, the Presidential Student Ambassador program, study abroad options, mandatory on-board activities, fall faculty research day, WSU communication tools (email/Student Planning/ Blackboard), and other support tools available to students (e.g., undergraduate catalog, Degree Audit, glossary of commonly used terms).

Global Perspectives (GP) (3 credits)

Students must complete one 3-credit course.

Courses in this area:

- Study the culture, history, or language of a nation or geopolitical area other than the U.S.
- Consider culture, power, and place in phenomena such as globalization, cultural colonialism, transnationalism, and human rights.
- Investigate issues about the environment and sustainable development in phenomena such as the use of natural resources and macroeconomic problems that affect people and ecosystems around the world.
- Study governance, peace, and justice in a global context.
- Analyze the international political economy in relation to governments, enterprises, societal groups, and communities from different countries.
- Consider issues such as race, class, gender, age, sexuality, language, ability, indigeneity, transnational labor, and refugee migration.

Code	Title	Credits
AR-118	Global Art History	3
AR-140	Drawing Fundamentals	3
AR-165	Creating Cultural Forms	3
AR-215	Art Theory and Practice	3
AR-225	Art Since Mid-20th Century	3
AR-235	3D Sculpture Studio	3
AR-313	Illustration	3

AS-101	Introduction to Asian Studies	3	HI-228	Currency, Commodities, and Crashes: Global Economic History, 1500-2000	3
BI-112	Diseases and Mankind	3	HI-236	Nature and Culture in Premodern East Asia	3
BI-114	Plants and Human Affairs	3	HI-237	Modern Far East History II	3
BI-130	Field Biology	4	HI-248	Seminar on Globalization & Human Rights	3
CJ-101	Introduction to Criminal Justice	3	HI-251	Roots of China's Rise: Reform, Revolution and Reinvention	3
EC-308	International Trade	3	HI-255	Faculty-Led Study Abroad: China Cultural Immersion	3
ED-271	International and Comparative Education	3	HI-261	Middle East History I	3
EN-132	World Literature	3	HI-262	Middle East History II: the Ottoman Empire, 1289-1920	3
EN-167	Literature and Human Rights	3	HI-263	The Modern Middle East, 1900-present	3
EN-172	Women and Literature	3	HI-278	African History Before 1800	3
EN-174	Women Poets	3	HI-279	African History Since 1800	3
EN-220	English Literature (beginnings to 1798)	3	HI-280	Introduction to African Diaspora History	3
EN-221	English Literature (1798-Present)	3	HI-284	Gender & Sexuality in the Middle East And North Africa	3
EN-240	Survey of Postcolonial and Transcultural Literature	3	HI-318	Ethnic Identities in China	3
EN-321	Gothic Monsters From Frankenstein to Dracula	3	HI-322	Nationalism	3
EN-348	Postcolonial Women's Writing	3	HI-326	Global Histories of Violence	3
FR-101	Beginning French I	3	HI-327	Out of Place: Displacement, Refugeehood, Migration in or of the Middle East	3
FR-102	Beginning French II	3	HI-335	Imperial Crossroads of Modern East Asia	3
FR-210	Intermediate French I	3	HI-337	Travels in Asia	3
FR-211	Intermediate French II	3	HI-373	African Immigration in the 20th Century	3
FR-341	Introduction to French Literature	3	HI-390	World History for Educators	4
FR-346	Twentieth Century French Literature	3	HR-100	Introduction to Human Rights and Social	3
GE-102	Human Geography	3	IS-100	Introduction to African and African Diaspora Studies	3
HC-202	Introduction to Global Health	3	MU-222	African Drumming	0.5-3
HC-203	Introduction to Epidemiology	3	MU-223	African Drumming II	3
HC-340	Global Perspective in Public Health	3	NU-357	Global Perspectives in Health	3
HE-350	Community Health Education	3	PH-170	Introduction to Asian Philosophy	3
HI-103	Connecting Ancient Worlds: World History to 1500	3	PH-171	Buddhist Philosophy	3
HI-104	Age of Empires: World History 1500 to the Present	3	PH-172	Chinese Philosophy	3
HI-105	Modern World History	3	PH-177	Introduction to Latin American Philosophy	3
HI-155	World History Through Film	3			
HI-156	Modern Global Environmental History	3			
HI-172	Plots, Scandals, and Villains	3			
HI-178	A History of Ghana	3			
HI-214	Modern Latin America	3			

PH-205	Environmental Ethics	3
PH-221	Existentialism and Phenomenology	3
PH-241	Genocide and Human Rights	3
PH-250	Global Feminisms	3
PH-251	Mass Violence Against Women	3
PH-263	Film and Philosophy	3
PH-328	Comparative Ethics	3
PH-360	Philosophy of History	3
PO-120	Global Politics	3
PO-201	International Relations Theory	3
PO-202	Globalization	3
PO-203	Gender, War and Peace	3
PO-205	Poverty and Development	3
PO-220	European Politics	3
PO-221	Asian Politics	3
PO-222	Latin American Politics	3
PO-224	Middle Eastern Politics	3
PO-240	The United Nations and Global Governance	3
PO-301	International Law	3
PO-327	Global South Leadership in the United Nations	3
SO-230	Political Sociology	3
SO-270	Social Theory I	3
SO-303	Environmental Sociology	3
SO-307	Puerto Rican Diaspora	3
SO-320	Sociology of Race and Ethnicity	3
SO-332	Contemporary Immigrant Experiences	3
SO-350	Wealth, Poverty, and Power	3
SO-360	Urban Sociology	3
SO-425	Global Capitalism	3
SP-101	Beginning Spanish I	3
SP-102	Beginning Spanish II	3
SP-191	Special Topics in Spanish	3
SP-210	Intermediate Spanish I	3
SP-211	Intermediate Spanish II	3
SP-292	Spanish for Women's Health	3
SP-294	Spanish for the Nutrition and Dietitian Professional	3
SP-326	Spanish for the Professions	3
SP-332	Cultures of Latin America	3
SP-333	Hispanic Presence in US	3
TH-235	History of Theatre	3

UR-280	The Queer City	3
UR-285	Urban Anthropology	3
UR-290	Gender and the City	3
UR-319	Transportation Planning	3
UR-331	Crime and the City	3
UR-332	Global Cities	3
WL-101	Beginning World Language	3
WL-102	Beginning World Language II	3

Human Behavior and Social Processes (HBS)

(3 credits)

Students must complete one 3-credit course.

Courses in this area:

- Develop an understanding of how factors such as market forces, politics, demographics, physical environment, and culture affect individual behavior and thinking.
- Examine political, economic, and social structures and the interplay between the individual and society.
- Explore the ways in which the individual is an agent in shaping and understanding his or her own experiences.
- Consider the ways in which individual and social roles and identities are socially constructed.
- Show how the results of social research can be used to effect social change.
- Teach the differences between and appropriate uses of qualitative and quantitative research methods.
- Investigate the ways in which scientific inquiry is value-laden.
- Help students understand the ways in which the various social sciences inform one another.

Code	Title	Credits
BI-111	Social Biology	3
BI-125	Women in Science	3
BT-101	Introduction to Forensic Sciences	4
CD-100	Introduction to Human Communication and its Disorders	3
CJ-101	Introduction to Criminal Justice	3

CJ-215	Art Crimes	3	HI-322	Nationalism	3
CM-100	Intro to Mass Communication	3	HI-334	Environmental Crisis and Management in China	3
CM-103	Survey of Radio and Television	3	HR-100	Introduction to Human Rights and Social	3
CM-180	Introduction to Advertising	3	IS-160	Introduction to Gerontology	3
CM-213	Gender and the Media	3	PB-200	Introduction to Psychobiology	4
CM-240	Principles of Public Relations Practices	3	PH-100	Introduction to Philosophy	3
CM-384	Media Criticism	3	PH-102	History of Modern Western Philosophy 1600-1800	3
CM-400	Advertising and Public Relations Research	3	PH-130	Ethics: Human Conduct & Values	3
CM-405	Mass Communication Research	3	PH-131	Medical Ethics	3
CM-416	Media Law and Ethics	3	PH-132	Business Ethics	3
EC-110	Introduction to Microeconomics	3	PH-133	Social and Political Ethics	3
EC-120	Introduction to Macroeconomics	3	PH-134	Computing Ethics	3
ED-149	Introduction to the Teaching Profession Middle/Secondary School	3	PH-152	Philosophy of Love and Sex	3
ED-150	Introduction to the Teaching Profession	3	PH-201	19th Century European Philosophy	3
ED-160	Early Childhood Education Today	3	PH-206	Animal Ethics	3
ED-305	Teaching Adult ESL and SIFE	3	PH-228	Bioethics	3
ED-339	Children's Literature: Multicultural Literature for PK-9	3	PH-231	Philosophy of Law	3
EN-217	Introduction to Narrative Studies of Health and Medicine	3	PH-242	Race, Nation, Class, Gender and Sexuality	3
EN-358	Disability Stories, Disability Studies	3	PH-254	Feminist Theory	3
ET-100	Introduction to Ethnic Studies	3	PH-260	Philosophy of Science	3
GE-102	Human Geography	3	PH-315	Moral Psychology	3
GE-250	Urban Geography	3	PH-328	Comparative Ethics	3
GE-285	Sustainable Communities	3	PO-110	American Government	3
HE-220	Mental Health Education	3	PO-120	Global Politics	3
HI-216	Labor, Capital, and Power in United States History	3	PO-150	Foundations of Legal Studies	3
HI-218	US Constitutional History I	3	PO-203	Gender, War and Peace	3
HI-219	US Constitutional History II	3	PO-204	Women in Politics	3
HI-228	Currency, Commodities, and Crashes: Global Economic History, 1500-2000	3	PO-205	Poverty and Development	3
HI-265	Land and Power in North America	3	PO-213	The Modern Presidency	3
			PO-215	State and Local Government	3
			PO-216	Political Parties and Interest Groups	3
			PO-217	The U.S. Congress	3
			PO-220	European Politics	3
			PO-221	Asian Politics	3
			PO-222	Latin American Politics	3
			PO-224	Middle Eastern Politics	3
			PO-230	Campaigns and Elections	3
			PO-240	The United Nations and Global Governance	3

PO-243	City Politics	3	SO-295	Sociology of Death & Dying	3
PO-250	Doing Political Science: an Introduction To Research Methodology	4	SO-303	Environmental Sociology	3
PO-262	Principles of US Public Policy	3	SO-305	Applied Sociology	3
PO-265	Racial and Ethnic Politics	3	SO-312	Youth, Race, and Public Space	3
PO-301	International Law	3	SO-318	Worcester and Its Discontents	3
PO-311	Environmental Politics and Policy	3	SO-340	Social Psychology	3
PO-312	Health Politics and Policy	3	SO-350	Wealth, Poverty, and Power	3
PO-334	Environmental Crisis and Management in China	3	SO-355	Gender and Sexuality	3
PO-380	American Foreign Policy Since the Cold War	3	SO-360	Urban Sociology	3
PS-101	General Psychology	3	SO-425	Global Capitalism	3
PS-201	Career Exploration in Psych	3	SP-293	Health and the Latino Community	3
PS-210	Developmental Psychology	3	SP-315	Health and the Latino Community	3
PS-240	Introduction to Abnormal Psychology	3	UR-101	Introduction to Urban Studies	3
PS-310	Development of Exceptional Children/Youth	3	UR-103	Introduction to Women's Studies	3
PS-318	Behavior Management Techniques	3	UR-150	Introduction to City Research	3
PS-326	Psychological Distress and Well-Being	3	UR-201	Introduction to Urban Policy	3
PS-330	Theories of Personality	3	UR-214	Urban Demography	3
PS-355	Social and Personality Development	3	UR-230	Technology, Public Policy and Urban Society	3
PS-365	Cultural Psychology	3	UR-240	Introduction to Qualitative Research Methods for the Social Sciences	3
PS-385	Motivation	3	UR-270	Leadership in Nonprofit and Public Organizations	3
PS-391	Clinical Psychology	3	UR-290	Gender and the City	3
SO-100	Introduction to Sociology: Exploring Our Social World	3	UR-311	Urban Politics and Policies	3
SO-190	Sport and Society	3	UR-331	Crime and the City	3
SO-200	Contemporary Social Problems	3	UR-380	Public Policy and Cultural Diversity	3
SO-201	Prejudice, Privilege, and Power	3			
SO-207	First Generation to College: Campus Diversity and College Inequality	3			
SO-215	Medical Sociology	3			
SO-220	Sociology of the Family	3			
SO-230	Political Sociology	3			
SO-235	Music and Social Change	3			
SO-250	Sociology of Religion	3			
SO-255	Sociology of Disability	3			
SO-285	Race, Class and Gender	3			

Individual and Community Well-being (ICW)

(3 credits)

Students must complete one 3-credit course.

Courses in this area:

- Explore the growth and development of the individual and address the interconnected dimensions of well-being.

- Study and evaluate the ways that the local, state, national, or private sectors frame and implement social policies, and the consequences of these policies for well-being.
- Examine social structures and practices such as urban and rural development, planning, funding allocations, and legislative initiatives designed to secure the well-being of the community.
- Examine the short- and long-term consequences of beliefs, behaviors, and policies that affect the well-being of individuals and communities.
- Address the role of prevention strategies in promoting well-being.

Code	Title	Credits
CD-100	Introduction to Human Communication and its Disorders	3
CJ-101	Introduction to Criminal Justice	3
CJ-354	Addictions Counseling of Individuals and Families	3
CM-416	Media Law and Ethics	3
EC-102	Consumer Economics	3
EC-104	Personal Financial Planning	3
EC-208	Economics of Health Care	3
ED-150	Introduction to the Teaching Profession	3
ED-155	Teaching and Learning in Elementary School	3
ED-205	An Introduction to Social-Emotional Learning	3
ED-206	Development and Learning of Typical and Atypical Children Birth to Age 8	3
ED-207	The Adolescent in Schools & Society	3
ED-271	International and Comparative Education	3
ED-285	Understanding and Supporting Children And Youth With Disabilities	3
EN-115	LGBTQ+ Narratives	3
EN-217	Introduction to Narrative Studies of Health and Medicine	3
EN-220	English Literature (beginnings to 1798)	3
EN-221	English Literature (1798-Present)	3
EN-230	Environmental Literature	3

EN-272	News Reporting and Writing I	3
EN-322	Community Writing	3
EN-354	Opinion Writing	3
EN-358	Disability Stories, Disability Studies	3
HC-202	Introduction to Global Health	3
HC-203	Introduction to Epidemiology	3
HC-340	Global Perspective in Public Health	3
HE-100	Personal Health	3
HE-120	Health and Nutrition	3
HE-220	Mental Health Education	3
HE-225	Advanced Nutrition: The Prevention and Treatment of Obesity	3
HE-325	Sports Nutrition	3
HE-350	Community Health Education	3
HE-354	Addictions Counseling of Individuals and Families	3
HE-400	Special Topics	3
HI-227	American Popular Art and Architectural History	3
HI-283	Food in American History	3
HI-290	Health and Healing in America	3
HI-332	American Environmental History	3
IS-160	Introduction to Gerontology	3
JO-101	Introduction to Journalism	3
LC-293	Peer Mentoring	3
MU-102	Applied Music	1
MU-321	Small Ensemble	0.5-1
MU-330	Jazz Ensemble	0.5-3
NU-357	Global Perspectives in Health	3
PH-101	Ancient Greek Philosophy	3
PH-110	Critical Thinking	3
PH-134	Computing Ethics	3
PH-152	Philosophy of Love and Sex	3
PH-171	Buddhist Philosophy	3
PH-180	Sports and Philosophy	3
PH-205	Environmental Ethics	3
PH-206	Animal Ethics	3
PH-225	Philosophy of Language	3
PH-228	Bioethics	3
PH-264	Philosophy of Education	3
PH-327	Feminist Medical Ethics	3

PH-335	Animal Law & Policy	3
PO-160	Introduction to Civic Engagement	3
PO-312	Health Politics and Policy	3
PS-201	Career Exploration in Psych	3
PS-210	Developmental Psychology	3
PS-326	Psychological Distress and Well-Being	3
PS-340	Psychological Testing and Measurement	3
SO-100	Introduction to Sociology: Exploring Our Social World	3
SO-201	Prejudice, Privilege, and Power	3
SO-207	First Generation to College: Campus Diversity and College Inequality	3
SO-215	Medical Sociology	3
SO-235	Music and Social Change	3
SO-250	Sociology of Religion	3
SO-255	Sociology of Disability	3
SO-295	Sociology of Death & Dying	3
SO-305	Applied Sociology	3
SO-312	Youth, Race, and Public Space	3
SO-318	Worcester and Its Discontents	3
SO-340	Social Psychology	3
SO-355	Gender and Sexuality	3
SO-360	Urban Sociology	3
SP-290	Introduction to Medical Spanish	3
SP-291	Foundations of Medical Spanish	3
SP-292	Spanish for Women's Health	3
SP-294	Spanish for the Nutrition and Dietitian Professional	3
SP-295	The Human Body: Spanish for Anatomy	3
SP-395	The Human Body: Spanish for Anatomy	3
TH-290	Theatre for Young Audiences	3
TH-292	Applied Theatre and Community Engagement	3
TH-348	Stage Combat	3
UR-103	Introduction to Women's Studies	3
UR-217	Child Advocacy	3
UR-220	Immigrant City	3

UR-230	Technology, Public Policy and Urban Society	3
UR-250	Introduction to Urban Planning	3
UR-319	Transportation Planning	3
UR-320	Power and Urban Insecurity	3
WO-100	Introduction to Women's, Gender, and Sexuality Studies	3
WO-115	Intro to Queer Theory	3
WO-302	Women of Color in Media	3

Natural Systems and Processes (LAB)

Students must complete a minimum of two 3-credit NSP courses (p. 49). At least one of the courses taken in this area must have a laboratory component. Note: Non-approved LASC lab (NLL) courses do not meet the requirement for a LASC LAB course.

Courses in this area:

- Study physical and natural systems and processes.
- Apply scientific models, theories, and technology to problems facing society.
- Have an analytical and/or quantitative component and include interpretation, communication and/or presentation of data and results.
- Compare and contrast various modes of scientific inquiry.
- Place scientific inquiry within its historical and contemporary contexts.
- Use and reflect on the scientific method of investigation.
- Address the strengths and limitations of scientific inquiry in human understanding.
- Encourage students to become scientifically literate citizens and be able to evaluate scientific information.

Code	Title	Credits
BI-101	Concepts of Biology	4
BI-104	The Human Animal Laboratory	1
BI-116	Animal Biology	4
BI-117	Humans and the Environment	4

BI-118	Dinosaurs	4
BI-130	Field Biology	4
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
BI-162	Human Anatomy and Physiology II	4
BI-206	Medical Microbiology	4
BI-354	Systematics and Evolution	4
BI-380	Biodiversity and Conservation Biology	4
BI-983	Techniques in Laboratory and Field Resea	4
BT-101	Introduction to Forensic Sciences	4
CH-112	Survey of Chemistry	4
CH-215	Science of Stuff	4
CH-250	Instrumental Technology for Forensic Analysis	4
CH-435	Advanced Laboratory Experience	2
EV-120	Integrated Environmental Science for Educators	4
EV-348	Fundamentals of Earth Data Analytics	4
EV-380	Biodiversity and Conservation Biology	4
GS-140	Physical Geology	4
GS-165	Geographic Information Systems I	4
GS-180	Field Geoscience	1-4
GS-225	Oceanography	3
GS-250	Hydrology	3
GS-270	Sediments and Soils	3
GS-348	Fundamentals of Earth Data Analytics	4
PB-200	Introduction to Psychobiology	4
PY-105	How Stuff Works (concepts in Physics)	3
PY-221	General Physics I	4
PY-222	General Physics II	4
PY-241	Physics I (Mechanics)	4
PY-242	Physics II (Electricity, Magnetism and Optics)	4
PY-250	Observational Astronomy	3

Natural Systems and Processes (NSP) (minimum of 6 credits)

Students must complete a minimum of two NSP 3-credit courses. At least one of the courses taken in this area must have a laboratory component (p. 48). Note: Non-approved LASC lab (NLL) courses do not meet the requirement for a LASC NSP course.

Courses in this area:

- Study physical and natural systems and processes.
- Apply scientific models, theories, and technology to problems facing society.
- Have an analytical and/or quantitative component and include interpretation, communication and/or presentation of data and results.
- Compare and contrast various modes of scientific inquiry.
- Place scientific inquiry within its historical and contemporary contexts.
- Use and reflect on the scientific method of investigation.
- Address the strengths and limitations of scientific inquiry in human understanding.
- Encourage students to become scientifically literate citizens and be able to evaluate scientific information.

Code	Title	Credits
BI-101	Concepts of Biology	4
BI-103	The Human Animal	3
BI-104	The Human Animal Laboratory	1
BI-109	Writing in the Natural Sciences	3
BI-111	Social Biology	3
BI-112	Diseases and Mankind	3
BI-114	Plants and Human Affairs	3
BI-116	Animal Biology	4
BI-117	Humans and the Environment	4
BI-118	Dinosaurs	4
BI-125	Women in Science	3
BI-130	Field Biology	4

BI-140	Introduction to Organismal Biology	4	PB-200	Introduction to Psychobiology	4
BI-141	Intro to Cellular and Molecular Biology	4	PH-200	Knowledge and Reality	3
BI-162	Human Anatomy and Physiology II	4	PH-220	Philosophy of Mind	3
BI-206	Medical Microbiology	4	PH-237	Philosophy of Space and Time	3
BI-271	Basic Kinesiology	3	PO-311	Environmental Politics and Policy	3
BT-101	Introduction to Forensic Sciences	4	PO-334	Environmental Crisis and Management in China	3
CD-110	Anatomy and Physiology of Speech And Hearing	3	PS-230	Brain and Behavior	3
CD-230	Neuroscience for Communication Sciences and Disorders	3	PS-270	Psychopharmacology	3
CH-106	Paper Or Plastics?	3	PS-280	Sensation and Perception	3
CH-112	Survey of Chemistry	4	PY-101	Introduction to Astronomy	3
CH-215	Science of Stuff	4	PY-105	How Stuff Works (concepts in Physics)	3
CH-250	Instrumental Technology for Forensic Analysis	4	PY-110	Astrophotography	3
EV-110	Meteorology	3	PY-114	Physics of Waves	3
EV-120	Integrated Environmental Science for Educators	4	PY-217	General Astronomy	3
EV-130	Environmental Problems and Solutions	3	PY-220	Energy and the Environment	3
EV-150	Environmental Science	3	PY-221	General Physics I	4
EV-218	Introduction to Remote Sensing	3	PY-222	General Physics II	4
EV-220	Energy and the Environment	3	PY-241	Physics I (Mechanics)	4
EV-348	Fundamentals of Earth Data Analytics	4	PY-242	Physics II (Electricity, Magnetism and Optics)	4
GS-101	Physical Geography	3	PY-250	Observational Astronomy	3
GS-110	Meteorology	3			
GS-140	Physical Geology	4			
GS-165	Geographic Information Systems I	4			
GS-180	Field Geoscience	1-4			
GS-218	Introduction to Remote Sensing	3			
GS-225	Oceanography	3			
GS-270	Sediments and Soils	3			
GS-348	Fundamentals of Earth Data Analytics	4			
HC-203	Introduction to Epidemiology	3			
HE-270	Psychopharmacology	3			
HI-332	American Environmental History	3			
HI-334	Environmental Crisis and Management in China	3			

Quantitative Reasoning (QR) (minimum of 6 credits)

Students must complete a minimum of two 3-credit QR courses, one of which must be a college-level mathematics course taught by the Mathematics Department, numbered "MA-XXX," and specifically approved for QR credit. Terms such as "math," "mathematics," "quantitative," or similar in a course title or description do not guarantee that a course meets the above criteria, and courses such as MA 098 and MA 099 do not qualify because they do not satisfy the QR requirement. The MA course must be completed within the first 60 credits of study, though exceptions may apply for transfer students. All students must pass the Math Placement Test at the stipulated level in order to register for a MA course above MA 105.

Courses in this area:

- Acquaint students with formal systems, procedures, and sequences of operations.
- Strengthen students' understanding of variables and functions.
- Apply mathematical techniques to the analysis and solution of real-life problems.
- Develop an understanding of and facility with statistical analysis, including an understanding of its applications and limitations. Courses meeting these criteria must emphasize why statistical inference works and not simply how to use statistical techniques.
- Strengthen understanding of the relationship between algebraic and graphical representations.
- Emphasize the importance of accuracy, including precise language and careful definitions of mathematical concepts.
- Understand both underlying principles and practical applications of one or more fields of mathematics.

Code	Title	Credits
CH-120	General Chemistry I	4
CS-101	Basics of Computer Science	3
CS-120	Microcomputer Applications	3
CS-124	Health Informatics	3
CS-131	Data Visualization and Statistical Analysis	3
CS-135	Programming for Non-CS Majors	3
CS-155	Computer Networking and Security	3
CS-265	Database Applications	3
EC-150	Statistics	3
ED-322	Contemporary Education Policy	3
EV-348	Fundamentals of Earth Data Analytics	4
GS-217	Spatial Data Methods	3
GS-348	Fundamentals of Earth Data Analytics	4
MA-105	Survey of Mathematics	3
MA-107	Mathematical Explorations-- Invitation To Effective Thinking	3
MA-130	Number and Operations for Teachers	3
MA-131	Patterns, Functions and Algebra for Teachers	3

MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
MA-150	Statistics I	3
MA-180	Introduction to Functions	3
MA-190	Pre-calculus	4
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-202	Business Calculus	4
NU-333	Nursing Informatics (Track II)	3
PH-115	Logic I	3
PH-215	Logic II	3
PO-250	Doing Political Science: an Introduction To Research Methodology	4
PS-275	Psychological Statistics	4
PS-340	Psychological Testing and Measurement	3
PY-221	General Physics I	4
TH-175	Introduction to Stagecraft	3
UR-214	Urban Demography	3
UR-232	Quantitative Data Analysis of Urban Problems	3

The United States and Its Role in the World (USW) (3 credits)

Students must complete one 3-credit course.

Courses in this area:

- Study cultures, histories, and social practices in the U.S., including consideration of the ways that differences in power affect different racial, ethnic, gender, and cultural groups as evidenced by readings, texts, testimony, and narratives.
- Address issues of economic and political power that shape the U.S. and the world.
- Trace the roots and development of U.S. political and economic institutions at home and around the globe.
- Focus on particular aspects of U.S. culture and how understanding them helps to illuminate the larger context of U.S. society and its role in its world.

Code	Title	Credits			
ED-253	History and Philosophy of Ed	3	PH-178	Africana Philosophy	3
EN-120	Race in Comics	3	PH-231	Philosophy of Law	3
EN-169	Ethnic Literature in the U.S.	3	PH-240	Political Theory	3
EN-210	U.S. Literature (Beginnings-1865)	3	PH-241	Genocide and Human Rights	3
EN-211	U.S. Literature (1865-Present)	3	PH-242	Race, Nation, Class, Gender and Sexuality	3
EN-272	News Reporting and Writing I	3	PH-251	Mass Violence Against Women	3
EN-328	Narratives of U.S. Immigration	3	PH-254	Feminist Theory	3
EN-345	American Women Writers	3	PH-360	Philosophy of History	3
EN-347	Studies in U.S. Ethnic Literature	3	PO-110	American Government	3
EN-370	Antislavery Literature	3	PO-160	Introduction to Civic Engagement	3
GE-285	Sustainable Communities	3	PO-201	International Relations Theory	3
HI-111	US History to 1877	3	PO-202	Globalization	3
HI-112	US History 1865 to the Present	3	PO-213	The Modern Presidency	3
HI-205	Native America	3	PO-215	State and Local Government	3
HI-211	History of US Foreign Policy I	3	PO-264	American Political Thought	3
HI-216	Labor, Capital, and Power in United States History	3	PO-265	Racial and Ethnic Politics	3
HI-217	US Social History	3	PO-320	Citizen Nation	3
HI-218	US Constitutional History I	3	PO-380	American Foreign Policy Since the Cold War	3
HI-219	US Constitutional History II	3	SO-190	Sport and Society	3
HI-248	Seminar on Globalization & Human Rights	3	SO-200	Contemporary Social Problems	3
HI-267	US-Latin American Relations	3	SO-228	Latinx Experiences in the U.s. and the World	3
HI-268	American Revolutionary Period	3	SO-307	Puerto Rican Diaspora	3
HI-274	The History of Gender and Sexuality in America	3	SO-320	Sociology of Race and Ethnicity	3
HI-285	History of Baseball	3	SO-332	Contemporary Immigrant Experiences	3
HI-300	The Early National Period of the US: 1783-1829	3	SO-350	Wealth, Poverty, and Power	3
HI-320	Citizen Nation	3	SP-323	Advanced Spanish Conversation Through Film	3
HI-351	Age of Jackson	3	SP-333	Hispanic Presence in US	3
HI-356	The History of the Cold War	3	TH-270	History of American Entertainment I	3
HI-377	American Fascism	3	TH-271	History of American Entertainment II	3
HI-391	U.S. History for Educators	4	UR-101	Introduction to Urban Studies	3
JO-101	Introduction to Journalism	3	UR-150	Introduction to City Research	3
LA-150	Introduction to Latinx Cultures in the US	3	UR-212	American Metropolitan Evolution	3
LA-357	Latinx Podcasts	3	UR-312	Worcester: A City & Its People	3
MU-330	Jazz Ensemble	0.5-3			
PH-151	Race, Gender, and the Law	3			
PH-163	Philosophy on Television	3			

UR-347	Refugees in American Society	3
UR-380	Public Policy and Cultural Diversity	3

Thought, Language, and Culture (TLC)

(3 credits)

Students must complete one 3-credit course.

Courses in this area:

- Explore human thought, history, culture, art, literature, and language (including world languages).
- Present the subject in the context of competing theoretical frameworks, for example, about race, gender, historiography, textual analysis, or cultural interpretation.
- Synthesize approaches from different disciplines.
- Explore problems of ethics, politics, aesthetics, epistemology, and metaphysics.
- Use original works as the primary object of study.
- Require discursive written work, including standard references and citations, for evaluation or extensive written work in a second language.

Code	Title	Credits
AB-101	Beginning Arabic I	3
AB-102	Beginning Arabic II	3
AB-210	Intermediate Arabic I	3
AB-211	Intermediate Arabic II	3
AR-100	Cross Media Studio	3
AR-240	Watercolor	3
AR-270	Driftwood to Dumpsters	3
AR-285	History of Photography	3
CD-103	Language Science	3
CD-110	Anatomy and Physiology of Speech And Hearing	3
CD-203	Language Science	3
CJ-215	Art Crimes	3
CM-100	Intro to Mass Communication	3
CM-103	Survey of Radio and Television	3
CM-106	Communications and the Internet	3

CM-110	Public Speaking	3
CM-213	Gender and the Media	3
CM-241	Understanding Movies	3
CM-242	Understanding Video Games	3
CM-285	History of Photography	3
CM-315	Social Media	3
CM-384	Media Criticism	3
CM-390	Independent Media and Society	3
ED-120	The Educational Experience Through Memoirs	3
ED-304	Best Practices for English Language Learners	3
ED-339	Children's Literature: Multicultural Literature for PK-9	3
EN-115	LGBTQ+ Narratives	3
EN-120	Race in Comics	3
EN-132	World Literature	3
EN-140	Introduction to Poetry	3
EN-150	The Short Story	3
EN-156	Mythology	3
EN-158	Science Fiction	3
EN-160	Literature of the Bible	3
EN-164	Fairy and Folk Tales From Around the World	3
EN-165	The Art of Storytelling	3
EN-168	Film and Literature	3
EN-169	Ethnic Literature in the U.S.	3
EN-170	Search for Identity	3
EN-172	Women and Literature	3
EN-173	Baseball: America's Literary Pastime	3
EN-174	Women Poets	3
EN-210	U.S. Literature (Beginnings-1865)	3
EN-211	U.S. Literature (1865-Present)	3
EN-220	English Literature (beginnings to 1798)	3
EN-221	English Literature (1798-Present)	3
EN-255	Methods of Literary Study	3
EN-257	The Power of Memoir	3
EN-260	Creative Writing: Poetry I	3
EN-266	Journalism: Practice and Techniques	3
EN-270	Journalism: Editing	3

EN-300	History of the English Language	3	HI-227	American Popular Art and Architectural History	3
EN-303	Arthurian Literature	3	HI-236	Nature and Culture in Premodern East Asia	3
EN-304	Witchcraft in Medieval and Renaissance Literature	3	HI-251	Roots of China's Rise: Reform, Revolution and Reinvention	3
EN-306	The Renaissance	3	HI-252	Civil War and Reconstruction	3
EN-320	Victorian Literature	3	HI-255	Faculty-Led Study Abroad: China Cultural Immersion	3
EN-321	Gothic Monsters From Frankenstein to Dracula	3	HI-261	Middle East History I	3
EN-328	Narratives of U.S. Immigration	3	HI-262	Middle East History II: the Ottoman Empire, 1289-1920	3
EN-342	The American Novel I	3	HI-268	American Revolutionary Period	3
EN-344	American Novel II	3	HI-274	The History of Gender and Sexuality in America	3
EN-358	Disability Stories, Disability Studies	3	HI-278	African History Before 1800	3
EN-370	Antislavery Literature	3	HI-279	African History Since 1800	3
ET-100	Introduction to Ethnic Studies	3	HI-280	Introduction to African Diaspora History	3
FR-101	Beginning French I	3	HI-285	History of Baseball	3
FR-102	Beginning French II	3	HI-290	Health and Healing in America	3
FR-210	Intermediate French I	3	HI-300	The Early National Period of the US: 1783-1829	3
FR-211	Intermediate French II	3	HI-318	Ethnic Identities in China	3
FR-321	Advanced French Composition I	3	HI-335	Imperial Crossroads of Modern East Asia	3
FR-323	Advanced French Conversation	3	HI-337	Travels in Asia	3
FR-331	General French Civilization	3	HI-351	Age of Jackson	3
FR-341	Introduction to French Literature	3	HI-373	African Immigration in the 20th Century	3
FR-342	Survey of French Literature I	3	HI-375	Popular Music and Performance in Modern Africa	3
FR-344	Survey of French Literature II	3	HI-390	World History for Educators	4
FR-346	Twentieth Century French Literature	3	LA-150	Introduction to Latinx Cultures in the US	3
GE-290	Conservation & Natural Res Mgt	3	MU-125	Jazz Appreciation	3
HE-242	Writing and Learning From Experience II	3	MU-231	Women in Music	3
HI-103	Connecting Ancient Worlds: World History to 1500	3	MU-250	Music of the Cinema: Spectacle, Splendor, And Spielberg	3
HI-104	Age of Empires: World History 1500 to the Present	3	NH-150	The Short Story for Narratives of Health And Medicine	3
HI-105	Modern World History	3	NH-257	The Power of Memoir for Narratives of Health and Medicine	3
HI-172	Plots, Scandals, and Villains	3			
HI-178	A History of Ghana	3			
HI-205	Native America	3			
HI-214	Modern Latin America	3			
HI-217	US Social History	3			
HI-224	English History I	3			
HI-225	English History II	3			

NH-260	Creative Writing: Poetry I for Narratives of Health and Medicine	3	PO-361	The Rise of the Right: Conservative Politics From Goldwater to Today	3
PH-100	Introduction to Philosophy	3	PS-365	Cultural Psychology	3
PH-101	Ancient Greek Philosophy	3	SO-100	Introduction to Sociology: Exploring Our Social World	3
PH-102	History of Modern Western Philosophy 1600-1800	3	SO-201	Prejudice, Privilege, and Power	3
PH-110	Critical Thinking	3	SO-228	Latinx Experiences in the U.s. and the World	3
PH-130	Ethics: Human Conduct & Values	3	SO-235	Music and Social Change	3
PH-131	Medical Ethics	3	SO-270	Social Theory I	3
PH-132	Business Ethics	3	SO-340	Social Psychology	3
PH-133	Social and Political Ethics	3	SO-350	Wealth, Poverty, and Power	3
PH-151	Race, Gender, and the Law	3	SP-101	Beginning Spanish I	3
PH-163	Philosophy on Television	3	SP-102	Beginning Spanish II	3
PH-170	Introduction to Asian Philosophy	3	SP-191	Special Topics in Spanish	3
PH-172	Chinese Philosophy	3	SP-210	Intermediate Spanish I	3
PH-177	Introduction to Latin American Philosophy	3	SP-211	Intermediate Spanish II	3
PH-178	Africana Philosophy	3	SP-290	Introduction to Medical Spanish	3
PH-200	Knowledge and Reality	3	SP-291	Foundations of Medical Spanish	3
PH-201	19th Century European Philosophy	3	SP-293	Health and the Latino Community	3
PH-205	Environmental Ethics	3	SP-295	The Human Body: Spanish for Anatomy	3
PH-206	Animal Ethics	3	SP-315	Health and the Latino Community	3
PH-220	Philosophy of Mind	3	SP-321	Advanced Spanish Composition I	3
PH-221	Existentialism and Phenomenology	3	SP-322	Advanced Spanish Composition II	3
PH-223	American Philosophy	3	SP-323	Advanced Spanish Conversation Through Film	3
PH-225	Philosophy of Language	3	SP-326	Spanish for the Professions	3
PH-228	Bioethics	3	SP-350	Advanced Spanish Grammar	3
PH-237	Philosophy of Space and Time	3	SP-390	Spanish for Native Speakers	3
PH-240	Political Theory	3	SP-395	The Human Body: Spanish for Anatomy	3
PH-250	Global Feminisms	3	TH-126	Script Analysis	3
PH-260	Philosophy of Science	3	TH-235	History of Theatre	3
PH-262	Philosophy of Art	3	UR-280	The Queer City	3
PH-263	Film and Philosophy	3	UR-285	Urban Anthropology	3
PH-264	Philosophy of Education	3	UR-315	Oral History for Urban Areas	3
PH-315	Moral Psychology	3	VP-200	Critical Thinking in the Arts	3
PH-328	Comparative Ethics	3	WO-302	Women of Color in Media	3
PH-335	Animal Law & Policy	3			
PO-130	Introduction to Political Theory	3			
PO-223	Political Communication	3			
PO-264	American Political Thought	3			

Writing (WR1 & WR2)

(6 credits)

Students must complete one three-credit course devoted to addressing the rhetorical abilities necessary for effective college writing and an additional three-credit course emphasizing formal academic genres, academic research skills, and the presentation of information to academic audiences. The core writing courses may not be taken pass/fail.

Writing I (WR1)

Writing I focuses on writing as a form of critical inquiry, reflection, and communication. This course is designed to help students develop transferable skills and strategies that may be applied to a variety of audiences and in a range of situations. Students explore the principles of information literacies while practicing the fundamentals of effective writing, with an emphasis on planning, drafting, revising, and editing. Upon completion of Writing I, students should be able to:

- Write using language appropriate for the task and situation
- Think analytically about writing and articulate how their writing will be situated within the contexts of purpose, audience, and setting
- Demonstrate basic concepts associated with information literacy
- Read critically for content, rhetorical strategies, and audience
- Apply different rhetorical strategies to specific writing situations and articulate why they chose them
- Recognize the conventions of personal, professional, academic, and other forms of writing
- Consider the relationship of their writing with the writing of others
- Engage the writing of others within their own work, using appropriate documentation as necessary
- Respond to the social implications of language use and maintain ethical standards in their writing

Writing II (WR2)

This course builds upon Writing I and focuses on research writing, synthesizing sources, critical analysis, argumentation, and information literacies. Students practice the fundamentals of effective writing in collaborative and academic communities, while evaluating and using sources in different rhetorical situations. This course is designed to help students develop transferable skills and strategies that may be applied to a variety of audiences and in a range of situations. Upon completion of Writing II, students should be able to:

- Produce extended writing according to the conventions associated with academic, public, and other writing situations.
- Demonstrate greater mastery of research skills and the ability to engage the work of others in their own writing
- Develop research, analytical, and writing skills transferrable to other academic, professional, and public situations
- Recognize how writing shapes conventions and expectations of academic, professional, and public situations
- Employ advanced concepts associated with information literacy
- Understand how the medium of writing impacts its composition, publication, and reception
- Respond to the social implications of language use and maintain ethical standards in their writing

Code	Title	Credits
EN-101	College Writing I	3
BI-109	Writing in the Natural Sciences	3
EN-102	College Writing II	3
EN-202	Honors Composition	3
HI-140	We the People: Writing the Constitution (writing I)	3

EN-202 is taken by students in the Honors Program in place of EN-102.

MajorPlus

All full-time, first-time students must declare a major with a minor or a double major of their own choosing and complete both for graduation:

- All first-time, full-time students will declare a major with a minor or a double major by the completion of their first 45 credits.
- All transfer students with 45 or fewer credits will be required to meet the major/minor/double major graduation requirement; transfer students with 46 credits or more would be encouraged, but not required, to fulfill the proposed major/minor/double major graduation requirements.
- All students enrolled in combined undergraduate or "3+" programs will satisfy the major/minor/double major graduation requirement upon successful completion of their programs.
- All students enrolled with a bachelor's degree in hand will satisfy the major/minor/double major graduation requirement.

Matriculation

Multicultural Affairs

Multicultural Affairs' mission is to provide opportunities, access, and retention to program participants by supporting their successful transition to higher education. We take a comprehensive approach to increasing students' effectiveness by creating a welcoming environment that caters to first generation, low-income, and/or ALANA/BIPOC (African, Latinx, Asian, Native American and/or Black, Indigenous, People of Color) students.

The office hosts the following programs: The **Alternatives for Individual Development (A.I.D.)**, Worcester State University A.I.D. **Summer Bridge Program**, the **Upward Bound Program**, **Intercultural Student Alliance** formerly known as **Third World Alliance (TWA)**, **First Generation Student Nation**, **Women of Color In STEM**, Worcester State University's **Martin Luther King Jr. Youth Breakfast**, **Multicultural Programming Committee** and **the Antiracism subcommittee**.

Alternatives for Individual Development (A.I.D.)

The Alternatives for Individual Development program is an alternative admissions program at Worcester State University which provides educational assistance to students. Participation in the program for some students may begin with WSU A.I.D. Summer Bridge Program held in June and July.

The primary focus is on the first two years (first and second year). The program requires a minimum participation of four academic semesters designed by the program staff and based on individual assessment. Other services are provided to students throughout their undergraduate experience including academic assistance, individualized or group skills development, assistance with financial adjustment, and cultural enrichment. To be eligible for the Summer A.I.D. Bridge Program, students must be incoming first-year students and meet minimal admissions requirements.

Upward Bound (UB)

The Upward Bound program is designed to encourage eligible high school students to persist in school through graduation and to seek a post-secondary education. The program actively recruits students who show motivation and desire to succeed and who are college bound. Services include college and cultural visits, workshops and seminars in college admissions and financial aid assistance, career counseling, individualized or group tutoring, and cultural enrichment activities. The program has two main components: the academic year Saturday component and the summer residential academy.

Multicultural Programming

Multicultural Programming's primary mission is to coordinate and implement comprehensive educational, cultural, and social programs that celebrate diverse cultural contributions. These programmatic efforts are designed to promote dialogue while creating opportunities for students to develop and expand their cultural competencies. The ultimate goal is to expose and educate all students to understand and appreciate racial and ethnic differences. Annual signature programming includes Latin Heritage, Native American/Indigenous Heritage, Black History, Women's History and Asian American Month celebrations. Other programs include Courageous Conversations and African American Read In Day.

The Antiracism subcommittee grew out of the work of the Multicultural Programming Committee which focuses more programming on campus in response to cross-racial and cultural topics.

The Martin Luther King Jr. Youth Breakfast is our city's annual celebration of our city's youth event in celebration of the legacy and commitment of Dr. King

Jr. to improving the lives of young people through education. The program includes performances, noted distinctions and awards to our community and youth, university scholarships, and essay/poetry contest.

Intercultural Student Alliance (formerly know as Third World Alliance)

Intercultural Student Alliance (formerly known as Third World Alliance) is a student organization dedicated to promoting inclusion and multicultural diversity and enhancing pluralism on campus and within the Worcester community. The organization features activities aimed at informing, educating, enriching, and encouraging conversation around topics related to ethnically and racially diverse issues.

First Generation Student Nation

The First Generation Nation is a student group dedicated to empowering first generation students to develop a sense of belonging and community through social, academic, cultural, career, and financial programming that is easily accessible. First Generation Nation coordinates support groups and experiences to assist students to navigate their college experiences and create a space where students can connect with peers, mentors, and resources on critical topics affecting first generation students' experience at Worcester State University.

Women of Color In STEM

Women of Color In STEM is a student organization to help women of color interested in pursuing academics and careers in the STEM field succeed academically and connect socially.

Prior Learning Portfolio Program

Prior Learning Portfolio Eligibility & Guidelines

The WSU Prior Learning Portfolio Program provides the opportunity for matriculated undergraduate adult students to complete a portfolio demonstrating knowledge that can be mapped to specific courses at

Worcester State University. The portfolio is evaluated by university faculty members to determine the awarding of credit.

Adult Students

- Only undergraduate matriculated students in good standing at Worcester State University with the designation of "Adult Learner" can access the Prior Learning Portfolio option.

Definition of Adult Learner

- Any matriculated student at Worcester State University who is 24 years old or older.
- Any student who is 24 years old or older at the point of admission to Worcester State University.
- Any student, regardless of age, who is admitted to Worcester State University with less than 12 college credits and who has been out of high school for 3+ years.

Courses

- Students may request a Prior Learning Portfolio in any area of undergraduate work at Worcester State with some exceptions. Academic departments have the ability to indicate courses in their departments that are not eligible for the Prior Learning Portfolio Program.
- Major capstone courses can not be requested through the Prior Learning Portfolio Program.
- Students may request a Prior Learning Portfolio to fulfill:
 - free electives and major electives
 - major, and minor requirements
 - LASC requirements.
- Students may not request a Prior Learning Portfolio for a course if they have previously taken the course and failed it or if a CLEP option is available and accepted at the institution.

Pre-requisites

- Students must have fulfilled the Writing I (WR1) and Writing (WR2) sections of LASC before starting the Prior Learning Portfolio option.

Credits

- Students may request up to 18 credits through Prior Learning Portfolio.
- Awarded credits are considered institutional credits and are recorded in transcripts as "P".
- Awarded credits are not calculated in GPA or towards pass/fail total credits.

Deadlines and process

- If course credit has been denied, students may revise and re-submit their portfolio for a second review. Students have 15 business days from the day they were provided with the denial letter to re-submit their portfolios. No additional reviews are allowed.
- Portfolios are reviewed once in the fall semester (deadline is last day of September) and spring semester (deadline is the last day of February). If deadlines fall on a weekend or the university is closed, the deadline will be postponed to the first workday following the last day of September or February.
- Students have to pay the per credit Prior Learning Portfolio Fee before they can submit their portfolio for review.
- The professional letters of reference must be dated and signed and submitted directly to the Portfolio Coordinator from the source.
- Students might be required to produce originals of any copies of supporting documentation submitted for visual verification.

Faculty Evaluators

- At the start of each academic year, no later than the second Monday after the first day of classes, the Portfolio Program Coordinator will contact Department Chairs for a list of full-time faculty interested in serving as portfolio Faculty Evaluators.
- The Portfolio Program Coordinator will compile and maintain a list of active portfolio Faculty Evaluators and will provide training to all new Faculty Evaluators.
- Faculty Evaluators will have 15 business days to provide credit recommendations.
- Faculty Evaluators will be compensated for their evaluation of the portfolio.

Minimum Prior Learning Portfolio Contents

- Cover page
- Table of contents
- Certificate of attendance to the Portfolio Workshop
- Certificate of payment of portfolio fees (non-refundable)
- Copy of degree audit and Portfolio Request to Pursue
- Abstract
- Resume
- Syllabus for courses requested (obtained from a faculty member or area department at Worcester State University). If the course is part of LASC, the syllabus should include learning outcomes in alignment with the content area learning objectives
- Narrative and Skills inventory (resources from the annotated bibliography should be integrated into this section)
- Supporting documentation/Evidence of Prior Learning: performance evaluations, reports, certificates of attendance to workshops/trainings, etc.
- Two professional letters of reference sent to the program directly from the recommenders
- Annotated bibliography: 10 sources per course requested. The resources should be integrated into the narrative and skills section.

Prior Learning Portfolio Process

- Undergraduate students interested in pursuing the Prior Learning Portfolio option complete an online self-paced Portfolio Workshop to understand the portfolio policies and the portfolio creation process.
- Students identify the courses they wish to request through their portfolio and complete the Portfolio Request to Pursue. Students meet with their major academic advisor to ensure that courses fit their degree completion plan, and the portfolio coordinator to receive approval (through signatures).
- Students produce all the necessary documentation and narratives for portfolio submission.

- Students pay portfolio review fees (a portfolio assessment charge is added to the students' accounts before payment for the bursar's office to process the charge).
- Students submit a portfolio.
- The Portfolio Coordinator sends the portfolio to the faculty evaluator(s) for review.
- Faculty Evaluators will return the Rating Rubric and Decision Letter to the Portfolio Coordinator within 15 days business days.
- Students are notified of the results and provided with the reviewers' feedback.
- If course credit has been denied, students may revise and re-submit their portfolios for a second review. Students will have 15 business days from the day they were provided with the denial letter to re-submit their portfolios. No additional reviews will be allowed.
- The Portfolio Coordinator sends the award letter to the Associate Vice President for Continuing Education for final approval.
- The Associate Vice President for Continuing Education submits an award letter to the Registrar's Office for credit posting.

Program

Registration and Course Credit Information

Seal of Biliteracy

Standards of Progress

Community Standards

As a student, the Office of Community Standards at Worcester State University is your resource for information on your rights and responsibilities as a member of our campus community, understanding the balance between individual and community rights, and support of a safe and inclusive atmosphere conducive to your success. Integrity, scholarship, community, creativity, and excellence are the core values that guide our conduct, performance, and decisions.

Information about The Office of Community Standards can be found at <https://www.worcester.edu/Community-Standards/>.

Transcripts

Official transcripts of coursework taken at Worcester State University or Becker College may be obtained by eligible students from the Office of the Registrar with the completion of the online transcript request process found at (<http://www.worcester.edu/transcriptrequest>). Transcripts are \$10 per copy.

Undergraduate Grade Appeal Procedure

Withdrawal from Worcester State University/Leave of Absence

Enhanced Learning Opportunities

- Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science (p. 61)
- American Antiquarian Society Seminar (p. 61)
- College Academic Program Sharing (CAPS) (p. 62)
- Department Challenge (p. 62)
- Higher Education Consortium of Central Massachusetts (HECCMA) (p. 62)
- Internships and Professional Experiences (p. 63)
- NEBHE Tuition Break (p. 63)
- Off-Campus Courses (p. 64)
- Pre-Law Program (p. 64)
- Pre-Medical, Pre-Dental, Pre-Veterinary and Pre-Pharmacy Advisory Program (p. 64)
- Reserve Officer Training Corps (ROTC) (p. 65)
- Summer Programs (p. 65)
- The Washington Center for Internships and Academic Seminars (p. 65)

Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science

Worcester State University (WSU) and Massachusetts College of Pharmacy and Health Science (MCPHS) have a formal affiliation agreement that admits students into an articulated program that begins with three years at WSU in one of three science tracks (Biology, Biotechnology, or Chemistry) and concludes with the three-year accelerated Doctor of Pharmacy program at MCPHS's Worcester or Manchester (NH) campus. After successfully completing the first-year of required coursework in the PharmD program at MCPHS, students will earn a Bachelor of Science degree from WSU. The first three years at WSU offer a blend of liberal arts and sciences that meet both the MCPHS general education curriculum requirements and the specific science track requirements at WSU. MCPHS provides the coursework needed for the student to earn the Bachelor of Science degree from WSU at the end of the first-year of professional study and the professional education required to earn the Doctor of Pharmacy degree at the end of three years at MCPHS.

MCPHS shall accept up to ten (10) qualified WSU students each year into the first year of the Pharmacy Program. If more than 10 students meet the established requirements and wish to transfer under the terms of this Agreement, the 10 students determined by the MCPHS Worcester/Manchester Pharmacy Admissions Committees to be the best qualified will be assured transfer admission, with the remaining students accepted on a space available basis.

Students who qualify (at the end of three years at WSU) for the Accelerated Pharmacy Program with MCPHS must:

- Have been full-time students at WSU for the three pre-pharmacy years and have followed one of the approved curricula
- Have complete all pharmacy prerequisite courses at WSU with at least C grades (not C-)

- Obtain an IBT-TOEFL score of at least 79 or an IELTS score of at least 6.5 if English is a second language
- Meet current MCPHS admission and prerequisite requirements published on the MCPHS website

Students who transfer to WSU from another college are not eligible for this program but can apply to MCPHS via the traditional application process.

Students applying to the MCPHS Accelerated Pharmacy Program must:

- Declare by November 1 of their third year at WSU their intent to transfer to MCPHS as a first-year Pharmacy Program student the subsequent Fall term by completing an online form available on the WSU pre-health website.
- Complete an application to MCPHS via the PharmCAS System by November 1.
- Complete a successful pre-admission interview, conducted by MCPHS at the campus to which the student intends to transfer.

American Antiquarian Society Seminar

Each fall the American Antiquarian Society and five Worcester Colleges—Assumption College, Clark University, College of the Holy Cross, Worcester Polytechnic Institute and Worcester State—sponsor a research seminar at the Society library. The seminar is conducted by a scholar familiar with the Society's extensive early American History collection, and the seminar topic is related to his or her field of research. Normally, two students are chosen from each of the five colleges to participate. The seminar topic and research methods combine several disciplines, and students from a wide variety of majors have participated in this unusual undergraduate opportunity. The seminar is approved as a LASC capstone and as a capstone in the History Major (as HI 465). Further information is available from the Department of History and Political Science.

American Antiquarian Society

185 Salisbury Street

Worcester, MA 01609

College Academic Program Sharing (CAPS)

A student enrolled at any of the nine Massachusetts State Universities may enroll for up to 30 credits at any other state university without going through formal registration procedures. Credits are automatically transferred to the student's home institution, and the student pays no additional tuition or fees. To take part in the program, degree-seeking students must have attained sophomore status and be in good academic standing at Worcester State. For further information consult the Registrar.

Bridgewater State University

131 Summer Street
Bridgewater, MA 02325

Fitchburg State University

160 Pearl Street
Fitchburg, MA 01420

Framingham State University

100 State Street
Framingham, MA 01701

Massachusetts College of Art and Design

621 Huntington Avenue
Boston, MA 02115

Massachusetts College of Liberal Arts

375 Church Street
North Adams, MA 01247

Massachusetts Maritime Academy

101 Academic Drive
Buzzards Bay, MA 02532

Salem State University

352 Lafayette Street
Salem, MA 01970

Westfield State University

577 Western Avenue
Westfield, MA 01086

Worcester State University

486 Chandler Street
Worcester, MA 01602

Department Challenge

When appropriate, and with the sanction of the faculty advisor, students may request and complete a department-developed examination to translate competencies into credit. A limited number of departments offer this as an option, so consult the appropriate department chair. However, in most cases it is recommended that students explore the CLEP option.

Higher Education Consortium of Central Massachusetts (HECCMA)

Eleven Central Massachusetts colleges comprise the Higher Education Consortium of Central Massachusetts (HECCMA). In addition to cultural activities, interdisciplinary programs, and other opportunities, the Consortium provides a cross-registration service whereby full-time, matriculated, day students of member colleges may register at no additional cost for one course per semester at another campus during the Fall and Spring semesters. Students must be in good academic standing to take advantage of the one course per semester cross-registration option. Student eligibility and course applicability is determined by the Registrar's Office. Further information is posted on the Consortium website — <http://www.heccma.org>. Locations of HECCMA institutions are:

Anna Maria College
50 Sunset Lane
Paxton, MA 01612

Assumption University
500 Salisbury Street
Worcester, MA 01609

Clark University
950 Main Street
Worcester, MA 01610

College of the Holy Cross
1 College Street
Worcester, MA 01610

Cummings School of Veterinary Medicine, Tufts University
200 Westboro Road
North Grafton, MA 01536

MCPHS University
19 Foster Street
Worcester, MA 01608

Nichols College
121 Center Road
Dudley, MA 01571

Quinsigamond Community College
670 West Boylston Street
Worcester, MA 01606

UMASS Chan Medical School
55 Lake Avenue North
Worcester, MA 01655

Worcester Polytechnic Institute
100 Institute Road
Worcester, MA 01609

Worcester State University
486 Chandler Street
Worcester, MA 01602

Internships and Professional Experiences

Matriculated students in good academic standing are eligible for internship placement if they meet departmental requirements for such placement. No more than 12 academic credits may be applied toward graduation. An internship is a form of experiential learning that permits a Worcester State matriculated student to convert theory into action. An internship may be undertaken with or without the expectation of academic credit. If credit is to be granted, however, the internship must be monitored and evaluated by the appropriate Worcester State department and a grade awarded at its completion. The internship can be constructed according to any of a number of models including professional

apprenticeships, work experience, field research, career exploration, socio-political action and service learning. Because students must be actively involved in the development of an internship placement —by developing a resume, preparing necessary correspondence, or being interviewed—they should contact the faculty sponsor in the semester prior to the proposed internship. The internship contract sets forth the responsibilities of each party so that each understands his or her specific role in the educational field experience. Each program is designed to accommodate and articulate the personal goals of the student, the academic goals of the department, and the needs of the participating off-campus organization. Information about available internships is regularly relayed to, and publicized in, appropriate academic departments. The following conditions apply to all internships:

- No more than 12 units of internship credit may count toward a degree.
- Students undertaking internships must be in good academic standing.
- Only juniors and seniors may undertake internships.
- A copy of the student's internship contract with the sponsoring department must be filed with the Registrar's Office.
- Students are responsible for providing their own transportation for off-campus learning experiences.

NEBHE Tuition Break

Worcester State participates in a regional cooperative program administered by the New England Board of Higher Education. The NEBHE Tuition Break program offers qualified residents the benefits of in-state tuition plus 50% in certain programs at any New England state university, college, two-year college, or technical institute. The purpose of the program is to expand higher educational opportunities for New England residents by making available, on an equal basis, those programs not commonly offered at every institution. Information about the program can be obtained from the Admissions Office, from any school counselor, or online at www.nebhe.org/tuitionbreak/.

Eligible Programs for Worcester State University:

Biotechnology: residents of CT

Occupational Studies (BS): residents of CT, ME, RI, VT
 Urban Studies: residents of ME, NH, RI, VT

Zip Codes: 06245, 06246, 06255, 06262, 06277

Off-Campus Courses

Matriculated students may enroll in off-campus courses at regionally accredited institutions in academic disciplines that are compatible with the Worcester State curriculum. To assure applicability and transferability, matriculated students must have approval in writing from their faculty advisor and the Registrar before enrolling in courses at other accredited institutions. Copies of course descriptions from college catalogs or other publications for each course must be attached. Forms are available at the Registrar's Office (Administration Building, Room 107), or on the Registrar webpage: <https://www.worcester.edu/registrar/>.

Pre-Law Program

In addition to the minor in Pre-Law (/undergraduate/school-humanities-social-sciences/political-science/minor-pre-law/ (p. 414)), WSU has 3+3 Law Degree Agreements with the UMass School of Law and the Western New England University School of Law.

More information about these programs can be found at <https://www.worcester.edu/Articulation-Agreements/>.

UMass School of Law

333 Faunce Corner Road

Dartmouth, MA 02747

Western New England University of Law

1215 Wilbraham Road

Springfield, MA 01119

Pre-Medical, Pre-Dental, Pre-Veterinary and Pre-Pharmacy Advisory Program

Worcester State University offers an advisory program for students interested in preparing for medical, dental, or veterinary studies, or for post-graduate study in another healthcare field such as pharmacy, physical therapy, or optometry. Students

interested in any of these tracks may pursue study in any of the Worcester State University academic majors but must complete all prerequisite courses required for their post-graduate programs of interest. It is the students' obligation to check with the professional school(s) to which they intend to apply for exact requirements. Nearly all medical, dental, and veterinary schools require one year each of the following laboratory courses: General Chemistry, Organic Chemistry, Biology, and Physics. Schools typically also require one year of English (e.g. EN-101 and EN-102), and may require Mathematics through Calculus. Study of a modern foreign language is encouraged but not required. Regardless of major, students are advised to select CH-120 and CH-121, General Chemistry I and II, and either BI-140 and BI-141, or PY-221 and PY-222 or PY-241 and PY-242 in their first-year.

Students interested in medicine (allopathic or osteopathic physician or physician assistant), dentistry, veterinary medicine, optometry, podiatry, or physical therapy should consult both the major advisor and the Chair of the Pre-Medical and Pre-Dental Advisory Committee as soon as possible following matriculation. Students should note that the application process for many of these professional programs must be started more than a year in advance of the planned date of matriculation into the programs. Therefore, the course requirements and required national pre-professional exam (e.g., MCAT, DAT) must be taken before that time (e.g. during the spring of the Junior year for anyone wishing to begin a professional program immediately after graduation from WSU). Students wishing to apply to programs with a committee letter of recommendation (usually for medical, dental, or podiatry school but not veterinary school or other healthcare programs) must arrange an interview with the Pre-Medical and Pre-Dental Advisory Committee prior to applying. Students majoring in Biology, Biotechnology, or Chemistry have the option of declaring a Pre-Medicine Concentration in those majors. Students pursuing a major other than Chemistry may also declare a Chemistry Minor for the Health Professions. Additional information is available at <http://www.worcester.edu/PreMed> and for the pre-medicine concentrations/minor as follows:

- Major in Biology, Pre-Medical Concentration (p. 294)
- Major in Biotechnology, Pre-Medical Concentration (p. 297)
- Major in Chemistry, Pre-Medical Concentration
- Chemistry Minor for the Health Professions
- Pre-Medical Courses For Non-Biology, Biotechnology, or Chemistry Majors (p. 299)

Reserve Officer Training Corps (ROTC)

Office of Military Affairs & Veteran Services

The Office of Military Affairs & Veteran Services acts as a liaison between the different ROTC options available to Worcester State University students.

Any interested can reach the director of Military Affairs & Veteran Services, Dr. Stephanie Teixeira (steixeira1@worchester.edu).

Air Force

The Department of Air Force Aerospace Studies at Worcester Polytechnic Institute offers education and training to become commissioned officers in the United States Air Force through its Air Force Reserve Officer's Training Corps (AFROTC) program to all qualified Worcester State University students. For further details, qualifications, and information on scholarship opportunities, please contact AFROTC Detachment 340, Worcester Polytechnic Institute, 37 Institute Road, Worcester, MA 01609, Phone: 508-831-5747, Email: afrotc@wpi.edu, Website: <http://www.wpi.edu/academic/departments/air-force-aerospace-studies>

Army

The Department of Military Science at Worcester Polytechnic Institute offers the education and training to become commissioned officers in the United States Army through its Army Reserve Officer's Training Corps (ROTC) program to all qualified Worcester State University students. For further details, qualifications, and information on scholarship opportunities, please contact Army ROTC Office, Daniels Hall, Worcester Polytechnic Institute, 100 Institute Road, Worcester, MA 01609-2280, Phone: 508-831-5268, Email: armyrotc@wpi.edu

Navy and Marine

The Department of Naval Science at the College of the Holy Cross offers the education and training to become commissioned officers in the United States Navy and Marine Corps through its Naval Reserve Officers Training Corps (NROTC) scholarship program and its College (non-scholarship) program to all qualified Worcester State University students. For further details, qualifications, and information on non-scholarship and scholarship opportunities, please contact NROTC Office, College of the Holy Cross, One College Street, Box E, Worcester, MA 01610-2395, Phone: 508-793-2433/2434, Email: nrotc@holycross.edu

Summer Programs

Worcester State offers a variety of undergraduate and graduate courses during the summer months. Two seven-week sessions, the first beginning in late May and the second beginning in early July, provide intensive enrichment opportunities for students working toward completion of degree requirements or upgrading and enhancing professional skills. In addition, there is a 14 week "Full Summer" session for classes that need to meet for a longer period of time. The summer schedule is usually available in March. Course listings are available at <http://www.worcester.edu/register>.

The Washington Center for Internships and Academic Seminars

Worcester State participates in this internship program that combines experience in public, private, or non-profit sectors in Washington, D.C. with academic learning. The internship provides a unique opportunity to explore career paths while sampling the intellectual and cultural diversity of the nation's capital. This internship must be taken for academic credit, so it is imperative that a student meets with the faculty sponsor within his/her academic major early in the semester prior to the proposed participation.

Interested students should contact the Associate Director of Employer Relations, who is the WSU Campus Liaison for The Washington Center (TWC) for Internships and Academic Seminars. She will explain how the application process works, how credits are

applied at WSU, and all of the logistics involved in participating in this program. All students who apply to TWC must obtain the approval of the Campus Liaison.

The Washington Center

1333 16th Street NW

Washington, DC 20036

Services for Students

Student Services is a collaboration of varied offices designed to enhance each student's experience at Worcester State University. WSU offers career counseling, provides assistance for students with physical and/or learning disabilities, and presents programs for students who may need additional academic preparation for college success.

- Academic Supports, Policies, and Procedures (p. 34)
- Athletics and Recreation (p. 66)
- Bookstore (p. 66)
- Career Services (p. 67)
- Counseling Services (p. 67)
- Dining Services (p. 68)
- Health Forms and Immunization (p. 68)
- Health Services (p. 69)
- LGBTQIA+ Resource Center (p. 70)
- Office of Student Involvement and Leadership Development (p. 70)
- Residence Life and Housing (p. 71)
- Spiritual Life (p. 71)
- Student Accessibility Services (p. 72)
- The Binienda Center for Civic Engagement (p. 72)
- University Police Department (p. 72)
- Veterans Service (p. 72)

Athletics and Recreation

The Athletics and Recreation office is an integral component of Worcester State University's efforts to provide a high-quality, affordable education and supportive environment that promotes the total development of the student. The Gene J. and Julianne DeFeudis Wellness Center provides our students robust intramural and recreational

opportunities, while our student-athletes compete in some of the nicest indoor facilities in New England. Employment opportunities for students may also be available in the Wellness Center.

The Athletics and Recreation staff provides students with the opportunities to grow and learn through intercollegiate varsity athletics, intramurals, and wellness programs. Participation in these activities fosters physical, mental, leadership, and life skills development, while enhancing self-discipline and sportsmanship qualities.

Worcester State University is a Division III member of the National Collegiate Athletic Association (NCAA) and a proud member of the Massachusetts State Collegiate Athletic Conference (MASCAC).

The University sponsors the varsity sports of baseball, men's and women's basketball, men's and women's cross country, field hockey, football, men's and women's golf, men's and women's ice hockey, men's and women's soccer, softball, men's and women's indoor and outdoor track and field, women's volleyball, and women's lacrosse.

For those students interested in competing on a less formal level, Worcester State offers an intramural sports program in such sports as football, basketball, street hockey, dodgeball, softball, soccer and volleyball. Any student who wishes to participate in intramural sports, regardless of ability or past experience, is urged to do so.

The Wellness Center also offers additional opportunities such as use of the 9,000 square foot Fitness Center, three exercise rooms with daily group exercise classes as well as a golf simulator and several academic classrooms.

In all of its programs, the Athletics and Recreation office is cognizant of its responsibilities as an educational support component at Worcester State University.

Bookstore

All required course materials for classes are available at the Worcester State University Bookstore located in the Student Center. This full-service bookstore offers new and used textbooks, as well as textbook rental. To make the book selection process for classes easier, please bring a class schedule. The

Bookstore also stocks school supplies, specialty books and a wide variety of gifts and clothing imprinted with the Worcester State University logo.

Used Textbooks

The Bookstore stocks many used copies of textbooks, but the supply is limited and they sell quickly. Students should shop early for the best selection of used books.

Rent-A-Text

Students have the option to use Rent-A-Text through the University bookstore saving on average half the price of a new book. Students need to complete the short rental agreement online or at the register in the store. Students must be 18 years of age and provide a valid ID and a credit card as collateral. With Rent-A-Text, students can highlight and write in the book. Normal wear and tear is anticipated. Students can pick up rental textbooks in store or order online and have them shipped to their home.

Textbook Rental Return Policy

Any student who uses the University Bookstore Book Rental Program must abide by the contract he/she signs with the bookstore. All rented textbooks are due back by the rental due date. Students who fail to return books or pay the balance due will have their accounts turned over to a collection agency. In addition, the student will not be eligible to participate in the Textbook Rental Program until he/she settles his/her debt.

Online Purchasing

Textbooks and many general merchandise items are available on the bookstore website at <http://www.bkstr.com/worcesterstatestore/home>. Students can purchase or rent textbooks by clicking on the textbook tab, picking the proper term and selecting the course and section numbers. Online orders can be picked up at the bookstore or they can be shipped home.

Return Policy

Textbooks are returnable for one week after the first day of the semester, with receipt, provided they are unmarked and are in the purchased condition with all materials intact. General merchandise is returnable at any time with receipt.

Ways to Pay

The bookstore accepts cash, personal checks, MasterCard, Visa, American Express, and Discover, as well as the OneCard. The bookstore also has gift cards available for sale both in store and online.

Book Buy Back

The bookstore will purchase books back at any time, no matter where they were originally purchased, provided there is national demand for the book, as determined by the bookstore's buying guide. The bookstore purchases books back for resale from Worcester State University students at half the new purchase price provided there is a current order and need for the book in the upcoming semester. The best time for students to sell books back is during finals when they are finished with them and the bookstore has the most-up-to-date information on the needs of the upcoming semester.

See bookstore website for hours. Bookstore Online:
<http://www.bkstr.com/worcesterstatestore/home>

Career Services

Career Services provides students with the opportunity to explore career fields, occupations and conduct self-assessment, link career planning to academic planning, obtain experience in a variety of professional areas, and make a successful transition from college to career or to further schooling. Career Services works with undergraduate and graduate students, and recent alumni on resume and cover letter writing, preparing for interviews, applying for internships/jobs, building LinkedIn profiles, and more! We have a wide variety of services and resources available. Please visit our website at <http://www.worcester.edu/careerservices>, or visit our office on the third floor of the Student Center. Appointments with a Career Advisor are available year-round to currently matriculated students and alumni who have graduated within the past 5 years. Please call us at 508-929-8941 to make an appointment or if you have any questions. We look forward to serving you.

Counseling Services

The Counseling Center assists students in coping with personal issues that interfere with their academic, personal development, and sense of well-being. The Counseling Center provides

services to degree seeking undergraduate students.

Individual counseling is available to those who are seeking assistance. Following an initial evaluation, counselors will work with students to assess the level of services the student needs. This may include weekly, bi-weekly, or monthly appointments and in some cases a referral to community resources. Same day appointments may be available through our walk-in triage process. Counselors are available to treat a wide-variety of mental health concerns including, but not limited to trauma, depression, anxiety, and substance use disorders. Group counseling may also be available on an as needed basis. On our website (worchester.edu/sp-counseling) students can access free online screenings for a variety of areas. These are available in Spanish and English.

The Counseling Center is located on the third floor of the Student Center. To make a counseling appointment, please call 508-929-8072 or you may email the Counseling Center at counseling_wsu@worchester.edu.

Dining Services

Dining at Worcester State University

Worcester State Dining Services is powered by Chartwells, a Division of Compass Group North America. Chartwells is proud to present to you an unforgettable dining experience built with passion, practicality, ingenuity and sensibility. Great food and exciting environments combined with our pride of service transform the ordinary into the unexpected.

Dining Locations

There are five dining locations on campus including Sheehan Hall Dining Hall, The Food Court, Lancer's Loft, Starbucks Café, and The Market. For more information on hours, menus, prices, specials and upcoming events visit www.dineoncampus.com/wsu for details.

Meal Plans

Chartwells offers a wide variety of meal plans for resident and commuter students. Below is a quick overview of the plans. For more information about meal plans and to see which plan is right for you, please visit <http://www.dineoncampus.com/wsu>.

Resident Meal Plans

Resident students can choose from traditional meal plans. New this year is the Lancer Unlimited, The Lancer 19, The Lancer 14 and the Lancer 10, visit <http://www.dineoncampus.com/wsu> for details.

Commuter Meal Plans

Commuter students are required to purchase a Commuter Dining Dollar plan for all first-year students, sophomore, junior and first-time transfer commuter students. These Dining Dollars can be used in Sheehan Dining Hall which is an "all you care to eat" environment or they can be used like cash in all of the retail locations. To find out more information about the commuter meal plans, visit <http://www.dineoncampus.com/wsu>.

Commuter Block Meal Plans

New this year! Commuter students have the option to purchase additional Commuter Block plans at much lower entry points than in previous years. These plans allow access to Sheehan Dining Hall which is an "all you care to eat" environment. Visit <http://www.dineoncampus.com/wsu>.

Dining Dollars

Dining Dollars can be used in Sheehan Dining Hall which is an "all you care to eat" environment or they can be used like cash in all of the retail locations. Dining Dollars can be added at any time to any Resident or Commuter meal plan by visiting <http://www.dineoncampus.com/wsu>.

Health Forms and Immunization

Each full-time undergraduate and graduate student, all full and part-time students in health science programs involving patient contact (Nursing, Occupational Studies, and Communication Sciences and Disorders), and all students attending Worcester State University on a student visa must present evidence of immunization in order to register for courses. Massachusetts law specifies the following immunizations:

1. two doses of measles, mumps and rubella vaccine given at least one month apart beginning at or after 12 months of age; and

2. one dose of tetanus/diphtheria/pertussis (Tdap) is required, if it has been 5 years or more since the last dose of tetanus/diphtheria (Td); and
3. three doses of Hepatitis B vaccine; and
4. all full-time students, 21 years of age and younger, and all students (regardless of age) living in a dormitory or other congregate on-campus housing, will be required to have immunization with the Meningococcal vaccine to protect against serotypes A, C W and Y, on or after their 16th birthday, or the student/parent/legal guardian may sign the Meningococcal Information and Waiver Form developed by the Massachusetts Department of Public Health; and
5. a history of varicella (chicken Pox) disease verified by a health care provider, or two doses of Varicella vaccine given at least 1 month apart beginning at or after 12 months of age.

A copy of an immunization record from a school or medical provider's office indicating receipt of the required immunizations may be presented; or in the case of measles, mumps, rubella, Hepatitis B, or varicella, laboratory evidence of immunity. The law provides for medical and/or religious exemptions. Provision is also made to allow students to register on condition that the required immunizations are obtained within thirty days of enrollment.

Students must submit the Worcester State University Health and Immunization form, completed by a medical provider, in order to register for courses. In addition to the required immunizations, this form includes a physical exam completed within 15 months of entrance to school, and the completion of the Tuberculosis Risk Screening Questionnaire.

All resident students must have a complete Worcester State University Health Form in order to move into the residence halls.

All students, listed previously, must have a complete Worcester State University Health Form in order to register for classes.

If a student does not have a complete Worcester State University Health Form within 30 days of enrollment, a Health Hold is placed on his/her account, and he/she will not be able to register for classes the next semester.

Contact Information

For additional information regarding the Worcester State University Health and Immunization Form or Health Holds, please contact :

Health Services - Sheehan Hall
 508-929-8875
 508-929-8075 (fax)
 email: health_services@worchester.edu
 Webpage: <http://www.worcester.edu/Health-Services/>

Health Insurance

The Commonwealth of Massachusetts requires that students must be covered by health insurance under their own policy or purchase the Worcester State University health insurance plan. Health insurance is required for undergraduate students if they register for nine (9) or more semester hours of credit. Coverage for graduate students is required if they register for four and a half (4.5) or more semester hours of credit.

At the time of Fall and Spring registration, all students will be enrolled in and charged for the Worcester State University Student Health Insurance Program. Students who do not wish to participate in Worcester State University's plan must return the completed waiver request form **that is enclosed with their bill**. They may also waive the insurance online at University Health Plans. Both the completed waiver form and proof of insurance coverage should be returned with payment of their bill to the Bursar's Office. Students who enroll only in summer session courses are not required to participate.

Health Services

Health Services offers health care and health education to currently enrolled full-time/part-time, matriculated, undergraduate students. The office is staffed by nurse practitioners and part-time physicians during the Academic Year.

Services

Services include visits for health concerns/illness, health maintenance/wellness information, women's health including routine gynecological exams/pregnancy issues/contraception, STI screening (male and female), Physical Exams in select situations, Tuberculosis skin testing in select situations, and specialty referral as needed. Information about the

student's care will only be shared with the student's written approval, except as required by law, and in cases of danger to the student or others. Students' Health and Immunization Forms remain on file in the Health Services office.

Costs

Most services in Health Services are covered by the Health Services Fee billed with the tuition bill. Any laboratory tests sent out from Health Services are billed to the student's health insurance company. The student is responsible for any additional charges not covered by their health insurance company. Students should call their health insurance company prior to the appointment to determine if they require laboratory specimens to go to a specific laboratory company. The laboratory specimens are sent to Quest Diagnostics Labs. Health Services does not bill your health insurance company for visits to our office or collect co-payments at the time of the office visit.

Location/Hours

The Health Services Office is located in Sheehan Hall. The office has a separate entrance from the main entrance doors of Sheehan Hall. The office entrance is located to the right of the main entrance, down the sidewalk headed toward lower campus.

Office hours during the Academic Year for clinical visits are:

Monday - Friday 8 a.m. - 4 p.m.

When Health Services is closed, emergencies are referred to Worcester State University Police, 508-929-8911

Appointments

Appointments can be made by calling the Office, 508-929-8875. It is best for the student to call as early in the day as possible, to schedule an appointment that is convenient for their schedule.

Contact Information

Health Services
508-929-8875
508-929-8075 (fax)
email: health_services@worchester.edu

Webpage: Health Services

LGBTQIA+ Resource Center

The Worcester State University LGBTQIA+ Resource Center works to create an open and inclusive environment for all students, faculty, and staff. The center aims to affirm all sexual orientations, and gender identities through advocacy, education, and events.

Contact: lgbtqia@worchester.edu

Office of Student Involvement and Leadership Development

The Office of Student Involvement and Leadership Development ("OSILD") is located on the 2nd floor of the Student Center. The mission of OSILD is to support the goals of Worcester State University by providing a co-curricular program student experience to challenge and encourage students to become empowered, inclusive, and knowledgeable future community and global leaders. Coupled with their intensive academic program, the co-curricular program allows the student to get the most out of their university experience. Through participation in leadership training, student organizations, and a diverse array of social, cultural, and educational programs, the student benefits by getting real world experience in planning and implementing their own programs. These experiences allow the student to gain valuable life lessons such as time-management and event planning as well as other leadership skills.

Student Organizations

Students are encouraged to participate in at least one co-curricular activity during their time at WSU. There are over 40 active student organizations on campus including groups such as Student Events Committee, Intercultural Student Alliance, Student Government/Student Senate, Equestrian team, Dance Team, Dance Company, Active Minds, Enactus, LGBTQ+ Alliance, Campus Ambassadors, Games Club, Cheerleading, Men's Lacrosse and many others. Leadership training is also provided and encouraged for all members of student organizations to improve their leadership skills and prepare for life after WSU. For more information check out our Student Organization page.

Student Center

The centrally located Student Center is both the heart of campus and the hub for student involvement, and students gravitate here to relax, socialize, study, work, attend meetings and events, and grab a bite to eat. The Student Center is home to a wide range of student services as well as the Information Desk, Resource Room, Bookstore, student organizations, living room lounge, and administrative offices. For more information regarding the Student Center check out our Student Center page.

Leadership Programs

To enhance skills needed by students for their career after WSU, our office offers an array of leadership programs for students involved in student organizations as well as to the larger WSU population. Our three tier leadership program, Circles of Leadership, allows students to partake in a progressive and immersive leadership experience through workshops and skill building sessions over their time as an undergraduate. OSILD also coordinates the annual Leadership Symposium, an event for students looking to expand their knowledge in many different areas of leadership, and provides leadership resources and shares stories of student leaders on <http://worchester.edu/campus-life/leadership-opportunities/>. Additional programs are offered specifically for student organization members as well including our Leadership Summit and our program planning and budgeting trainings.

Commuter Services

OSILD also provides many opportunities for commuters to get involved on campus. Commuter Services staff is dedicated to assisting students and serves as an advocate for commuter concerns. Students are welcome to contact Commuter Services to express any concerns that you may encounter as a commuter student at WSU. The office works in conjunction with the Commuter Activities Board to support commuter students in addressing such concerns. The Commuter Activities Board ("CAB") is a major student organization supporting the voice of commuter students and plans fun and educational events for the entire campus community with particular emphasis on commuter students.

Orientation

OSILD also oversees the planning and implementation of the Orientation Program. The comprehensive program includes sessions for first year students, parents, and transfer students as well.

Email: studentinvolvement@worchester.edu
Phone: 508-929-8073

Residence Life and Housing

Mission

Residence Life and Housing is committed to providing inclusive living and learning experiences that enhance our residents' engagement in their own development and academic success.

Students may choose to live in one of four residence halls on campus: Chandler Village, Dowden Hall, Sheehan Hall or Wasylean Hall.

Residence Life and Housing
101 Sheehan Hall
508-929-8074
reslife@worchester.edu

<http://www.woolife.worcester.edu>

Spiritual Life

Spiritual Life at Worcester State University offers you an interfaith experience for personal enrichment. We strive to cultivate the spiritual and psychological development of the university community, and we provide religious services, pastoral counseling, and a variety of spiritually uplifting and enlightening programs. We also sponsor bible study groups, prayer groups, free luncheons, stress free events, and events with ministry groups at other area campuses. Located on the main floor of the Learning Resource Center, the Spiritual Life Office and Prayer and Meditation Lounge is a sanctuary for reflection and relaxation. The space is open to all members of the university community, and we encourage you to use our main space for meetings or other scheduled events. Whether you seek solitude or connection with other people, you will find an atmosphere of peace and comfort here. Learn more <https://www.worcester.edu/campus-life/student-services-2/spiritual-life/>.

Student Accessibility Services

Worcester State University is dedicated to making its programs, services and activities accessible for all students. Student Accessibility Services (SAS) collaborates with and empowers students who have disabilities in order to coordinate support services and programs that enable equal access to an education and university life. SAS assists eligible students with self-advocacy, utilizing reasonable accommodations, and gaining awareness about campus-wide resources in order to fulfill their postsecondary education goals. SAS provides a welcoming, supportive and engaging setting for students, and promotes disability as an essential aspect of diversity and inclusion on campus.

Accommodations and services are individually determined through an interactive intake process. Please see our website: www.worcester.edu/Student-Accessibility-Services for documentation guidelines. For further information, contact us: Room 131, Shaughnessy Administration Building, telephone: 508-929-8733, fax: 508-929-8214, email: sas@worchester.edu.

The Binienda Center for Civic Engagement

The Binienda Center for Civic Engagement was established originally as the Center for Service Learning and Civic Engagement in the Spring of 2006 by a group of distinguished faculty at Worcester State University. The center was gifted by the family of John Binienda in 2014 and the center renamed in the honor of our distinguished Alum. Currently located in the Office of Student Affairs (Student Center room 335) the mission of the Center is to challenge students and faculty to investigate social problems by examining their root causes in the classroom while simultaneously addressing them in the community. To accomplish this successfully, students and faculty are encouraged to work collaboratively with community partners to design effective research and service projects. We facilitate projects such as Jumpstart, an Americorps pre-school literacy program, and sponsor alternative spring break trips. We offer reciprocal partnerships with public, private and non-profit organizations in communities to address critical social issues.

The hope of our civic engagement projects is that higher education institutions engender students' civic learning through participation in civic engagement, academic coursework, extracurricular activities and off-campus programming. Used effectively, civic learning and civic engagement prepare individuals for effective democratic participation, which in turn promotes growth of healthy communities, global economic vitality, social and political well being, and positive human interactions. Faculty, staff, students and community partners needing support in civic learning and engagement practices are invited to contact the center's director at: WSU_BiniendaCenter@worchester.edu

University Police Department

The Worcester State University Police Department's main priority is to provide the safest and most secure environment possible for the students, faculty, staff, and visitors that comprise the institution's community. WSU believes that safety is everyone's responsibility and encourages students, faculty, and staff to engage in community policing and to report any suspicious activity to Worcester State University Police. Policing is provided 24 hours a day throughout the calendar year by a full-time staff of sworn officers, security officers, and dispatchers. Worcester State University Police officers enforce the rules and regulations of Worcester State University in conjunction with applicable state and federal laws. The department also provides crime prevention programs and seminars scheduled at intervals throughout the year as well as ad hoc programs when requested by any constituent of the Worcester State University community.

The Worcester State University Police Department and the Parking and Transportation Office are located on the first floor of Wasylean Hall. The University Police may be reached by visiting www.worcester.edu/police or by calling 508-929-8911 for emergencies or 508-929-8044 for non-emergency calls. The Parking and Transportation Office can be reached by visiting www.worcester.edu/parking or by calling 508-929-8887.

Veterans Service

Worcester State University proudly welcomes student Veterans. Veterans have provided a noble and crucial service and for that, Worcester State thanks you.

Worcester State is committed to helping Veterans and their dependents meet their educational needs by providing information, services, and support.

Certifying Official for Veterans Benefits

The WSU Certifying Office for Veterans Benefits contact, who handles certifications for Chapter 33, the Post-9/11 GI Bill®, and the Montgomery GI Bill® at WSU is: Cherie Milosh, Veterans Affairs School Certifying Official (cmilosh@worchester.edu) Registrar's Office, Administration Building, Room 107, 508-929-8773.

The Registrar's Office can also provide general information of interest to Veterans and dependents of Veterans enrolled at WSU. Veterans and dependents of Veterans wishing to inquire about possible Veteran's benefits should contact VA Education Benefits at 1-888-442-4551.

(GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the U.S. government web site at <https://www.benefits.va.gov/gibill>).

Director of Military Affairs & Veteran Services

The Director and the Office of Military Affairs & Veteran Services provides access to resources, programming, and positive opportunities as well as creating and fostering a community of Veterans and military connected students at Worcester State University community. Anyone interested in ROTC opportunities available at WSU should reach out to the director. Once a Veteran has been accepted to WSU and the benefits are certified, the Office of Veterans Services will assist in the transition to the academic environment. Every day the office works to provide necessary resources, student Veteran advocacy, research and programing to aid in student Veterans in achieving their goals at WSU. The student Veteran Lounge located in the Student Center also has off-campus resources, a space to study, or relax between classes.

The mission of the Office of Military Affairs & Veteran services is to ensure that Veterans and dependents are successful in completing their academic undergraduate and graduate goals at

WSU. Through dedicated partnerships both on WSU campus and in the greater Worcester community, we are dedicated to the academic, professional, personal development, and empowerment of military connected students. We encourage you to reach out, contact the Director of Military Affairs & Veteran Services, Dr. Stephanie Teixeira (steixeira1@worchester.edu) Student Center, 3rd Floor, 508-929-8884.

Veterans Access, Choice, and Accountability Act

The Veterans Access, Choice and Accountability Act of 2014 (codified at 38 U.S.C. 3679) has been amended by Public Law 117-68, the Colonel John M. McHugh Tuition Fairness for Survivors Act of 2021, which modifies 38 U.S.C. 3679(c).

The amendment requires that for all courses, semesters, or terms beginning after August 1, 2022, public institutions of higher education must charge qualifying Veterans, dependents, and eligible individuals the in-state resident rate for tuition and fees.

In summary, Public Law 117-68 adds Chapter 35 recipients to individuals required to receive the in-state resident tuition rate effective August 1, 2022.

As amended, 38 U.S.C. 3679(c) requires that all of the following individuals be charged the in-state resident rate:

- A Veteran using educational assistance under either Chapter 30 (Montgomery G.I. Bill® – Active Duty Program), Chapter 31 (Veteran Readiness & Employment) or Chapter 33 (Post-9/11 G.I. Bill®), of 38 U.S.C. who lives in the state in which the institution is located (regardless of their formal state of residence).
- Anyone using transferred Post-9/11 G.I. Bill® benefits (38 U.S.C. § 3319) who lives in the state in which the institution is located (regardless of their formal state of residence).
- Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in the state in which the institution is located (regardless of their formal state of residence).

- Anyone using Chapter 35 (Survivors and Dependents Educational Assistance Program) benefits who lives in the state in which the institution is located (regardless of their formal state of residence).

- Anyone described above while they remain continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same institution. The person so described must be using educational benefits under Chapter 30, Chapter 31, Chapter 33 or Chapter 35 of 38 U.S.C.

Federal law permits public institutions of higher education to require eligible Veterans, dependents, or individuals to demonstrate their intent to establish residency in the state by means other than satisfying a physical presence requirement. For example, institutions can request documentation such as a driver's license, car registration or voter registration, signed lease, or rent receipt to help establish an applicant's intent to establish residency in Massachusetts.

Please note that the federal law does not include a durational residency requirement, nor does it include a requirement that the eligible Veteran, dependent, or individual demonstrate intent to remain in Massachusetts indefinitely. Finally, please note that the federal law does not bar institutions from requiring the eligible Veteran, dependent, or individual to meet other requirements, unrelated to residency, in order to be eligible for the in-state tuition rate.

Public institutions of higher education are required to make this in-state tuition applicability to covered individuals publicly available in their academic catalogs and on their websites. The U.S. Department of Veterans Affairs ("VA") will make publicly available on its website a database explaining any public institution's requirements for beneficiaries to be charged in-state tuition.

Any institution found not to be in compliance with the requirements of Public Law 117-68 by August 1, 2022, will be disapproved by VA for the Chapter 33 Post-9/11 G.I. Bill®, Chapter 30 Montgomery G.I. Bill®-Active Duty Program, Chapter 35 Survivors and Dependents Educational Assistance Program and Chapter 31 Veteran Readiness and Employment (VR&E).

Harry W. Colmery Educational Assistance Act of 2017

WSU adheres to the Harry W. Colmery Educational Assistance Act of 2017 (Forever GI Bill®) - Section 107. Below is a list of addresses including zip codes of any location where a student may physically take classes other than the address approved under Worcester State University's VA-assigned facility code and approved by the Massachusetts State Approving Agency. This list can be found below and at <https://www.worcester.edu/Military-and-Veteran-Students/>.

Aids Project Worcester-nature of site-Practicum
85 Green Street, Worcester, MA 01604

Fairlawn Rehabilitation Hospital-nature of site-Clinical
189 May Street, Worcester, MA 01602

Saint Francis Rehabilitation Center-nature of site-Clinical
101 Plantation Street, Worcester, MA 01604

Sterling Village-nature of site-Clinical
18 Dana Hill Road, Sterling, MA 01564

University of Massachusetts Medical School-nature of site-Practicum
55 Lake Avenue North, Worcester, MA 01609

Worcester Polytechnic Institute-nature of site-ROTC
100 Institute Road, Worcester, MA 01609

United Nations Association of Greater Boston-nature of site-Internship
85 Devonshire Street #1000, Boston, MA 02109

Hostal Dona Chava-nature of site-Field work
Calle 2da NO,5, Pedernales 84000
Dominican Republic

May Street School-nature of site-Practicum
265 May Street, Worcester, MA 01602

Doherty Memorial High School-nature of site-Practicum
299 Highland Street, Worcester, MA 01602

Family Behavioral Health, Inc.-nature of site-Internship
387 Main Street, Oxford, MA 01540

Fairway Independent Mortgage Corporation-nature of site-Internship

783 Southbridge Street, Auburn, MA 01501

Autism Links-nature of site-Internship
377 Shrewsbury Street, Worcester, MA 01608

Machado Consulting, Inc.-nature of site-Internship
32 Franklin Street, 5th floor, Worcester, MA 01608

Sullivan Middle School.-nature of site-Practicum
140 Apricot Street, Worcester, MA 01603

Goddard School of Science & Technology-nature of site-Internship
14 Richard Street, Worcester, MA 01603

Ware Police Department-nature of site-Internship
22 North Street, Ware, MA 01082

Veterans Benefits and Transition Act of 2018

For Veterans using Chapter 31 and Chapter 33 VA benefits, Worcester State University adheres to S2248 PL 115-407 Section 103. For Chapter 33 to be considered a “covered individual” under the Veterans Benefits and Transition Act 2018, the Veteran or other eligible beneficiary must provide a Certificate of Eligibility (COE) or statement of benefit from the Department of Veterans Affairs prior to the first day of classes. The Veteran or other eligible beneficiary must complete a Worcester State University Veteran In-House form to have their VA educational benefits certified for the semester. The Veteran or other eligible beneficiary may be required to provide additional information necessary to properly certify their enrollment by the educational institution. For Chapter 31, the School Certifying Official must receive an authorization from the Department of Veterans Affairs. Worcester State University will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual’s inability to meet his or her financial obligations to the institution due to delayed disbursement funding from VA under Chapter 31 or Chapter 33 except for the amounts not covered by the COE, statement of benefit, or the authorization. Refer to the Worcester State University payment policy (p. 82).

Financial Information

- Affordability/Accessibility Disclosure Statement (p. 75)
- Evening Undergraduate, Graduate, and Summer Programs (p. 76)
- General Worcester State Refund Policy (p. 76)
- Return of Title IV Funds (p. 77)
- Room and Board (p. 79)
- Student Health Insurance (p. 80)
- Tuition and Fees (p. 80)
- Tuition Surcharge (p. 82)
- Undergraduate State-supported Programs (p. 82)

Affordability/Accessibility Disclosure Statement

2024-2025

The schedule of fees, tuition, methods of payment and refund policies are those in effect at the time of publication. They are subject to change without notice.

One of the benefits of being part of public higher education in Massachusetts is the substantial subsidy students receive to enroll in Worcester State. The annual cost information below is provided about the “average” student as a way of showing the amount of this subsidy.

Full Operating Cost (per full-time student)	\$31,710
Less: State Operating Subsidy	(\$12,872)
= Tuition and Mandatory Fees (based on 30 credit hours)	\$18,838
Add: Average Residence Hall Fees	\$13,245
= Cost of Attendance Estimate	*\$32,083*
Annual Aid Available to Students	
Less: Average Annual Student Financial Aid	(\$10,111)
= Net Direct Price to Student	*\$21,972*

Evening Undergraduate, Graduate, and Summer Programs

Tuition for undergraduate courses is currently \$148 per semester hour of credit. Tuition for graduate courses is currently \$189 per semester hour of credit. Tuition is payable at the time of registration and may be made by bank check, money order, personal check, or credit card (MasterCard, Visa, American Express or Discover); cash will not be accepted.

Fees are charged and payable when and as applicable:

Administrative Fee (Undergraduate)	\$161.00 - per credit
Administrative Fee (Graduate)	\$163.00 - per credit
Capital Improvement Fee	\$26.50 - per credit
Transcript	\$10.00 - per copy
Rush Transcript	\$10.00 - per copy
Laboratory Instruction	\$90.00 - per course
Nursing Clinical	\$320.00 - per course
Field Work Supervision/ Internship/Teacher Education Practicum	\$15.00 - per credit
International Student Fee-Fall/ Spring	250.00 per term
International Student Fee-Summer	125.00 per term

Tuition and fee charges are subject to change by the Board of Trustees.

Course Cancellation/Processing of Tuition Refunds

Worcester State reserves the right to cancel any course for which there is insufficient enrollment. Students may transfer to another course by completing appropriate forms in the Registrar's Office. Processing of tuition refunds takes two to four weeks. Refunds are sent to the student at the address of record.

General Worcester State Refund Policy

Applicability

This refund policy applies to all full- and part-time students enrolled in regularly scheduled courses at Worcester State. This policy applies to all tuition, room, board, fees, and other standard billed charges.

Withdrawal Requirements

All matriculated students, undergraduate and graduate, who wish to withdraw from Worcester State must do so in writing to the Registrar's Office on the prescribed form. The official date of withdrawal is that on which the completed form is received and stamped by the Registrar.

All withdrawals from courses – rather than withdrawal from Worcester State entirely – must be done in writing to the Registrar's Office, following the procedures established for that purpose.

Refund Policy

Refunds for withdrawal from Worcester State or withdrawal from courses will be made based on the following schedule if official notice of withdrawal has been received in writing and certified by the Registrar.

1. Prior to the first day of classes, or within the official add/drop period
 - Full refund of all tuition and fees paid
2. After the official add/drop period
 - No refund of any tuition or fees paid (unless registration is cancelled by Worcester State)
3. Room Charge (if applicable)
 - A. Agreement Releases

A Student may request, in writing, a release from this Agreement under the following conditions, but will forfeit the deposit if granted:

1. Graduation; 2. Withdrawal from University; 3. Transferring to another school; and 4. University approved study abroad.

B. Buy-Out of Agreement

A Student seeking a release from this Agreement for any other reason will be charged the corresponding Buy-Out. A Buy-Out of 60% of room charges for the Fall semester is available through the 8th week of the Fall semester. After

the 8th week of the Fall semester, Students are responsible for 100% of the Fall semester room charges and 60% of the Spring semester room charges. A Buy-Out of 60% of room charges for the Spring semester is available until the 8th week of the Spring semester. After the 8th week of the Spring semester, students are responsible for 100% of the Spring semester room charges. Students who participate in the Buy-Out are not eligible for a refund of their deposit.

C. Returning Students Cancellation Policy

Current Students who complete a License Agreement, thereby reserving a space for the 2024-2025 academic year, may request, in writing, to cancel this Agreement according to the terms listed below.

Cancellation before Residence Hall Opening for the Fall semester will result in forfeiture of the housing deposit and being assessed a \$500.00 cancellation charge. All cancellation dates will be established by date received in the Office of Residence Life and Housing.

Current resident students withdrawing for the Spring 2025 semester must have their belongings moved out of their residence hall room within 72 hours of withdrawing from housing and/ or University.

D. Incoming Student Cancellation Policy

Upon receiving a signed Agreement and deposit, this Agreement will be accepted by the Office of Residence Life and Housing for assignment. A Student may request, in writing, to cancel this Agreement within 7 days of the signed Agreement with no penalty except the forfeiture of deposit. Students who cancel this Agreement after the 7th day but before the Fall or Spring semester opening will be assessed a \$300.00 cancellation charge and will forfeit their deposit. Additionally, this Agreement cannot be canceled within 5 days of a semester opening as listed in the Academic Calendar. All cancellation dates will be established by date received in the Office of Residence Life and Housing.

E. License Agreement Buy-Out Appeal

For a Student wishing to appeal a Residence Hall Buy-Out based on a Medical or Financial Hardship, a request in writing must be submitted no later than 48 hours after the approval of the Residence Hall Buy-Out. The criteria and documentation required within the letter of appeal can be requested by email to reslife@worchester.edu. Appeals are heard on a case by case basis.

Return of Title IV Funds

Refund Policy for Students Who Receive Federal Financial Aid

Applicability

This refund policy applies only to all full- and part-time students enrolled in regularly scheduled courses at Worcester State who are receiving Federal Title IV Financial Aid.

This policy is mandated by federal regulation.

Withdrawal Requirements

Matriculated students who fail to take a course during a calendar year will be administratively withdrawn from Worcester State University. Students who wish to permanently withdraw from Worcester State University or take a temporary leave of absence must complete appropriate forms in the Academic Success Center. If the withdrawal or leave of absence is filed prior to the last day to withdraw from courses for the term, "W" will be recorded on the student's record. Students who file for leave of absence or withdrawal after the last day to withdraw from courses for the term may petition if they feel circumstances warrant the recording of "W" for all courses enrolled for that term. Normally, a leave of absence is for one semester; however, a student may have up to one year to return to Worcester State University. Failure to return at the specified time will result in an administrative withdrawal from Worcester State University.

Return of Federal Title IV Funds Policy

Return of Title IV Funds is based on the date a student completely withdraws from Worcester State University (WSU) as determined by the Registrar. During the first 60% of the semester a student earns

Title IV funds in direct proportion to the length of time he or she remained enrolled. A student who remains enrolled beyond the 60% point earns all aid for the semester. The 50% point of the semester is used for unofficial withdrawals in cases where the last day of academic activity could not be confirmed by the faculty member.

The percentage of the semester that a student remains enrolled is derived by dividing the number of days a student remains in attendance by the number of days in a semester. Calendar days are used but breaks of at least five days are excluded from both the numerator and the denominator.

The school will perform these calculations as soon as possible but no later than 45 days from the date of the withdrawal determination. Post withdrawal disbursements must be credited back to the student within 45 days for grants. Loans will be offered to the student with 30 days which students then have 14 days to accept the loans. All credit balances are applied to the students account first before any refunds are made. If the result of the calculation creates a credit balance, the credit balance must be disbursed as soon as possible, but no later than 14 days.

Post-withdrawal Disbursements:

Federal regulations require that we notify the parent of late PLUS Loan disbursement and/or the student of late Federal Direct Student Loan disbursement.

In addition, we require confirmation from the parent and/or student that they accept this late disbursement.

WSU processes a Return of Title IV Funds calculation to determine if a student is eligible for a post-withdrawal disbursement. If the student and/or parent decides to accept the late disbursement we can reinstate the loan up to 120 days from last attendance.

All Title IV returns are reversed from the student's account and refunded to the appropriate Title IV programs. The student is informed of the result of the Return of Title IV Funds via a revised award letter notification.

Title IV Funds are returned in the following order (within 45 days of the date WSU determined that the student withdrew):

- Federal Direct Unsubsidized Loan
- Federal Direct Subsidized Loan
- Federal Perkins Loan
- Federal Parent Loan
- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant
- Other Title IV programs
- See examples below.

EXAMPLE 1:

Student 1 stopped attending classes on November 8. The semester began on September 6 and is 109 days long. Student 1 attended 64 days and has earned 58.7 percent of his financial aid (64 days divided by 109 days equals 58.7).

Student 1 received in aid:

- Federal Pell Grant \$1,083
- Federal Direct Subsidized Loan \$1,750
- Federal Direct Unsubsidized Loan \$1,000
- Federal Parent Loan \$5,210

Total aid = \$9,043

1. The amount of federal aid earned is 58.7% x \$9,043 = \$5,308.24
2. Total federal aid unearned is \$9,043 - \$5,308.24 = \$3,734.76
3. The second calculation determines percentage of amount unearned based on school charges for tuition. Student 1 was charged \$5,366 in tuition and did not live on campus. Percentage of unearned aid for this second calculation is 100% - 58.7% = 41.3%. Therefore, unearned aid based on the tuition charges for the semester, \$5,366 x 41.3% = \$2,216.16.
4. The amount of federal aid Student 1 must return is the lesser of step 2 or 3 (\$2,216.16 in our example).

5. Federal guidelines determine the order of aid types to be reduced. Therefore Student 1's aid will be reduced accordingly:

Federal Direct Unsubsidized Loan \$0 (\$1,000 returned)

Federal Direct Subsidized Loan \$534 (\$1,216 returned)

Federal Parent Loan \$5,210 (no adjustment)

Federal Pell Grant \$1,083 (no adjustment)

The total returned amount of \$2,216 will be reversed from Student 1's account and returned to the appropriate Title IV funds reducing Student 1's total aid to \$6,827.

EXAMPLE 2:

Student 2 stopped attending classes on March 1. The semester began on January 6 and is 111 days long (excluding a 5 day break). Student 2 attended 44 days and has earned 39.6 percent of his financial aid (44 days divided by 111 days equals 39.6).

Student 2 received in aid:

Federal Pell Grant \$2,907

Federal Direct Subsidized Loan \$2,250

Federal Direct Unsubsidized Loan \$1,000

Total aid = \$6,157

1. The amount of federal aid earned is 39.6% x \$6,157 = \$2,438.17
2. Total federal aid unearned is \$6,157 - \$2,438.17 = \$3,718.83
3. The second calculation determines percentage of amount unearned based on school charges for tuition. Student 2 was charged \$3,318 in tuition and did not live on campus. Percentage of unearned aid for this second calculation is 100% - 39.6% = 60.4%. Therefore, unearned aid based on the tuition charges for the semester, \$3,318 x 60.4% = \$2,004.07.

4. The amount of federal aid Student 1 must return is the lesser of step 2 or 3 (\$2,004.07 in our example).

5. Federal guidelines determine the order of aid types to be reduced. Therefore Student 1's aid will be reduced accordingly:

Federal Direct Unsubsidized Loan \$0 (\$1,000 returned)

Federal Direct Subsidized Loan \$1,246 (\$1,004 returned)

Federal Pell Grant \$2,907 (no adjustment)

The total returned amount of \$2,004 will be reversed from Student 2's account and returned to the appropriate Title IV funds reducing Student 2's aid to \$4,153.

Room and Board

Students admitted to Worcester State as resident students will be notified by the Director of Admissions. The information will be made available to the Residence Life Staff and subsequent correspondence regarding residence hall assignments should be sent to the Office of Residence Life and Housing. First-year residents, including first-year transfer students, are not guaranteed a parking permit.

Housing is guaranteed ONLY for the specified academic year for which a student signs an occupancy agreement.

Students residing in campus housing are assessed a room fee and a food service fee each semester. All students residing on campus are required to purchase a food service plan for the academic year. Upon acceptance, each resident student must pay a \$150 non-refundable room deposit and a \$100 damage deposit:

For First-Year and Transfer Students:

1. A separate check for \$150 (non-refundable) must be submitted to the Admissions Office. Payment of this deposit and the resident's receipt of an agreement signed by Worcester State will reserve

a space for occupancy; the room deposit is credited to the student account in the Spring semester.

2. The \$100 damage deposit will be billed with room rent.

For Returning Residents:

1. A \$150 room deposit (non-refundable) along with a signed License Agreement Form must be submitted at the time of room selection for the following year; the room deposit is credited to the student account in the Spring semester
2. The \$100 damage deposit will be billed with room rent.

Food Service Plan

The food service plan is a board plan that permits the user to purchase a specific number of meals per week. All resident students are required to be on a meal plan. These plans were designed to meet the needs of those students who will plan to eat a majority of their meals on campus. The food service staff are available to meet with students to develop an appropriate food service plan. These plans are also available for commuter students.

Waiting List Procedure

First-year and transfer students may submit to the Admissions Office a \$150 room deposit to be considered for room assignment. All other students may submit to the Residence Life Office a \$150 on-line room deposit along with a signed License Agreement Form to be considered for room assignment. Students' names will be placed on a waiting list until a room becomes available; assignments will be made on a first-come, first-served basis.

Student Health Insurance

Undergraduate degree seeking students enrolled in nine (9) or more credits per semester, and graduate degree seeking students enrolled in 4.5 or more credits per semester are required by State regulation to carry individual health insurance coverage. Students without such coverage will be billed a health insurance premium (currently \$3,941.00 per year) for mandatory enrollment. Students who already have appropriate coverage must complete a waiver of insurance at the time of payment (before the first day of classes) in order to waive

the mandatory insurance premium. Any student not completing a waiver will be billed for insurance. This charge may not be adjusted, and is non-refundable after the add/drop period.

Tuition and Fees

Tuition and fee schedules are presented separately for undergraduate day programs, and evening undergraduate, graduate and summer programs. Certain students may be eligible for tuition waivers. Information about eligibility requirements can be found in the section on financial aid.

Day Program Tuition and Fees – 2024/2025

Undergraduate Day Division ¹	Annual	Per Semester	Per Cr. Hour
Cost for Full-Time In-State Student	\$11,786.00	\$5,893.00	\$491.09
Tuition:			
MA Resident	\$970.00	\$485.00	\$40.42
Non-Resident	\$7,050.00	\$3,525.00	\$293.75
N.E. Regional	\$1,455.00	\$727.50	\$60.63
Fees:			
General Fee	\$9,798.00	\$4,899.00	\$408.25
Student Activity Fee	\$72.00	\$36.00	\$3.00
Student Health Services Fee	\$310.00	\$155.00	\$12.92
Capital Improvement Fee	\$636.00	\$318.00	\$26.50
Total Fees	\$10,816.00	\$5,408.00	\$450.67
Residence Halls:			
Residence Hall Fee			
Chandler Village	\$8,700.00	\$4,350.00	
Dowden Hall	\$8,400.00	\$4,200.00	
Single (Additional charge)	\$1,000.00	\$500.00	

Wasylean Hall	\$9,200.00	\$4,600.00
Sheehan Hall	\$9,000.00	\$4,500.00
Residence Activity Fee	\$50.00	\$25.00
Technology and Equipment Fee	\$220.00	\$110.00
Board Plans		
Lancer 10 \$100 Flex/Sem	\$4,420.00	\$2,210.00
Lancer 14 \$250 Flex/Sem	\$4,690.00	\$2,345.00
Lancer 19 \$200 Flex/Sem	\$4,770.00	\$2,385.00
Lancer Unlimited \$450 Flex/Sem	\$5,500.00	\$2,750.00
Damage Deposit (1st Semester)		\$100.00
Other:		
Health Insurance	\$3,941.00	na
Orientation Fee (New Students)	\$75.00	na
Commuter Meal Plan	\$300.00	\$150.00
International Student Fee Fall/Spring	\$500.00	\$250.00
International Student Fee-Summer		\$125.00

Division of Graduate and Continuing Education Tuition and Fees – 2024/2025

	Annual	Per Semester	Per Cr. Hour
Tuition:			
Undergraduate ²			\$148.00
Graduate			\$189.00
Fees:			
Administrative Fee			
Undergraduate			\$161.00
Graduate			\$163.00
Capital Improvement Fee			\$26.50

Other Fees – 2024/2025

	Annual	Per Semester	Per Cr. Hour
Student Teaching Fee		\$75.00 per course	
Lab Instruction Fee		\$90.00 per course	
Art Model Fee		\$25.00 per course	
Applied Music Fee		\$260.00 per course	
Application Fee		\$50.00 per item	
Transcript Fee		\$10.00 per item	
Field Work Supervision Fee			\$15.00
Internship Fee			\$15.00
International Student Fee - Fall/Spring	\$500	\$250	
International Student Fee - Summer		\$125	

¹ Undergraduate Day division courses are offered M-F, 8 a.m. - 4 p.m.

² Undergraduate courses in the Division of Continuing Education begin at 4 p.m. M - F, Sat/Sun, and on-line

Tuition Surcharge

Students enrolled in credits that result in course registration in excess of 118% of academic degree program requirements will be assessed a tuition surcharge. These students are required to pay a surcharge of \$235 per credit hour in excess of the 118% limit. Transfer and continuing education credits are not included in total credit hour when determining who will be assessed the surcharge.

Undergraduate State-supported Programs

In addition to the non-refundable application fee of \$50 for Commonwealth residents, \$50 for nonresidents, students must upon acceptance pay a \$75 non-refundable tuition deposit that will be credited towards tuition upon matriculation and an orientation fee for \$75. Students are billed for all semester charges following completion of registration.

Payment may be made by check, money order, or credit card (MasterCard, Visa, Discover, American Express). If payment is made by check, the cancelled check will serve as the student's receipt. If a student remits payment with a check that is returned because of insufficient funds, he or she must make any future payments to Worcester State in the form of a certified check, bank check, or money order. **A returned check fee of \$25 will be imposed for each instance of a personal check in payment of any Worcester State charge that is returned not honored.** Students will incur all collection fees if Worcester State must place their accounts with a collection agency and with the Commonwealth of Massachusetts for intercept of other State payments (tax refunds, etc.).

Monthly payment plans through external agencies are available for families who wish to avoid a large outlay of cash at the beginning of each semester. For further information, contact the Student Accounts office.

Non-Payment Reinstatement Policy

Payment in full is required by the due date specified on the student bill. Students whose accounts are not paid in full will be subject to cancellation of class enrollment. Students who have not paid their bill in full will receive a non-payment registration hold. Further, if the account remains unpaid after the add/drop period, the Blackboard access will be suspended until paid along with a \$75.00 reinstatement fee.

If after the suspension period, the account remains unpaid, the entire student schedule will be deleted and reinstatement into those courses will not be allowed.

Tuition and fees are subject to change by vote of the Legislature, Department of Higher Education, or Board of Trustees.

Financial Aid

General Information

All students are encouraged to apply for financial aid to help them meet their educational costs. To receive financial assistance from the University, students must be enrolled in a degree-granting or federally-approved certification program at Worcester State University. Second-degree students are eligible for Federal Loans and graduate students are eligible for Federal Loans and Federal Work Study funds. Applicants must also meet all Federal eligibility requirements and must be in good academic standing.

Financial aid is awarded to students with demonstrated financial need. Need is the difference between the total cost of college attendance (including reasonable costs for room, board, books, transportation, and other personal expenses) and the expected family contribution. Non-need based financial aid is available through several loan programs.

Complete information on financial aid programs, application procedures, and the award process is available on the Financial Aid Office website at <http://www.worcester.edu/financialaid>. Applicants to the University, current students, and their families should feel free to contact the Financial Aid Office at 508-929-8056.

Academic Scholarships for Returning Students

Donor funded academic scholarships are available to undergraduate students at Worcester State University who take the initiative to apply and meet the eligibility criteria. These scholarships are available to a wide variety of class years, majors, backgrounds, and interests, as well as varying levels of academic success and financial need. Applications are accepted annually shortly after January 1st, until April 15th. Students are required to apply online. Details are available at <http://www.worcester.edu/scholarships>.

Application Process

All students applying for financial aid must complete and submit a Free Application for Federal Student Aid (FAFSA). Priority for financial aid is given to students who comply with the deadlines (p. 83) listed in this catalog. Please note that funding from the Federal Pell Grant and Federal Direct Loan programs is available to all late applicants who qualify.

All applicants are encouraged to apply for any scholarship assistance awarded by the state in which they legally reside. Students are urged to contact the appropriate agency in their home state for further information.

Financial aid is not automatically renewable. A new application for financial aid must be submitted for each academic year.

Federal Grants and Benefits

Federal Pell Grant

The Federal Pell Grant is available to undergraduate students enrolled in a degree program who do not already have a bachelor's degree. For the 2024-2025 academic year, Pell Grants range from \$740 to \$7,395. All eligible students will receive the Federal Pell Grant amount to which they are entitled.

Federal Supplemental Educational Opportunity Grant

The Federal Supplemental Educational Opportunity Grant (FSEOG) is a federal grant administered by the University. These Grants are limited to undergraduate students who do not already have a bachelor's

degree. Priority is given to students with exceptional need who are also Pell Grant recipients. SEOG awards are determined by the Financial Aid Office.

TEACH Grant

The TEACH Grant Program provides grants to students who are completing or plan to complete course work needed to begin a career in teaching. As a condition for receiving a TEACH Grant, students must sign a *TEACH Grant Agreement to Serve* in which they agree to (among other requirements) teach:

- in a high-need field;
- at an elementary school, secondary school, or educational service agency that serves students from low-income families; and
- for at least four complete academic years within eight years after completing (or ceasing enrollment in) the course of study for which the grant was received

The eligible undergraduate programs are Early Childhood Education, Elementary Education, and Middle & Secondary Education.

The eligible graduate programs are English as a Second Language, Reading Specialist, and Moderate Disabilities.

If students do not meet the requirements of the service obligation, all TEACH Grants received will be converted to Direct Unsubsidized Loans. Students must repay these loans in full, with interest.

Veterans Benefits

The Department of Veterans Affairs and the Massachusetts State Approving Agency has approved Worcester State University for the purpose of certifying Veterans Educational Benefits. Questions concerning veteran's benefits should be directed to the Office of the Registrar.

Financial Aid Application Deadlines

March 1

- priority date for students starting in the Fall to complete the Free Application for Federal Student Aid (FAFSA). All students who wish to be considered for financial aid, must file the FAFSA

May 1

- priority date for returning students to complete the Free Application for Federal Student Aid (FAFSA). All students who wish to be considered for financial aid, must file the FAFSA
- deadline for applying for the MASSGrant using the the Free Application for Federal Student Aid (FAFSA)
- late applications will be considered subject to the availability of funds

November 1

- deadline for on-time consideration for financial aid for students entering in the upcoming Spring

Grants and Waivers for Massachusetts Residents

MassGrant Program

The MASSGrant Program is administered and awards are made by the Office of Student Financial Assistance under the MA Department of Higher Education. Scholarship eligibility is verified by the Financial Aid Office. For the 2024-2025 academic year, scholarship awards at Worcester State University range from \$1400 to \$3,000. Application is made by completing the FAFSA. Massachusetts residents applying for financial aid who will enroll full-time must apply for MASSGrant by July 1, 2024. MASSGrant eligibility is limited to eight semesters.

MassGrant Plus and MassGrant Plus Expansion Programs

The MASSGrant Plus and MassGrant Plus Expansion Programs are funds available to in-state Massachusetts residents. MassGrant Plus funds are awarded to Pell eligible students attending at least half-time. MassGrant Plus Expansion funds are for part-time pell eligible students or full-time non-pell eligible students (with an SAI up to 15,000).

Worcester State University Need-Based Tuition Waiver and Massachusetts Cash Grant Program

Full and partial need-based tuition waivers are awarded to selected students who demonstrate financial need and who are:

- undergraduate students
- in good academic standing
- legal residents of Massachusetts.

Waivers may not exceed a semester's tuition charge and other waivers and/or tuition remissions for which a student is eligible will be deducted from the tuition charged before the need-based tuition waiver amount is determined. Award amounts are determined by the Financial Aid Office.

Massachusetts Cash Grant is awarded based on need and cannot exceed tuition and fees. Award amounts are determined by the Financial Aid Office.

Categorical Tuition Waivers

Worcester State University students may be considered for tuition waivers based on the following designations (contact the Bursar about providing documentation of eligibility):

Veterans Tuition Waiver: As provided in M.G.L. ch. 4 s.7, cl.43 as amended by the Acts of 2005, ch.130. Please contact Worcester State University, Office of the Registrar, for further details, qualifications, and information.

Native American Tuition Waiver: Available and certified by the Bureau of Indian Affairs.

Senior Citizen Tuition Waiver: Available for persons over the age of 60.

Armed Forces Tuition Waiver: Available for an active member of the Armed Forces including Army, Navy, Air Force, or Coast Guard stationed and residing in Massachusetts.

Clients of the Massachusetts Rehabilitation Commission or Commission for the Blind: Available as certified by the respective commission.

Other Tuition Waivers

John and Abigail Adams Scholarship Program:

Awards non-need-based state-supported undergraduate tuition waivers to students who are awarded John and Abigail Adams Scholarship by the Department of Education. Completion of a FAFSA, continuous full-time enrollment at a state college or university, and a 3.0 are required.

Mass Transfer Program: Available to students who have completed an associate degree at a public community college under the Mass Transfer Program. The waiver is equal to 100% of the resident tuition rate at Worcester State University for the two years of a student's enrollment immediately following their community college enrollment. A 3.0 GPA is required for renewal of the waiver.

Department of Social Services Adopted Children Tuition Waiver: This tuition waiver encompasses 100% of tuition for state-supported courses at all of the Massachusetts public institutions of higher education, excluding graduate courses. Eligible students include all students in the custody of the Department of Social Services adopted by eligible Massachusetts' residents through the Department of Social Services. Students must be twenty-four (24) or under. The Department of Social Services will provide certification of eligibility for the waiver; please contact them for further information.

Department of Social Services Foster Care Tuition Waiver: This tuition waiver encompasses 100% of tuition for state-supported courses at all of the Massachusetts public institutions of higher education, excluding graduate course. Eligible students include all students in the custody of the Department of Social Services placed in foster care with eligible Massachusetts' residents through the Department of Social Services. Students must be twenty-four (24) or under. The Department of Social Services will provide certification of eligibility for the waiver; please contact them for further information.

Massachusetts National Guard

Scholarships: Members of the Massachusetts Air Force National Guard and Massachusetts Army National Guard may be eligible for the Tuition and Fee Reimbursement Program. Members must provide a Certificate of Eligibility to the Bursar's Office. **All certificates must be turned in prior to attending classes.** Army personnel should

contact the Education Service Office or Worcester State University, Office of the Registrar, for more information.

State Employees' Tuition Remission: State Employees and their dependents that elect to take courses at Worcester State University may have some or all of their tuition waived. Documentation of eligibility should be submitted to the Bursar's Office. Eligible persons should contact the Personnel Office at their place of employment for further details.

Army/Navy and Marine/Air Force ROTC Scholarship Programs: The ROTC Scholarship is designed to offer financial assistance to outstanding students in the four year programs. Normally, the award is made prior to the student's first-year of college; however, a student may enter the program in their first-year. Recipients are required to serve on active duty in the branch of the Service they have elected for a period of four years, and then in the active reserve. For the latest information about scholarship opportunities, please contact College of the Holy Cross for Navy and Marine (NROTC) Reserve Officers Training Corps programs or Worcester Polytechnic Institution for Air Force (AROTC) and Army (ROTC) Reserves Officers Training Corps programs.

Merit Scholarships for Entering Students

Worcester State University recognizes superior academic achievement by awarding a number of academic scholarships to incoming first-year and transfer students. Merit Scholarships can provide up to full in-state tuition and fees and are awarded for a full academic year. They are renewable for full-time students who maintain specific requirements as outlined in the scholarship award letter. Applying for admission to WSU automatically constitutes consideration for these scholarships. No additional application is required. A limited number of merit scholarships are available and students must meet minimum academic standards in order to be eligible. Meeting minimum academic standards does not guarantee the awarding of a merit scholarship. Additional factors beyond a student's GPA and SAT scores are considered in the selection process.

Satisfactory Academic Progress Policy

The U.S. Department of Education requires that all students receiving Title IV financial aid maintain Satisfactory Academic Progress (SAP). To assure this goal is met, the U.S. Department of Education requires colleges to determine whether financial aid is being utilized in the most effective way. It is the responsibility of the Financial Aid Office at Worcester State University to monitor each financial aid applicant's academic work and to confirm the student's academic success and continued financial aid eligibility or to determine if a student is not academically progressing toward the goal of degree attainment. This also includes credits not paid for by financial aid.

Requirements: As part of the qualitative measurement of SAP, a student must have a cumulative Grade Point Average (GPA) of at least 2.00 (grade of C) when they have attempted sixty or more credits. As part of the quantitative measurement of SAP, the maximum number of credits a student may complete and still remain in good standing for financial aid is 180 (one and a half times the number of credits required for graduation). The following are additional qualitative and quantitative requirements for maintaining SAP.

- Students who have attempted 1-15 credits, must maintain a cumulative GPA of at least a 1.00 and have satisfactorily completed at least 66.67% of their credits.
- Students who have attempted 16-29 credits, must maintain a cumulative GPA of at least a 1.50 and have satisfactorily completed at least 66.67% of their credits.
- Students who have attempted 30-59 credits, must maintain a cumulative GPA of at least a 1.75 and have satisfactorily completed at least 66.67% of their credits.
- Students who have attempted 60-180 credits, must maintain a cumulative GPA of at least a 2.00 and have satisfactorily completed at least 66.67% of their credits.

Please note: All courses attempted with earned grades of A, B, C, D, and E are included in the GPA calculation. Additionally, transfer credits accepted by Worcester State University and dual enrollment

coursework taken at Worcester State University are included in the calculation for Satisfactory Academic Progress.

If a student does not meet the minimum requirements for Satisfactory Academic Progress, the student is notified that they are no longer eligible for financial aid. The Financial Aid Office sends the student a letter informing the student of the unsatisfactory academic progress. The letter includes the grade point average and completion percentage that the student earned which made them ineligible. The letter also includes details on how the eligibility was calculated, requirements for the student to regain good standing, and information about the appeal process.

A student may submit an appeal of unsatisfactory progress if there were extenuating circumstances that prevented the student from succeeding. The appeal requires explanation, possibly documentation of the extenuating circumstances, and an explanation of what changes the student has made to succeed in future semesters. If the appeal is approved, the student may be required to contact the Academic Success Center for a degree audit. Within the degree audit, the Academic Success Center reviews the student's progress and sets up a plan for the student to graduate. The plan is sent to the student in writing. Upon completion of the Academic Success Center degree audit, the student is eligible for aid during the current semester and may continue eligibility if the student earns a minimum of 2.0 for each semester and completes at least 66.67% of the credits attempted each semester. All students with approved appeals are monitored at the end of each semester. If a student loses eligibility after a semester, the student must regain overall good standing to be eligible for aid.

- Graduate students are making Satisfactory Academic Progress for financial aid as long as they are in good standing in their graduate program.
- Incomplete grades count as attempted but not completed.
- If a student withdraws from a course after the add/drop period, the course will be counted as attempted but not completed.

- A student may repeat a course twice in which a low grade was earned and still have that course counted in the semester load and the higher grade replaces the lower grade which may improve a student's GPA.
- If a student drops a course during the add/drop period, the course will not be counted as attempted.

This policy is applied consistently to all students at Worcester State University. Satisfactory Academic Progress is measured at the end of each academic year.

Sources of Financial Aid

Worcester State University has numerous financial aid programs available to assist students in meeting college costs. Funding for these programs comes from federal, state, institutional and private sources. Types of programs include grants, scholarships, waivers, loans, and employment. Please go to <https://www.worcester.edu/Sources-of-Financial-Aid/> for more information.

Student and Parent Loans

Federal Direct Loans

The Federal Direct Loan Program is a federal loan program designed to help a student pay expenses at institutions of post-secondary education. All Federal Direct Loan applicants must demonstrate financial need in order to qualify for a subsidized loan. A student with no need or partial need may be eligible for an unsubsidized loan. A Free Application for Federal Student Aid (FAFSA) must be completed before a Federal Subsidized and/or Unsubsidized Direct Loan can be processed. The interest rate for Federal Direct Loans is variable but will not exceed 8.25% for undergraduate and 9.5% for graduate students. The interest rate is adjusted each year on July 1. The repayment period for Federal Direct Loans begins six months after the student/borrower is graduated, ceases to be at least a half-time student or withdraws from school.

- **Dependent/Independent undergraduates** can receive subsidized Direct Loans up to: 1) Students who have completed 1-29 credit hours of study are eligible for \$3,500, 2) Students who have completed 30-59 credit hours of study are eligible for \$4,500, 3) Students who have

completed 60 or more credit hours of study are eligible for \$5,500. Also, all students are eligible for up to \$2,000 in additional unsubsidized Direct Loans.

- **Independent students** and dependent students whose parents are unable to obtain a PLUS loan can borrow additional amounts from the Unsubsidized Federal Direct Loan Program, in the amount of \$4,000 for their first and second years of study and \$5,000 for their third and fourth year.
- **Graduate students** can borrow up to \$20,500 from the Unsubsidized Federal Direct Loan Program if their cost of education warrants these amounts.

Direct Loan borrowers should go to <https://studentaid.gov/> for specific information on repayment, deferment, cancellation and default provisions.

Federal Parent Loan to Undergraduate students (PLUS)

This loan enables parents of dependent undergraduates to borrow for their dependent's education. A FAFSA is required to receive a Federal Plus Loan. Repayment of this loan begins within 60 days of the date that the loan is disbursed. However, parents may apply for a deferment through their servicer. The interest rate is variable, adjusted annually, not to exceed 10.5%. Parents may borrow up to the cost of attendance annually, less any financial aid awarded to the student. Parents can apply for PLUS loans and get specific information on repayment, deferment, cancellation and default provisions at <https://studentaid.gov/plus-app/parent/landing>

Private Education Loans

Private education loans may be available to assist students who have received the maximum financial aid award(s) allowed through grants, workstudy, and loans but still have remaining University expenses.

Students may search online for more information regarding private education options.

Student Employment

Federal Work-Study Program

The Federal Work-Study Program (FWS) is a need-based program that provides federally subsidized employment opportunities on campus for enrolled students. A student's financial aid offer letter indicates the FWS award and maximum earnings limit, typically \$2,000, depending on availability of funds and individual need. Students are paid only for hours actually worked. The FWS wage rate is variable depending on placement. FWS earnings are not applied directly to the student's tuition account without the student's written consent. These earnings are paid directly to the student. Students employed under the FWS Program are not eligible for unemployment compensation benefits or worker's compensation for on-the-job accidents. Students are encouraged to participate in employment that complements and reinforces their educational goals.

Other On-Campus Employment

Some departments on campus offer part-time jobs to students. View Worcester State's "Employment Opportunities" page for available jobs (see the "Student" section). Students are encouraged to view their financial aid offer letter to see if they qualify for FWS funding before applying for these non-FWS jobs.

Tuition Payment Plan

Worcester State University offers two interest-free payment plans. Nelnet Payment Plan payments start before a semester begins, so please apply early. You may contact Nelnet directly at 800-609-8056 or sign up online at <https://mycollegepaymentplan.com/wsu/>. A low cost, interest-free, monthly payment plan is also offered through Official Payments/ACI. Please go to <https://payplan.officialpayments.com/PlanEnrollment/SelectPlan.aspx> for more information and to enroll.

Academic Calendar

FALL 2024 ACADEMIC CALENDAR

September

2	Labor Day: NO CLASSES
3	Pre-College Conference and Academic Convocation
4	Classes begin: day, evening, graduate

10	Last day to add day courses (state-supported)
17	Last day to drop day courses (state-supported)
17	Last day to add/drop evening/graduate courses (non state-supported)
24	Unity Day: University Activities
October	
14	Indigenous Peoples' Day: NO CLASSES
16	Last day to makeup Incomplete grades from Spring/Summer 2024
24	Failure warnings due in the Registrar's Office
28	Failure warnings issued to students
29	Last day to declare/change major/minor
November	
11/4-11/15	Advising for Pre-registration
5	Last day to withdraw from courses/university
11	Veterans' Day: NO CLASSES
14	Last day to elect Pass/Fail option
18-22	Pre-registration for Spring 2025
27-30	Thanksgiving Recess
December	
5	Student evaluation of the faculty due
6	All classes end
9	Reading Day
10	Professional Development Day
11-19	Final Exams
20,23	Make-up days for exams postponed due to inclement weather
23	Semester ends
30	Final grades for Fall 2024 due to Registrar's Office

Fall 2024 Examination Schedule

Class Day and Time	Examination Day and Time
MWF 8:00/8:30AM	Wednesday December 11, 8:30AM
MWF 9:30AM	Friday December 13, 8:30AM
MWF 10:30AM	Monday December 16, 8:30AM
MW/MWF 11:30AM	Wednesday December 11, 12:30PM
MW/MWF 12:30PM	Friday December 13, 12:30PM

MW/MWF 1:30/2:00PM	Monday December 16, 12:30PM
MW 3:30PM	Wednesday December 18, 8:30AM
F 11:30/12:30/1:30PM	Wednesday December 18, 12:30PM
TR 8:00/8:30AM	Thursday December 12, 8:30AM
TR 10:00AM	Tuesday December 17, 8:30AM
TR 11:30AM	Thursday December 12, 12:30PM
TR 1:00PM	Tuesday December 17, 12:30PM
TR/T 2:30PM	Thursday December 19, 8:30AM
R 2:30PM	Thursday December 19, 12:30PM

Continuing Education (evening) and Graduate Courses may have a final exam at the same day and time slot of their regularly scheduled class during the first week of the Final Exam period. See course syllabus for details.

WINTER 2025 ACADEMIC CALENDAR

October 9- December 29 Wintersession 2024 Registration

Tuesday, December 26 Classes Begin

Friday, January 3 Deadline to add or drop Wintersession Classes

Friday, January 10 Deadline to withdraw or request Pass/Fail grading

Sunday, January 15 Last day of classes

January 26 Final Grades due for Winter Session 2024

SPRING 2025 ACADEMIC CALENDAR

January

20 **Martin Luther King Jr. Day: NO CLASSES**

21 **Classes begin: day, evening, graduate**

27 Last day to add day courses (state-supported)

February

3 Last day to drop day courses (state-supported)

3 Last day to add/drop evening, graduate courses (non state-supported)

17 President's Day: NO CLASSES

March

4 Last day to make up Incompletes from Fall 2024

17-21 Spring Break: NO CLASSES

25 Last day to declare/change major or minor

25 Failure warnings due in the Registrar's Office

27 Failure warnings issued to students

3/31-4/11 Advising for Pre-registration

April

2 Last day to withdraw from courses/university

8 Last day to elect Pass/Fail status

14-18 Pre-registration for Fall 2025

21 Patriot's Day: NO CLASSES

29 Student evaluation of faculty due

May

5 All classes end

6 Reading Day

7 Professional Development Day

8-16 Final Exams

16 Graduate Commencement and end of semester

17 Undergraduate Commencement

27 Final Grades for Spring 2025 due to Registrar's Office

Spring 2025 Examination Schedule

Class Day and Time	Examination Day and Time
MWF 8:00/8:30AM	Friday May 9, 8:30AM
MWF 9:30AM	Monday May 12, 8:30AM
MWF 10:30AM	Wednesday May 14, 8:30AM
MW/MWF 11:30AM	Friday May 9, 12:30PM
MW/MWF 12:30PM	Monday May 12, 12:30PM
MW/MWF 1:30/2:00PM	Wednesday May 14, 12:30PM

MW 3:30PM	Friday May 16, 8:30AM
F 11:30/12:30/1:30PM	Friday May 16, 12:30PM
TR 8:00/8:30AM	Thursday May 8, 8:30AM
TR 10:00AM	Tuesday May 13, 8:30AM
TR 11:30AM	Thursday May 8, 12:30PM
TR 1:00PM	Tuesday May 13, 12:30PM
TR/T 2:30PM	Thursday May 15, 8:30AM
R 2:30PM	Thursday May 15, 12:30PM

Continuing Education (evening) and Graduate Courses may have a final exam at the same day and time slot of their regularly scheduled class during the first week of the Final Exam period. See course syllabus for details.

22	Last day to Add/Drop (Summer II) - 100% online graduate programs do not have an "add" option
25	Last day to request Pass/Fail (Full Summer)

August	
1	Last day to Withdraw (Summer II)
1	Last day to request Pass/Fail (Summer II)
31	Summer Session II Ends
31	Full Summer Session (14 week) Ends
September	
8	Summer II and Full Summer grades due

Important Notes:

Students must visit Self Service to view course schedules and for their final grades. Schedules and grades will not be mailed.

Office of Academic Affairs

Dr. Lois A. Wims
Provost and Vice President for Academic Affairs

Dr. Henry Theriault
Associate Vice President for Academic Affairs

Dr. Roberta Kyle
Associate Vice President for Continuing Education and Dean of Graduate Studies

Dr. Anthony K. Adade
Associate Vice President and Chief Information Officer

Dr. Linda S. Larrivee
Dean of the School of Science, Technology, and Health

Dr. Russ Pottle
Dean of the School of Humanities and Social Sciences

Dr. Raynold M. Lewis
Dean of Education, Liberal and Interdisciplinary Studies

Mary Jo Marion
Associate Vice President for University and Community Engagement

Laxmi Bissoondial
Director of Multicultural Affairs and Alternatives for Individual Development

SUMMER 2025 ACADEMIC CALENDAR

March	
4	Summer Registration Begins
May	
15	Older Student Registration
19	Full Summer and Summer Session I Begins
26	Memorial Day: NO CLASSES/UNIVERSITY CLOSED
27	Last day to Add/Drop (Summer I) - 100% online graduate programs do not have an "add" option
June	
2	Last day to Add/Drop (Full Summer)
6	Last day to Withdraw (Summer I)
6	Last day to request Pass/Fail (Summer I)
19	Juneteenth Holiday Observed: NO CLASSES-UNIVERSITY CLOSED
July	
3	Summer Session I Ends
7-11	Full Summer Break (14 week classes) NO CLASSES
10	Older Student Registration for Summer II
14	Summer Session I Grades Due
14	Summer Session II Begins
18	Last Day to Withdraw (Full Summer)

Matt Bejune
Executive Director of Library

Dr. Meghna Dilip
Director of Commonwealth Honors Program

Dr. Noah M. Dion
Director of Academic Support Services

Library

The Library, <http://www.worcester.edu/Library>, is the intellectual heart of Worcester State University, a place where people converge, collaborate, learn, and discover. Library staff assist users at the research help desk, the circulation desk, and by phone, email, and online chat. They teach information literacy and research skills to help students better understand the ever-changing world of information and knowledge.

The Library, located on the 2nd and 3rd floors of the Learning Resource Center, is open over 100 hours per week during the fall and spring semesters. Users will find a variety of spaces to meet their needs including collaborative areas with mobile whiteboards and large digital displays, carrels for independent study, tables with ample space to spread out, lounge chairs with built-in desks, and comfortable café-style seating.

Print collections include more than 130,000 books, 200 journals, magazines, and newspapers, and 3,500 DVDs and videos. Electronic collections include over 275,000 e-books, 90,000 e-journals, and a diversified selection of 400+ databases from publishers such as EBSCO, JSTOR, and ProQuest. Remote access to electronic materials is available any time by signing in with a WSU network account. The WSU Archives and Special Collections, <https://libguides.worcester.edu/archives>, features more than 300 linear feet of materials related to Worcester State University history and more than 500 rare books. Included in the collection are historic faculty and student papers, local and regional history materials, and the papers of poet and activist Dennis Brutus. The collection is available for student and faculty research.

Library users can request items from other libraries via Interlibrary Loan. Users may also borrow items from area libraries through partnerships with the Higher Education Libraries of Massachusetts (HELM), <https://libraries.flo.org/HELM-Public>, a consortium of

Massachusetts public higher education institutions, and the Academic and Research Collaborative (ARC), <http://www.worcesterarc.org>, a coalition of Worcester area libraries.

Lt. Col. James F. Sheehan '55 Honors Program

The Commonwealth Honors Program at Worcester State University is designed to challenge and transform students through diverse and demanding coursework, experiences, and service learning, enabling them to grow as well-rounded scholars and engaged citizens. It builds strong community ties to sustain the intellectual and social development of its participants and to enhance the life of the University. The program is part of the Massachusetts Commonwealth Honors Program and a member of the National Collegiate Honors Council. Students with a GPA of 3.5 or higher are encouraged to contact the director for information regarding entrance into the program. Students who complete an independent research project and present it in a public forum earn the additional Commonwealth Honors Scholar designation.

Requirements

Program requirements include maintaining an overall GPA of 3.2, completing 21 credits in honors courses, and attendance at a minimum of two approved co-curricular activities per semester.

Freshman Students (by invitation only)

Code	Title	Credits
<i>Freshman Year</i>		6
XX-193-H	Honors First Year Seminar	
EN-202	Honors Composition	
<i>Sophomore Year</i>		3
HO-2XX-1	Honors Interdisciplinary Seminar	
<i>Sophomore, Junior, or Senior Year</i>		12
4 Other Honors-designated Courses		
Total Credits		21

Students Entering as Sophomores, Juniors, and Seniors (by invitation only)

Code	Title	Credits
HO-2XX-1	Honors Interdisciplinary Seminar	3
5 Other Honors-designated Courses		15
Total Credits		18

Honors students may take up to two world language courses as honors, may transfer up to two courses taken abroad as honors, and may transfer up to two honors courses with a grade of B or better taken at other Commonwealth Honors Program approved universities or colleges. Courses will be counted as honors only if students achieve a grade of B or above in the class. Honors courses may also fulfill general education (LASC) or major/minor requirements. Honors courses may be all-honors sections or regular course sections with “embedded” honors seats. Students entering as Sophomores, Juniors, and Seniors are not required to take the Honors First Year Seminar.

The Worcester State University Lt. Col. James F. Sheehan '55 Honors Program draws its faculty from multiple disciplines across campus. Each faculty member’s information can be found at the respective department for each of the courses. For more information on the Honors Program, please contact the Honors Program Director at honors@worchester.edu.

Addictions Counseling

Overview

Minor

This 18-credit interdisciplinary minor focuses on the basic competencies associated with helping people recover from substance use disorders. Courses are offered through the Department of Health Sciences, the Department of Criminal Justice, and the Department of Psychology and provide students with content knowledge in addictions counseling that map to core competencies outlined by the Massachusetts Department of Public Health’s Bureau of Substance Abuse Services. Students may begin coursework in this minor at any point in their undergraduate education.

The minor is an excellent option for students in the following majors:

- Criminal Justice
- Psychology
- Health Sciences
- Nursing
- Occupational Therapy
- Sociology
- Urban Studies
- Liberal Studies

Students in this minor will:

- Gain knowledge of the factors and cultural implications leading to addiction.
- Understand the assessment, clinical evaluation, treatment planning and case management skills related to addictions counseling.
- Gain knowledge of patient, family and communication education issues related to addiction.
- Gain knowledge of coexisting issues related to addiction.

This minor can also be a pathway for matriculated students who first complete a minor to earn a Certificate in Addictions Counseling by completing one additional course, the Pre-Practicum Seminar in Addictions Counseling (3 credits) and the 300-hour Practicum in Addictions Counseling (6 credits). Completing these additional requirements would earn the student a Certificate in Addictions Counseling which would then make it possible for the student to pursue state licensing (CADC) after completing 4,000 hours of supervised work in the field (if bachelor’s degree is in a behavioral science major).

Certificate

Available for matriculated and non-matriculated students, this 24-credit certificate focuses on the basic competencies associated with helping people recover from substance abuse disorders. Courses are offered through the Department of Health

Sciences, the Department of Criminal Justice and the Department of Psychology and provide students with content knowledge in addictions counseling that map to core competencies outlined by the Massachusetts Department of Public Health's Bureau of Substance Abuse Services (BSAS). Worcester State University has been recognized by the BSAS as an approved Addictions Education Provider. Completing the Certificate in Addictions Counseling makes it possible for the student to pursue state licensing (CADC) after completing 4,000 hours of supervised work in the field (if bachelor's degree is in a behavioral science major).

Student completing this certificate will:

- Gain knowledge of the factors and cultural implications leading to addiction.
- Understand the assessment, clinical evaluation, treatment planning and case management skills related to addictions counseling.
- Gain knowledge of patient, family and communication education issues related to addiction.
- Gain knowledge of coexisting issues related to addiction.
- Gain applied experiences through the practicum in working in an addictions counseling program.

The coordinator of the program will work with students and local substance abuse counseling centers in securing practicum placements.

Programs

- Certificate in Addictions Counseling (p. 95)
- Minor in Addictions Counseling (p. 96)

Faculty

As an interdisciplinary program, Addictions Counseling draws its core faculty from multiple disciplines across campus. Each faculty member's information can be found at the respective department for each of the courses. The Program Coordinator for Addictions Counseling is Dr. Robert Brooks.

Courses

CJ-208 Systems of Addictions Treatment

Prerequisites: HE-285 or CJ-285

This course provides an overview of counseling modalities and techniques used in addiction treatment and recovery settings, including for those with co-occurring disorders. A family systems approach will be employed to understand how the Criminal Justice System, the Mental Health System, and the larger community relate. Legal and regulatory restrictions, ethical codes, and legal sanctions also are discussed.

Fall and Spring and every year. 3 Credits

CJ-285 Drugs and Society

This course examines the history of alcohol and other mood changing drugs in the U.S, the myths and stereotypes of alcohol and drug use, sociocultural factors that contribute to the use of drugs, and the patterns and progression of substance use disorders. Every 2-3 years. 3 Credits

CJ-354 Addictions Counseling of Individuals and Families

LASC Categories: ICW

Prerequisites: HE-285 or CJ-285

This course provides students with an applied understanding of counseling skills, techniques, and strategies in addiction treatment. The psychology of addictions and various treatment modalities are discussed. Engagement, assessment, treatment planning, brief and ongoing treatment, continuing care, and work with special populations are considered. Dialectical behavior therapy, cognitive-behavioral, mindfulness practice techniques, and motivational interviewing concepts are introduced, and students apply them in role-playing scenarios. Boundaries, ethics, and counselor self-awareness are also covered.

Fall and Spring and every year. 3 Credits

CJ-406 The 12 Core Functions of Addictions Counseling

Prerequisites: HE-285 or CJ-285 Take CJ-208 or HE-208; Take PS-270 or HE-270; Take CJ-354 or HE-354;

This culminating course prepares students to enter the field of substance use disorders and/or addictions counseling through an intensive review of the 12 Core Functions of Addictions Counseling. Students further develop the skill sets from prior coursework to serve as a foundation for gaining practical experience in addictions counseling. Fall and Spring and every year. 3 Credits

CJ-407 Pre-Practicum Seminar in Addictions Counseling

Prerequisites: PS-101 Take HE-285 or CJ-285; Take HE-270 or PS-270; Take HE-208 or CJ-208; Take HE-354 or CJ-354;

Prerequisites or Corequisite: CJ-406 or HE-406
The course is designed for students who wish to complete the course Practicum in Addictions Counseling in pursuit of CADC licensure. Students are prepared for fieldwork through practice of counseling techniques, reviews of case studies, and study of counseling theories. All core functions of addictions counseling are reviewed and reinforced, with particular emphasis on assessment, counseling, and case management. Students practice in role play using a variety of modalities while considering the needs of special populations and the opportunities and constraints of various treatment settings. Ethical and legal considerations for addictions counselors are also explored. Open to Addictions Counseling Certificate

Fall and Spring and every year. 3 Credits

CJ-409 Practicum in Addictions Counseling

Prerequisites: CJ-407 or HE-407

Field experience in which students complete 150 hours of direct care experience in a substance use disorders counseling setting. To qualify for CADC licensure, the practicum must be repeated for a total of 300 hours and 6 credits. Course may be repeated. Fall and Spring and every year. 3 Credits

HE-208 Systems of Addictions Treatment

Prerequisites: HE-285 or CJ-285

This course provides an overview of counseling modalities and techniques used in addiction treatment and recovery settings, including for those with co-occurring disorders. A family systems approach will be employed to understand how the Criminal Justice System, the Mental Health System, and the larger community relate. Legal and regulatory restrictions, ethical codes, and legal sanctions also are discussed.

Fall and Spring and every year. 3 Credits

HE-270 Psychopharmacology

LASC Categories: NSP

Prerequisites: PS-101

This course will explore the effects of psychotropic drugs on the brain and subsequent effects on behavior.

Fall and Spring and every year. 3 Credits

HE-285 Drugs and Society

Drug use and abuse, and implications for the individual and society.

Fall only and every year. 3 Credits

HE-354 Addictions Counseling of Individuals and Families

LASC Categories: ICW

Prerequisites: HE-285 or CJ-285

This course provides students with an applied understanding of counseling skills, techniques, and strategies in addiction treatment. The psychology of addictions and various treatment modalities are discussed. Engagement, assessment, treatment planning, brief and ongoing treatment, continuing care, and work with special populations are considered. Dialectical behavior therapy, cognitive-behavioral, mindfulness practice techniques, and motivational interviewing concepts are introduced, and students apply them in role-playing scenarios. Boundaries, ethics, and counselor self-awareness are also covered.

Fall and Spring and every year. 3 Credits

HE-406 The 12 Core Functions of Addictions Counseling

Prerequisites: 4 groups Take CJ-285 or HE-285; Take CJ-208 or HE-208; Take HE-270 or PS-270; Take CJ-354 or HE-354;

This culminating course prepares students to enter the field of substance use disorders and/or addictions counseling through an intensive review of the 12 Core Functions of Addictions Counseling. Students further develop the skill sets from prior coursework to serve as a foundation for gaining practical experience in addictions counseling. Fall and Spring and every year. 3 Credits

HE-407 Pre-Practicum Seminar in Addictions Counseling

Prerequisites: PS-101 Take HE-285 or CJ-285; Take HE-270 or PS-270; Take HE-208 or CJ-208; Take HE-354 or CJ-354; # Take HE-406 or CJ-406;

Prerequisites or Corequisite: HE-406 or CJ-406
The course is designed for students who wish to complete the course Practicum in Addictions Counseling in pursuit of CADC licensure. Students are prepared for fieldwork through practice of counseling techniques, reviews of case studies, and study of counseling theories. All core functions of addictions counseling are reviewed and reinforced, with particular emphasis on assessment, counseling, and case management. Students practice in role play using a variety of modalities while considering the needs of special populations and the opportunities and constraints of various treatment settings. Ethical and legal considerations for addictions counselors are also explored.

Fall and Spring and every year. 3 Credits

HE-409 Practicum in Addictions Counseling

Prerequisites: HE-407 or CJ-407

Field experience in which students complete 150 hours of direct care experience in a substance use disorders counseling setting. To qualify for CADC licensure, the practicum must be repeated for a total of 300 hours and 6 credits. Course may be repeated. Fall and Spring and every year. 3 Credits

PS-101 General Psychology

LASC Categories: HBS

Introduction to history of psychology, scientific method, brain/nervous system, development, learning, motivation, sensation/perception, personality, psychopathology, psychotherapy, cognitive processes, social behavior.

Fall and Spring and every year. 3 Credits

PS-270 Psychopharmacology

LASC Categories: NSP

Prerequisites: PS-101 with a C- or above.

This course will explore the effects of psychotropic drugs on the brain and subsequent effects on behavior.

Other or on demand and every year. 3 Credits

Certificate in Addictions Counseling

Requirements

Code	Title	Credits
HE-285	Drugs and Society	3
or CJ-285	Drugs and Society	
PS-270	Psychopharmacology	3
or HE-270	Psychopharmacology	
HE-208	Systems of Addictions Treatment	3
or CJ-208	Systems of Addictions Treatment	
HE-354	Addictions Counseling of Individuals and Families	3
or CJ-354	Addictions Counseling of Individuals and Families	
HE-406	The 12 Core Functions of Addictions Counseling	3
or CJ-406	The 12 Core Functions of Addictions Counseling	
HE-407	Pre-Practicum Seminar in Addictions Counseling	3
or CJ-407	Pre-Practicum Seminar in Addictions Counseling	
HE-409	Practicum in Addictions Counseling	3
or CJ-409	Practicum in Addictions Counseling	
CJ-409	Practicum in Addictions Counseling	3
or HE-409	Practicum in Addictions Counseling	

Total Credits 24

Courses must have a minimum grade of C and must be taken at WSU. Credits cannot be earned through life experience portfolio.

After completing the practicum, and required supervised practical work experience (2000-6000 hours depending on highest degree earned), certificate students may apply for and take the state licensing exam for the LADC II.

Admissions requirements:

- Online Application and \$30 Application Fee
- Student must have a high school diploma or GED
- Evidence of successful completion of PS-101 or its equivalent (official transcript)

Minor in Addictions Counseling

Requirements

Code	Title	Credits
PS-101	General Psychology ^{1,2}	3
HE-285 or CJ-285	Drugs and Society Drugs and Society	3
PS-270 or HE-270	Psychopharmacology Psychopharmacology	3
HE-208 or CJ-208	Systems of Addictions Treatment Systems of Addictions Treatment	3
HE-354 or CJ-354	Addictions Counseling of Individuals and Families Addictions Counseling of Individuals and Families	3
HE-406 or CJ-406	The 12 Core Functions of Addictions Counseling The 12 Core Functions of Addictions Counseling	3
Total Credits		18

¹ Should be the first course in the minor. Can be transferred in and can also be CLEPed.

² Psychology majors who want to take the minor will need to take an additional Psychology elective (3 cr).

Courses (outside of PS 101) must have a minimum grade of C and must be taken at WSU and cannot be transferred in. Credits cannot be earned through life experience portfolio.

For more information about the Addictions Counseling Minor, please contact the Program Coordinator for Addictions Counseling, Dr. Robert Brooks, at rbrooks@worchester.edu.

Forensic Science Minor

Forensic Science is an interdisciplinary academic area of study that draws from a wide range of disciplines including Biology, Biotechnology,

Chemistry, Communication, Computer Science, Criminal Justice, and Psychology. The mission of the Forensic Science minor is to provide a quality educational experience that will enable students to reach the highest standards of academic excellence through a generalist perspective on the forensic sciences. The program will provide opportunities for the analysis and application of knowledge through exposure to a wide variety of scientific disciplines and professional skill sets.

Requirements for a Forensic Science Minor: 19 credits

Code	Title	Credits
Core Requirements		10
BT-101	Introduction to Forensic Sciences	
CJ-103	Evidence Collection and Crime Scene Preservation	
CJ-401	Forensic Science Senior Seminar	
Electives from Biotechnology, Chemistry, Computer Science, Criminal Justice or selection approved by the FS Director		9
CJ-211	Victimology	
CJ-305	Principles of Evidence and Proof	
PS-240	Introduction to Abnormal Psychology	
PS-315	Physical and Sexual Abuse	
PS-330	Theories of Personality	
CM-151	Introduction to Digital Photography	
CM-260	Introduction to Video	
Total Credits		19

The Forensic Science Minor is an interdisciplinary program drawing from the faculty of multiple departments at Worcester State University.

- Nada AlSallami, Assistant Professor (2019), B.Sc., M.Sc., Ph.D., University of Technology, Iraq

Mark H. Beaudry, Assistant Professor (2018), A.S. Mount Wachusett Community College; B.S., M.S. Northeastern University; Ph.D., Capella University

Roger S. Greenwell, Co-Coordinator of the Biotechnology Program, Associate Professor (2014), B.S. Western Kentucky University; Ph.D. University of Wisconsin-Madison

Jennifer Hood-DeGrenier, Department Chair, Professor (2012), B.A. Williams College; Ph.D. Harvard University

Eihab Jaber, Professor (2006), B.A. Hunter College; M.S., Ph.D. State University of New York Stony Brook

Maura Pavao, Professor (2001), B.S. Worcester Polytechnic Institute; M.S., Ph.D. Rutgers University

BT-101 Introduction to Forensic Sciences

LASC Categories: NSP, HBS, LAB

Prerequisites: Math placement code of 3 or higher. Survey of forensic case studies and the laboratory techniques used to solve crimes including microscopy, chromatography, ballistics and DNA analysis.

Every year. 4 Credits

BT-240 Research Experience for Undergraduates

Lab and/or field based research on a specific research topic under the supervision of a faculty member. Permission of instructor and department chair required.

Fall and Spring. 1-6 Credits

BT-408 Directed Study: Biotechnology

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

Other or on demand. 3 Credits

BT-440 Advanced Research Experience

Prerequisites: BI-205. Instructor permission required. Junior/Senior standing required.

Advanced lab and/or field based research on a specific research topic under the supervision of a faculty member. Permission of instructor and department chair required.

Fall and Spring. 1-6 Credits

BT-450 Internship in Biotechnology

Qualified upper-level biotechnology majors can learn experimental techniques by working in a company laboratory or a professional manufacturing environment. Permission of faculty sponsor and department chair required.

Fall and Spring. 3-6 Credits

CH-250 Instrumental Technology for Forensic Analysis

LASC Categories: NSP, QAC, LAB

Prerequisites: CH-120 and CH-121, minimum grade C- or take CH-112, minimum grade C-.

Introduction to instrumental techniques used to analyze crime scene evidence. Includes HPLC, IR spectrometry, Atomic spectroscopy, and GC-MS. Three lecture hours and three lab hours per week. Other or on demand. 4 Credits

CH-408 Directed Study: Chemistry

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3-4 Credits

CH-480 Internship: Chemistry

Project completed at an institution other than Worcester State by a student with a non-Worcester State sponsor and Worcester State liaison.

Every year. 1-6 Credits

CJ-103 Evidence Collection and Crime Scene Preservation

Prerequisites: CJ-101. Forensic Science minors must take BT-101 as the prerequisite for this course.

This course provides students with a theoretical framework for the practice of evidence collection and crime scene preservation. Various techniques and protocols for investigation will be reviewed and linked to methods of collection of physical evidence, as well as the interpretation, accountability and preservation of data. Techniques of documentation and case preparation will also be explored.

Fall only and every year. 3 Credits

CJ-211 Victimology

Prerequisites: CJ-101

Criminal-victim relationships, with emphasis on victim-precipitated crimes and compensation to the victims.

Every 2-3 years. 3 Credits

CJ-305 Principles of Evidence and Proof

Prerequisites: CJ-101 and CJ-205.

This course analyzes federal and state rules of evidence in criminal proceedings, focusing on the relationship between evidence and proof. The course also examines issues related to the collection and seizure of admissible physical evidence, the role of privileges, and the interrogation of the accused. Spring only and every 2-3 years. 3 Credits

CJ-398 Criminal Justice Internship

Prerequisites: CJ-101 and CJ-102 and CJ-111 and CJ-203

Criminal Justice internship involves student field-based work experience within selected agencies of the criminal justice system or allied helping agencies.

This course is designed to provide students with an opportunity to translate theoretically oriented classroom principles into practical application.

Fall and Spring and every year. 3-6 Credits

CJ-399 Independent Study in Criminal Justice

Individual research and independent study related to a particular aspect of criminal justice that is of special interest.

Every year. 3-6 Credits

CJ-401 Forensic Science Senior Seminar

Prerequisites: BT-101 and CJ-103

The senior seminar is designed to bring together the diverse areas of knowledge that the student has gained in the area of forensic science. It is a synthesis of classroom knowledge applied to real world forensic science issues. Topics covered emphasize the use of critical thinking skills to analyze, integrate and synthesize research and case studies relevant to the forensic sciences.

Spring only and every year. 3 Credits

CJ-408 Directed Study: Criminal Justice

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

Other or on demand. 3 Credits

CS-165 Digital Forensics

Prerequisites: CS-155

Digital forensics investigation; data acquisition; processing crime and incident scenes; multiple operating systems and file formats; digital forensics tools, analysis and validation.

Every year. 3 Credits

CS-497 Selected Topics: Computer Science

Prerequisites: CS-282

Selection of topics of mutual interest to student and faculty.

Other or on demand. 1-6 Credits

CS-498 Internship: Computer Science

Prerequisites: 21 credit hours in Computer Science courses including CS-282

Working in and for an organization where skills can be tested in real situations in order to gain experience, increase knowledge in various functional areas, and establish important contacts with an organization.

Every year. 3 Credits

CS-499 Independent Study: Computer Science

Prerequisites: 18 credit hours in Computer Science including CS-282.

An opportunity for advanced students to examine topics not normally taught in other mathematics or computer courses. Geared to the interests of both the student and the instructor.

Every year. 1-6 Credits

PS-240 Introduction to Abnormal Psychology

LASC Categories: HBS

Prerequisites: PS-101. Psychology majors must pass with a C- or above. Credit will not be provided for both PS-240 and PS-335.

Etiology, dynamics and treatment of psychopathology and their relation to normal personality are considered from traditional and contemporary perspectives.

Fall and Spring and every year. 3 Credits

PS-315 Physical and Sexual Abuse

Prerequisites: PS-101-General Psychology with a C- or above. Either PS240 or PS335 with a C- or above or by permission of instructor for the Women's, Gender, and Sexuality Studies Minor.

Etiology, characteristics, consequence, treatment and prevention of various forms of physical, sexual and emotional abuse in children, adolescents and adults.

Other or on demand and every 2-3 years. 3 Credits

PS-330 Theories of Personality**LASC Categories:** HBS

Prerequisites: PS 101 and either PS 240 or PS 335 or PS 210. Psychology Majors require a C- or higher in each pre-requisite course. Must be completed prior to taking this course

A survey of major theories of personality. Why people think, feel, and behave as they do is explored through the different theories.

Fall only and every year. 3 Credits

CM-151 Introduction to Digital Photography**LASC Categories:** CA

Techniques and aesthetics of digital photography. Introduction to the operation of SLR digital cameras and the computer as digital darkroom.

Every year. 3 Credits

CM-260 Introduction to Video**LASC Categories:** CA

A beginning course in video program production, using lightweight and portable equipment.

Fall and Spring and every year. 3 Credits

Multimedia Journalism

The Multimedia Journalism Minor prepares students for potential careers in news media; advanced study in graduate journalism programs; and allows students to develop highly transferable skills that can be utilized in a multitude of non-profit, governmental, and for-profit organizations.

Requirements for Multimedia Journalism Minor

Code	Title	Credits
Required:		
JO-101	Introduction to Journalism	3
JO-201	Multimedia Journalism	3

Electives: 12 additional credits with at least 3 credits at the 300-level. No more than two courses with a CM designation or two courses with an EN designation may be counted toward the minor. Students are strongly encouraged to take either CM-325: Community Media Production or EN-352: Practicum in Journalism. Students have the opportunity to work in the Community Media Center and for The New Worcester Spy.

Electives:

CM-107	Journalism and Democracy	3
CM-151	Introduction to Digital Photography	3
CM-204	Analysis of News	3
CM-206	Digital Storytelling	3
CM-244	Graphic Design I	3
CM-260	Introduction to Video	3
CM-325	Community Media Production	3
CM-359	Documentary Production	3
CM-390	Independent Media and Society	3
CM-416	Media Law and Ethics	3
EN-107	Journalism and Democracy	3
EN-167	Literature and Human Rights	3
EN-266	Journalism: Practice and Techniques	3
EN-267	Journalism: Advanced Newswriting	3
EN-268	Journalism: Feature Writing	3
EN-270	Journalism: Editing	3
EN-271	Journalism Workshop	3
EN-272	News Reporting and Writing I	3
EN-275	Sportswriting	3
EN-281	Writing for Digital Environments	3
EN-352	Practicum in Journalism	3
EN-353	Narrative Journalism	3
EN-354	Opinion Writing	3
Total elective credit		12

As an interdisciplinary program, the Journalism Minor draws its core faculty from multiple disciplines across campus. Each faculty member's information can be found at the respective department for each of the courses. The Program Coordinator for the Journalism Minor is Cleve Wiese, Ph.D. in the Department of English.

Education, Liberal and Interdisciplinary Studies

Dean

Dr. Raynold Lewis

Location

Sullivan Academic Center
Second Floor, Room S-226F

Programs

- African and African Diaspora Studies (p. 101)
- Asian Studies
- Education (p. 104)
- Environmental and Sustainability Studies
- Ethnic Studies
- Global Studies
- Interdisciplinary Studies (p. 153)
- Liberal Studies
- Women's, Gender, and Sexuality Studies

African and African Diaspora Studies Minor

Requirements for the Minor in African and African Diaspora Studies (18 credits)

Code	Title	Credits
<i>Introductory Course</i>		3
IS-100	Introduction to African and African Diaspora Studies	
<i>African or African Diaspora History course (1 course)</i>		3
HI-221	African-American History I	
HI-222	African-American History II	
HI-280	Introduction to African Diaspora History	
<i>African History Course (1 course)</i>		3
HI-278	African History Before 1800	
HI-279	African History Since 1800	
HI-375	Popular Music and Performance in Modern Africa	
<i>Elective courses (3 courses)</i>		9
HI-213	Colonial Latin America	
HI-214	Modern Latin America	
HI-221	African-American History I	
HI-222	African-American History II	
HI-247	Central America and the Caribbean	
HI-248	Seminar on Globalization & Human Rights	
HI-278	African History Before 1800	
HI-279	African History Since 1800	
HI-280	Introduction to African Diaspora History	
HI-373	African Immigration in the 20th Century	
HI-375	Popular Music and Performance in Modern Africa	
PO-265	Racial and Ethnic Politics	
SO-307	Puerto Rican Diaspora	
SO-320	Sociology of Race and Ethnicity	
MU-222	African Drumming	
EN-370	Antislavery Literature	
PH-178	Africana Philosophy	

GE-255	Geography of Africa
AB-101	Beginning Arabic I
AB-102	Beginning Arabic II
AB-210	Intermediate Arabic I
AB-211	Intermediate Arabic II
FR-101	Beginning French I
FR-102	Beginning French II
FR-210	Intermediate French I
FR-211	Intermediate French II
SP-101	Beginning Spanish I
SP-102	Beginning Spanish II
SP-210	Intermediate Spanish I
SP-211	Intermediate Spanish II
Total Credits	18

Students are encouraged but not required to study abroad in one of the many countries that make up Africa or the African diaspora, study an African language, or intern with an organization whose mission is to support people of African descent.

As an interdisciplinary program, African and African Diaspora Studies draws faculty from multiple disciplines across the campus. Each faculty member's information can be found at the respective department that offers each of the courses.

Any students with questions, please contact the Chair of Interdisciplinary Studies, Dr. Aldo Garcia Guevara at aguevara@worchester.edu.

Asian Studies Minor

The Asian Studies minor is a multi-disciplinary course of study through which students engage the history, politics, languages, cultures, and other aspects of Asian peoples, societies, and countries.

In the program, students gain knowledge in core areas while exploring their own areas of interest.

At its core, the program provides students with the analytical tools to (a) evaluate Asian ways of experiencing and understanding the world, (b) develop a nuanced understanding of how "Asia" as a conceptual framework relates to specific geographical and historical realities, and (c) build a rigorous interdisciplinary and regional studies foundation for future work as global citizens and agents of social justice around the world.

Code	Title	Credits
Requirements		(18 credits)
AS-101	Introduction to Asian Studies	3
Five Elective Courses		15
At least one elective course must be at the 300 level or higher		
At least two elective courses must be in a different discipline from the other Asian Studies courses		
Total Credits		18

- A maximum of two courses can be in the student's major, unless the Asian Studies Minor is part of a Liberal Studies Major.
- Students must take at least one course that has substantial historical content and at least one course with substantial content on philosophy/religion.
- Students are strongly encouraged to take courses in more than one geographical area (such as East Asia, Southeast Asia, South Asia, Central Asia).
- Students are strongly encouraged to take courses in an Asian language.

Code	Title	Credits
<i>Asian Studies Elective Courses</i>		
HI-236	Nature and Culture in Premodern East Asia	3
HI-237	Modern Far East History II	3
HI-251	Roots of China's Rise: Reform, Revolution and Reinvention	3
HI-255	Faculty-Led Study Abroad: China Cultural Immersion	3
HI-318	Ethnic Identities in China	3
HI-334	Environmental Crisis and Management in China	3
HI-335	Imperial Crossroads of Modern East Asia	3
HI-337	Travels in Asia	3
PH-170	Introduction to Asian Philosophy	3
PH-171	Buddhist Philosophy	3
PH-172	Chinese Philosophy	3
PO-221	Asian Politics	3

As an interdisciplinary program, Asian Studies draws faculty from multiple disciplines across the campus. Each faculty member's information can be found at the respective department that offers each of the courses.

Any students with questions, please contact the Chair of Interdisciplinary Studies, Dr. Aldo Garcia Guevara at aguevara@worchester.edu.

Required Courses

AS-101 Introduction to Asian Studies

LASC Categories: GP, DAC

Introduction to Asian Studies is an interdisciplinary course that introduces students to interdisciplinary approaches to the study of Asian societies and cultures, using sources from different genres and disciplines to examine the social, cultural, historical, religious, and philosophical dimensions of Asian societies.

Alternating and every year. 3 Credits

AS-401 Practicum in Asian Studies

Prerequisites: AS-101

In this course, students will apply Asian Studies knowledge and skill base through a hands-on activity, such as an internship in an Asian country or locally in an Asia-focused organization, or to a practical issue or challenge relevant to Asian Studies in a real-world setting, such as an internship in an Asia-focused think tank.

Alternating and every year. 3 Credits

Elective Courses

HI-236 Nature and Culture in Premodern East Asia

LASC Categories: GP, TLC

This course will examine premodern East Asian history through the lens of interactions between humans and nature, exploring how people in the regions of present-day China, Japan, (North and South) Korea, and Vietnam engaged with the land, water, plants, and animals to forge new cultural patterns, social relations, and political institutions. Counts for Middle East/Asia in the History major. Every 2-3 years. 3 Credits

HI-237 Modern Far East History II

LASC Categories: GP

The transformation and re-invention of East Asian societies since World War II. Counts for Middle East/Asia in the History major.

Every year. 3 Credits

HI-251 Roots of China's Rise: Reform, Revolution and Reinvention**LASC Categories:** TLC, GP

Examines the modern historical roots of China's rise as an international power, from the decline of its last imperial dynasty through the tumults of 20th century social movements to its recent emergence as a global economic power. Counts for Middle East/Asia in the History major.

Every 2-3 years. 3 Credits

HI-255 Faculty-Led Study Abroad: China Cultural Immersion**LASC Categories:** TLC, GP

Experientially based immersion in the culture and society of China, consisting of language study, visits to historical and cultural sites, cultural immersion activities in local life, and the opportunity to engage with Chinese students. Counts for Middle East/Asia in the History major.

Every 2-3 years. 3 Credits

HI-318 Ethnic Identities in China**LASC Categories:** TLC, GP, DAC, WAC**Prerequisites:** Writing II.

This course examines the modern history of ethnic identity formation in China and its frontiers and borderlands. It explores how China's own history of territorial expansion and political subjugation driven by ethnic minority rule shaped Chinese concepts of ethnic unity and diversity. The intersecting trajectories of European imperialism and Chinese ethnic nationalism will also be discussed, with the goal of situating the construction of ethnic categorization in China to global processes of colonialism and nationalism. Counts for Middle East/Asia in the History major.

Alternating and every 2-3 years. 3 Credits

HI-334 Environmental Crisis and Management in China**LASC Categories:** HBS, NSP

This course will examine the history of the relationship between Chinese society and culture, economic development, state power, scientific theories, and the environment. Recent media reports have highlighted a worsening environmental crisis in China while at the same time reporting on China as a new leader in the development of alternative energy sources. Government, domestic and international non-governmental organizations, urban and rural activists, scientific studies and discourses, and evolving political ideologies will be addressed.

Counts for Middle East/Asia in the History major.

Every 2-3 years. 3 Credits

HI-335 Imperial Crossroads of Modern East Asia**LASC Categories:** TLC, GP

Examines East Asian history at the crossroads of Chinese, Japanese, Russian and Korean colonial and nationalist movements in a region called Manchuria, presently China's northeast border with Russia, Korea, and Mongolia. Counts for Middle East/Asia within the History major.

Every 2-3 years. 3 Credits

HI-337 Travels in Asia**LASC Categories:** TLC, GP

Travels in Asia examines modern East Asian history through the lens of Chinese, Japanese, European, and American travel narratives from the seventeenth through the twentieth centuries. Counts for Middle East/Asia in the History major.

Every 2-3 years. 3 Credits

PH-170 Introduction to Asian Philosophy**LASC Categories:** GP, TLC, DAC

Introduces and surveys the major philosophical traditions in East-Asia, South-Asia, and South-East Asia. This course will study the different worldviews, conceptions of human nature and the good life from these philosophical perspectives, and where possible, make comparisons with Western philosophies.

Every 2-3 years. 3 Credits

PH-171 Buddhist Philosophy**LASC Categories:** GP, ICW, DAC

Introduces and surveys the history and development of the major Buddhist traditions, and their interpretation of core Buddhist philosophies, as they move outwards from India.

Every 2-3 years. 3 Credits

PH-172 Chinese Philosophy**LASC Categories:** GP, TLC, DAC

Surveys the philosophies of ancient China, including Taoism, Buddhism, Legalism and the development of the Confucian tradition in China.

Every 2-3 years. 3 Credits

PO-221 Asian Politics**LASC Categories:** HBS, GP

This course provides students with an analysis of selected political systems of the countries of Asia. Students will have the opportunity to learn about major theories in comparative politics, which will be applied to the understanding of countries in the Asian region. Topics will include communist and post-communist transitions, democratization, social movements, and economic reform. [Applicable to the Global Studies Concentration.]

Every 2-3 years. 3 Credits

Education

DISCLAIMER: REGULATIONS FOR TEACHER LICENSURE ARE CURRENTLY UNDER REVIEW BY THE MASSACHUSETTS DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION. AS A RESULT, THE PROGRAMS DESCRIBED BELOW MAY BE SUBJECT TO CHANGE AT ANY TIME.

Department of Education

The Education Department offers a wide range of undergraduate and graduate programs in teacher education. Students can become licensed to teach in Early Childhood (PK-2), Elementary (1-6), Middle (5-8), Middle and Secondary (5-12), or Secondary (8-12) schools or credentialed to teach in preschool and day care programs through the undergraduate programs offered in the Education Department. The department programs offer a blending of classroom and fieldwork approaches. Kappa Delta Pi, the International Honor Society in Education, is available to outstanding upper-division students.

To teach in the Commonwealth of Massachusetts, a teaching license is required. The Worcester State University Teacher Education program is recognized by the Massachusetts Department of Elementary and Secondary Education as having an approved program in the fields of Early Childhood Education, Elementary Education, Middle School Education, and Secondary School Education. Those students who major in early childhood or elementary education, must also complete a minor or an additional major.

The Middle and Secondary school programs require a major in a content area and a minor in education. The Massachusetts Test for Educator Licensure (MTEL) is embedded in the program at various stages and must be passed to obtain the initial license.

Graduate programs provide opportunities for students to prepare for careers in Reading, Educational Administration, Moderate Disabilities, English as a Second Language, and School Psychology as well as in Early Childhood, Elementary, Middle, Middle and Secondary, or Secondary Education. Please refer to the Graduate Catalog for further information.

- 4+ Initial License and M.Ed in Middle School Education (p. 111)
- 4+ Initial License and M.Ed in Secondary School Education (p. 113)
- 4+ Initial License in English as a Second Language (p. 115)
- 4+ Initial License in Middle School Education (p. 116)
- 4+ Initial License in Secondary School Education (p. 117)
- Early Childhood Education Major (p. 118)
- Early Education and Care Program (p. 121)
- Education Studies Major (p. 123)
- Education Studies Minor (p. 124)
- Elementary Education Major (p. 125)
- Middle School Education (p. 128)
- Secondary School Education (p. 130)

Faculty

Kristine A. Camacho, Assistant Professor (2020), B.S., Westfield State University; M.S., Worcester State University; C.A.G.S., Worcester State University; Ph.D., University of Massachusetts Amherst

Diane Cooke, Professor (2002), B.S., Louisiana State University; M.A., Ph.D., University of Colorado Boulder

Carol B. Donnelly, Professor (1997), A.B., Wellesley College; M.A., University of Miami; M.Ed., Harvard University; Ed.D. Boston University

Denise R. Foley, Professor (2010), B.A., College of the Holy Cross; M.Ed., Bridgewater State College; C.A.G.S., Fitchburg State College; C.A.G.S., University of Massachusetts, Boston; Ed.D., Indiana University of Pennsylvania

Sue F. Foo, Professor (2004), M.Ed., Ed.D., University of Cincinnati

Pamela Hollander, Department Chair, Associate Professor (2012), B.A., State University of New York Binghamton; M.Ed., Rutgers University; Ed.D., University of Massachusetts Amherst

Christina L. Kaniu, Professor (2010), B.A., Stonehill College; M.Ed., Worcester State College; Ed.D., Northeastern University

Susan R. Monaghan, Associate Professor (2016), B.S., University of Massachusetts, Amherst; A.M., Stanford University; Ph.D., Marquette University

Margarita Perez, Professor (1999), B.A., Mount Holyoke College; M.A., Ed.D., Teachers College Columbia University

Heidi L. Wojcik, Assistant Professor (2020), B.A., M.Ed., Framingham State University; Ed.D., Leslie University

Sara L. Young, Professor (2010), B.A., School for International Training; M.S.T., New School for Social Research; Ed.D., University of Massachusetts Amherst

Courses

ED-101 MTEL Preparation for the Communication And Literacy Skills Subtest

Credits do not count towards graduation. MTEL preparation for the Communication and Literacy Skills Subtest.

Fall only and every year. 1 Credit

ED-102 MTEL Preparation for the General Curriculum Multi-Subject Or Early Childhood Subtests

Credits do not count towards graduation. MTEL preparation for the General Curriculum Multi-subject or Early Childhood Subtests.

1 Credit

ED-103 Mtel Preparation for the Foundations Of Reading Sub-Test

Credits do not count towards graduation. MTEL Preparation for the Foundations of Reading Sub-test. 1 Credit

ED-104 MTEL Preparation for the Mathematics Portion of the General Curriculum Subtest

Credits do not count towards graduation. MTEL Preparation for the Mathematics Portion of the General Curriculum Subtest.

1 Credit

ED-120 The Educational Experience Through Memoirs

LASC Categories: TLC, DAC

Explores educational issues through reading memoirs on teaching and being a student focused on diversity. Provides advanced reading strategies.

3 Credits

ED-149 Introduction to the Teaching Profession Middle/Secondary School

LASC Categories: HBS

This course will provide a basic understanding to the teaching aspects in middle and secondary classrooms. It will explore the Massachusetts Department of Educational Professional Standards for Teachers and give students a general orientation to the profession. Principles of the teaching/learning process and related skills will be addressed, in addition to observable behaviors in the classroom setting(s). Students will be required to do 5 fieldwork observation hours in an accredited middle/secondary school.

Fall and Spring and every year. 3 Credits

ED-150 Introduction to the Teaching Profession

LASC Categories: HBS, ICW

Overview of the teaching profession, including an examination of a variety of grade levels (Birth-Grade 12), learning environments, equity issues and school management and organization. Developmental domains of learning will be introduced. Students will engage in lesson planning, observational techniques and collaboration. 5 hours of fieldwork or Experiential Learning. Fall and Spring and every year.

Fall and Spring and every year. 3 Credits

ED-155 Teaching and Learning in Elementary School**LASC Categories:** ICW

Overview of the teaching profession, examination of a variety of learning environments, organizing and managing schools, integrating curricula, observational techniques. 5 hours of fieldwork.

Fall and Spring and every year. 3 Credits

ED-160 Early Childhood Education Today**LASC Categories:** HBS

Exploration of early childhood education emphasizing developmentally appropriate creativities, motor skills. Discussion: families, community resources, play, integration of special needs. 5 hours of fieldwork.

Fall and Spring and every year. 3 Credits

ED-191 Explorations in Education

An introductory education course on a current or specialized topic.

Every 2-3 years. 3 Credits

ED-193 First Year Seminar Education**LASC Categories:** FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

Every year. 3 Credits

ED-205 An Introduction to Social-Emotional Learning**LASC Categories:** ICW

Prerequisites: one of the following courses: ED-150 ED-149 ED-155 ED-160.

This course introduces students to learning strategies needed to promote effective behavior management and social-emotional learning needs in today's classrooms. This course will promote the notion that in order for students to succeed academically, teachers need to ensure that social-emotional and behavioral needs are met. Different strategies for promoting positive behavioral support and social emotional learning strategies at the individual and class-wide level will be introduced.

Fall and Spring and every year. 3 Credits

ED-206 Development and Learning of Typical and Atypical Children Birth to Age 8**LASC Categories:** DAC, ICW

Prerequisites: ED-150 or ED-160.

Analysis of children's learning, focusing on special education, typical and atypical conditions for learning- birth through age eight.

Fall and Spring and every year. 3 Credits

ED-207 The Adolescent in Schools & Society**LASC Categories:** ICW

This course will investigate the educational, psychological, social and environmental factors related to adolescents in school settings.

Fall and Spring and every year. 3 Credits

ED-211 Integrating Science, Social Studies and the Fine Arts in Early Childhood Curriculum

Prerequisites: either ED-150 or ED-160, and both ED-206 and PS-210.

Designing and evaluating multi-disciplinary curricula for all children; materials, organizing environments, regulations, learning theories, evaluation of children's learning and development. 10 hours of fieldwork.

Fall and Spring and every year. 3 Credits

ED-214 Emergent Literacy**LASC Categories:** WAC

Prerequisites: either ED-150 or ED-160. Take EN-102, ED-206, and ED-211.

Early literacy skills, content and approaches include construction of meaning with written and spoken language, written language forms and functions, letter-sound relationship, phonemic awareness, vocabulary development and assessment. Methods of teaching second language are included. 10 hours of fieldwork.

Every year. 3 Credits

ED-230 PK-2 Mathematics Methods**Prerequisites:** MA-130.

This course focuses on using the foundational knowledge of mathematics to develop and implement effective methods for teaching mathematics in PK-2 settings. Requires 10 hours of fieldwork in a PK-2 classroom.

Fall and Spring and every year. 3 Credits

ED-250 Educational Psychology

Prerequisites: either ED-150 or ED-155. Take PS-210.

Learning and developmental processes of typical and atypical learners. Motivation, relationships of intelligence, affect, and achievement. Application to teaching and learning. 10 hours of fieldwork.

Prerequisite Elementary: PS 210, and ED 155 or ED 150.

Every year. 3 Credits

ED-251 Principles of Curriculum, Instruction, And Assessment in Middle and High School**LASC Categories:** WAC

Prerequisites: ED-149 or ED-150, and take ED-207. Introduces lesson planning, literacy demands, curriculum development and assessment strategies at the middle and high school level. 10 hours of fieldwork.
Every year. 3 Credits

ED-253 History and Philosophy of Ed**LASC Categories:** USW

Contemporary problems of education in relation to selected ancient, medieval, and modern philosophers of education.
Other or on demand and every year. 3 Credits

ED-261 Introduction to the Foundations of Reading

This course provides an opportunity for prospective elementary and early childhood level teachers to acquire a strong foundation in current knowledge, perspective and procedures for teaching literacy in grades PK through 6.
Every year. 3 Credits

ED-270 Diversity & Multicultural Ed**LASC Categories:** DAC, DIV

Prerequisites: ED 149 OR ED 150 Take ED-207 ED 251 must be taken concurrently or before ED 270

Prerequisites or Corequisite: ED-251 previously or concurrently.

Introduction to multicultural education, equity and social justice issues in education including a focus on race, ethnicity, languages, class, gender, gender identity, sexual orientation, and disabilities.
Fall and Spring and every year. 3 Credits

ED-271 International and Comparative Education**LASC Categories:** ICW, GP

This course compares the educational policies, practices and outcomes in two or more countries.
3 Credits

ED-275 Curr/Instr in Elementary Ed**LASC Categories:** WAC

Prerequisites: either ED-150 or ED-155, and take PS-210.

Analysis of interactions in effective elementary schools through participation in and exploration of curriculum, teaching and learning roles. 10 hours of fieldwork.
Fall and Spring and every year. 3 Credits

ED-285 Understanding and Supporting Children And Youth With Disabilities**LASC Categories:** ICW

Introduction to the characteristics of diverse children and youth with disabilities and multidisciplinary supports designed to meet their special needs for success in school.
Fall and Spring and every year. 3 Credits

ED-302 Educational Assessment & Measurement

Prerequisites: ED 150 (or equivalent: ED 149, ED 155) and any Education class at the 200-level or above. Examine the range of assessment tools & procedures (observation to standardized tests) measuring functioning domains (e.g., behavior, achievement, career interest) for decision making; In-depth focus on cultural appropriateness and fairness.
Other or on demand and every year. 3 Credits

ED-303 Urban Education

Development of understanding of the social, psychological, and educational problems of the culturally different; strategies and techniques for teaching in the inner-city practicum.
Other or on demand and other or on demand. 3 Credits

ED-304 Best Practices for English Language Learners**LASC Categories:** TLC, DAC, DIV

Prerequisites: ED-270 or ED-275, or ED-214

Research-based grade level subject matter, instructional strategies, and performance assessments of English Language Learners are the focus of discussions and class projects.
Fall and Spring and every year. 3 Credits

ED-305 Teaching Adult ESL and SIFE**LASC Categories:** HBS, DAC

Prerequisites: ED-148 and 9 Education credits

Designed to enhance teacher effectiveness in the adult ESL classroom taking into consideration their unique circumstances.
Every year. 3 Credits

ED-306 Elementary Reading, Language Arts and Literature

Stresses interrelationships of oral/written communication; investigates concepts, skills and procedures for teaching literacy and using children's literature in grades 1-6. 20 hours of fieldwork.
Every year. 6 Credits

ED-307 ECE - Science

Thematically taught developmentally-appropriate activities linked to State Science Frameworks (Life, Physical, Earth/Space). Emphasizing hands-on inquiry and relevance to learners' experiences, and addressing diversity, authentic assessment, and use of technology. 10 hours of fieldwork. Pre-requisite: Admitted to Stage 2
Fall and Spring and every year. 3 Credits

ED-308 ECE - Mathematics**LASC Categories:** QAC

Application of Piaget's ideas to early mathematical education. Other well-known psychologists' views concerning early mathematics instruction, with application. Field experience. 10 hours of fieldwork. Prerequisite: Admitted into Stage 2.
Fall and Spring and every year. 3 Credits

ED-313 Practicum in Early Childhood Education: Preschool/Kindergarten

Prerequisites: either ED-150 or ED-160. Take ED-206, ED-211, and PS-210. Take ED-400 concurrently.

Corequisites: ED-400

150 hour practicum in an NAEYC accredited preschool/kindergarten/licensed day care center. Students apply content, methods, and materials from college courses.
Fall and Spring and every year. 3 Credits

ED-315 Pre-Practicum Experience in Early Childhood Education

Prerequisites: At least 3 stage II Classes. Transfer students who have completed a preschool practicum (ED 313) are eligible to take this course. Pre-practicum experience in an Early Childhood classroom to strengthen skills required to become an effective teacher Topics will include well structured lessons, high expectations, teaching all students, providing a safe learning environment, and professionalism. The Department of Elementary and Secondary Education required Gateway Assessment will be the culminating experience in this course.
Fall and Spring and every year. 3 Credits

ED-319 Advanced Field Experience in Early Childhood Education

LASC Categories: CAP

Prerequisites: ED-313 and ED 400.

Students who have already completed a preschool practicum complete an additional 100-150 hour field experience in Early Childhood Education. Portfolio required.
Fall and Spring and every year. 3 Credits

ED-320 Elementary Science

Thematically taught grade-appropriate activities linked to State Science Frameworks (Life, Physical, Earth/Space). Emphasizing hands-on inquiry and relevance to learners' experiences, and addressing diversity, authentic assessment, and use of technology. 10 hours of fieldwork. Prerequisite: Admitted into Stage 2
Fall and Spring and every year. 3 Credits

ED-321 Gateway Experience in Early Childhood Ed

Prerequisites: Candidates must have completed at least three Stage II Courses. Co-requisite with ED 313 or ED 315 Pre-practicum Experience in Early Childhood Education.

Prerequisites or Corequisite: ED-313 or ED-315 concurrently.

Gateway experience in Early Childhood Education. Preparation for, completion, and analysis of Worcester State University's approved DESE Gateway Assessment. Must take place in an educational setting.

Fall and Spring and every year. 1 Credit

ED-322 Contemporary Education Policy

LASC Categories: QR

Prerequisites: ENT102, an introductory education course (ED150, ED149, ED155, or ED160) and a college level math course.

This is an applied statistics course, focused on education policy. Education policy at the state and federal level is justified and evaluated by the use of data, statistics, and statistical models. In this course, students will gain an understanding of statistics and current education policy to deeply examine and evaluate the quantitative justification and evaluation of policies. They will build upon this understanding to use available data to propose a new equitable policy or policy change that is ethically justified by data, analysis, and statistical models.

Other or on demand and other or on demand. 3 Credits

ED-323 Grades 3-6 Mathematics Methods

Prerequisites: MA-130 and MA-131.

This course focuses on using the knowledge of and language of mathematics to develop and implement effective methods for teaching mathematics in grade 3-6 settings. Requires 10 hours of fieldwork in a public grades 3-6 classroom.

Fall and Spring and every year. 3 Credits

ED-325 Elementary Mathematics**LASC Categories:** QAC**Prerequisites:** MA-130 and MA-131 or MA-132
Mathematics in elementary school. Emphasizes curriculum theory, material development, and evaluation of materials/techniques. 10 hours of fieldwork. Prerequisite: Admitted into Stage 2
Fall and Spring and every year. 3 Credits**ED-330 Elementary Social Studies and Multiculturalism**Goals, curriculum, skills, issues, teaching strategies in educating diverse populations in a global context. 10 hours of fieldwork. Prerequisite: Admitted into Stage 2
Fall and Spring and every year. 3 Credits**ED-339 Children's Literature: Multicultural Literature for PK-9****LASC Categories:** HBS, TLC, DAC, DIV**Prerequisites:** EN-102 or EN-202In this class, students will read, discuss, and analyze children's and young adult literature by people of diverse backgrounds including diversity in race, ethnicity, class, gender, sexual orientation, ability, language, and country. Genres and formats may include fiction, nonfiction, biographies, novels in verse, graphic novels, fairy tales, fantasy, and wordless books. While children's and young adult literature will comprise the primary texts in this course, secondary sources from education, linguistics, English, history, sociology, anthropology, women's studies and communications will provide context and theory to guide analysis
Fall and Spring and every year. 3 Credits**ED-340 Language Arts & Literacy for the Primary Grades**Early literacy/language arts content, curriculum materials, and approaches including phonological awareness, phonics, vocabulary, fluency, comprehension, writing and assessment. 10 hours of fieldwork. Admitted into Stage 2.
Fall and Spring and every year. 3 Credits**ED-348 Teaching Children's Literature****LASC Categories:** CA**Prerequisites:** EN-102Inquiry into children's literature with a focus on teaching strategies, awards, history, aesthetics, and genres including emphasis on image and text in picture books and graphic novels.
Other or on demand. 3 Credits**ED-351 Exceptionalities and Accommodating Diverse Learners in Secondary Schools**Exploration of learning disabilities and other exceptionalities. Addresses strategies to differentiate secondary school curriculum to meet student needs. 10 hours fieldwork.
Fall and Spring and every year. 3 Credits**ED-352 Exceptionalities and Accommodating Diverse Learners in Middle Schools**Exploration of learning disabilities and other exceptionalities. Addresses strategies to differentiate middle school curriculum to meet student needs. 10 hours fieldwork.
Fall and Spring and every year. 3 Credits**ED-353 Assessment, Adjustment to Practice, and Classroom Management in the Secondary School****LASC Categories:** WACExplores classroom management and development and analysis of assessment strategies and data to inform secondary school teaching. 15 hours fieldwork.
Fall and Spring and every year. 3 Credits**ED-354 Assessment, Adjustment to Practice, and Classroom Management in the Middle School****LASC Categories:** WACExplores classroom management and development and analysis of assessment strategies and data to inform secondary school teaching. 15 hours of fieldwork.
Fall and Spring and every year. 3 Credits**ED-370 Methods and Materials in Science, Technology, Engineering, and Mathematics (STEM) At the Middle and Secondary Level****Corequisites:** ED-382 or ED-383Teaching methods and advanced curriculum course for STEM fields including math, health, and the sciences. Taken concurrently with pre-practicum.
Fall and Spring and every year. 3 Credits**ED-371 Methods and Materials in Humanities and Social Sciences At the Middle and Secondary Level.****Corequisites:** ED-382 or ED-383Teaching methods and advanced curriculum course for humanities fields, including English, World Language, and History/Political Science. Taken concurrently with prepracticum.
Fall and Spring and every year. 3 Credits

ED-372 Technology, Digital Literacy, and Education

Prerequisites: a curriculum course from ED-251, ED-275 or ED-211.

This course will provide students with the opportunity to review, implement and evaluate educational technologies and digital literacy teaching and learning resources.

Other or on demand. 3 Credits

ED-375 Prepracticum: Instruction, Classroom Management, and Family and Community Engagement in the Elementary School

Prepracticum experience in the elementary classroom, addressing accommodations of ELL's and children with disabilities, classroom management, and family/community engagement.

Every year. 3 Credits

ED-382 Prepracticum Experience in Middle School

Prepracticum experience in the subject areas and at the level of the license which the candidate is pursuing. Taken concurrently with ED-370 or ED-371. 45 hours fieldwork.

1 Credit

ED-383 Prepracticum Experience in Secondary School

Prepracticum experience in the subject areas and at the level of the license which the candidate is pursuing. Taken concurrently with ED-370 or ED-371. 45 hours fieldwork.

1 Credit

ED-386 Assessment and Adjustment in Practice In Early Childhood Education

Development of skills to assess young children and identify special needs. Analyzing assessment data and adjusting practice to improve learning. 10 hours of fieldwork. Pre-requisite: Admitted to Stage 2.

Fall and Spring and every year. 3 Credits

ED-395 Educator & Cultural Diversity

To enable the educator to better understand the roots and contributions of diverse cultures in America.

Other or on demand. 3 Credits

ED-400 Inclusive Early Childhood Education: Preschool Through Grade 2

Special education law and procedures, modification of programs for English language learners, working with parents, and developing and implementing an anti-bias curriculum. Pre-requisite: Admitted to Stage II.

Fall and Spring and every year. 3 Credits

ED-405 Classroom Management and Child Guidance Techniques

LASC Categories: CAP

Prerequisites or Corequisite: ED-430

Guided analysis/application of principles for students completing a practicum in primary classrooms. Classroom management and guidance techniques.

Fall and Spring and every year. 3 Credits

ED-408 Directed Study: Education

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

ED-410 Spec Topics: Education

Prerequisites: ED-155

A seminar course on current issues or topics in education.

Fall and Spring and every year. 3 Credits

ED-424 Sem: Teaching Practicum

LASC Categories: CAP

Prerequisites or Corequisite: ED-480 or ED-485

Implications of the attempts to juxtapose theory and practice are analyzed from the viewpoint of becoming professional teachers. Taken concurrently with ED-480 and ED-485. Prerequisite: Admitted into Stage 3

Fall and Spring and every year. 3 Credits

ED-425 Sem: Applying Ed Principles

LASC Categories: CAP

Prerequisites or Corequisite: ED-435

Guided analyses and application of principles and procedures for students completing their practicum. Prerequisite: Admitted into Stage 3.

Fall and Spring and every year. 3 Credits

ED-430 Practicum in Early Childhood Education: Grade 1 or Grade 2

Prerequisites or Corequisite: ED-405.

Semester-long 200-hour practicum in first or second grade. Planning, implementing, evaluating learning. Setting includes children with special needs.

Fall and Spring and every year. 9 Credits

ED-435 Practicum in Teaching: Elementary School**Prerequisites or Corequisite:** ED-425

Principles, techniques, and responsibility of planning, executing, and evaluating teaching and learning for a full semester.

Fall and Spring and every year. 9 Credits

ED-440 Education Studies Internship**Prerequisites:** 30 credits of Education courses.

Internships in museums, schools, community organizations, government agencies, etc. under joint supervision of the organization/agency and WSU faculty.

Fall and Spring and every year. 3 Credits

ED-450 Independent Study in Education

For the student who wishes to pursue independent study in education; faculty members from other disciplines may be called upon to counsel the student.

Fall and Spring and other or on demand. 1-9 Credits

ED-460 Education Studies Capstone**Prerequisites:** 30 credits of Education courses.

This is a capstone course that will be the culminating experience for students in the education major and can take many forms including but not limited to research projects, service-learning projects, curriculum projects, etc. The format of the capstone will be determined based on the career path and interest of the student.

Fall and Spring and every year. 3 Credits

ED-475 Practicum in Teaching

For the secondary education student; practice in teaching in the secondary school. Prerequisite: Completion of required education courses including the appropriate course in methods and media

Fall and Spring and every year. 6-12 Credits

ED-480 Practicum Tchg Secondary Sch**Prerequisites or Corequisite:** ED-424

planning, teaching, and evaluating learning experiences. Prerequisite: Admitted into Stage 3

Fall and Spring and every year. 9 Credits

ED-485 Practicum in Teaching Middle School**Prerequisites or Corequisite:** ED-424

Full semester teaching experience in a middle school. Includes planning, teaching, and evaluating learning experiences. Prerequisite: Admitted into Stage 3

Fall and Spring and every year. 9 Credits

Program Learning Outcomes

- Candidates have subject matter knowledge for the content they will teach.
- Candidates apply and evaluate pedagogical principles and can integrate them with content in planning, implementing and assessing.
- As caring professionals, our candidates have high expectations for all learners and work with learning communities to meet the individual needs of diverse learners.
- Candidates reflect upon and evaluate teaching practices in order to improve learner outcomes.
- Candidates use evidence from research and practice to address challenges and improve student outcomes.
- Candidates develop and demonstrate in practice the affirmation of diversity and promote equity in schools and in the larger world. (e.g. race, gender, ethnicity, class, sexual orientation, language, family structure, religion, ability and age, etc.)
- Candidates use technology and digital media strategically and critically in research, teaching and learning.
- Candidates collaborate with colleagues and community members to advance professional practice (e.g. across the curriculum, interdisciplinary, community service etc.).

4+ Initial License and M.Ed in Middle School Education

Worcester State University offers the Initial Licensure Program in Middle School Education. Certain grade levels covered by licensure differ based on subject areas (see table below). For more information about licensure areas, please see an academic advisor from the Education Department. Students who complete the 4+ Initial license in Middle School will earn an initial license as a middle school teacher. The Massachusetts Test for Educator Licensure (MTEL) is embedded in the program at various stages and must be passed for completion of the program and licensure.

Fieldwork accompanies most education courses and is a necessary component of the program. Student pre-practicum experiences include a wide variety of field settings.

The Department of Elementary and Secondary Education offers Initial Licensure programs in the following areas in cooperation with liberal arts and sciences departments in the Worcester State University Education Program.

Teacher of English (5-12)

Teacher of General Science (5-8)

Teacher of History (5-12)

Teacher of Mathematics (5-8)

Teacher of Spanish (5-12)

For required courses in these subject areas students should consult their liberal arts/science advisor.

Admission Requirements: Undergraduate Program

Students in the 4+ initial license in middle school education will progress through a three-stage process. Each stage must be completed satisfactorily prior to passage to the next stage. Students will pursue a major in the content area relevant to their licensure as listed above.

In order to apply to the 4+ Initial license and MED Middle School Program, students must:

- pass the four above education classes with minimum grades of B-,
- pass their Communication and Literacy MTEL,
- pass their Subject Area MTEL,
- have a 3.0+ GPA average in a minimum of 60 credits, and
- have 2 letters of recommendation.

Students can be conditionally admitted to the program, prior to student teaching/initial license. Once a student successfully completes all initial license coursework including student teaching/ seminar and earns an initial license, they can be fully admitted into the M.Ed. in Middle School program.

Application Priority Deadlines: for Fall entry, March 30.

Application Priority Deadlines: for Spring entry, October 30.

Students must complete all LASC and Major requirements and take the following undergraduate courses:

Code	Title	Credits
ED-149	Introduction to the Teaching Profession Middle/ Secondary School (HBS)	3
or ED-150	Introduction to the Teaching Profession	
ED-207	The Adolescent in Schools & Society (ICW)	3
ED-251	Principles of Curriculum, Instruction, And Assessment in Middle and High School (WAC)	3
ED-270	Diversity & Multicultural Ed (DAC)	3
Total Credits		12

Students admitted to the 4+ Initial License and MED in Middle School program use the four undergraduate stage 1 Education courses (ED-149/150, ED-207, ED-251, and ED-270) to meet the Adolescent growth and development requirement and the Multicultural and foundations in education competencies (like ED-949 American Education Contexts and Influences at the graduate level).

After admission to the 4+ program—(students could take 1 to 5 courses for a maximum of 13 credits):

Code	Title	Credits
ED-909	RETELL: Best Practices for English Language Learners (ED-509)	3
ED-973	Instructional Design and Evaluation for Middle-Secondary School (ED-573)	3
ES-925	Inclusive Settings: Learning Strategies and management Techniques (5-12) (ES-525)	3
ES-905	Methods and Materials for Teaching Humanities (ES-505)	3
or ES-906	Methods and Materials for Teaching Science and Math	
ES-921	Clinical Experience for Middle-Secondary Grades (5-12)	1
Total Credits		13

Students who complete the requirements for a Bachelor's degree, graduate (with their class).

ES 911 Teaching Practicum (Student Teaching) and ES 908 Teaching Practicum Seminar are completed at the graduate level in the fall or spring, upon completion of all other required classes in the program (ED149/150, ED207, ED251, ED270, ED573/973, ED 509/909, ES 525/925, ES505/506/905/906 with ES521/921). The following classes may be completed at the 500(part of undergraduate program) or 900 (graduate only) level: ED573/973, ED 509/909, ES 525/925, ES505/506/905/906 with ES521/921.

M.Ed. in Middle School Education

Code	Title	Credits
ED-981	Advanced Foundations of Education	3
ED-958	Middle School Curriculum and Instruction : Strategies and Modification	3
ED-959	Assessment, Differentiation and Data Analysis in Middle School	3
ED-963	The Understanding and Teaching of Culture	3
ES-950	Disciplinary, Multimodal and Critical Literacies Across the Content Area	3
ES-905 or ES-906	Methods and Materials for Teaching Humanities Methods and Materials for Teaching Science and Math	3
Content Elective 2		3
Content Elective 3		3
Content Elective 4		3
Content Elective 5		3
ED-982	Research in Education	3
ED-994	Thesis Seminar	3
ES-926	Portfolio Evaluation (Middle/ Secondary)	1
Total Credits		37

4+ Initial License and M.Ed in Secondary School Education

Worcester State University offers the Initial Licensure Program in Secondary School Education. Certain grade levels covered by licensure differ based on

subject areas (see table below). For more information about licensure areas, please see an academic advisor from the Education Department. Students who complete the 4+ Initial license in Secondary School will earn a Master's Degree in Education in Secondary School. The Massachusetts Test for Educator Licensure (MTEL) is embedded in the program at various stages and must be passed for completion of the program and licensure.

Fieldwork accompanies most education courses and is a necessary component of the program. Student pre-practicum experiences include a wide variety of field settings. Students attend different and varied schools in urban, rural, and suburban settings. They also vary their placements and grade levels in different school buildings within districts to insure a well-rounded experience.

The Department of Elementary and Secondary Education offers Initial Licensure programs in the following areas in cooperation with liberal arts and sciences departments in the Worcester State University Education Program.

Teacher of Biology (8-12)

Teacher of Chemistry (8-12)

Teacher of Earth and Space Science (8-12)

Teacher of English (5-12)

Teacher of History (5-12)

Teacher of Mathematics (8-12)

Teacher of Spanish (5-12)

For required courses in these subject areas students should consult their liberal arts/science advisor.

Admission Requirements: Undergraduate Program

Students planning to do a 4+ program in Secondary School Education will progress through a three-stage process. Each stage must be completed satisfactorily prior to passage to the next stage. Students will pursue a major in the content area relevant to their licensure as listed above.

Students must complete all LASC and Major requirements and take the following undergraduate courses:

Code	Title	Credits
ED-149	Introduction to the Teaching Profession Middle/Secondary School (HBS)	3
or ED-150	Introduction to the Teaching Profession	
ED-207	The Adolescent in Schools & Society (ICW)	3
ED-251	Principles of Curriculum, Instruction, And Assessment in Middle and High School (WAC)	3
ED-270	Diversity & Multicultural Ed (DAC)	3
Total Credits		12

In order to apply to the 4+ Initial license and MED Secondary School Program, students must:

- pass the four above education classes with minimum grades of B-,
- pass their Communication and Literacy MTEL,
- pass their Subject Area MTEL,
- have a 3.0+ GPA average in a minimum of 60 credits, and
- have 2 letters of recommendation.

Students can be conditionally admitted to the program, prior to student teaching/initial license. Once a student successfully completes all initial license coursework including student teaching/ seminar and earns an initial license, they can be fully admitted into the M.Ed. in Secondary School program.

Application Priority Deadlines: for Fall entry, March 30.

Application Priority Deadlines: for Spring entry, October 30.

Students admitted to the 4 + Initial License and MED in Secondary School program use the four undergraduate stage 1 Education courses (ED-149/ ED150, ED-207, ED-251, and ED-270) to meet the Adolescent growth and development requirement and the Multicultural and foundations in education competencies (like ED-949 American Education Contexts and Influences at the graduate level).

After admission to the 4+ program, students could take 1 to 5 courses for a maximum of 13 credits:

Code	Title	Credits
ED-957	Instructional Design and Evaluation for Middle School Grades (ED-557)	3
ED-909	RETELL: Best Practices for English Language Learners (ED-509)	3
ES-925	Inclusive Settings: Learning Strategies and management Techniques (5-12) (ES-525)	3
ES-905	Methods and Materials for Teaching Humanities (ES-505)	3
or ES-906	Methods and Materials for Teaching Science and Math	
ES-921	Clinical Experience for Middle-Secondary Grades (5-12) (ES-521)	1
Total Credits		13

Students who complete the requirements for a Bachelor's degree graduate.

ES-911 Teaching Practicum (Student Teaching) and ES-908 Teaching Practicum Seminar are completed at the graduate level in the fall or spring, upon completion of all other required classes in the program (ED-149/150, ED-207, ED-251, ED-270, ED-573/ED-973, ED-509/ED-909, ES-525/ED-925, ES-505/ES-506/ES-905/ES-906 with ES-521/ES-921). The following classes may be completed at the 500(part of undergraduate program) or 900 (graduate only) level: ED-573/ED-973, ED-509/ED-909, ES-525/ ES-925, ES-505/ES-506/ES-905/ES-906 with ES-521/ ES-921.

M.Ed. in Secondary School Education

Code	Title	Credits
ED-981	Advanced Foundations of Education	3
ED-974	Curriculum Development and Innovations (Secondary School) ((or initial license course))	3
ED-975	Assessment, Differentiation and Data Analysis in Secondary Schools ((or initial license course))	3

ED-963	The Understanding and Teaching of Culture ((or initial license course))	3
ES-950	Disciplinary, Multimodal and Critical Literacies Across the Content Area	3
ES-905 or ES-906	Methods and Materials for Teaching Humanities Methods and Materials for Teaching Science and Math	3
Content Elective 2		3
Content Elective 3		3
Content Elective 4		3
Content Elective 5		3
ED-982	Research in Education	3
ED-994	Thesis Seminar	3
ES-926	Portfolio Evaluation (Middle/ Secondary)	1
Total Credits		37

4+ Initial License in English as a Second Language Admission Requirements

- Passing score on the communication and literacy MTEL
- A course in human, child, or adolescent development at the undergraduate level (PS-210 Developmental Psychology, ED-207 Adolescent in School and Society, ED-206 Development and Learning B-8)
- ED-304 Best Practices in Teaching English Language Learners with a grade of B- or better (contact instructor for permission to add this course)
- Language proficiency in a language other than English: Documentation of fluency at an intermediate level in a language other than English from a college or through the proficiency level determined by
 - Successful completion of foreign language courses deemed appropriate by the foreign language program in the Languages and Literature Department;

- Results of a language proficiency assessment, if applicable
- Coursework in a foreign university or foreign secondary school
- An individual's language background for the assessment of language proficiency conducted by the program of life experiences working/living in a language other than English—conducted as individual language proficiency assessment
- GPA of 3.0 or better in a minimum of 60 credits.
- Graduate Application to the ESL Initial License Program with all transcripts, references, and supporting materials.

Code	Title	Credits
ED-978	Contemporary Issues in the Teaching of Bilingual and English Language Learners	3
ES-914	Methods and Materials for Teaching English Language Skills to the ELL	3
ED-986	Literacy Instruction for the English Language Learner (ELL)	3
ED-955	Assessing English Language Learners	3
ES-930	Sheltered Instruction and Assessment in the Immersion Classroom	3
ES-924	Linguistics for Teachers of English Language Learners	3
CD-910	Speech/Language Development, Differences and Diversity	3
ES-928	Second Language Acquisition	3
ES-940 or ES-945	Practicum and Seminar in the Teaching of English as a Second Language (ESL) in Grades Pre-K-6 Practicum & Seminar in Teaching English as a Second Language (ESL) in Grades 5-12	5
Total Credits		29

Students must earn a B- or better in all licensure courses.

Undergraduate students admitted to the 4+ program for ESL Initial Licensure could take up to 4 classes at the 500 level (undergraduate 4+ level) selected from the following 5 classes (or other courses with advisor/coordinator permission):

Code	Title	Credits
ED-955	Assessing English Language Learners	3
ES-903	The Art of Teaching Adolescents	3
ES-914	Methods and Materials for Teaching English Language Skills to the ELL	3
ED-978	Contemporary Issues in the Teaching of Bilingual and English Language Learners	3
ED-986	Literacy Instruction for the English Language Learner (ELL)	3

Students can graduate when they meet undergraduate requirements and then take all remaining ESL Licensure Course Requirements at the graduate level, pass the ESL Content MTEL and take Practicum & Seminar in Teaching English as a Second Language. A passing score report from the ELL / ESL content MTEL is required prior to beginning the practicum.

4+ Initial License in Middle School Education

4 + Middle School Education Initial License

The 4+ Middle Initial Licensure program is for students who are majoring in DESE approved licensure program areas and are seeking a license issued by the Massachusetts Department of Elementary and Secondary Education at the middle school level. Students may choose to use some of the courses to meet some LASC requirements.

Students must complete all LASC and Major requirements and take the following undergraduate courses:

ED 149 Intro to Teaching (HBS) or ED 150 Intro to the Teaching Profession (ICW/HBS)

ED 207 Adolescent in School and Society (ICW)

ED 251 Principles of Curriculum and Instruction (WAC)

ED 270 Diversity and Multicultural Education (DAC)

Students must take the 4 above education classes with minimum grades of C+, pass their Communication and Literacy MTEL, pass their Subject Area MTEL, and have a 3.0 GPA average in a minimum of 60 credits in order to be accepted to the 4 + Middle School Education Initial License Program.

Application Priority Deadlines: for Fall entry, March 30.

Application Priority Deadlines: for Spring entry, October 30.

Students admitted to the 4 + Initial License program use the 4 undergraduate stage 1 Education courses (ED 149/150, ED 207, ED 251, and ED 270) to meet the Adolescent growth and development requirement and the Multicultural and foundations in education competencies (like ED 949 American Education Contexts and Influences at the graduate level).

After admission to the 4+ program—(students could take 1 to 5 courses for a maximum of 13 credits)

ED 973 Instructional Design and Evaluation in Middle-Secondary School – Transcribed as ED 573

ED 909 RETELL – transcribed as ED 509

ES 925 Inclusive Settings – transcribed as ES 525

ES 905 or ES 906 Methods and Materials in Humanities/STEM transcribed as ED 505/506 with ES921 transcribed as 521 Clinical Experience in Teaching Middle -Secondary School (1 credit)

Students who complete the requirements for a Bachelor's degree, graduate (with their class).

ES 911 Teaching Practicum (Student Teaching) and ES 908 Teaching Practicum Seminar are completed at the graduate level in the fall or spring, upon completion of all other required classes in the program (ED149/150, ED207, ED251, ED270, ED573/973, ED 509/909, ES 525/925, ES505/506/905/906 with ES521/921). The following classes may be completed at the 500(part of

undergraduate program) or 900 (graduate only) level: ED573/973, ED 509/909, ES 525/925, ES505/506/905/906 with ES521/921.

To maximize the benefit, students may choose for example to complete the 4+ initial license program by taking:

2 cross-listed classes (6 credits) in the Fall of senior year

3 cross-listed classes (7 credits) in the Spring of senior year

Graduate with their class in May!

Graduate level student teaching and seminar in the following Fall. They would then complete the program in December.

Students could also take fewer 500 level classes during their undergraduate study and take summer, fall or spring 900 level graduate sections of required classes to complete the initial license course work prior to student teaching and seminar.

4+ Initial License in Secondary School Education

4 + Secondary Education Initial License

The 4+ Secondary Initial Licensure program is for students who are majoring in DESE approved licensure program areas and are seeking a license issued by the Massachusetts Department of Elementary and Secondary Education at the secondary school level.

Students take the following undergraduate courses:

ED 149 Intro to Teaching (HBS) OR ED 150 Introduction to the Teaching Profession (ICW, HBS)

ED 207 Adolescent in School and Society (ICW)

ED 251 Principles of Curriculum and Instruction (WAC)

ED 270 Diversity and Multicultural Education (DAC)

Students must take the 4 above education classes with minimum grades of C+, pass their Communication and Literacy MTEL, pass their Subject Area MTEL, and have a 3.0 GPA average in

a minimum of 60 credits in order to be accepted to the 4 + Secondary School Education Initial License Program.

Application Priority Deadlines: for Fall entry, March 30.

Application Priority Deadlines: for Spring entry, October 30.

Students admitted to the 4 + Secondary Education Initial License program use the 4 undergraduate stage 1 Education courses (ED 149/150, ED 207, ED 251, and ED 270) to meet the Adolescent growth and development requirement and the multicultural and foundations in education competencies (like ED 949 American Education Contexts and Influences at the graduate level).

After admission to the 4+ program—(students could take 1 to 5 courses for a maximum of 13 credits)

ED 973 Instructional Design and Evaluation in Secondary Schools – Transcribed as ED 573

ED 909 RETELL – transcribed as ED 509

ES 925 Inclusive Settings – transcribed as ES 525

ES 905 or ES 906 Methods and Materials in Humanities/STEM transcribed as ED 505/506 with ES921 transcribed as 521 Clinical Experience in Teaching Secondary School (1 credit)

Students complete the requirements for a Bachelor's degree and graduate.

ES 911 Teaching Practicum (Student Teaching) and ES 908 Teaching Practicum Seminar are completed at the graduate level in the fall or spring, upon completion of all other required classes in the program (ED149, ED207, ED251, ED270, ED573/973, ED 509/909, ES 525/925, ES505/506/905/906 with ES521/921). The following classes may be completed at the 500(part of undergraduate program) or 900 (graduate only) level: ED573/973, ED 509/909, ES 525/925, ES505/506/905/906 with ES521/921. Students must earn a B- or better in all graduate level courses.

To maximize the benefit, students may choose for example to complete the 4+ initial license program by taking:

2 cross-listed classes (6 credits) in the Fall of senior year

3 cross-listed classes (7 credits) in the Spring of senior year

Graduate with their class in May!

Graduate level student teaching and seminar in the following Fall. They would then complete the program in December.

Students could also take fewer 500 level classes during their undergraduate study and take summer, fall or spring 900 level graduate sections of required classes to complete the initial license course work prior to student teaching and seminar.

Early Childhood Education Major

The Early Childhood Education major prepares candidates for the Massachusetts Department of Elementary and Secondary Education Initial License as a teacher of children in public school classrooms, PK through grade 2. The program of study is based on a broad liberal arts foundation and an integrated professional teacher preparation program. A course waiver process is available for transfer students where appropriate. Fieldwork accompanies most education courses and is a necessary component of the program. Student prepracticum experiences include a wide variety of field settings. Students attend different and varied schools in urban, rural, and suburban settings. They also vary their placements and grade levels in different school buildings within districts to ensure a well rounded experience.

Preparation for the Massachusetts Test for Educator Licensure (MTEL) is embedded in the program at various stages and must be passed to obtain the initial license.

Early Childhood Education Major Teacher Licensure Program (Massachusetts Public Schools, PK-2)

Requirements for a Major in Early Childhood Education leading to MA Department of Elementary and Secondary Education Initial Licensure (PK-2):

45 credits

Prerequisite Courses

Code	Title	Credits
MA-130	Number and Operations for Teachers	3
PS-210	Developmental Psychology	3
Total Credits		6

Required Courses

Code	Title	Credits
ED-160	Early Childhood Education Today	3
or ED-150	Introduction to the Teaching Profession	
ED-206	Development and Learning of Typical and Atypical Children Birth to Age 8	3
ED-211	Integrating Science, Social Studies and the Fine Arts in Early Childhood Curriculum	3
ED-214	Emergent Literacy	3
ED-304	Best Practices for English Language Learners	3
ED-307	ECE - Science	3
ED-308	ECE - Mathematics	3
ED-313	Practicum in Early Childhood Education: Preschool/ Kindergarten	3
ED-340	Language Arts & Literacy for the Primary Grades	3
ED-386	Assessment and Adjustment in Practice In Early Childhood Education	3
ED-400	Inclusive Early Childhood Education: Preschool Through Grade 2	3
ED-405	Classroom Management and Child Guidance Techniques	3
ED-430	Practicum in Early Childhood Education: Grade 1 or Grade 2	9
Total Credits		45

Recommended Courses

Code	Title	Credits
EN-102	College Writing II (or equivalent)	3
HE-100	Personal Health	3
HE-120	Health and Nutrition	3

MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
--------	--	---

Students are required to take specific liberal arts and science courses to satisfy foundation and distribution requirements.

Students who major in early childhood education must also complete a minor or second major. Early childhood education students must meet with an advisor in the education department in order to choose an appropriate minor or second major that aids the student in at least one of the following areas: gaining subject matter knowledge relevant to what they will teach in the future, enhancing pedagogical skills, and/or understanding the diverse students in their future classrooms.

Admission to the Early Childhood Education Major

Early Childhood Education majors seeking the MA Department of Elementary and Secondary Education Initial License will progress through a three-stage process. Each stage must be satisfactorily completed before passage to the next stage.

Stage I: Early Childhood Major

1. Students demonstrate competence in communication skills by completing the following course with a grade of C or higher.

Code	Title	Credits
EN-102	College Writing II (or equivalent)	3

2. Students demonstrate competence in math with a grade of C or higher in the following course:

Code	Title	Credits
MA-130	Number and Operations for Teachers	3

3. Students must submit a Criminal Offender Records Information (CORI) application and be approved prior to beginning classroom observations in the Worcester Public Schools. No student is allowed to do fieldwork unless approval of the CORI has been received from the state. Before completion of ED-160 or ED-150, students must be fingerprinted through the Massachusetts designated agency (MorphoTrust

USA IdentGO). Additional information regarding fingerprinting is available in the Education Department.

4. Students demonstrate potential for teaching children by completing all of the following courses with a grade of C+ or higher and earning a cumulative GPA of 2.5.

Code	Title	Credits
PS-210	Developmental Psychology	3
ED-160 or ED-150	Early Childhood Education Today (5 hours fieldwork) Introduction to the Teaching Profession	3
ED-206	Development and Learning of Typical and Atypical Children Birth to Age 8 (10 hours)	3
ED-211	Integrating Science, Social Studies and the Fine Arts in Early Childhood Curriculum (10 hours fieldwork)	3
ED-214	Emergent Literacy (10 hours fieldwork)	3

5. Students must receive a passing score on the Massachusetts Test for Educator Licensure (MTEL) Communication and Literacy Skills Test. MTEL preparation courses are available in the fall and spring semesters.
6. Any departure from the prescribed program of study for teacher licensure must have Waiver Committee approval prior to advancement to Stage II.

Stage II: Admission into the Early Childhood Licensure Program

1. Upon satisfactory completion of Stage I requirements, students are eligible to apply for formal admission to the Early Childhood Education Licensure Program. The application must include MTEL test results and transcripts of all previous course work. Approval by the Education Department is necessary for a student to progress to Stage II.

During Stage II, students must complete all of the following courses with a grade of C+ or higher AND earn a cumulative GPA of 2.7. Fieldwork accompanies the following methods courses.

Code	Title	Credits
ED-304	Best Practices for English Language Learners	3
ED-307	ECE - Science (10 hours fieldwork)	3
ED-308	ECE - Mathematics (10 hours fieldwork)	3
ED-313	Practicum in Early Childhood Education: Preschool/Kindergarten	3
ED-340	Language Arts & Literacy for the Primary Grades (10 hours fieldwork)	3
ED-386	Assessment and Adjustment in Practice In Early Childhood Education (5 hours fieldwork)	3
ED-400	Inclusive Early Childhood Education: Preschool Through Grade 2	3

- After completing 90 credits of academic work, students may apply for formal admission into ED-313 (corerequisite ED-400). This application will be reviewed and acted upon by the Licensure Officer. Additional information regarding formal application for Practicum in ECE is available from the Education Department.

Stage III: Early Childhood Education Major – Practicum

- Upon satisfactory completion of Stage II requirements, students are eligible to apply for formal admission into ED-430 (corequisite ED-405).
- Students must have received a passing score on all portions of the Massachusetts Test for Educator Licensure (Communication and Literacy, Early Childhood, and Foundations of Reading).
- Students must have attained senior standing (90 credits of course work) to complete the Primary Practicum.
- This application will be reviewed and acted upon by the Licensure Officer.

- Students convicted of a felony may be denied admission to student teaching.
- Any departure from the prescribed program of study must be approved by the Department Chair and/or Dean of Education and Interdisciplinary Studies.

Additional information regarding formal application for the Primary Practicum is available from the Education Department.

Department of Education: Early Childhood Education & Second Major Sample Timeline For Completion of Degree

Year One

Semester One		Credits
ED-160	Early Childhood Education Today	3
EN-101	College Writing I ¹	3
LASC	First-Year Seminar (p. 41)	3
MA-130	Number and Operations for Teachers (LASC QR)	3
PS-101	General Psychology (LASC HBS)	3
Credits		15

Semester Two

EN-102	College Writing II ¹	3
HI-111	US History to 1877 (LASC Const)	3
ED-206	Development and Learning of Typical and Atypical Children Birth to Age 8 (LASC DAC)	3
GS-101	Physical Geography (LASC NSP)	3
PS-210	Developmental Psychology	3
Credits		15

Year Two

Semester Three

ED-211	Integrating Science, Social Studies and the Fine Arts in Early Childhood Curriculum	3
HI-112	US History 1865 to the Present (LASC USW)	3
HE-100	Personal Health (LASC ICW)	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers (LASC QR)	3

LASC QLAC or Second Major Requirement		3
Credits		15
Semester Four		
ED-214	Emergent Literacy (LASC WAC)	3
EV-120	Integrated Environmental Science for Educators	4
ED-339	Children's Literature: Multicultural Literature for PK-9 (or other LASC Elective TLC)	3
Credits		10
Year Three		
Semester Five		
ED-307	ECE - Science	3
ED-340	Language Arts & Literacy for the Primary Grades	3
MU-237	Music in the Elementary School (LASC CA)	3
HI-103	Connecting Ancient Worlds: World History to 1500 (LASC GP)	3
Second Major Requirement		3
Second Major Requirement		3
Credits		18
Semester Six		
ED-308 or ED-307	ECE - Mathematics (LASC QLAC) or ECE - Science	3
ED-386	Assessment and Adjustment in Practice In Early Childhood Education	3
Credits		6
Year Four		
Semester Seven		
ED-304	Best Practices for English Language Learners (LASC DAC)	3
ED-400	Inclusive Early Childhood Education: Preschool Through Grade 2	3
ED-313	Practicum in Early Childhood Education: Preschool/ Kindergarten	3
Second Major Requirement		3
Second Major Requirement		3
Credits		15
Semester Eight		
ED-405	Classroom Management and Child Guidance Techniques	3

ED-430	Practicum in Early Childhood Education: Grade 1 or Grade 2	9
Credits		12
Total Credits		106

¹ EN-101 & EN-102 satisfies LASC writing.

MTEL Timeline:

- After completing EN-102, students should take the Communication and Literacy Skills MTEL.
- By the beginning of their Junior Year, students should take the Foundations of Reading MTEL.
- By the end of their Junior Year, students should take the Early Childhood MTEL.
- In order to enroll in ED-405 and ED-430, students must successfully complete all MTEL requirements.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Early Education and Care Program

(Early Intervention, Head Start, Private Preschool, and Group Day Care)

The Early Childhood Education major prepares students to enter the field of Early Education and Care so they can work in areas such as Early Intervention, Head Start, private preschool, and group day care. The program integrates studies in liberal arts and sciences with guidelines and standards presented by the Massachusetts Department of Early Education and Care. Fieldwork accompanies most education courses and is a necessary component of the program. A course waiver process is available for transfer students and articulation agreements are in place with regional community colleges.

Admission into the Early Education and Care Major

Early Education and Care students progress through a three-stage process. Each stage within this track must be satisfactorily completed before passage to the next stage.

Stage I: Early Education and Care

1. Students demonstrate competence in communication skills by completing the following course with a grade of C or higher.

Code	Title	Credits
EN-102	College Writing II (or equivalent)	3

2. Students must submit a CORI application and be approved prior to beginning classroom observations in the Worcester Public Schools. No student is allowed to do fieldwork unless approval of the CORI has been received from the state.
3. Students demonstrate potential for teaching children by completing all of the following courses with a grade of C+ or higher AND earning a cumulative GPA of 2.5 or higher.

Code	Title	Credits
ED-160	Early Childhood Education Today (5 hours fieldwork)	3
or ED-150	Introduction to the Teaching Profession	
ED-206	Development and Learning of Typical and Atypical Children Birth to Age 8 (10 hours fieldwork)	3
ED-211	Integrating Science, Social Studies and the Fine Arts in Early Childhood Curriculum (10 hours fieldwork)	3
ED-214	Emergent Literacy (10 hours fieldwork)	3

4. Any departure from the prescribed program of study must have Waiver Committee approval prior to advancement to Stage II.

Stage II: Admission into Early Education and Care

1. Upon satisfactory completion of Stage I requirements, the student is eligible to apply for formal admission to the Early Education and Care Program. The application must include transcripts of all previous course work. Approval by the Education Department is necessary for a student to progress to Stage II.

During Stage II, students must complete all of the following courses with a grade of C+ or higher. Fieldwork accompanies the following methods courses.

Code	Title	Credits
ED-307	ECE - Science (10 hours fieldwork)	3
ED-308	ECE - Mathematics (10 hours fieldwork)	3
ED-340	Language Arts & Literacy for the Primary Grades (10 hours fieldwork)	3
ED-386	Assessment and Adjustment in Practice In Early Childhood Education (5 hours fieldwork)	3

Stage III: Early Education and Care Practicum

1.

Code	Title	Credits
ED-313	Practicum in Early Childhood Education: Preschool/Kindergarten	3
ED-319	Advanced Field Experience in Early Childhood Education ¹	3
ED-400	Inclusive Early Childhood Education: Preschool Through Grade 2 ¹	3

¹90 credits must be completed prior to taking ED-319. ED-400 should be taken as a corequisite with ED-313.

2. Students must apply for formal admission to ED-313 and ED-319. This application will be reviewed and acted upon by the Licensure

Officer. Additional information regarding formal application for the advanced practicum is available from the Education Department.

This program provides preparation for certification through the Department of Early Education and Care as a Lead Teacher for Preschool.

Note: This program does not lead to Massachusetts Department of Elementary and Secondary Education public school licensure. Students who complete this program and apply to the WSU post-baccalaureate non-degree initial licensure program must provide evidence that they have worked in the field for 3 years. Any departure from the prescribed program of study must have approval from the Department Chair or Dean.

Requirements for Early Education and Care: 33 Credits

Code	Title	Credits
Prerequisite Course (0 credits)		
PS-210	Developmental Psychology	
Required Courses (33 credits)		
ED-160	Early Childhood Education Today	3
ED-206	Development and Learning of Typical and Atypical Children Birth to Age 8	3
ED-211	Integrating Science, Social Studies and the Fine Arts in Early Childhood Curriculum	3
ED-214	Emergent Literacy	3
ED-307	ECE - Science	3
ED-308	ECE - Mathematics	3
ED-313	Practicum in Early Childhood Education: Preschool/ Kindergarten	3
ED-319	Advanced Field Experience in Early Childhood Education	3
ED-340	Language Arts & Literacy for the Primary Grades	3
ED-386	Assessment and Adjustment in Practice In Early Childhood Education	3

ED-400	Inclusive Early Childhood Education: Preschool Through Grade 2	3
--------	--	---

Recommended Courses (0 credits)

ED-304	Best Practices for English Language Learners	
HE-120	Health and Nutrition	
or HE-140	Creative Arts and Health	
MA-130	Number and Operations for Teachers	
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	

Total Credits 33

Students are required to take specific liberal arts and science courses to satisfy foundation and distribution requirements. Students can meet with their advisors and/or consult their degree audit through WebAdvisor.

Early Education and Care majors must either complete an academic major in the arts or sciences approved by the Education Department OR complete a cluster of 30 credits of course work which address the MA Department of Early Education and Care's Core Teacher Competencies. A list of possible courses is available in the Education Department.

Education Studies Major

The major in Education Studies will allow students who would like to explore careers in education or related fields to major in education without pursuing a license from the Massachusetts Department of Elementary and Secondary Education. Students will be able to prepare for careers in community organizations, museums, curriculum development, etc. Also, WSU students majoring in occupational sciences, communication sciences and disorders, psychology, sociology, and urban studies, amongst others, may be particularly interested in adding a major in education studies.

Requirements: Take a minimum of 18 Credits in Foundations of Education. You must take at least one course from each category; 2 or more courses can be taken from any category except Introduction. Take 18 credits in advanced Education electives at the 300, 400, or 500 level. If you use a course to meet

Foundations of Education, you cannot also use it as an upper-level elective. A 3-credit Capstone or Internship Experience is also required.

Please Note: This major will not lead to any license from the Massachusetts Department of Elementary and Secondary Education.

Code	Title	Credits
Foundations of Education		(18 credits)
<i>Introduction</i>		3
Take one course from the following:		
ED-149	Introduction to the Teaching Profession Middle/ Secondary School	
ED-150	Introduction to the Teaching Profession	
ED-155	Teaching and Learning in Elementary School	
ED-160	Early Childhood Education Today	
<i>Learning and Development</i>		3
Take one course from the following:		
ED-206	Development and Learning of Typical and Atypical Children Birth to Age 8	
ED-207	The Adolescent in Schools & Society	
ED-250	Educational Psychology	
ED-285	Understanding and Supporting Children And Youth With Disabilities	
<i>Curriculum and Instruction</i>		3
Take one course from the following:		
ED-211	Integrating Science, Social Studies and the Fine Arts in Early Childhood Curriculum	
ED-251	Principles of Curriculum, Instruction, And Assessment in Middle and High School	
ED-261	Introduction to the Foundations of Reading	
ED-275	Curr/Instr in Elementary Ed	
<i>Cultural and Historical Foundations in Education</i>		3
Take one from the following:		
ED-120	The Educational Experience Through Memoirs	
ED-253	History and Philosophy of Ed	
ED-270	Diversity & Multicultural Ed	

ED-271	International and Comparative Education	
ED-304	Best Practices for English Language Learners	
ED-339	Children's Literature: Multicultural Literature for PK-9	
<i>Foundations of Education Electives</i>		6
Take two additional courses from any of the above categories except Introduction.		
Upper Level Education Courses		(18 credits)
Take 18 credits of Education courses at the 300 level or above. Cannot include courses taken for Foundations of Education or the Capstone/ Internship Experience.		
Capstone or Internship Experience		(3 credits)
ED-440	Education Studies Internship	3
or ED-460	Education Studies Capstone	

CREDIT TOTAL: 39

Stage 2 Methods courses can only be taken with permission of advisor and instructor.

With the exception of ED-304 Best Practices for English Language Learners, upper-level electives should not be Stage II courses counting toward licensure unless special permission is granted by an advisor and the course instructor.

Education Studies Minor

Many courses of study at WSU lead students to pursue school-based careers or careers that may require a general background in the theoretical and practical aspects of teaching, learning, school contexts, diversity, and child development. This minor provides opportunities for students who are not enrolled in an initial licensure program through the education department to gain knowledge and skills in these areas without having to engage in a full licensure program.

The minor does not lead to initial license in education and does not require students to take the MTEL exams. The Education Studies Minor is a minimum of 18 credits. At least 3 credits must be at the 300/400 level.

Requirements for a Minor in Education Studies

Code	Title	Credits
Introduction		(3 credits)
Take only one course in the Introduction section from the following:		3
ED-149	Introduction to the Teaching Profession Middle/Secondary School	
ED-150	Introduction to the Teaching Profession	
ED-155	Teaching and Learning in Elementary School	
ED-160	Early Childhood Education Today	
Learning and Development		(3 credits)
Take one course from the following:		3
ED-250	Educational Psychology	
ED-206	Development and Learning of Typical and Atypical Children Birth to Age 8	
ED-207	The Adolescent in Schools & Society	
ED-285	Understanding and Supporting Children And Youth With Disabilities	
Curriculum		(3 credits)
Take one course from the following:		3
ED-211	Integrating Science, Social Studies and the Fine Arts in Early Childhood Curriculum	
ED-251	Principles of Curriculum, Instruction, And Assessment in Middle and High School	
ED-275	Curr/Instr in Elementary Ed	
Diversity		(3 credits)
Take one course from the following:		3
ED-120	The Educational Experience Through Memoirs	
ED-270	Diversity & Multicultural Ed	

ED-271	International and Comparative Education	
ED-304	Best Practices for English Language Learners	
ED-339	Children's Literature: Multicultural Literature for PK-9	
Electives		(6 credits)
Take two additional Education courses (not including the Introduction courses) from the categories above or ANY OTHER Education Course at the 200 level or above.		6
Total Credits		18

Stage 2 Methods courses can only be taken with permission of advisor and instructor.

With the exception of ED-304 Best Practices for English Language Learners, upper-level electives should not be Stage II courses counting toward licensure unless special permission is granted by an advisor and the course instructor.

Elementary Education Major Elementary Education Major Teacher Licensure Program

The Elementary Education major prepares candidates for Initial Licensure as a teacher of children in a public school classroom, grades 1 through 6. The program of study is based on a broad liberal arts foundation and an integrated professional teacher preparation program. A course waiver process is available for transfer students where appropriate. Fieldwork accompanies most education courses and is a necessary component of the program. Student fieldwork and pre-practicum experiences include a wide variety of field settings. Students attend different and varied schools in urban, rural, and suburban settings. They also vary their placements and grade levels in different school buildings within districts to ensure a well rounded experience.

Preparation for the Massachusetts Test for Educator Licensure (MTEL) is embedded in the program at various stages, which must be passed to obtain the initial license.

Admission to the Elementary Education Major

Students planning to major in Elementary Education will progress through a three-stage process. Each stage must be satisfactorily completed before passage to the next stage.

Stage I: Elementary Education Major

1. Students must demonstrate competence in communication skills by completion of the following course with a grade of C or higher:

Code	Title	Credits
EN-102	College Writing II (or equivalent)	3

2. Students must demonstrate competence in Math with a grade of C or higher in the following courses:

Code	Title	Credits
MA-130	Number and Operations for Teachers	3
MA-131	Patterns, Functions and Algebra for Teachers	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3

3. Students must submit a Criminal Offender Records Information (CORI) application and be approved prior to doing classroom observations in Worcester Public Schools. No student is allowed to do fieldwork unless approval of the CORI has been received from the state. Before completion of ED-155 or ED-150, students must be fingerprinted through the Massachusetts designated agency (MorphoTrust USA IdentGO). Additional information regarding fingerprinting is available in the Education Department.

4. Students demonstrate potential for teaching children by completing all of the following courses with a grade of C+ or higher AND earning a cumulative GPA of 2.5.

Code	Title	Credits
PS-210	Developmental Psychology	3
ED-155	Teaching and Learning in Elementary School (5 hours fieldwork)	3
or ED-150	Introduction to the Teaching Profession	

ED-250	Educational Psychology (10 hours fieldwork)	3
ED-261	Introduction to the Foundations of Reading	3
ED-275	Curr/Instr in Elementary Ed (10 hours fieldwork)	3

5. Students must receive a passing score on the Massachusetts Test for Educator Licensure (MTEL) Communication and Literacy Skills Test.
6. Any departure from the prescribed program of study for teacher licensure must have Waiver Committee approval prior to advancement to Stage II.

Stage II: Admission into the Elementary Education Licensure Program

1. Upon satisfactory completion of Stage I requirements, students are eligible to apply for formal admission to the Elementary Education Licensure Program. The application must include MTEL test results and transcripts of all previous course work. Approval by the Education Department is necessary for a student to progress to Stage II.
2. During Stage II, students must complete all of the following courses with a grade of C+ or higher AND earn a cumulative GPA of 2.7. Fieldwork accompanies the following methods courses.

Code	Title	Credits
ED-304	Best Practices for English Language Learners	3
ED-306	Elementary Reading, Language Arts and Literature (20 hours fieldwork)	6
ED-320	Elementary Science (10 hours fieldwork)	3
ED-325	Elementary Mathematics (10 hours fieldwork)	3
ED-330	Elementary Social Studies and Multiculturalism (10 hours fieldwork)	3
ED-375	Prepracticum: Instruction, Classroom Management, and Family and Community Engagement in the Elementary School	3

Stage III: Elementary Education Major – Practicum

1. Upon satisfactory completion of Stage II requirements, student are eligible to apply for formal admission into the Practicum, ED-435 (corequisite ED-425).
2. Students must have received a passing score on the Massachusetts Test for Educator Licensure (MTEL) in Communication and Literacy Skills, Foundations of Reading, General Curriculum Multisubject subtest and Mathematics subtest for Elementary majors.
3. The Stage III application will be reviewed and acted on by the Licensure Officer.
4. Students must have attained senior standing (90 credits of course work) to student teach.
5. Students convicted of a felony may be denied admission to student teaching.
6. Any departure from the prescribed program of study must be approved by the Department Chair or Dean.

Additional information regarding formal application into student teaching is available from the Education Department.

Requirements for a Major in Elementary Education

Prerequisite Courses

Code	Title	Credits
MA-130	Number and Operations for Teachers	3
MA-131	Patterns, Functions and Algebra for Teachers	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
PS-210	Developmental Psychology	3

Required Courses

Code	Title	Credits
ED-155	Teaching and Learning in Elementary School	3
or ED-150	Introduction to the Teaching Profession	
ED-250	Educational Psychology	3
ED-261	Introduction to the Foundations of Reading	3
ED-275	Curr/Instr in Elementary Ed	3

ED-304	Best Practices for English Language Learners	3
ED-306	Elementary Reading, Language Arts and Literature	6
ED-320	Elementary Science	3
ED-325	Elementary Mathematics	3
ED-330	Elementary Social Studies and Multiculturalism	3
ED-375	Prepracticum: Instruction, Classroom Management, and Family and Community Engagement in the Elementary School	3
ED-425	Sem: Applying Ed Principles	3
ED-435	Practicum in Teaching: Elementary School	9
Total Credits		45

Recommended Courses

Code	Title	Credits
HE-100	Personal Health	3
or HE-120	Health and Nutrition	

Students will also be required to take specific liberal arts and science courses to satisfy LASC requirements.

Students who major in elementary education must also complete a minor or second major. Elementary education students must meet with an advisor in the education department in order to choose an appropriate minor or second major that aids the student in at least one of the following areas: gaining subject matter knowledge relevant to what they will teach in the future, enhancing pedagogical skills, and/or understanding the diverse students in their future classrooms.

Department of Education: Elementary Education & Second Major Sample Timeline for Completion of Degree

Year One		Credits
Semester One		
ED-150	Introduction to the Teaching Profession (ICW)	3
or ED-155	or Teaching and Learning in Elementary School	
MA-130	Number and Operations for Teachers (QR) ²	3

LASC	First-Year Seminar (p. 41)	3
EN-101	College Writing I (Writing) ¹	3
PS-101	General Psychology (HBS)	3
Credits		15
Semester Two		
MA-131	Patterns, Functions and Algebra for Teachers ²	3
PS-210	Developmental Psychology (HBS)	3
EN-102	College Writing II (Writing) ¹	3
HI-111	US History to 1877 (CON)	3
Second Major or Minor Requirement		3
Credits		15
Year Two		
Semester Three		
ED-250	Educational Psychology	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers ²	3
HI-112	US History 1865 to the Present (USW)	3
MU-237	Music in the Elementary School (CA)	3
Second Major or Minor Requirement		3
Credits		15
Semester Four		
ED-261	Introduction to the Foundations of Reading	3
ED-271	International and Comparative Education (GP)	3
ED-275	Curr/Instr in Elementary Ed	3
EV-120	Integrated Environmental Science for Educators (NSP, LAB)	4
Second Major or Minor Requirement		3
Credits		16
Year Three		
Semester Five		
ED-304	Best Practices for English Language Learners (TLC)	3
ED-306	Elementary Reading, Language Arts and Literature ³	6
GS-101	Physical Geography (NSP)	3
Second Major or Minor Requirement		3
Second Major or Minor Requirement		3
Credits		18
Semester Six		
ED-320	Elementary Science	3

ED-325	Elementary Mathematics	3
Second Major or Minor Requirement		3
Second Major or Minor Requirement		3
Second Major or Minor Requirement		3
Credits		15
Year Four		
Semester Seven		
ED-330	Elementary Social Studies and Multiculturalism	3
ED-375	Prepracitum: Instruction, Classroom Management, and Family and Community Engagement in the Elementary School	3
Second Major or Minor Requirement		3
Second Major or Minor Requirement		3
Second Major or Minor Requirement		3
Credits		15
Semester Eight		
ED-425	Sem: Applying Ed Principles (LASC CAP) ⁴	3
ED-435	Practicum in Teaching: Elementary School ⁴	9
Credits		12
Total Credits		121

¹ EN-101 & EN-102 satisfies LASC writing. Students should take the Communication and Literacy Skills MTEL after completing EN-102.

² Students should take the General Curriculum Mathematics Subtest MTEL after completing MA-130, MA-131 and MA-132.

³ Students should take the Foundations of Reading MTEL after completing ED-306.

⁴ Students must successfully complete all MTEL requirements before enrolling in ED-425 and ED-435.

Students are required to meet with their department advisor each semester to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Middle School Education

Worcester State University offers the Initial Licensure Program in Middle School Education. Certain grade levels covered by licensure differ based on subject areas (see table below). For more information about licensure areas, please see an academic advisor from

the Education Department. The Massachusetts Test for Educator Licensure (MTEL) is embedded in the program at various stages and must be passed for completion of the program and licensure.

Fieldwork accompanies most education courses and is a necessary component of the program. Student pre-practicum experiences include a wide variety of field settings. Students attend different and varied schools in urban, rural, and suburban settings. They also vary their placements and grade levels in different school buildings within districts to insure a well rounded experience.

The Department of Elementary and Secondary Education offers Initial Licensure programs in the following areas in cooperation with liberal arts and sciences departments in the Worcester State University Education Program.

Teacher of English (5-12)

Teacher of General Science (5-8)

Teacher of Health/Family and Consumer Sciences (all grades)

Teacher of History (5-12)

Teacher of Mathematics (5-8)

Teacher of Spanish (5-12)

For required courses in these areas students should consult their liberal arts/science advisor.

Admission Requirements: Undergraduate Program

Students planning to minor in Middle School Education will progress through a three-stage process. Each stage must be completed satisfactorily prior to passage to the next stage. **Students will pursue a major in the content area relevant to their licensure as listed above.**

Requirements for the Middle School Education Initial Teacher Licensure Program

Stage I: Middle School Education Minor

1. Students must complete EN-102 with a grade of C or higher.
2. Students must complete 15 semester hours in the subject major.
3. Students must submit a Criminal Offender Records Information (CORI) application and be approved prior to beginning classroom observations for Education courses. No student is allowed to do fieldwork unless approval of the CORI has been received from the state. Before completion of ED-149, students must be finger printed through the Massachusetts designated agency (Morpho Trust USA Identity GO). Additional information regarding finger printing is available in the Education Department.
4. Students demonstrate potential for teaching children by completing all of the following courses with a grade of C+ or higher AND earning a cumulative GPA of 2.5.

Code	Title	Credits
ED-149	Introduction to the Teaching Profession Middle/Secondary School	3
or ED-150	Introduction to the Teaching Profession	
ED-207	The Adolescent in Schools & Society	3
ED-251	Principles of Curriculum, Instruction, And Assessment in Middle and High School	3
ED-270	Diversity & Multicultural Ed	3

5. Students must have received a passing score on the Massachusetts Test for Educator Licensure (MTEL) Communication and Literacy Skills Test.

- Any departure from the prescribed program of study for teacher licensure must have Waiver Committee approval prior to advancement to Stage II.

Stage II: Admission into Middle School Education Licensure Program

- Upon satisfactory completion of Stage I requirements, the student is eligible to apply for formal admission into the middle school education minor. The application must include MTEL test results and transcripts of all previous course work. Approval by the Education Department is necessary for a student to progress to Stage II.
- During Stage II, students must complete all of the following courses with a grade of C+ or higher AND earn a cumulative GPA of 2.7. Fieldwork accompanies the following courses (except for ED304).

Code	Title	Credits
ED-304	Best Practices for English Language Learners	3
ED-352	Exceptionalities and Accommodating Diverse Learners in Middle Schools	3
ED-354	Assessment, Adjustment to Practice, and Classroom Management in the Middle School	3
ED-370 or ED-371	Methods and Materials in Science, Technology, Engineering, and Mathematics (STEM) At the Middle and Secondary Level Methods and Materials in Humanities and Social Sciences At the Middle and Secondary Level.	3
ED-382	Prepracticum Experience in Middle School (corerequisite with ED 370/ED371)	1

- Students must have received a passing score on the Massachusetts Test for Educator Licensure (MTEL) in their major subject area and communication and literacy skills.

Stage III: Middle School Education Minor – Practicum

- Upon satisfactory completion of Stage II requirements, the student is eligible to apply for formal admission into the practicum, ED-485 (9 credits), ED-424 (3 credits)
- Students must have received a passing score on the Massachusetts Test for the Educator Licensure (MTEL) in Communication and Literacy Skills and the subject matter area.
- The Stage III application will be reviewed and acted upon by the Licensure Officer.
- Students must have attained senior standing (90 credits of course work) to student teach.
- Students convicted of a felony may be denied admission to student teaching.

Additional information regarding formal application into student teaching is available from the Education Department.

Secondary School Education

Worcester State University offers the Initial Licensure in Secondary School Education depending on the specific licensure. Certain grade levels covered by licensure differ based on subject areas (see table below). For more information about licensure areas, please see an academic advisor from the Education Department. The Massachusetts Test for Educator Licensure (MTEL) is embedded in the program at various stages and must be passed for completion of the program and licensure.

Fieldwork accompanies most education courses and is a necessary component of the program. Student pre-practicum experiences include a wide variety of field settings. Students attend different and varied schools in urban, rural, and suburban settings. They also vary their placements and grade levels in different school buildings within districts to insure a well rounded experience.

The Department of Elementary and Secondary Education offers Initial Licensure programs in the following areas in cooperation with the liberal arts and sciences departments in the Worcester State University Education Program.

Teacher of Biology	(8-12)
Teacher of Chemistry	(8-12)
Teacher of Earth and Space Science	(8-12)
Teacher of English	(5-12)
Teacher of Health/Family and Consumer Sciences	(all grades)
Teacher of History	(5-12)
Teacher of Mathematics	(8-12)
Teacher of Spanish	(5-12)

For required courses in these areas, students should consult their liberal arts/science advisor.

Admission Requirements: Undergraduate Program

Students planning to minor in Secondary Education will progress through a three-stage process. Each stage must be completed satisfactorily prior to passage to the next stage. **Students will pursue a major in the content area relevant to their licensure as listed above.**

Requirements for the Secondary School Education Initial Teacher Licensure Program

Stage I: Secondary School Education Minor

1. Students must complete EN-102 with a grade of C or higher.
2. Students must complete 15 semester hours in the subject major.
3. Students must submit a Criminal Offender Records Information (CORI) application and be approved prior to beginning observations for Education courses. No student is allowed to do fieldwork unless approval of the CORI has been received from the state. Before completion of ED-149, students must be finger printed through the Massachusetts designated agency (Morpho Trust USA Identio GO). Additional information regarding finger printing is available in the Education Department.

4. Students demonstrate potential for teaching children by completing all of the following courses with a grade of C+ or higher AND earn a cumulative GPA of 2.5.

Code	Title	Credits
ED-149	Introduction to the Teaching Profession Middle/Secondary School	3
or ED-150	Introduction to the Teaching Profession	
ED-207	The Adolescent in Schools & Society	3
ED-251	Principles of Curriculum, Instruction, And Assessment in Middle and High School	3
ED-270	Diversity & Multicultural Ed	3

5. Students must have received a passing score on the Massachusetts Test for Educator Licensure (MTEL) Communication and Literacy Skills Test.
6. Any departure from the prescribed program of study for teacher licensure must have Waiver Committee approval prior to advancement to Stage II.

Stage II: Admission into Secondary School Education Minor

1. Upon satisfactory completion of Stage I requirements, the student is eligible to apply for formal admission into the Secondary School Education minor. The application must include MTEL test results and transcripts of all previous course work. Approval by the Education Department is necessary for a student to progress to Stage II.
2. During Stage II, students must complete all of the following courses with a Grade of C+ or higher AND earn cumulative GPA of 2.7. Fieldwork accompanies the following courses (except ED304):

Code	Title	Credits
ED-304	Best Practices for English Language Learners	3
ED-351	Exceptionalities and Accommodating Diverse Learners in Secondary Schools	3
ED-353	Assessment, Adjustment to Practice, and Classroom Management in the Secondary School	3
ED-370 or ED-371	Methods and Materials in Science, Technology, Engineering, and Mathematics (STEM) At the Middle and Secondary Level Methods and Materials in Humanities and Social Sciences At the Middle and Secondary Level.	3
ED-383	Prepracticum Experience in Secondary School (corequisite with ED 370/ED371)	1

Additional information regarding formal application into student teaching is available from the Education Department.

3. Students must receive a passing score on the Massachusetts Test for Educator Licensure (MTEL) in their major subject area and communication and literacy skills.

Stage III: Secondary School Education Minor – Practicum

1. Upon satisfactory completion of Stage II requirements, the student is eligible to apply for: ED 480 Practicum in Teaching Secondary School (9 credits), ED-424 (3 credits)
2. Students must have received a passing score on the Massachusetts Test for the Educator Licensure (MTEL) in Communication and Literacy Skills and the subject matter area.
3. The Stage III application will be acted upon by the Licensure Officer.
4. Students must have attained senior standing (90 credits of course work) to student teach.
5. Students convicted of a felony may be denied admission to student teaching.

Environmental and Sustainability Studies

STEWARDSHIP MATTERS

Environmental and Sustainability Studies (ESS) is a multidisciplinary and interdisciplinary minor that offers students the opportunity to explore and critically examine issues related to the environments we share with other humans and with other species. Students have the opportunity to consider how the scientific, social, cultural, cognitive, intellectual, and spiritual dimensions of human-ecological relationships relate to the natural world and how these relationships affect the well-being of human, non-human, and shared communities alike. In addition, students develop the tools to form, evaluate, and act upon environmental questions at the local, national, and global levels.

PROGRAM MISSION

The mission of the ESS program is to bring together faculty and students to explore human-environment relationships. Environmental degradation produced by human activity poses an existential threat to humans and other-than-humans. Communities around the world are creating alternative social, political, economic, and ethical structures and worldviews to transition to a just and sustainable future. The ESS Program prepares students to become part of this transformation.

Students who choose a minor in ESS will:

1. Understand the critical urgency of threats to our ecological communities and systems,
2. Deepen their understanding of the connections between individual and community well-being and the integrity of the places we inhabit,
3. Deconstruct systems of privilege and power to examine how they threaten natural systems and environments,
4. Explore the rich variety of existing practices and perspectives that represent sustainable alternatives to dominant socio-economic structures,
5. Focus on the interconnected socio-cultural, economic, political, and ethical systems that lead to environmental degradation and/or environmental sustainability,
6. Explore sustainable alternatives to human ecology and communities,
7. Reflect on the meaning of being human in a more-than-human world, and
8. Engage in community stewardship projects and/or creative expression that combines environmental theory and practice.

Requirements for Minor in Environmental and Sustainability Studies (18 Credits)

The Environmental and Sustainability Studies (ESS) Minor requires a minimum of six courses (18 credits)

- At least one 100 Introductory Level Course (3 - 9 credits)
 - A prerequisite for an ESS designated course (CH 106, EC 110 or EC 120, EV 150, GE 102, GS 101, SO 100, UR 101)
- and/or
- A First Year Seminar or Special Topics in Interdisciplinary Studies with ESS Coordinator and Interdisciplinary Studies Department Chair Approval
- At least two elective Environmental and Sustainability Studies courses at 200 level (6-12 credits)
- At least one elective Environmental and Sustainability Studies course at the 300 level or higher (3-9 credits)
- At least one course that incorporates an action or creative component.
 - Course may be in any department, but must be approved by ESS Coordinator and Department Chair
 - Course must be at 200 level or above and can count towards total of electives
 - Criteria for meeting the action or creative component include:

- Design alternatives
- Engage in community service and environmental action (i.e.: policy brief, internship, volunteer, service learning)
- Produce creative work (i.e.: writing, visual or musical piece, performance, PR, video/podcast)

Students can take at most 8 credits from any one department to count towards the minor.

A maximum of two courses at the 200 level or above can come from any single department

*If the Environmental and Sustainability Studies Minor is part of a Liberal Studies Major, this maximum does not apply.

Environmental and Sustainability Studies is an interdisciplinary program drawing from the faculty of many departments at Worcester State University.

Any students with questions, please contact the Chair of Interdisciplinary Studies, Dr. Aldo Garcia Guevara at aguevara@worchester.edu or the Chair of the Board of the Environmental and Sustainability Studies program, Dr. Josh Koenig at jkoening2@worchester.edu.

Elective Courses

EN-230 Environmental Literature

LASC Categories: CA, ICW

This course will focus on how environmental writers challenge and change how we perceive human ecological relationships to the natural world. We will address the following questions: How have writers challenged us to think about our place in a shared world and our responsibilities toward our ecological communities? How have writers attempted to awaken us to our connections to the natural world and the non-human other? How do these connections feed our mind, body, and spirit? We will also consider their warnings of what happens when we ignore our ecological selves, our ecological communities, and our ecological responsibilities.

Every 2-3 years. 3 Credits

GE-258 Global Environmental Change

Prerequisites: GE-102 or GL/GE-102 or GS-101 or GL-150 or EV-150 or UR-101 or CH-106

An introduction to the science, political economy and ethics of global environmental change.

Every year. 3 Credits

GE-285 Sustainable Communities

LASC Categories: HBS, USW

Prerequisites: GE-102 or GL/GE-102 or GL-150 or EC-110 or EC-120.

Exploration of changes in U.S. and global economic landscape, 1970 to present. Approaches to sustainable economic development.

Every 2-3 years. 3 Credits

GE-307 American Public Lands: Environmental Issues

Prerequisites: GE-258 or permission of instructor.

Exploration of the environmental management issues on U.S. public lands such as national parks, national forests BLM lands.

3 Credits

GE-312 Sustainable Food Systems

Prerequisites: GE-102 or a 200 level GE, GS, SO or UR course.

Overview of the structure, evolution, costs and benefits of the global food system. Exploration of local and global alternatives.

Every 2-3 years. 3 Credits

HE-390 Environmental Health

Prerequisites: HE-100 or HC-201

Examination of the issues affecting the environment and their impact on our health.

Fall and Spring and every year. 3 Credits

UR-360 Environmental Systems and Public Policy

Prerequisites: UR-101

Examination of urban ecosystems, focusing on land uses designed to effectively utilize water, open space, and other natural resources.

Other or on demand. 3 Credits

UR-361 Public Policy and Environmental Issues

Prerequisites: UR-101

Investigation of the factors that determine the formation of public policy on the environment with consideration of the roles played by state and federal regulatory agencies.

Other or on demand. 3 Credits

Ethnic Studies

The Ethnic Studies minor and concentration are interdisciplinary programs focused on the experiences of historically marginalized racial and ethnic groups (including African, Latina/o, Asian, and Native Americans) within the United States. Ethnic Studies promotes a broader understanding of the historical, geographical, political, economic, social, and cultural complexity of these racial/ethnic groups, and the structural inequality in which these groups' experiences are maintained and embedded.

Ethnic Studies courses often explore the rich contributions to the production of knowledge issuing from various racial/ethnic groups in the US that tend to be underrepresented in the curriculum, for example, in sciences, social sciences, arts, humanities, and the professions. Based on a discipline emerging out of civil rights movements, Ethnic Studies courses also often explore historical and contemporary social movements and encourage active and reflective learning in the pursuit of racial and social justice. The curriculum emphasizes creating a community within the classroom where students learn from one another, experience personal empowerment, and develop as agents of racial and social justice in a diverse and complex world. As a result, students develop a heightened racial, ethnic, and social consciousness toward promoting a more just and equitable society.

Ethnic Studies Minor (18 credits):

ET-100 Introduction to Ethnic Studies (3 credits)

Five elective Ethnic Studies (ETH) courses (15 credits)

- At least one elective course must be at the 300 level or higher
- A maximum of two elective courses can come from the student's major*
- A maximum of four elective courses can come from any single department

*If the Ethnic Studies Minor is part of a Liberal Studies Major, this maximum does not apply.

Ethnic Studies Concentration (15 credits):

Program Structure and Requirements

- Offered as an interdisciplinary concentration
- 15 credits total across at least two disciplines
- Required course (3 credits): ET-100: Introduction to Ethnic Studies
- Core Courses (12 Credits): Chosen from approved list of electives across departments

As an interdisciplinary program, Ethnic Studies draws faculty from multiple disciplines across the campus. Each faculty member's information can be found at the respective department that offers each of the courses.

Any students with questions, please contact the Chair of Interdisciplinary Studies, Dr. Aldo Garcia Guevara at aguevara@worchester.edu or Dr. Rita Mookerjee at rmookerjee@worchester.edu.

Required Course

ET-100 Introduction to Ethnic Studies

LASC Categories: TLC, HBS, DAC

An interdisciplinary survey course analyzing socio-political, economic, historical and contemporary issues related to African American, Latino/a American, Asian American and Native American (ALANA) communities.

Every year. 3 Credits

Elective Courses

In addition to the courses listed below, departments frequently offer special topics courses that qualify as Ethnic Studies electives.

ED-270 Diversity & Multicultural Ed

LASC Categories: DAC, DIV

Prerequisites: ED 149 OR ED 150 Take ED-207 ED 251 must be taken concurrently or before ED 270

Prerequisites or Corequisite: ED-251 previously or concurrently.

Introduction to multicultural education, equity and social justice issues in education including a focus on race, ethnicity, languages, class, gender, gender identity, sexual orientation, and disabilities.

Fall and Spring and every year. 3 Credits

ED-339 Children's Literature: Multicultural Literature for PK-9**LASC Categories:** HBS, TLC, DAC, DIV**Prerequisites:** EN-102 or EN-202

In this class, students will read, discuss, and analyze children's and young adult literature by people of diverse backgrounds including diversity in race, ethnicity, class, gender, sexual orientation, ability, language, and country. Genres and formats may include fiction, nonfiction, biographies, novels in verse, graphic novels, fairy tales, fantasy, and wordless books. While children's and young adult literature will comprise the primary texts in this course, secondary sources from education, linguistics, English, history, sociology, anthropology, women's studies and communications will provide context and theory to guide analysis

Fall and Spring and every year. 3 Credits

EN-120 Race in Comics**LASC Categories:** TLC, USW, DAC, DIV

Comics offers a unique combination of tools for representing race. Artists have long used either language or visual art to think about identity, but comics merges the two in new ways. In this course, students analyze innovative comics and graphic novels/nonfiction to better understand why this medium is such a productive way to reflect on racial identity. How do comics authors engage with the difficult history of racial caricature and the longstanding lack of diversity in the field? And what can the combination of image and text say about the tension between appearance and identity?

Every 2-3 years. 3 Credits

EN-169 Ethnic Literature in the U.S.**LASC Categories:** USW, TLC, DAC

Study of ethnic literature in the U.S., focusing on African- American, Asian-American, Latino, and Native-American writers.

Fall and Spring. 3 Credits

EN-170 Search for Identity**LASC Categories:** DAC, TLC, DIV

This course is designed to explore the topic of identity in literature, which may include gender, race, ethnicity, philosophy, body image, physical ability/disability, etc. The course will examine each literary text for the relative importance of the various aspects of identity for each author/character and the intersectionality of identity. Questions to consider will include: which identity is prioritized (by the individual and by society) in any given situation? What or who determines which aspect of identity is prioritized at different moments? How do conflicts in identity for an individual get resolved?

Other or on demand. 3 Credits

EN-328 Narratives of U.S. Immigration**LASC Categories:** TLC, USW, DAC, WAC**Prerequisites:** EN-102 or EN-202

In this course students examine narratives of United States immigration in literature, film, and history. The immigrant narrative is both a foundational American story and also a story of the outsider to American culture. Students explore how authors navigate these conflicting poles, and how they complicate myths of the U.S. as a melting pot and land of opportunity. Topics for discussion include: assimilation and pluralism; citizenship, class, ethnicity, gender, language, nationality, race, and religion; diaspora; labor; nativism and xenophobia; and the social, legal, and political history of American immigration.

Every 2-3 years. 3 Credits

EN-347 Studies in U.S. Ethnic Literature**LASC Categories:** USW**Prerequisites:** EN-102

Selected topics in U.S. ethnic literature, including thematic and comparative approaches, and in-depth studies of a single ethnic literature.

Every 2-3 years. 3 Credits

EN-370 Antislavery Literature**LASC Categories:** TLC, USW, DAC, WAC, DIV**Prerequisites:** EN-102 or EN-202 or EN-250

This course traces the literary history of the antislavery movement in the Atlantic World: writing in a range of genres, antislavery writers made a significant contribution to the campaigns to end the slave trade and slavery. These texts also shaped the history and memory of legal enslavement and its aftermath. While the Atlantic system of legal slavery ended in the nineteenth century, an even larger system of illegal slavery still exists, and so the course concludes by considering the work of contemporary antislavery writers and what they might learn from their predecessors.

Fall only and every 2-3 years. 3 Credits

ET-100 Introduction to Ethnic Studies**LASC Categories:** TLC, HBS, DAC

An interdisciplinary survey course analyzing socio-political, economic, historical and contemporary issues related to African American, Latino/a American, Asian American and Native American (ALANA) communities.

Every year. 3 Credits

HC-234 Multiculturalism and Health

Examination of diverse ethnic/racial and cultural beliefs and practices affecting health and illness

Spring only and every year. 3 Credits

HI-205 Native America**LASC Categories:** TLC, USW, DIV, DAC

This survey covers the broad sweep of Native American history and focuses on the encounter between American and European civilizations and how Native culture has adapted through the centuries. Counts for Europe/US in the History Major.

Every 2-3 years. 3 Credits

HI-208 American Immigrant History

Survey of immigration. Topics such as old-world background, impact on the United States, nativism, cultural pluralism, religion, mobility, family and politics. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-217 US Social History**LASC Categories:** TLC, USW, WAC, DIV, DAC

Considers topics and approaches in the field of social history in the United States. Counts for Europe/US in History major. [Applicable to Women's, Gender, and Sexuality Studies Minor.]

Every 2-3 years. 3 Credits

HI-221 African-American History I

The people of African descent from the emergence of the slave trade to the Civil War, focusing on race, gender, and power. Counts for Europe/United States in the History major.

Every year. 3 Credits

HI-222 African-American History II

The people of African descent from the end of the Civil War through the twentieth century, focusing on race, class, gender, and power. Counts for Europe/United States in the History major.

Every year. 3 Credits

HI-248 Seminar on Globalization & Human Rights**LASC Categories:** USW, GP, DAC

This class is taught with SO 228 LatinX Experiences. WSU and A.I.D. program participants in their sophomore year will explore globalization and human rights and issues of personal growth and academic development. Counts for Global/Thematic/Methodological in the History major.

Every 2-3 years. 3 Credits

HI-280 Introduction to African Diaspora History**LASC Categories:** TLC, GP, DAC

Students will learn about the development of the African diaspora and how it has shaped the world since antiquity. We will consider the movements, experiences, and exploits of ordinary people and celebrated figures of African descent through such topics as imperial expansion; slavery, resistance, and freedom; nationalism and the civil rights movement; and current global issues. Counts for Global/Thematic/Methodological in the History major.

Alternating and every 2-3 years. 3 Credits

HI-320 Citizen Nation**LASC Categories:** CON, USW, WAC, DIV, DAC**Prerequisites:** Writing II.

Explores the history and meaning of citizenship in the United States, including discrimination, rights struggles and changing citizenship criteria. Counts for Europe/US in History major. [Cross-listed with PO-320.]

Fall only and every 2-3 years. 3 Credits

HI-373 African Immigration in the 20th Century**LASC Categories:** GP, TLC, DAC**Prerequisites:** Writing II

Why do we commonly hear about a "brain drain" in African countries or human rights violations of refugees entering Europe? This course examines how these current global issues developed through the history of immigration from the African continent to North America and Europe during the 20th century. Counts for Global/Thematic/Methodological in the History major.

Other or on demand and every 2-3 years. 3 Credits

PH-151 Race, Gender, and the Law**LASC Categories:** TLC, USW, CON, DIV

This course provides a philosophical approach to issues of race and gender as expressed in legislation, judicial interpretation, enforcement, and public policy. Every 2-3 years. 3 Credits

PH-178 Africana Philosophy**LASC Categories:** TLC, USW, DAC

Explores the philosophy of the African diaspora in African, African American and Caribbean writings. The course addresses both historical and contemporary material across intersections of race, gender, and class using philosophy, history, and literature.

Every 2-3 years. 3 Credits

PH-254 Feminist Theory**LASC Categories:** HBS, USW, DAC, DIV

Feminist Theory: Examines the development of feminist ideas and movements from the 18th century to the present, in the US and, particularly in recent decades, globally. A close analysis of Second Wave, Postmodern, and Black Feminist ideas are studied as a basis for writings and social action that attends to issues of race, class, gender, and sexuality, using intersectional methodologies and critiques to address issues of reproduction and health, labor and economic power, violence, and state power.

Other or on demand and every year. 3 Credits

PO-265 Racial and Ethnic Politics**LASC Categories:** HBS, USW, DAC

This class will analyze the relationship between the United States government and racial and ethnic groups and explore the way that race is utilized in American politics. We will focus on issues affecting racial and ethnic communities in the United States, the politics behind racial and ethnic classification, and the use of racial and ethnic appeals in American political campaigns. The readings for this course will cover topics such as affirmative action, criminal justice reform, and civil rights. It will offer students an opportunity to analyze political speeches and advertisements that utilize race and ethnicity. Every 2-3 years. 3 Credits

PO-320 Citizen Nation**LASC Categories:** CON, USW, DAC, WAC, DIV**Prerequisites:** EN-102 or EN-202.

Explores the history and meaning of citizenship in the United States, including discrimination, rights struggles and changing citizenship criteria. [Cross-listed with HI-320.]

Other or on demand. 3 Credits

PS-255 Psychological Foundations of Diversity**Prerequisites:** PS-101 with a C- or above.

Explores the gender, racial/ethnic, multiple-group membership, cultural, social class, religious, disability and sexual orientation facets of diversity.

Other or on demand and every year. 3 Credits

SO-228 Latinx Experiences in the U.s. and the World**LASC Categories:** TLC, USW, DAC, DIV

This course surveys current theoretical approaches used to explain Latina/o experiences and provides an empirical overview of how social institutions affect the daily lives of Latinas and Latinos in the U.S. and the world.

Other or on demand. 3 Credits

SO-285 Race, Class and Gender**LASC Categories:** HBS, DAC

An introduction to dominant-minority group relations through the investigation of the patterns and dynamics of differentiation, inequality and discrimination.

3 Credits

SP-333 Hispanic Presence in US

LASC Categories: GP, USW, DAC

Prerequisites: SP-321

Socio-cultural study of Hispanics in the United States, with a focus on major contemporary issues. Conducted un Spanish. [Prerequisites: Two SP 200 level courses.]

Fall only and every year. 3 Credits

SP-349 Spanish-American Literature

Prerequisites: SP-321

Representative works from South and Central American authors from the colonial period to the present.

Fall only and every 2-3 years. 3 Credits

Gerontology Minor

Through the Interdisciplinary Minor in Gerontology students will explore issues and topics related to aging in today's society. Students will benefit from a broad knowledge base drawn from a selection of courses from departments across the university including the social and natural sciences and humanities. Gerontology incorporates an understanding of psychological, social, and biological changes across the lifespan and their effect on policy and the economy. The Gerontology minor will prepare students interested in working directly with older adults and their caregivers through their major field of study (e.g. nursing, occupational therapy) as well as those interested in policy, community services, human services, and business.

Students must take the 4 required courses and 2 electives. At least 1 course must be at 300-level or higher.

Code	Title	Credits
Introductory Course		
IS-160	Introduction to Gerontology	3
Development of Aging Course		
BI-266	Biology of Aging	3
or PS-322	Psychology of Aging	
Health Policy Course		
Take one of these courses:		3
PO-312	Health Politics and Policy	
HC-220	Health Policy	
HC-345	Introduction to the U.S. Health Care System	
Experiential Learning Course		
Take one from these courses:		3

UR-142	Practicum in Urban Studies-Introductory
UR-242	Practicum in Urban Studies-Intermediate
UR-315	Oral History for Urban Areas
UR-450	Internship: Urban Studies
PS-400	Internship in Psychology
SO-410	Field Work
Electives	
Take two courses from these courses:	
6	
UR-142	Practicum in Urban Studies-Introductory
UR-242	Practicum in Urban Studies-Intermediate
UR-217	Child Advocacy
UR-221	Introduction to Social Work
UR-306	Interviewing and Counseling Techniques
UR-315	Oral History for Urban Areas
UR-321	Advanced Social Work
UR-350	Urban Youth in American Society

Total Credits **18**

***A single semester of UR 142/242, UR 315, & PS 400/SO 410/UR 450 can only be used to fulfill either the experiential learning requirement or an elective. Students can opt to take UR 142/242 or PS 400/ SO 410/UR 450 more than once to fulfil more than 1 requirement.

As an interdisciplinary program, Gerontology Studies draws faculty from multiple disciplines across the campus. Each faculty member's information can be found at the respective department that offers each of the courses.

Any students with questions, please contact the Chair of Interdisciplinary Studies, Dr. Aldo Garcia Guevara at aguevara@worchester.edu or Dr. Nicole Rosa at nrosa@worchester.edu.

Global Studies

Global Studies is an interdisciplinary academic area that draws from a wide range of disciplines in the Humanities, the Sciences and the Arts to examine global processes and events and their effects at a local level. For decades, the world has been undergoing a sustained reorganization along economic, social, political, cultural, technological

and environmental lines that cuts across national boundaries. WSU has also experienced an increased global connectivity, integration and interdependence, and witnessed the emergence of planet-wide issues such as climate change, poverty, new technologies, and entrenched wars. In response to these real-world events, Global Studies has emerged as a dynamic interdisciplinary academic field to study the forces shaping these complex processes.

- Concentration in Global Studies (p. 150)
- Minor in Global Studies (p. 151)

Global Studies is an interdisciplinary program drawing from the faculty of many departments at Worcester State University. Any students with questions, please contact the Chair of the Interdisciplinary Studies, Dr. Aldo Garcia Guevara at aguevara@worchester.edu.

Required Course

GL-150 Introduction to Global Studies

This course analyzes the forces reorganizing the planet along economic, social, political, cultural, technological and environmental lines across national boundaries.
Every year. 3 Credits

Elective Courses

AB-102 Beginning Arabic II

LASC Categories: TLC

Prerequisites: AB-101

A continuation of AB 101, designed for students to acquire additional vocabulary, grammar, and reading ability.
3 Credits

AB-210 Intermediate Arabic I

LASC Categories: TLC

Prerequisites: AB-102

Instruction in advanced rules of Arabic grammar and verb system, and in advanced writing and reading.
3 Credits

AR-118 Global Art History

LASC Categories: GP, DAC, CA

Surveys the outstanding visual art from all cultures beginning in the prehistoric era to the late 19th century.

Fall only and every year. 3 Credits

BA-430 Administrative Practices and Management

Prerequisites: BA-305

Overview and analysis of human conduct in work-organization settings.

3 Credits

BA-440 International Business and Management

Prerequisites: BA-316 and BA-318

Study and analyze the nature, structures and strategies of international/global businesses. Examine international markets, economic systems, value-chains and core competencies of a firm.

3 Credits

BA-494 International Marketing

Prerequisites: EC-120 BA-318

With the rapid and continuous changes in global environment we will examine the complex issues in international marketing faced by today's manager.

3 Credits

BI-112 Diseases and Mankind

LASC Categories: GP, NSP

Diseases of ancient and modern man; the impact on history, religion, science, art and philosophy.

Every 2-3 years. 3 Credits

BI-114 Plants and Human Affairs

LASC Categories: GP, NSP

Man's dependence upon plants and their influence on civilization and its art, religions, literature, folklore, medicine, and human behavior.

Every 2-3 years. 3 Credits

BI-117 Humans and the Environment

LASC Categories: LAB, NSP

A survey of Anthropologic environmental impacts and the underlying mechanisms involved. Three lecture hours and three laboratory hours per week.

Not open to Biology or Environmental Science majors.

Every 2-3 years. 4 Credits

BI-130 Field Biology

LASC Categories: GP, NSP, LAB

Study-Abroad Field Biology course for non-Biology majors. Course explores the intersection of human activities and environmental preservation, with a basic introduction to topics in organismal biology, biodiversity and biogeography.

Spring only and every year. 4 Credits

BI-202 Principles of Ecology**LASC Categories:** NLL, WAC**Prerequisites:** BI-140, EN-102, MA-150 or MA-180, or MA-190, or MA-200 with a grade of C- or above.

Basic ecological theory relating to organism-environment interactions; population dynamics, and ecosystems. Three hours of lecture and a three-hour laboratory per week.

Fall and Spring and every year. 4 Credits

BI-380 Biodiversity and Conservation Biology**LASC Categories:** LAB, NLL**Prerequisites:** BI-140, BI-141, BI-202, and BI-203 with a grade of C- or above.

A theoretical and quantitative approach to species, genetic, ecosystem and community diversity in the context of modern conservation biology principles. Three lecture hours and three laboratory hours per week.

Every 2-3 years. 4 Credits

BI-430 Field Biology for Majors

Prerequisites: BI-202 with a minimum grade of C-. Study-Abroad Field Biology course for Biology majors. Course explores the intersection of human activities and environmental preservation, with an in-depth discussion of topics in organismal biology, ecology, biodiversity and biogeography.

Spring only and every year. 4 Credits

CH-106 Paper Or Plastics?**LASC Categories:** NSP

Students will study modern issues related to chemistry. These will include sustainability, green chemistry, climate change and the ozone layer.

Every year. 3 Credits

CH-320 Environmental Chemistry**LASC Categories:** NLL**Prerequisites:** CH-120 and CH-121 with a C- or above.

Chemistry of the atmosphere, soil, and natural water systems, air and water pollution, water treatment, hazardous wastes and pollution control. Lab techniques including sampling and analysis of environmental media. Lecture 3 hours per week and Lab will meet once a week for 3 hours.

Fall only and every year. 4 Credits

CM-350 Intercultural Communication**Prerequisites:** CM-100

Introductory communication theory and practice across cultural groups defined by race, ethnicity, gender, religion, age, nationality, politics and economics.

3 Credits

CM-390 Independent Media and Society**LASC Categories:** TLC, DAC**Prerequisites:** CM-100

This course introduces students to the theory and practice of wide range of media economically and politically independent of both corporation and the state. The course focuses on the relationship between independent media and corporate media as well as the role of independent media within social movements, cultures of resistance, and processes of social change.

Other or on demand and other or on demand. 3 Credits

EC-206 Urban Economics**Prerequisites:** EC-110 and EC-120

The theory and policy of the growth and development of metropolitan areas; some of the policy-related problems discussed are poverty, residential and commercial land use and traffic congestion.

3 Credits

EC-210 Current Economic Issues**Prerequisites:** EC-110 EC-120

This course is designed to connect economic knowledge and theory acquired at the introductory level to current economic issues and policy. National and international topics of importance will be considered. For example, pollution, trends in productivity, profitability and distribution, debt and deficits, patterns of investment, trade, and globalization and the economic issues of race, gender and poverty may be covered.

3 Credits

EC-301 Economic Development**Prerequisites:** EC-110 and EC-120

A survey of contemporary economic theories concerning less developed countries; social, cultural, and political forces shaping the development of such countries are also investigated.

3 Credits

EC-308 International Trade**LASC Categories:** GP**Prerequisites:** EC-110 and EC-120

Reasons why nations gain by spatial specialization and exchange with other countries. Analysis of the mechanism by which international equilibrium is restored. Study of trade and foreign exchange policies.

3 Credits

ED-271 International and Comparative Education**LASC Categories:** ICW, GP

This course compares the educational policies, practices and outcomes in two or more countries.
3 Credits

ED-339 Children's Literature: Multicultural Literature for PK-9**LASC Categories:** HBS, TLC, DAC, DIV**Prerequisites:** EN-102 or EN-202

In this class, students will read, discuss, and analyze children's and young adult literature by people of diverse backgrounds including diversity in race, ethnicity, class, gender, sexual orientation, ability, language, and country. Genres and formats may include fiction, nonfiction, biographies, novels in verse, graphic novels, fairy tales, fantasy, and wordless books. While children's and young adult literature will comprise the primary texts in this course, secondary sources from education, linguistics, English, history, sociology, anthropology, women's studies and communications will provide context and theory to guide analysis
Fall and Spring and every year. 3 Credits

EN-132 World Literature**LASC Categories:** GP, DAC, TLC, DIV

The course examines the major authors in world literature from ancient to modern times; however, in a given semester the course may focus on one particular time period. All areas of the world are covered, including such areas as Africa, Europe, the Americas. An emphasis will be put on cultural, sociological, historical, and philosophical influences on the literature. Such authors may be included as Chinua Achebe, Pablo Neruda, Bei Dao, Salman Rushdie, Nadine Gordimer, Edwidge Danticat, and Bessie Head.

Fall and Spring and every year. 3 Credits

EN-167 Literature and Human Rights**LASC Categories:** GP, DAC, DIV

The course examines writing about human rights, including memoirs and novels, and examines issues of social justice. Violations of human rights that may be addressed include genocide, political repression, and torture; while social justice issues that may be examined include women's rights, justice and punishment, disability rights and methods of protesting for human rights. The course will examine definitions of human rights as well as reparations and living with the aftermath of human rights violations.
Fall and Spring and every 2-3 years. 3 Credits

EN-169 Ethnic Literature in the U.S.**LASC Categories:** USW, TLC, DAC

Study of ethnic literature in the U.S., focusing on African- American, Asian-American, Latino, and Native-American writers.

Fall and Spring. 3 Credits

EN-240 Survey of Postcolonial and Transcultural Literature**LASC Categories:** GP**Prerequisites:** EN-102

Introduction to literatures in English from formerly colonized countries in Africa, Asia, and the Caribbean, and from the postcolonial diaspora.

Every year. 3 Credits

EN-348 Postcolonial Women's Writing**LASC Categories:** GP**Prerequisites:** EN-102

Writing by women from colonized and formerly colonized countries on local and global issues shaping women's lives and creative expression.

Every 2-3 years. 3 Credits

EV-320 Environmental Chemistry**LASC Categories:** NLL**Prerequisites:** CH-120 and CH-121 with a grade of C- or above.

Chemistry of the atmosphere, soil, and natural water systems, air and water pollution, water treatment, hazardous wastes and pollution control. Lab techniques including sampling and analysis of environmental media. Lecture 3 hours per week and Lab will meet once a week for 3 hours. [Cross-listed with CH-320.]

Fall only and every year. 4 Credits

FR-210 Intermediate French I**LASC Categories:** TLC, GP**Prerequisites:** FR-102

Review of fundamentals and presentation of more complex grammatical features; development of conversational skills; selected readings; written and oral composition.

Fall and Spring and every year. 3 Credits

FR-211 Intermediate French II**LASC Categories:** TLC, GP**Prerequisites:** FR-210

Continuation of FR210.

Fall and Spring and every year. 3 Credits

FR-321 Advanced French Composition I**LASC Categories:** TLC, WAC**Prerequisites:** EN-102 or EN-250 or EN-202

Practice in diverse composition styles as well as review of grammar, and introduction to reading French texts. Conducted in French. [Prerequisite: Two 200-level French courses.]

Other or on demand. 3 Credits

FR-323 Advanced French Conversation**LASC Categories:** TLC**Prerequisites:** FR-211 or any 300 level French course.

Development of fluency and accuracy, free discussions, prepared oral presentations, practical exercises in oral expression. Conducted in French. Spring only and other or on demand. 3 Credits

FR-331 General French Civilization**LASC Categories:** TLC**Prerequisites:** 6 credits department FR At level 200;

Significant aspects of French history, geography, cultural achievements to world War I. Conducted in French. [Prerequisite: Two FR 200 level courses or equivalent.]

Other or on demand. 3 Credits

FR-341 Introduction to French Literature**LASC Categories:** TLC, GP, DAC**Prerequisites:** 6 credits department FR At level 200;

Major periods and genres of French literature; for majors and minors. Conducted in French.

[Prerequisites: Two FR 200 level courses or equivalent.]

Other or on demand. 3 Credits

FR-342 Survey of French Literature I**LASC Categories:** TLC**Prerequisites:** 6 credits department FR At level 200;

Selections from the epic, drama, lyric poetry, and the major prose writers to major authors of the classical period. Conducted in French. [Prerequisite: Two FR 200 level courses or equivalent.]

Every 2-3 years. 3 Credits

FR-344 Survey of French Literature II**LASC Categories:** TLC**Prerequisites:** 6 credits department FR At level 200;

Major authors of the eighteenth and nineteenth centuries. Conducted in French. [Prerequisites: Two FR 200 level courses.]

Every 2-3 years. 3 Credits

FR-346 Twentieth Century French Literature**LASC Categories:** TLC, GP**Prerequisites:** 6 credits department FR At level 200;

Major novelists, dramatists and poets from the turn of the century to the present. Conducted in French. [Two FR 200 level courses or equivalent.]

Other or on demand. 3 Credits

GE-102 Human Geography**LASC Categories:** GP, HBS

Introduction to human geography, emphasizing globalization, human-environment relations, and spatial patterns of population, development, economics, politics, urbanization and culture. Fall and Spring and every year. 3 Credits

GE-258 Global Environmental Change**Prerequisites:** GE-102 or GL/GE-102 or GS-101 or

GL-150 or EV-150 or UR-101 or CH-106

An introduction to the science, political economy and ethics of global environmental change.

Every year. 3 Credits

GE-285 Sustainable Communities**LASC Categories:** HBS, USW**Prerequisites:** GE-102 or GL/GE-102 or GL-150 or EC-110 or EC-120.

Exploration of changes in U.S. and global economic landscape, 1970 to present. Approaches to sustainable economic development.

Every 2-3 years. 3 Credits

GL-150 Introduction to Global Studies

This course analyzes the forces reorganizing the planet along economic, social, political, cultural, technological and environmental lines across national boundaries.

Every year. 3 Credits

HC-202 Introduction to Global Health**LASC Categories:** GP, ICW, DIV, DAC

The course introduces students to the main concepts of public health and the critical links between public health and social and economic development.

Students get an overview of the determinants of health, how health status is measured, and the influences of various factors, including cultural, historic, geographic, social, economic, and political issues on the health of individuals and communities. The course also introduces students to key concerns regarding nutrition, reproductive health, infectious disease, and chronic diseases. The course will be global in coverage but with an important focus on the developing world and on the health of the poor.

Fall and Spring and every year. 3 Credits

HC-228 Health Ethics**Prerequisites:** HE-100 or HC-201

Ethical issues in health including genetic research, euthanasia, medical intervention and reproductive technologies as well as professional ethics.

Fall and Spring and every year. 3 Credits

HC-340 Global Perspective in Public Health**LASC Categories:** GP, ICW

Seminar course for students accepted into a global service learning trip during the academic year. It is designed to prepare students through curriculum-based learning, the components of service learning; ethical partnering with vulnerable communities, and the cultural/historical/political and economic factors that impact health and healthcare policies within the population where immersion takes places. There will be self-reflection and integration of learning through journal writing, critical thinking and exercises formal preparation for service in the host country and final paper at the end of the semester.

Other or on demand and every year. 3 Credits

HE-390 Environmental Health**Prerequisites:** HE-100 or HC-201

Examination of the issues affecting the environment and their impact on our health.

Fall and Spring and every year. 3 Credits

HI-103 Connecting Ancient Worlds: World History to 1500**LASC Categories:** GP, TLC

Surveys economic, social, political and intellectual developments of global societies and their inter-relationship from ancient times to 1500. Counts for Global/Thematic in the History major.

Fall and Spring and every year. 3 Credits

HI-104 Age of Empires: World History 1500 to the Present**LASC Categories:** GP, TLC

Surveys economic, social, political, and intellectual development of global societies world civilizations and their inter relationship from 1500 to the present. Counts for Global/Thematic in the History major.

Fall and Spring and every year. 3 Credits

HI-105 Modern World History**LASC Categories:** GP, TLC

Surveys economic, social, political, and intellectual development of global societies and their inter-relationship from 1914 to the present. Counts for Global/Thematic in the History major.

Fall and Spring and every year. 3 Credits

HI-208 American Immigrant History

Survey of immigration. Topics such as old-world background, impact on the United States, nativism, cultural pluralism, religion, mobility, family and politics. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-213 Colonial Latin America

The People of Latin America from Pre-Columbian societies to the wars for independence, focusing on race, sex and power. Counts for Africa/Latin America in the History major.

Every 2-3 years. 3 Credits

HI-214 Modern Latin America**LASC Categories:** TLC, GP, DAC

The people of Latin America from independence to the present, focusing on race, sex and power. Counts for Africa/Latin America in the History major.

Every 2-3 years. 3 Credits

HI-216 Labor, Capital, and Power in United States History**LASC Categories:** HBS, USW

The history of the United States economic development. Topics to be addressed include: slavery; consumerism and market economies; industrialization and de-industrialization; gendered and racialized divisions of labor; the global movement of capital, goods, and workers; union organizing; and the role of government and the law in shaping the economy. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-221 African-American History I

The people of African descent from the emergence of the slave trade to the Civil War, focusing on race, gender, and power. Counts for Europe/United States in the History major.

Every year. 3 Credits

HI-226 Latin American History Through Film

This course will explore how filmmakers have portrayed Latin American History in their movies. Counts for Africa/Latin America in the History major.

Every 2-3 years. 3 Credits

HI-247 Central America and the Caribbean

This survey examines the political, cultural and social history of Central America and the Caribbean from pre-Columbian times to the present with an emphasis on the 20th century. Counts for Africa/Latin America in the History major.

Every 2-3 years. 3 Credits

HI-248 Seminar on Globalization & Human Rights

LASC Categories: USW, GP, DAC

This class is taught with SO 228 LatinX Experiences. WSU and A.I.D. program participants in their sophomore year will explore globalization and human rights and issues of personal growth and academic development. Counts for Global/Thematic/Methodological in the History major.

Every 2-3 years. 3 Credits

HI-261 Middle East History I

LASC Categories: TLC, GP

The rise and expansion of Islam; the Caliphate; Muslim religion, civilization and its impact on the West, decline of medieval Islam. Counts for Middle East/Asia in History major.

Every 2-3 years. 3 Credits

HI-262 Middle East History II: the Ottoman Empire, 1289-1920

LASC Categories: GP, TLC, WAC

The Ottoman Empire: expansion, institutions, impact on Europe, decline of the Empire. Counts for Middle East/Asia in History major.

Every 2-3 years. 3 Credits

HI-263 The Modern Middle East, 1900-present

LASC Categories: GP, DIV

This course is an invitation to reconsider our preconceived notions about the modern Middle East, by way of introduction to the rich history of the region since 1900. Students will learn about the legacies of the Pan-Arabism in the era of decolonization, the politics of oil in the Gulf, and the rise of authoritarian states (Syria, Iraq). We will focus on histories of violence and the struggles of stateless peoples (Palestinians, Kurds, Armenians) and consider the dynamics of popular uprisings, revolutions and rebellions, both failed and successful ones. Counts for Middle East/Asia in the History major.

Every 2-3 years. 3 Credits

HI-267 US-Latin American Relations

LASC Categories: USW, WAC, DAC

This course will analyze the political, economic, social, and cultural impact of the interactions between and among the governments and people of the US and Latin America. Counts for Africa/Latin America in the History major.

Every year. 3 Credits

HI-270 History of Modern Italy

Study of modern Italy from 1789 to the present.

Counts for Europe/U.S. in the History major.

Every 2-3 years. 3 Credits

HI-276 Jewish History I

This course constitutes a systematic introduction to the Biblical history of the Jewish people down to the 12th century. Counts for Global/Thematic/Methodological in the History major.

Every 2-3 years. 3 Credits

HI-277 Jewish History II

History of the Jewish people from Medieval period to early Modernity. Counts for Global/Thematic/Methodological in the History major.

Every 2-3 years. 3 Credits

HI-278 African History Before 1800

LASC Categories: GP, TLC, DAC, DIV

An introduction to the history of societies and cultures of Africa up to 1800. We will consider such topics as Nubian queens in Egypt, the diffusion of Bantu languages, transcontinental trade networks, the spread of Islam and Christianity, the rise of West African empires, and the transatlantic slave trade. Counts for Africa/Latin America in the History major.

Alternating and every 2-3 years. 3 Credits

HI-279 African History Since 1800

LASC Categories: GP, TLC, DAC, DIV

An introduction to the history of groups and countries within Africa from 1800 to the early 21st century. Like the rest of the world, Africa was also changing rapidly during these centuries. Topics include the extraction of wealth, European colonial rule, pan-Africanism, independence and development during the Cold War, and Africa today. Counts for Africa/Latin America in the History major.

Alternating and every 2-3 years. 3 Credits

HI-280 Introduction to African Diaspora History**LASC Categories:** TLC, GP, DAC

Students will learn about the development of the African diaspora and how it has shaped the world since antiquity. We will consider the movements, experiences, and exploits of ordinary people and celebrated figures of African descent through such topics as imperial expansion; slavery, resistance, and freedom; nationalism and the civil rights movement; and current global issues. Counts for Global/Thematic/Methodological in the History major. Alternating and every 2-3 years. 3 Credits

HI-312 20th Century Europe I**Prerequisites:** HI-103 or HI-104

The politics and economics of World War I; the pattern of restlessness between the wars in the rise of dictatorship in Germany, Italy, and Spain; the regimentation of economic control. Counts for Europe/United States in History major. Every 2-3 years. 3 Credits

HI-322 Nationalism**LASC Categories:** GP, HBS, DAC

Examines the theories of nationalism, the development of the modern nation-state, and its effect on global politics. [Cross-listed with PO-322.] Counts for Global/Thematic/Methodological in the History major. Every 2-3 years. 3 Credits

HI-323 Empire**Prerequisites:** HI-103 and HI-104

Theories and models of colonization, the reaction of colonized peoples, and the way historians analyze imperialism from 1400 to 1920's. [Cross-listed with PO-323.] Counts for Global/Thematic/Methodological in the History major. Every 2-3 years. 3 Credits

HI-333 Women in Latin America**Prerequisites:** HI-213 HI-214 HI-226 or HI-247

Examines the roles of women in diverse societies including Mexico, Brazil and Caribbean nations. Emphasis on the modern period. Counts for Africa/Latin America in the History major. Every 2-3 years. 3 Credits

HI-335 Imperial Crossroads of Modern East Asia**LASC Categories:** TLC, GP

Examines East Asian history at the crossroads of Chinese, Japanese, Russian and Korean colonial and nationalist movements in a region called Manchuria, presently China's northeast border with Russia, Korea, and Mongolia. Counts for Middle East/Asia within the History major. Every 2-3 years. 3 Credits

HI-337 Travels in Asia**LASC Categories:** TLC, GP

Travels in Asia examines modern East Asian history through the lens of Chinese, Japanese, European, and American travel narratives from the seventeenth through the twentieth centuries. Counts for Middle East/Asia in the History major. Every 2-3 years. 3 Credits

HI-373 African Immigration in the 20th Century**LASC Categories:** GP, TLC, DAC**Prerequisites:** Writing II

Why do we commonly hear about a "brain drain" in African countries or human rights violations of refugees entering Europe? This course examines how these current global issues developed through the history of immigration from the African continent to North America and Europe during the 20th century. Counts for Global/Thematic/Methodological in the History major.

Other or on demand and every 2-3 years. 3 Credits

HI-375 Popular Music and Performance in Modern Africa**LASC Categories:** CA, TLC, DAC**Prerequisites:** Writing II

This course looks at changes in popular music in Africa since the late 19th century. Instead of studying the practice of traditional or art music in Africa, students will gain a stronger understanding of the significance of global connections between Africa and other parts of the world by examining the performance of popular music in a variety of spaces, including streets, nightclubs, and ceremonies. Counts for Africa/Latin America in the History major.

Other or on demand and every 2-3 years. 3 Credits

MU-140 World Music**LASC Categories:** CA

An introduction to music of various cultures and continents including music of Africa, Asia, Latin America, the Middle East, and India.

Spring only and every 2-3 years. 3 Credits

MU-222 African Drumming**LASC Categories:** GP, CA, DAC

An exploration of African music and drumming techniques from the culture of Ghana. Students will develop performance skills and present a public performance during the course of the semester.
Every year. 0.5-3 Credits

NU-357 Global Perspectives in Health**LASC Categories:** GP, ICW

Interactive course preparing students for global service immersion experience in partnership with host country.
Other or on demand. 3 Credits

PH-170 Introduction to Asian Philosophy**LASC Categories:** GP, TLC, DAC

Introduces and surveys the major philosophical traditions in East-Asia, South-Asia, and South-East Asia. This course will study the different worldviews, conceptions of human nature and the good life from these philosophical perspectives, and where possible, make comparisons with Western philosophies.
Every 2-3 years. 3 Credits

PH-172 Chinese Philosophy**LASC Categories:** GP, TLC, DAC

Surveys the philosophies of ancient China, including Taoism, Buddhism, Legalism and the development of the Confucian tradition in China.
Every 2-3 years. 3 Credits

PH-177 Introduction to Latin American Philosophy**LASC Categories:** GP, TLC, DAC

An introduction to many of the principal texts, thinkers, and debates within Latin American philosophy.
Every 2-3 years. 3 Credits

PH-178 Africana Philosophy**LASC Categories:** TLC, USW, DAC

Explores the philosophy of the African diaspora in African, African American and Caribbean writings. The course addresses both historical and contemporary material across intersections of race, gender, and class using philosophy, history, and literature.
Every 2-3 years. 3 Credits

PH-241 Genocide and Human Rights**LASC Categories:** USW, GP, DIV

This course treats the ethical, political, and other dimensions of systematic mass violence through case studies and general theoretical analyses.
Every 2-3 years. 3 Credits

PH-250 Global Feminisms**LASC Categories:** TLC, GP

Investigates the theoretical underpinnings of women's movements for equal rights around the globe.
Every 2-3 years. 3 Credits

PH-251 Mass Violence Against Women**LASC Categories:** USW, GP, DIV

A philosophy-based, interdisciplinary course examining historical and contemporary mass violence against women.
Every 2-3 years. 3 Credits

PO-120 Global Politics**LASC Categories:** GP, HBS, DAC, DIV

An introduction to Comparative Politics and International Relations. In this course, students will learn how different countries around the world govern themselves and how they interact with each other. Topics may include democratic and non-democratic regimes, theories of war and peace, global political cultures, and intergovernmental organizations such as the United Nations. [Applicable to the Global Studies Concentration.]
Fall and Spring and every year. 3 Credits

PO-202 Globalization**LASC Categories:** USW, GP, WAC

The promise and problems of globalization (spread of free market capitalism and political democracy). [Applicable to the Global Studies Concentration.]
Every 2-3 years. 3 Credits

PO-220 European Politics**LASC Categories:** HBS, GP

This course provides a comparative study of European government and politics, with a focus on major countries such as Great Britain, France, Italy, Spain, Germany, and Russia. Special emphasis will be placed on learning about the structure of political power within the state and on important institutions that form the link between state and society, such as political parties and interest groups. Diverse nationalistic responses to the European Union will also be considered. [Applicable to the Global Studies Concentration.]
Every 2-3 years. 3 Credits

PO-221 Asian Politics**LASC Categories:** HBS, GP

This course provides students with an analysis of selected political systems of the countries of Asia. Students will have the opportunity to learn about major theories in comparative politics, which will be applied to the understanding of countries in the Asian region. Topics will include communist and post-communist transitions, democratization, social movements, and economic reform. [Applicable to the Global Studies Concentration.]

Every 2-3 years. 3 Credits

PO-222 Latin American Politics**LASC Categories:** GP, HBS

This course provides a comparative study of the government and politics of contemporary Latin America. It will explore the political systems of various countries, as well as how political dynamics, such as democratization, authoritarianism, and crisis situations, have affected political, economic, and social policies throughout the region. [Applicable to the Global Studies Concentration.]

Every 2-3 years. 3 Credits

PO-322 Nationalism

Examines the theories of nationalism, the development of the modern Nation-state, and its effect on global politics. [Cross-listed with HI-322. Applicable to the Global Studies Concentration.] Other or on demand. 3 Credits

PO-323 Empire**Prerequisites:** HI-103 and HI-104

Theories and models of colonization, the reaction of colonized peoples, and the way historians analyze imperialism from 1400 to 1920's. [Cross-listed with HI-323. Applicable to the Global Studies Concentration.]

Every 2-3 years. 3 Credits

PS-365 Cultural Psychology**LASC Categories:** TLC, HBS, WAC**Prerequisites:** PS-101, EN-102, PS-210 with a C- or above.

This course addresses the role culture plays in human psychological processes and approaches to researching cultural aspects of human action.

Other or on demand and every 2-3 years. 3 Credits

SO-110 Cultural Anthropology

Cross-cultural analysis of the human capacity for adaptation and technological and ideological development. Significant field studies will be examined.

3 Credits

SO-270 Social Theory I**LASC Categories:** TLC, GP**Prerequisites:** SO-100

Fundamental concepts and intellectual traditions, especially the contributions of Comte, Spencer, Marx, Toennies, Durkheim, and Simmel.

3 Credits

SO-425 Global Capitalism**LASC Categories:** HBS, GP, WAC**Prerequisites:** EN-102

This class will look at the development of capitalism from an historical, sociological, and critical perspective and consider the ways capitalism has made and unmade the world. Themes may include: imperialism and the underdevelopment of the Global South, decolonization struggles, global urbanization, global financial institutions, global labor struggles, war and capitalism, global environmental crises and the struggle over resources, and market hegemony.

Every year. 3 Credits

SP-210 Intermediate Spanish I**LASC Categories:** TLC, GP

This course is a review of language constructions and everyday vocabulary at a slighter faster pace than an elementary course. Grammar review starts with the most basic structures, such as present, preterite, and imperfect tenses, ser/estar, por/para, command forms, pronouns, and ends with present subjunctive. Vocabulary fields include feelings and emotions; urban living; family relationships; the media; and the environment. Readings, videos, and short films related to different Spanish speaking countries will add a cultural component to the course. This course is intended for students with 2 years of past Spanish instruction. Closed to students who have already taken a 300-level* Closed to Native/Heritage speakers. Native and/or Heritage speakers are encouraged to take SP390 instead. * Unless recommended to a specific student by the Department of World Languages, on a per-case basis. Fall and Spring and every year. 3 Credits

SP-211 Intermediate Spanish II**LASC Categories:** TLC, GP**Prerequisites:** SP-210 or appropriate placement score.

Continuation of SP210. [Formerly SP213.] Closed to students who have already taken a 300-level* Closed to Native/Heritage speakers. Native and/or Heritage speakers are encouraged to take SP390 instead. * Unless recommended to a specific student by the Department of World Languages, on a per-case basis. Fall and Spring and every year. 3 Credits

SP-321 Advanced Spanish Composition I**LASC Categories:** TLC, WAC**Prerequisites:** SP-211 or appropriate placement score.

Facility in prose writing; study of style of selected authors; variety of expression through word discrimination, and advanced grammatical structures. [Prerequisites: Two SP 200 level courses.] Every year. 3 Credits

SP-322 Advanced Spanish Composition II**LASC Categories:** TLC, WAC**Prerequisites:** SP-321

Continuation of SP321.

Spring only and every year. 3 Credits

SP-323 Advanced Spanish Conversation Through Film**LASC Categories:** TLC, USW**Prerequisites:** Two 200-level or above Spanish courses.

The main objective of this course is to develop the student's oral proficiency and communication skills, while building on vocabulary, and learning about different aspects of the Hispanic cultural world with a special emphasis on immigration issues. Regarding the class format, it will be mainly based on group/pair discussions and debates, in which the students will ask questions, express their views, elaborate on their ideas, and defend them by providing supporting examples drawn from their own experiences, analysis, or comparisons.

Fall and Spring and every year. 3 Credits

SP-326 Spanish for the Professions**LASC Categories:** GP, TLC**Prerequisites:** SP-321.

Intensive practice with language and documents used in private and public sectors including business, medicine, communication, education and social services.

Fall and Spring and every year. 3 Credits

SP-327 Introduction to Translation**Prerequisites:** SP-321.

SP-327 will prepare you for careers in translation and will satisfy professional and academic requirements. It seeks to introduce the student to the techniques required for translation in a competitive environment. Within the context of the development of greater cross-cultural awareness, it will develop the following language skills for business purposes: speaking, listening comprehension, reading, writing, and translation.

Spring only and every year. 3 Credits

SP-331 Spanish Civilization**LASC Categories:** CA**Prerequisites:** SP-321

An historical survey of Spanish social, cultural, and political life. Conducted in Spanish.

Spring only and every year. 3 Credits

SP-332 Cultures of Latin America**LASC Categories:** DAC, GP**Prerequisites:** SP-321.

Introduction to the cultures and history of Latin America from pre-Columbian times to the present day. This course will introduce students to colonial, modern and contemporary cultural, historical and political issues that influenced the development of Latin American identities. The course is taught in Spanish.

Fall only and every year. 3 Credits

SP-333 Hispanic Presence in US**LASC Categories:** GP, USW, DAC**Prerequisites:** SP-321

Socio-cultural study of Hispanics in the United States, with a focus on major contemporary issues. Conducted un Spanish. [Prerequisites: Two SP 200 level courses.]

Fall only and every year. 3 Credits

UR-213 Human Identity and Urban Environment**Prerequisites:** UR-101

This course addresses a number of learning outcomes, including: studying historical experiences, cultural patterns, and social advantages and disadvantages of different groups within society; exploring social problems such as racism, sexism, homophobia, and other forms of prejudice, discrimination, and exploitation as both mainstream and non-mainstream groups experience them; examining the diversity of different groups and their changing dynamics; helping students become knowledgeable about diversity issues and develop the ability to distinguish facts from interpretations and opinions; become familiar with materials written by and about diverse groups.

Spring only and every year. 3 Credits

UR-290 Gender and the City**LASC Categories:** WAC, GP, HBS**Prerequisites:** EN-102

Exploration of the ways in which gender, both male and female, structures responses of individuals to urban life and spaces.

Every 2-3 years. 3 Credits

UR-360 Environmental Systems and Public Policy**Prerequisites:** UR-101

Examination of urban ecosystems, focusing on land uses designed to effectively utilize water, open space, and other natural resources.

Other or on demand. 3 Credits

WL-210 Intermediate World Language I**Prerequisites:** WL-102

Intermediate level I instruction in world languages that are not otherwise offered by the Department of Languages and Literature.

Other or on demand. 3 Credits

WL-211 Intermediate World Language II**Prerequisites:** WL-210

Intermediate level II instruction in world languages that are not otherwise offered by the Department of Languages and Literature.

Other or on demand. 3 Credits

community. Students are encouraged to connect their knowledge of a particular region of the world to larger transnational processes and to examine their identities in a global frame. The interdisciplinary Minor and Concentration in Global Studies helps students develop skills to function in a global market and the depth of understanding necessary to be responsible citizens of planet Earth.

Requirements for a Concentration in Global Studies: 15 credits

Students are required to take a total of five Global Studies courses starting with GL-150 (Required) plus four electives chosen from across various disciplines. One of the elective courses has to be at a 200 level and another at either a 300 or 400 level. No more than two courses can be counted from the same department. Students are strongly encouraged to elect a world language course other than English and/or a study abroad course that meets the Global Studies criteria.

Global Studies is an interdisciplinary program drawing from the faculty of many departments at Worcester State University.

Any students with questions, please contact the Chair of Interdisciplinary Studies, Dr. Aldo Garcia Guevara at aguevara@worchester.edu.

Concentration in Global Studies

The mission of the Global Studies Program is to help students understand trans-national phenomena and to provide them with a solid background for decision-making in an increasingly interdependent world

Minor in Global Studies

The mission of the Global Studies program is to help students understand trans-national phenomena and to provide them with a solid background for decision-making in an increasingly interdependent world community. Students are encouraged to connect their knowledge of a particular region of the world to larger transnational processes and to examine their identities in a global frame. The interdisciplinary Minor and Concentration in Global Studies helps students develop skills to function in a global market and the depth of understanding necessary to be responsible citizens of planet Earth.

Program Requirements

Code	Title	Credits
GL-150	Introduction to Global Studies	3
Three 200-level courses or higher		9
One 300-level or higher course		3
One additional course at any level		3

No more than two courses with the same course prefix (e.g., PO, CH, HI) can be counted towards the minor. In line with University policy, no more than one course (3-4 credits) may be reused between a major and a minor. Students are strongly encouraged to elect a world language course other than English and/or a study abroad course that meets the Global Studies criteria.

Courses that count toward Global Studies including the following. This list is not exhaustive and is subject to change. Students may be able to count courses not listed here with the approval of the IDS Chair and Global Studies Advisory Board.

Total Credits **18**

Code	Title	Credits
AB-102	Beginning Arabic II	3
AB-210	Intermediate Arabic I	3
AR-118	Global Art History	3
AS-101	Introduction to Asian Studies	3
BA-430	Administrative Practices and Management	3
BA-440	International Business and Management	3
BA-494	International Marketing	3
BI-112	Diseases and Mankind	3
BI-114	Plants and Human Affairs	3

BI-117	Humans and the Environment	4
BI-130	Field Biology	4
BI-202	Principles of Ecology	4
BI-380	Biodiversity and Conservation Biology	4
BI-430	Field Biology for Majors	4
CH-106	Paper Or Plastics?	3
CH-320	Environmental Chemistry	4
CM-350	Intercultural Communication	3
CM-390	Independent Media and Society	3
EC-206	Urban Economics	3
EC-210	Current Economic Issues	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3
ED-271	International and Comparative Education	3
ED-339	Children's Literature: Multicultural Literature for PK-9	3
EN-132	World Literature	3
EN-167	Literature and Human Rights	3
EN-169	Ethnic Literature in the U.S.	3
EN-240	Survey of Postcolonial and Transcultural Literature	3
EN-348	Postcolonial Women's Writing	3
EV-320	Environmental Chemistry	4
FR-210	Intermediate French I	3
FR-211	Intermediate French II	3
FR-321	Advanced French Composition I	3
FR-323	Advanced French Conversation	3
FR-331	General French Civilization	3
FR-341	Introduction to French Literature	3
FR-342	Survey of French Literature I	3
FR-344	Survey of French Literature II	3
FR-346	Twentieth Century French Literature	3
GE-102	Human Geography	3
GE-258	Global Environmental Change	3
GE-285	Sustainable Communities	3
GL-150	Introduction to Global Studies	3

HC-202	Introduction to Global Health	3	NU-357	Global Perspectives in Health	3
HC-228	Health Ethics	3	OT-411	Occupational Therapy International Service Learning Experience	2
HC-340	Global Perspective in Public Health	3	PH-170	Introduction to Asian Philosophy	3
HE-390	Environmental Health	3	PH-172	Chinese Philosophy	3
HI-103	Connecting Ancient Worlds: World History to 1500	3	PH-177	Introduction to Latin American Philosophy	3
HI-104	Age of Empires: World History 1500 to the Present	3	PH-178	Africana Philosophy	3
HI-105	Modern World History	3	PH-241	Genocide and Human Rights	3
HI-208	American Immigrant History	3	PH-250	Global Feminisms	3
HI-213	Colonial Latin America	3	PH-251	Mass Violence Against Women	3
HI-214	Modern Latin America	3	PO-120	Global Politics	3
HI-216	Economic History of the United States	3	PO-202	Globalization	3
HI-221	African-American History I	3	PO-220	European Politics	3
HI-226	Latin American History Through Film	3	PO-221	Asian Politics	3
HI-247	Central America and the Caribbean	3	PO-222	Latin American Politics	3
HI-248	Seminar on Globalization & Human Rights	3	PO-322	Nationalism	3
HI-261	Middle East History I	3	PO-323	Empire	3
HI-262	Middle East History II: the Ottoman Empire, 1289-1920	3	PS-365	Cultural Psychology	3
HI-263	The Modern Middle East, 1900-present	3	SO-110	Cultural Anthropology	3
HI-267	US-Latin American Relations	3	SO-270	Social Theory I	3
HI-270	History of Modern Italy	3	SO-425	Global Capitalism	3
HI-276	Jewish History I	3	SP-210	Intermediate Spanish I	3
HI-277	Jewish History II	3	SP-211	Intermediate Spanish II	3
HI-278	African History Before 1800	3	SP-321	Advanced Spanish Composition I	3
HI-279	African History Since 1800	3	SP-322	Advanced Spanish Composition II	3
HI-280	Introduction to African Diaspora History	3	SP-323	Advanced Spanish Conversation Through Film	3
HI-312	20th Century Europe I	3	SP-326	Spanish for the Professions	3
HI-322	Nationalism	3	SP-327	Introduction to Translation	3
HI-323	Empire	3	SP-331	Spanish Civilization	3
HI-333	Women in Latin America	3	SP-332	Cultures of Latin America	3
HI-335	Imperial Crossroads of Modern East Asia	3	SP-333	Hispanic Presence in US	3
HI-337	Travels in Asia	3	UR-213	Human Identity and Urban Environment	3
HI-373	African Immigration in the 20th Century	3	UR-290	Gender and the City	3
HI-375	Popular Music and Performance in Modern Africa	3	UR-360	Environmental Systems and Public Policy	3
MU-140	World Music	3	WL-210	Intermediate World Language I	3
MU-222	African Drumming	0.5-3	WL-211	Intermediate World Language II	3

Global Studies is an interdisciplinary program drawing from the faculty of many departments at Worcester State University.

Any students with questions, please contact the Chair of Interdisciplinary Studies, Dr. Aldo Garcia Guevara at aguevara@worchester.edu.

Human Rights and Social Justice Minor

Human Rights Minor Requirements

Code	Title	Credits
HR-100	Introduction to Human Rights and Social	3
HR-400	Internship in Human Rights and Social Justice	2-6
HR-450	Senior Project on Human Rights and Social Justice	4
3 Human Rights and Social Justice electives at any level		9
Total Credits		18-22

As an interdisciplinary program, the Human Rights and Social Justice Minor draws faculty from multiple disciplines across the campus. Each faculty member's information can be found at the respective department that offers each of the courses.

Any students with questions, please contact the Chair of Interdisciplinary Studies, Dr. Aldo Garcia Guevara at aguevara@worchester.edu.

Interdisciplinary Studies

Interdisciplinary Studies is an expanding, exciting academic area in which students study, conduct research, and do creative work in subject areas that span multiple traditional academic disciplines. It has developed out of recognition that responses to complex problems and challenges require a combination of the intellectual tools available from a wide range of academic disciplines. Students with interdisciplinary studies backgrounds are well-prepared for the fluidly changing realities of the professional world as well as future study in an ever more interdisciplinary academic arena.

The Interdisciplinary Studies Department provides a number of major, minor, and concentration programs for students interested in subjects that span multiple traditional academic disciplines. The growing list includes

- the self-designed interdisciplinary major of Liberal Studies,
- minors (18 credits) in Asian Studies; Ethnic Studies; Global Studies; and Women's, Gender, and Sexuality Studies; and,
- concentrations (15 credits) in Environmental and Sustainability Studies; Ethnic Studies; Global Studies; and Women's, Gender, and Sexuality Studies.

Some courses in these areas are offered by the Interdisciplinary Studies Department, while many other courses are offered in other departments across the university's curriculum. WSU's Student Planning platform allows students to search for all courses offered in a given semester in a specific program.

- African and African Diaspora Studies (p. 101)
- Asian Studies
- Environmental and Sustainability Studies
- Ethnic Studies
- Gerontology (p. 139)
- Global Studies
- Human Rights and Social Justice (p. 153)
- Liberal Studies
- Women's, Gender, and Sexuality Studies

Robert Brooks, Chair

- Ph.D., American University
- J.D., University of Detroit Law School
- M.A., Antioch University, Los Angeles
- B.M., Wayne State University

Rita Mookerjee

- Ph.D., Florida State University
- M.A., Temple University
- B.A., Temple University

Nafisa Tanjeem

- Ph.D., Rutgers - The State University of New Jersey
- M.A., University of Toronto
- B.S.S., University of Dhaka, Bangladesh

Liberal Studies

The Liberal Studies major provides students a flexible, customized alternative to existing programs of study while fostering academic excellence in interdisciplinary learning. Liberal Studies majors may earn either the bachelor of arts or the bachelor of science degree.

As an individualized program, the Liberal Studies major prepares students for life after college through a broad-based liberal arts education and the fulfillment of these overarching learning outcomes: interdisciplinary learning, career development, entrepreneurship and self-advocacy, and engaged citizenship.

The Liberal Studies major serves incoming first-year students who have a clear sense of their academic goals and want to craft their own major of study, transfer students who want to maximize the use of previously earned credits by designing their own major, students who have not selected a major of study or who decide not to complete their initial intended major, and adult students who may already be working in their desired field but seek a degree completion program.

Admission Requirements

Students interested in the Liberal Studies major must meet the standard admissions criteria for Worcester State University. Once admitted, incoming first-year and transfer students must meet with an academic advisor in the Academic Success Center to discuss a program of study. These students will then take LS-190, during which they will submit a written plan of study to the Chair of the Interdisciplinary Studies Department with a rationale for the selection of the areas of study. Once approved, this plan of study is reflected in the student's Degree Audit.

Current Worcester State students who want to change from undeclared status or from other majors must also meet with an academic advisor in the Academic Success Center before changing majors. Those who want to pursue a Liberal Studies major will be required to enroll in LS-190. During this course,

they will submit a written program of study to the director with a rationale for the selection of the areas of study.

This development of a program of study and review process allows for important conversations about a student's academic and professional goals, the best use of transfer credits, and the selection of the two primary areas of study.

Standards for Minimum Academic Performance in the Liberal Studies major

Liberal Studies majors must meet the requirements for graduation as specified in the Undergraduate Catalog. These include the completion of a minimum of 120 credits with a 2.0 cumulative grade point average and a minimum 2.0 grade point average in each of the two areas of study.

Minors Available at Worcester State University

- Addictions Counseling Minor (p. 96)
- African and African Diaspora Studies Minor (p. 101)
- Art Minor (p. 462)
- Asian Studies Minor (p. 101)
- Astronomy Minor (p. 293)
- Business Administration Minor (p. 314)
- Cellular and Molecular Biology Minor (p. 176)
- Chemistry Minor (p. 198)
- Civic Engagement Minor (p. 412)
- Communication Minor (p. 325)
- Communication Education Minor (p. 320)
- Communication Sciences and Disorders Minor (p. 207)
- Composition and Music Technology Minor (p. 385)
- Computer Science Minor (p. 223)

- Criminal Justice Minor (p. 334)
- Data Science Minor (p. 224)
- Disabilities Studies Minor (p. 207)
- Economics Minor (p. 343)
- Education Studies Minor (p. 124)
- English Minor (p. 359)
- Environmental Science Minor (p. 231)
- Environmental and Sustainability Studies Minor (p. 133)
- Ethnic Studies Minor (p. 135)
- Financial Mathematics Minor
- Forensic Science Minor (p. 96)
- Geography Minor (p. 244)
- Geospatial Information Science Minor (p. 245)
- Global Studies Minor (p. 139)
- History Minor (p. 382)
- Human Development Minor (p. 421)
- Human Rights and Social Justice Minor (p. 153)
- Journalism Minor (p. 99)
- Latin American and Latinx Studies Minor (p. 475)
- Literature Minor (p. 360)
- Mathematics Minor (p. 270)
- Middle School Education Minor (p. 128)
- Middle School Mathematics Minor (p. 270)
- Music Minor (p. 384)
- Narrative Studies of Health and Body Minor (p. 361)
- Normal and Disordered Speech, Language and Hearing Minor (p. 208)
- Philosophy Minor (p. 402)
- Physics Minor (p. 293)
- Political Science Minor (p. 413)
- Pre-Law Minor (p. 414)
- Psychobiology Minor (p. 422)
- Psychology Minor (p. 426)
- Public Health Minor (p. 257)
- Public History Minor (p. 382)
- Secondary Education Minor (p. 130)
- Social Work and Social Policy Minor (p. 444)
- Sociology Minor (p. 434)
- Spanish Minor (p. 489)
- Spanish Minor for Health Professionals (p. 489)
- Theatre Minor (p. 464)
- Urban Studies Minor (p. 447)
- Women's, Gender, and Sexuality Studies Minor (p. 157)
- Writing Minor (p. 361)

Requirements for the Liberal Studies major

In addition to meeting the 40-credit Liberal Arts and Sciences Curriculum (LASC) (p. 37) requirements for all undergraduates, Liberal Studies majors complete a minimum of 39 credits from two areas of study.

The first area (18-27 credits) must be completed in an established minor at Worcester State University.

The second area (15 or more credits) may be another of the University's established minors, a concentration, or a self-designed cluster of classes. A maximum of 18 credits may be transferred in to this second area of the major.

At least 9 credits in the Liberal Studies student's two areas must be at the 300-level or above. The program of study plan must reflect that at least 51

percent of the major credits are taken at Worcester State University. To receive a baccalaureate degree from Worcester State University, a student must complete 30 of the last 40 credits at Worcester State University.

In addition, all Liberal Studies students must take:

Code	Title	Credits
LS-190	St: Introduction to Liberal Studies	3-4
LS-490	Capstone/Senior Research in Liberal Studies ¹	3
Two optional courses are designed to allow for flexibility in the major and to provide a deeper understanding of an interdisciplinary education:		
LS-290	St: Intermediate Liberal Studies	3-4
LS-390	St: Advanced Liberal Studies	3-4

¹ Students who have completed 30 credits between areas one and two of their program of study may enroll in the capstone.

Each Liberal Studies major is required to maintain an e-portfolio of work produced in the student's various courses, beginning in LS-190 and culminating in LS-490.

Evening students: Students wishing to declare a Liberal Studies major may, depending on the chosen areas of study, complete the required courses in the evening or during the summer.

Honors program: Liberal Studies majors with a 3.3 GPA or higher who wish to graduate with honors may add a 3-credit research project, creative work/portfolio, or thesis to the individualized plan of study.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

For more information about Liberal Studies, including to be assigned an Advisor, please contact the Chair of the Interdisciplinary Studies Department, Dr. Aldo Garcia Guevara at aguevara@worcester.edu, or the Academic Success Center.

LS-190 St: Introduction to Liberal Studies

A special topics course that introduces students to interdisciplinary scholarship and learning as well as student-initiated/directed learning. Every year. 3-4 Credits

LS-290 St: Intermediate Liberal Studies

This course focuses on a particular area of study that requires students to show mastery of the topic and a critical understanding of interdisciplinary learning and research methods. 3-4 Credits

LS-390 St: Advanced Liberal Studies

This course is organized around a particular subject area or research methodology problem. Students engage in joint or individual scholarship related to the course topic. 3-4 Credits

LS-401 Liberal Studies Honors Thesis

The honors thesis represents an advanced research project culminating in a written liberal arts thesis that extends a student's Liberal Studies course of study. 3 Credits

LS-402 Liberal Studies Honors Research

The honors scientific or social scientific research project includes a written paper reporting on the project's results and extends to an advanced level a student's Liberal Studies course of study. 3 Credits

LS-403 Liberal Studies Creative Honors Project/Portfolio

The honors creative work/portfolio extends to an advanced level a student's Liberal Studies course of study in the areas of the visual arts, theater, music, dance, literature, filmmaking, or another area of creative expression. 3 Credits

LS-408 Directed Study: Liberal Studies

Fall and Spring. 1-3 Credits

LS-480 Liberal Studies Internship

Prerequisites: LS-190 Student must be a declared Liberal Studies major.

This is an internship in Liberal Studies. It is appropriate for an internship experience that is part of a student's Liberal Studies course of study but that does not fit in an existing discipline with an internship course at WSU.

Other or on demand. 1-6 Credits

LS-490 Capstone/Senior Research in Liberal Studies

LASC Categories: CAP, WAC

Prerequisites: LS-190 and at least 30 credits toward the Liberal Studies major.

This course provides an opportunity for students to compile evidence and reflect on the courses and independent work comprising their Liberal Studies major. Students will be expected to develop a cohesive narrative of their course of study.

3 Credits

Women's, Gender, and Sexuality Studies Minor

The Women's, Gender, and Sexualities Studies (WGSS) program introduces an interdisciplinary, intersectional, and transnational understanding of gendered experiences. It examines how gender is locally and globally constituted at the intersection of race, class, sexuality, ethnicity, nationality, religion, (dis)ability, and other forms of differences.

Wherever issues of gender and sexuality are germane to a discipline, Women's, Gender, and Sexuality Studies can be found, bringing new models of understanding to all areas of study, and thus incorporates a diverse range of courses across the university. The WGSS Minor bridges the gap between theory and activism by connecting historical and contemporary feminist theories with local, regional, and transnational feminist activism. It trains students for advanced graduate studies as well as social-justice oriented non-profit, government, and international professions.

Code	Title	Credits
Requirements for a Minor in Women's, Gender, and Sexuality Studies		(18 credits)
WO-100	Introduction to Women's, Gender, and Sexuality Studies	3

A minimum of 15 additional credits.

15

At least one elective course must be at the 300 level or higher.

A maximum of two elective courses can come from the student's major. (If the WGSS minor is part of a Liberal Studies major, the maximum does not apply.)

A maximum of three elective courses can come from any single discipline.

Total Credits

18

The WGSS Minor provides recursive opportunities for students to encounter, develop, and master (a) the core knowledge of these interdisciplinary fields, (b) the practices needed to comprehend and communicate this knowledge to diverse audiences, and (c) the dispositions, habits of mind, and practices essential to advancing WGSS's liberatory values and aspirations. Students who minor in WGSS will

1. Compare, critique and challenge the formation of categories of gender, gender identity, and sexuality as they function in social, economic, cultural, and/or political contexts; and as they intersect with other categories of difference such as race, ethnicity, class, nationality, and ability.
2. Research, explain, and evaluate the historical development of feminist and queer theories, scholarship, and creative expression; engage in critical debates about those theories, scholarship, and creative expression; and apply feminist and queer critical perspectives to analyze meaningful questions across disciplines.
3. Learn and practice how to use intersectional gender- and sexuality-based frames of analysis as tools for academic research, creative production, collaborative work, and social change. WGSS courses substantively address at least one of the above program goals.

As an interdisciplinary Minor, Women's, Gender, and Sexuality Studies (WGSS) draws its core faculty from multiple disciplines across campus. Each faculty member's information can be found at the respective department for each of the courses.

For more information about Women's, Gender, and Sexuality Studies, including to be assigned a WGSS Advisor, please contact the Chair of the Interdisciplinary Studies Department, Dr. Aldo Garcia Guevara at aguevara@worchester.edu, or Dr. Nafisa Tanjeem at ntanjeem@worchester.edu for more information about the program.

AR-225 Art Since Mid-20th Century**LASC Categories:** CA, GP, WAC, DAC

Explores how artists have challenged the traditional definitions of the art object and the expanded materials, media and concepts employed by artists since 1950 to the present era.

Fall only and every year. 3 Credits

CM-213 Gender and the Media**LASC Categories:** HBS, TLC, DAC, WAC, DIV**Prerequisites:** CM-100 and EN-102

This course will explore how difference is socially constructed along gender lines and will explore the intersections of gender, identity, power and media representation.

Fall and Spring and every 2-3 years. 3 Credits

CM-350 Intercultural Communication**Prerequisites:** CM-100

Introductory communication theory and practice across cultural groups defined by race, ethnicity, gender, religion, age, nationality, politics and economics.

3 Credits

ED-330 Elementary Social Studies and Multiculturalism

Goals, curriculum, skills, issues, teaching strategies in educating diverse populations in a global context.

10 hours of fieldwork. Prerequisite: Admitted into Stage 2

Fall and Spring and every year. 3 Credits

EN-132 World Literature**LASC Categories:** GP, DAC, TLC, DIV

The course examines the major authors in world literature from ancient to modern times; however, in a given semester the course may focus on one particular time period. All areas of the world are covered, including such areas as Africa, Europe, the Americas. An emphasis will be put on cultural, sociological, historical, and philosophical influences on the literature. Such authors may be included as Chinua Achebe, Pablo Neruda, Bei Dao, Salman Rushdie, Nadine Gordimer, Edwidge Danticat, and Bessie Head.

Fall and Spring and every year. 3 Credits

EN-167 Literature and Human Rights**LASC Categories:** GP, DAC, DIV

The course examines writing about human rights, including memoirs and novels, and examines issues of social justice. Violations of human rights that may be addressed include genocide, political repression, and torture; while social justice issues that may be examined include women's rights, justice and punishment, disability rights and methods of protesting for human rights. The course will examine definitions of human rights as well as reparations and living with the aftermath of human rights violations.

Fall and Spring and every 2-3 years. 3 Credits

EN-172 Women and Literature**LASC Categories:** WAC, TLC, GP

Explores basic issues and problems in literature by and about women.

Every year. 3 Credits

EN-174 Women Poets**LASC Categories:** TLC, WAC, GP**Prerequisites:** Fulfillment of Writing II

A close reading and analysis of poetry written by women from a historical as well as a contemporary feminist perspective.

Other or on demand. 3 Credits

EN-348 Postcolonial Women's Writing**LASC Categories:** GP**Prerequisites:** EN-102

Writing by women from colonized and formerly colonized countries on local and global issues shaping women's lives and creative expression.

Every 2-3 years. 3 Credits

HC-234 Multiculturalism and Health

Examination of diverse ethnic/racial and cultural beliefs and practices affecting health and illness

Spring only and every year. 3 Credits

HE-210 Women's Health Issues

Overview of women's health issues: women in the health marketplace, a woman's right to control her body, media images and illness, eating disorders, therapy, alcohol, aging and the women's health movement.

Fall and Spring and every year. 3 Credits

HE-230 Human Sexuality and Sex Education**Prerequisites:** HE-100

Focus on the need for and understanding of sex education, along with the process of implementing sexuality education, with emphasis upon teacher preparation.

Every year. 3 Credits

HI-216 Labor, Capital, and Power in United States History**LASC Categories:** HBS, USW

The history of the United States economic development. Topics to be addressed include: slavery; consumerism and market economies; industrialization and de-industrialization; gendered and racialized divisions of labor; the global movement of capital, goods, and workers; union organizing; and the role of government and the law in shaping the economy. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-217 US Social History**LASC Categories:** TLC, USW, WAC, DIV, DAC

Considers topics and approaches in the field of social history in the United States. Counts for Europe/US in History major. [Applicable to Women's, Gender, and Sexuality Studies Minor.]

Every 2-3 years. 3 Credits

HI-274 The History of Gender and Sexuality in America**LASC Categories:** TLC, USW, DIV, DAC

The history of sexuality and gender in America. Includes investigations of lesbian and gay histories; transgender histories; attempts to regulate and define sexuality; practices of birth control; the intersections of race, class, and gender; the social construction of gender; and the challenges of doing hidden histories. Counts for Europe/US in the History major. [Applicable to the Women's, Gender, and Sexuality Studies Minor.]

Every 2-3 years. 3 Credits

HI-333 Women in Latin America**Prerequisites:** HI-213 HI-214 HI-226 or HI-247

Examines the roles of women in diverse societies including Mexico, Brazil and Caribbean nations. Emphasis on the modern period. Counts for Africa/Latin America in the History major.

Every 2-3 years. 3 Credits

HI-353 The Age of Reform: US History, 1877-1920**Prerequisites:** one History course.

An analysis of the transformation of America, including reform response to the Gilded Age's industrialization, urbanization and immigration patterns. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

MU-231 Women in Music**LASC Categories:** CA, TLC

A survey of the role of women in music, particularly the great composers from Medieval to Contemporary times.

3 Credits

NU-340 Nursing Science II: Pediatrics (Track I)**LASC Categories:** NLL, DIV, DAC**Prerequisites:** NU-210 NU-216 NU-309 NU-310 NU-430 Take EN-250 EN-202 or EN-102;**Prerequisites or Corequisite:** NU-315

Concepts of wellness, disease, and health behavior are examined as the nursing process is operationalized in the care of acutely ill pediatric patients. Lecture and an off-site clinical experience are included in this course.

Spring only and every year. 4.5 Credits

PH-152 Philosophy of Love and Sex**LASC Categories:** HBS, ICW, DAC

Investigates the concepts of love and sex and structural and discursive factors contributing to our daily experiences of these phenomena.

Every year. 3 Credits

PH-178 Africana Philosophy**LASC Categories:** TLC, USW, DAC

Explores the philosophy of the African diaspora in African, African American and Caribbean writings. The course addresses both historical and contemporary material across intersections of race, gender, and class using philosophy, history, and literature.

Every 2-3 years. 3 Credits

PH-240 Political Theory**LASC Categories:** USW, TLC, DIV

Investigates concepts including political power, equality, revolution, liberties, slavery, socialism and patriarchal power, race and gender.

Every year. 3 Credits

PH-241 Genocide and Human Rights**LASC Categories:** USW, GP, DIV

This course treats the ethical, political, and other dimensions of systematic mass violence through case studies and general theoretical analyses.

Every 2-3 years. 3 Credits

PH-250 Global Feminisms**LASC Categories:** TLC, GP

Investigates the theoretical underpinnings of women's movements for equal rights around the globe.

Every 2-3 years. 3 Credits

PH-254 Feminist Theory**LASC Categories:** HBS, USW, DAC, DIV

Feminist Theory: Examines the development of feminist ideas and movements from the 18th century to the present, in the US and, particularly in recent decades, globally. A close analysis of Second Wave, Postmodern, and Black Feminist ideas are studied as a basis for writings and social action that attends to issues of race, class, gender, and sexuality, using intersectional methodologies and critiques to address issues of reproduction and health, labor and economic power, violence, and state power.

Other or on demand and every year. 3 Credits

PS-255 Psychological Foundations of Diversity**Prerequisites:** PS-101 with a C- or above.

Explores the gender, racial/ethnic, multiple-group membership, cultural, social class, religious, disability and sexual orientation facets of diversity.

Other or on demand and every year. 3 Credits

PS-260 Psychology of Human Sexuality**Prerequisites:** PS-101 with a C- or above.

Sexuality as a foundation of personality. The wide range of human sexuality is explored; sexual development, roles, attitudes and behaviors.

Other or on demand and every 2-3 years. 3 Credits

PS-263 Psychology of Women**Prerequisites:** PS-101 with a C- or above.

Women's psychological development throughout the lifespan will be examined, including female development, achievement, stereotyping, stress, violence and psychological disorders.

Other or on demand and every 2-3 years. 3 Credits

SO-285 Race, Class and Gender**LASC Categories:** HBS, DAC

An introduction to dominant-minority group relations through the investigation of the patterns and dynamics of differentiation, inequality and discrimination.

3 Credits

SO-355 Gender and Sexuality**LASC Categories:** HBS, ICW, DAC

This course introduces the sociologist study of gender and sexuality. This course examines how social institutions and cultural norms construct particular gender roles and sexual identities within society.

3 Credits

SP-292 Spanish for Women's Health**LASC Categories:** GP, ICW, DAC

Prerequisites: SP-211 or above, or 3 years of language instruction.

In this course, students will develop communication skills in Spanish using information and vocabulary related to women's health. The content of this course focuses on language used in health professions as well as cultural situations. By familiarizing students with conversational Spanish and medical Spanish, this course will enable students to apply their learning to real-world situations, to assist in communications, and ultimately to break down the barrier between professionals and Spanish-speakers. Finally, the course's focus on cultural competency interrogates intersections between women's health and topics including but not limited to politics, economics, gender, sexuality, race and age.

Spring only and every 2-3 years. 3 Credits

SP-349 Spanish-American Literature**Prerequisites:** SP-321

Representative works from South and Central American authors from the colonial period to the present.

Fall only and every 2-3 years. 3 Credits

UR-103 Introduction to Women's Studies**LASC Categories:** DAC, ICW, HBS

This course uses a variety of academic disciplines to study the situation of women around the world.

Every year. 3 Credits

UR-290 Gender and the City**LASC Categories:** WAC, GP, HBS**Prerequisites:** EN-102

Exploration of the ways in which gender, both male and female, structures responses of individuals to urban life and spaces.

Every 2-3 years. 3 Credits

WO-100 Introduction to Women's, Gender, and Sexuality Studies**LASC Categories:** ICW, DAC, DIV

How do the experiences of women reflect broader structures of power? What is gender? How does sexuality inform the construction of identity and relationships of power? How do gender, gender identity, and sexuality function in intersection with other categories of difference such as race, ethnicity, class, nationality, and ability? How have scholars, authors, and artists made sense of of these questions in their own work? In answering these questions, this course will introduce students to the interdisciplinary academic field of Women's, Gender, and Sexuality Studies.

Fall and Spring and every year. 3 Credits

WO-191 Special Topics in Women's, Gender, and Sexuality Studies

This course provides students an introduction to the field of WGSS through a frame that would not otherwise be offered in WO-100: Introduction to WGSS or PH-152: The Philosophy of Love and Sex. The specific focus of this course will be determined by the instructor, as per their area of expertise. Other or on demand and other or on demand. 3 Credits

WO-201 Special Topics in Women's, Gender, and Sexuality Studies

This course provides students an opportunity for intermediate study in a more specialized area of WGSS. The specific focus of this course will be determined by the instructor, as per their area of expertise.

Other or on demand and other or on demand. 3 Credits

WO-301 Special Topics in Women's, Gender, and Sexuality Studies**Prerequisites:** EN-102. Must have completed a minimum of 12 credits, must have taken at least 1 WGSS course or permission of instructor

This course provides students an opportunity for advanced study in a specialized area of WGSS. The specific focus of this course will be determined by the instructor, as per their area of expertise.

Other or on demand and other or on demand. 3 Credits

WO-401 Special Topics in Women's, Gender, and Sexuality Studies**Prerequisites:** EN-102. Must have taken 39 credits and either WO-100, PH-152, or equivalent course, or permission of instructor.

This course provides students an opportunity for highly advanced study in a specialized area of WGSS. The specific focus of this course will be determined by the instructor, as per their area of expertise.

Other or on demand and other or on demand. 3 Credits

WO-408 Directed Study in Women's, Gender, and Sexuality Studies

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

Other or on demand and other or on demand. 3 Credits

WO-430 Fieldwork in Women's, Gender, and Sexuality Studies**Prerequisites:** EN-102.

Lab and/or field based research on a specific topic under the supervision of a faculty member. May include assisting faculty with ongoing research.

Other or on demand and other or on demand. 1-3 Credits

WO-481 Independent Study in Women's, Gender, And Sexuality Studies**Prerequisites:** EN-102.

An opportunity for further study in a special area of interest under faculty supervision. Topic to be approved by an independent study advisor.

Other or on demand and other or on demand. 1-3 Credits

WO-486 Internship in Women's, Gender, and Sexuality Studies**Prerequisites:** EN-102.

Provides opportunity to students to increase experience through internship with sponsoring community organization, institution, or business under appropriate supervision.

Other or on demand and other or on demand. 1-3

Credits

School of Science, Technology and Health

Dean

Dr. Linda S. Larrivee

Mission Statement

Worcester State University's School of Science, Technology, and Health is dedicated to engaging students in learning so that they may become successful and conscientious citizens of the world. Through teaching, scholarship, and research both on and off campus, students learn theoretical and practical knowledge that enable critical analysis in their areas of study and promote a passion for lifelong learning. Through practicum, internship, fieldwork, and other experiences, students develop leadership skills and find their path forward to careers and/or post graduate education.

Location

Kalyan K. Ghosh Science and Technology Building
First Floor, Room ST-101

Departments

- Biology (p. 164)
- Biotechnology (p. 182)
- Chemistry (p. 190)
- Communication Sciences and Disorders (p. 201)
- Computer Science (p. 214)
- Earth, Environment, and Physics (p. 291)
- Health Sciences (p. 246)
- Mathematics (p. 258)
- Nursing (p. 271)
- Occupational Therapy (p. 286)

Centers

- Aisiku STEM Center
- Center for Interdisciplinary Health Studies and Practice
- Math Center
- Speech-Language-Hearing Center

Biology

Department of Biology

The Biology Department houses both the Biology Major and the Biotechnology Major (p. 182), which is an interdisciplinary major sponsored by the Biology Department and Chemistry Department (p. 190). Within the Biology Department, students may also pursue minors in Ecology (not open to Biology majors) or Cellular & Molecular Biology (not open to Biology or Biotechnology majors). In addition, the Biology Department co-sponsors interdisciplinary minors in Psychobiology together with the Psychology Department (p. 415) and Bioinformatics together with the Computer Science Department (p. 214); both of these minors can be elected by Biology or Biotechnology majors.

The Biology major program provides students with a broad knowledge in the biological sciences through a core curriculum and upper-level courses in specialized areas of study. A hands-on approach for teaching laboratory techniques and field work is emphasized. Throughout the program, students are encouraged to develop effective communication skills and an awareness of the societal and global implications of biology. Students interested in medical, dental, veterinary, or physician assistant school may complete a Biology major with a Pre-Medicine Concentration. The Biology Major also provides a path to meet most of the prerequisites necessary for other programs in the health professions, such as optometry, physical therapy, and pharmacy, and the Accelerated Pharmacy Program with MCPHS can be completed through the Biology major.

Undergraduate biology majors who have demonstrated academic excellence and an interest in biological research may participate in the Honors in Biology program. The Chi Iota Chapter of the national biological honor society, Beta Beta Beta, provides recognition to outstanding students majoring in Biology and Biotechnology.

- Bioinformatics Minor for Biology/Biotechnology Majors (p. 171)
- Bioinformatics Minor for Chemistry Majors (p. 172)
- Bioinformatics Minor for Computer Science Majors (p. 172)

- Bioinformatics Minor for non-Biology, Biotechnology, Chemistry, or Computer Science Majors (p. 173)
- Biology Major (p. 174)
- Biology Major and Prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Sciences (p. 178)
- Cellular & Molecular Biology Minor (p. 176)
- Ecology Minor (p. 177)
- Honors Program in Biology (p. 177)
- Major in Biology, Concentration in Pre-Medicine (p. 294)
- Psychobiology Minor (p. 179)

Faculty

Latifeh Amini-Kormi, Professor (1994), B.S., Tehran University; Ph.D., University of Pennsylvania

Daron C. Barnard, Professor (2006), B.A., Middlebury College; Ph.D., Vanderbilt University

Maura Collins, Professor (2001), B.S., Worcester Polytechnic Institute; M.S., Ph.D. Rutgers University

Stephen Gee, Visiting Assistant Professor (2022), B.S., University of South Carolina; M.S., Medical University of South Carolina; Ph.D., University of North Carolina at Chapel Hill

Roger S. Greenwell, Co-Coordinator of the Biotechnology Program, Associate Professor (2014), B.S., Western Kentucky University; Ph.D., University of Wisconsin-Madison

Aleel K. Grennan, Associate Professor (2017), B.S., University of Massachusetts; M.S., Ph.D., University of Illinois

Bradley Harris, Visiting Assistant Professor (2023), B.S., University of California, Berkeley; M.S., Kaplan University; M.D., Tufts University School of Medicine

Jennifer Hood-DeGrenier, Department Chair, Professor (2012), B.A., Williams College; Ph.D., Harvard University

Yan Hu, Associate Professor (2018), B.S., Qufu Normal University ; Ph.D., Wuhan University

Jaime G. Mancilla, Assistant Professor (2023), B.S., University of Maryland; Ph.D., University of Chicago

Steven J. Oliver, Professor (2003), B.A., University of Montana; Ph.D., Boston University

Luis Rosado, Assistant Professor (2020), B.S., Boise State University; M.S., Ph.D., University of Massachusetts Amherst

Randall Tracy, Professor (2003), B.S., M.S., University of Connecticut; Ph.D., Arizona State University

Sebastian Velez, Professor (2012), B.S., University of Puerto Rico; M.S., University of Notre Dame; Ph.D., Harvard University

Courses

PB-200 Introduction to Psychobiology

LASC Categories: HBS, NSP, LAB

Prerequisites: PS-101 and BI-116 or BI-140.

Introductory course in Psychobiology that covers topics including neurobiology, evolution, sensory/motor systems, learning and memory, and social behavior.

Fall only and every year. 4 Credits

PB-400 Capstone in Psychobiology

LASC Categories: CAP

Seminar covering selected topics in Psychobiology including primary source material readings, laboratory activities, discussion, oral presentation and written papers.

Spring only and every year. 2 Credits

Biology Courses (Undergraduate)

See LASC section for information on the Liberal Arts and Sciences Curriculum (LASC).

BI-101 Concepts of Biology

LASC Categories: LAB, NSP

Unifying principles in biology; diversity and evolution of plant and animal life at cellular and organismic levels. Three lecture hours and a two-hour laboratory per week. Not open to Biology Majors.

Fall and Spring and every year. 4 Credits

BI-103 The Human Animal

LASC Categories: NSP

A general survey of the structure and function of human body systems from the biochemical and cellular basis of life to evolution of the human body and the organization of organs and organ systems, including the biological basis of selected disease states. Not open to Biology Majors.

Every year. 3 Credits

BI-104 The Human Animal Laboratory

LASC Categories: NSP, LAB

Prerequisites or Corequisite: BI-103

This course is the lab to accompany The Human Animal, a general survey of the structure and function of human body systems from the biochemical and cellular basis of life to evolution of the human body and the organization of organs and organ systems, including the biological basis of selected disease states.

Every year. 1 Credit

BI-109 Writing in the Natural Sciences

LASC Categories: WR2, NSP

Prerequisites: EN-101.

Builds upon the writing skills gained in EN-101 to introduce students to the various genres of writing in the natural sciences. Students will develop literature research skills, learn how to craft and explain an experimental proposal, and practice written, graphical, and oral presentation of data and scientific concepts to academic and lay audiences.

Spring only and every year. 3 Credits

BI-111 Social Biology

LASC Categories: HBS, NSP

This course considers the interface between current biological technologies and the social, cultural, legal, and moral postures of modern man.

Every 2-3 years. 3 Credits

BI-112 Diseases and Mankind

LASC Categories: GP, NSP

Diseases of ancient and modern man; the impact on history, religion, science, art and philosophy.

Every 2-3 years. 3 Credits

BI-114 Plants and Human Affairs

LASC Categories: GP, NSP

Man's dependence upon plants and their influence on civilization and its art, religions, literature, folklore, medicine, and human behavior.

Every 2-3 years. 3 Credits

BI-116 Animal Biology**LASC Categories:** LAB, NSP

Survey of animal kingdom with emphasis on animal diversity, morphology, life histories, ecological evolutionary relationships. No credit for Biology major. Three lecture hours and two laboratory hours per week. Not open to Biology majors.

Every year. 4 Credits

BI-117 Humans and the Environment**LASC Categories:** LAB, NSP

A survey of Anthropologic environmental impacts and the underlying mechanisms involved. Three lecture hours and three laboratory hours per week. Not open to Biology or Environmental Science majors.

Every 2-3 years. 4 Credits

BI-118 Dinosaurs**LASC Categories:** NSP, LAB

A survey of dinosaurs; their evolution, anatomy, diversity and impact on evolutionary biology. discussions of the changing views of dinosaurs in the media and public consciousness. Three hours lecture and two hours lab.

Every 2-3 years. 4 Credits

BI-125 Women in Science**LASC Categories:** HBS, NSP, DAC

Examines issues related to gender in science and technology. Includes historical and recent contributions to science made by women.

Every 2-3 years. 3 Credits

BI-130 Field Biology**LASC Categories:** GP, NSP, LAB

Study-Abroad Field Biology course for non-Biology majors. Course explores the intersection of human activities and environmental preservation, with a basic introduction to topics in organismal biology, biodiversity and biogeography.

Spring only and every year. 4 Credits

BI-140 Introduction to Organismal Biology**LASC Categories:** LAB, NSP

Evolution, ecology, anatomy, physiology and diversity of organisms. Three hours lecture and three hours lab each week. Intended for STEM Majors.

Fall and Spring and every year. 4 Credits

BI-141 Intro to Cellular and Molecular Biology**LASC Categories:** NSP, LAB

Prerequisites: CH-120 with a C- or above. CH-121 is a recommended course that can be completed concurrently or previously.

Cellular and molecular concepts in biology. Emphasis on the structures and functions of macromolecules and organelles. Introduction to cellular transport, signaling, metabolism, cell division, and gene expression. Three lecture hours and three laboratory hours per week. Intended for STEM Majors/Minors.

Fall and Spring and every year. 4 Credits

BI-161 Human Anatomy and Physiology I**LASC Categories:** NLL

Considers human cellular biology, tissues, integumentary, nervous, endocrine, skeletal, muscular systems. Three hours of lecture and a three-hour laboratory per week.

Fall and Spring and every year. 4 Credits

BI-162 Human Anatomy and Physiology II**LASC Categories:** LAB, NSP**Prerequisites:** BI-161.

Considers digestive, respiratory, cardiovascular, urinary, immune and lymphatic systems; water and electrolyte balance, reproduction and embryology. Three lecture hours and three laboratory hours per week.

Fall and Spring and every year. 4 Credits

BI-193 First Year Seminar Biology**LASC Categories:** FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

Every year. 3 Credits

BI-199 Selected Topics: Biological Sciences

Each topic is a lecture and/or a laboratory course in a selected area of the biological sciences presented by a departmental instructor. Topics will be announced in advance.

Every 2-3 years. 1-4 Credits

BI-200 Human Biology**LASC Categories:** NLL

Prerequisites: BI-140 and BI-141 or PB-200 with a grade of C- or above

A systemic approach to the study of human biology. The course will emphasize structure/function relationships and homeostatic mechanisms. Three hour lecture and three hour lab.

Fall and Spring and every year. 4 Credits

BI-202 Principles of Ecology**LASC Categories:** NLL, WAC**Prerequisites:** BI-140, EN-102, MA-150 or MA-180, or MA-190, or MA-200 with a grade of C- or above.

Basic ecological theory relating to organism-environment interactions; population dynamics, and ecosystems. Three hours of lecture and a three-hour laboratory per week.

Fall and Spring and every year. 4 Credits

BI-203 Genetics**LASC Categories:** NLL, QAC**Prerequisites:** BI-141 with a grade of C- or above.

Must have a minimum math placement exam score of 3.

Introductory genetics with examples of human inheritance and recent developments in genetic engineering. Three hours of lecture and a three-hour laboratory per week.

Fall and Spring and every year. 4 Credits

BI-204 Microbiology**LASC Categories:** NLL**Prerequisites:** BI-141 and CH-121 with a grade of C- or above.

The cytology, metabolism, and genetics of bacteria. Immune responses and control of microorganisms are stressed. Three lectures and a three-hour laboratory per week. (Prerequisites: Introductory chemistry and biology courses)

Fall and Spring and every year. 4 Credits

BI-205 Research Techniques and Experimental Design**Prerequisites:** BI-141, and MA-150.

Investigations in experimental design and research methodologies required for the Honors program in Biology (or Biotechnology).

Spring only and every year. 2 Credits

BI-206 Medical Microbiology**LASC Categories:** NSP, LAB**Prerequisites:** BI-161 and either CH-112 or CH-120 and CH-121.

A study of growth and control of pathogenic microorganisms with emphasis on infectious disease transmission, immune responses, prevention and treatment. Three lecture and three laboratory hours per week.

Fall and Spring and every year. 4 Credits

BI-207 Public Health Microbiology**Prerequisites:** BI-161 and CH-112.

Growth and control of pathogenic microorganisms with emphasis on infectious disease transmission, immune responses, prevention and treatment for Public Health Majors.

Every year. 3 Credits

BI-211 Pre-Medical Seminar: Preparing for a Career in MedicineA seminar that will introduce pre-medical, pre-dental, and pre-veterinary students to the requirements for admission to graduate programs in these areas. Students will develop personal plans for working toward these requirements, will interact with a variety of healthcare professionals to gain knowledge about different careers and determine which is the best fit for them, and will discuss current ethical and policy issues related to healthcare. Open only to Biology, Biotechnology, and Chemistry students with a declared Pre-Medical Concentration who have an overall GPA of at least 3.2 and a Biology/Chemistry/Math/Physics GPA of at least 3.2.
Fall only and every year. 1 Credit**BI-212 Concepts of Microbiology****Prerequisites:** BI-206: Medical Microbiology (with a B- or higher) CH-121: General Chemistry II Only for students who transfer into the Biology or Biotechnology major and have taken BI-206: Medical Microbiology prior to switching their major. This course introduces students to fundamental concepts in microbiology that are not emphasized in a medically-focused microbiology course, including the myriad positive and negative ways that microorganisms affect our lives and impact the world around us, microbial physiology and genetics, microbial contributions to biotechnology, microbial diversity, and evolutionary relationships and genetic exchange between microbes.
Other or on demand and other or on demand. 2 Credits**BI-215 Neuroscience****LASC Categories:** NLL**Prerequisites:** BI-161 and BI-162

Structural and functional organization of the human nervous system with a focus on clinical applications. Three lecture hours and three laboratory hours per week.

Fall only and every year. 4 Credits

BI-240 Research Experience

Lab and/or field based research on a specific research topic under the supervision of a faculty member. Permission of instructor required.

Fall and Spring. 1-6 Credits

BI-271 Basic Kinesiology

LASC Categories: NSP

Prerequisites: BI-161.

Structure and function of human skeletal muscles in relation to motion and general body mechanics under normal and stress conditions.

Spring only and every year. 3 Credits

BI-301 Topics in Invertebrate Zoology

LASC Categories: NLL

Prerequisites: BI-140 and BI-202 with a grade of C- or above.

Considers anatomy, taxonomy (including selected articles of the international code of zoological nomenclature), natural history, and evolutionary relationships of selected invertebrate phyla. Three hours of lecture and a three-hour laboratory per week. Every 2-3 years. 4 Credits

BI-303 Parasitology

LASC Categories: NLL

Prerequisites: BI-140 and either BI-200 or BI-161 and BI-162 with a grade of C- or above.

Basic concepts in symbiology, life cycles, epidemiology, disease development, control and prevention of selected human parasites. Three hours of lecture and a three-hour laboratory per week.

Every 2-3 years. 4 Credits

BI-304 Comparative Vertebrate Anatomy

LASC Categories: NLL

Prerequisites: BI-140 and either BI-200 or BI-161 and BI-162 with a grade of C- or above.

Considers prochordate and chordate taxonomy and phylogeny; systematic morphological comparison of representative chordates to establish homology, analogy, and evolution. Three lecture hours and a three-hour laboratory per week.

Every 2-3 years. 4 Credits

BI-306 Developmental Biology

LASC Categories: NLL

Prerequisites: BI-141 and BI-203 with a grade of C- or above.

Study of developmental patterns, cellular differentiation and cell interactions resulting in cellular diversity, organization, and perpetuation of the germ line. Three lecture hours and three laboratory hours per week.

Every 2-3 years. 4 Credits

BI-307 Human Movement and Perception

Prerequisites: either BI-161 and BI-162, or BI-200 or BI-271.

This course is an introduction to the ecological perspective of human movement (action) and perception in which we will explore the philosophical roots for our contemporary views of human perception, the evolution/development of our sensory/perceptive mechanisms and compare-contrast humans with other perceptive organisms in the Animal Kingdom.

Every 2-3 years. 4 Credits

BI-315 Comparative Neurobiology

LASC Categories: NLL

Prerequisites: BI-161 and BI-162 or BI-200 or PB-200 with a grade of C- or above.

Structural and functional organization of the central and peripheral nervous system. Principles of normal and abnormal transmission, integration, and storage of information in neuronal pathways. Three hours of lecture and a three-hour laboratory per week.

Every 2-3 years. 4 Credits

BI-321 Comparative Physiology

LASC Categories: NLL

Prerequisites: BI-140, BI-141, and either BI-200 or BI-161 and BI-162 with a grade of C- or above.

A comparison of select physiological functions of different animal taxa with mammals used as a reference. Three lecture hours and a three-hour laboratory per week.

Every 2-3 years. 4 Credits

BI-324 Endocrinology

LASC Categories: NLL

Prerequisites: BI-140, BI-141, and BI-200 or BI-161/162 with a grade of C- or above.

The role of endocrine glands in the normal integration of animals; mechanisms of hormone action, function, and interrelationships. Three hours of lecture and a three-hour laboratory per week.

Every 2-3 years. 4 Credits

BI-331 Marine Biology**LASC Categories:** NLL**Prerequisites:** BI-140 and BI-202 with a grade of C- or above.

Considers the marine environment, its flora and fauna, distribution and production of plankton-nekton-benthos, zoogeography, bioeconomic factors and potential. Three lecture hours and a three-hour laboratory per week.

Every 2-3 years. 4 Credits

BI-333 Topics in Vertebrate Zoology**LASC Categories:** NLL**Prerequisites:** BI-140 and BI-202 with a grade of C- or above.

Life histories, adaptations, distribution, systematics, and economic importance of selected vertebrates taxa. Each semester will focus on a particular taxon. Three hours of lecture and a three-hour laboratory per week.

Every 2-3 years. 4 Credits

BI-334 Wildlife Biology**Prerequisites:** BI-140 and BI-202 with a grade of C- or above.

Theory and Practice of wildlife management. Considers procedures for collection and analysis of field and laboratory data on vertebrate game populations useful to wildlife biologists. Three hours of lecture and a three-hour laboratory per week.

Every 2-3 years. 4 Credits

BI-340 Plant Sciences**LASC Categories:** NLL**Prerequisites:** BI-140 and BI-202 with a grade of C- or above.

Morphology, anatomy, physiology of flowering plants with studies on life cycles, ecological relationships, biochemical processes and evolution of plant diversity. Three lecture hours and three laboratory hours per week.

Every 2-3 years. 4 Credits

BI-342 Plant Physiology**Prerequisites:** BI-141 and either BI-204, or BI-206 and BI-212, with grades of C- or higher.

Fundamentals of plant processes: nutrition, metabolism, growth, development and responses. Three hours of lecture and a three-hour laboratory per week.

Every 2-3 years. 4 Credits

BI-354 Systematics and Evolution**LASC Categories:** LAB, NLL**Prerequisites:** BI-140 and BI-203.

Introduction to the use of morphological and molecular data to trace the evolutionary history of living things. Historical overview of the fields of taxonomy and systematics. Evolution of genes and genomes. Algorithmic and criteria-based methods for the development of phylogenetic hypotheses. Course includes lectures and projects based on computer applications. Lecture and computer laboratory.

Every 2-3 years. 4 Credits

BI-360 Animal Behavior**LASC Categories:** NLL**Prerequisites:** BI-202 or PB-200 with a grade of C- or above.

Survey of ethology and behavioral ecology from an historical and evolutionary perspective. Laboratory involves observation, recording and analysis of animal behavior. Three lecture hours and three laboratory hours per week.

Every 2-3 years. 4 Credits

BI-370 Darwinian Revolution

Philosophical, religious, and social impacts of Darwin's theory of evolution by the process of natural selection. An interdisciplinary perspective. [Superseded by BI120.]

Other or on demand. 3 Credits

BI-371 Advanced Topics in Cell and Molecular Biology**LASC Categories:** NLL**Prerequisites:** BI-141 and BI-203 or BI/CH-410 with a grade of C- or above.

Examination of current topics in cell and molecular biology, including mechanisms that regulate gene expression and protein function, organization of cellular components into functional pathways, and modern experimental techniques.

Every 2-3 years. 4 Credits

BI-372 Immunology**LASC Categories:** NLL**Prerequisites:** BI-141 and either BI-204, or BI-206 and BI-212, with grades of C- or higher.

Introduction to cellular defense mechanisms in health and disease; antigen-antibody reactions, human immune responses. Three lecture hours and three laboratory hours per week.

Every 2-3 years. 4 Credits

BI-375 Virology**LASC Categories:** NLL**Prerequisites:** BI-141 and either BI-204, or BI-206 and BI-212, with grades of C- or higher.

Physical structure and replication schemes of viruses; role of viruses in human disease, research and commercial applications. Three lecture hours and three laboratory hours per week.

Every 2-3 years. 4 Credits

BI-380 Biodiversity and Conservation Biology**LASC Categories:** LAB, NLL**Prerequisites:** BI-140, BI-141, BI-202, and BI-203 with a grade of C- or above.

A theoretical and quantitative approach to species, genetic, ecosystem and community diversity in the context of modern conservation biology principles. Three lecture hours and three laboratory hours per week.

Every 2-3 years. 4 Credits

BI-398 Cancer Biology**Prerequisites:** BI-141 and BI-203 with a grade of C- or above.

Cellular and molecular basis of cancer, including cancer genetics, biochemical pathways related to cancer, and modern treatment approaches.

Every 2-3 years. 4 Credits

BI-401 Selected Topics: Biological Sciences

Each topic is a lecture and/or laboratory course in a selected area of the biological sciences presented by a departmental instructor and/or guest lecturers when appropriate. Topic to be announced in advance.

Every 2-3 years. 1-4 Credits

BI-402 Independent Study: Biology

Advanced semi-independent study (by qualified upper-level biology majors) of an approved biological problem. Faculty supervision required. (May not be used for major requirements.) Consent of department and instructor. Junior/Senior standing required.

Fall and Spring. 1-6 Credits

BI-403 Internship: Biology

Intended for qualified, upper-level biology majors. Faculty advisor required. (May not be used for major requirements.) Consent of department. Junior/Senior standing required.

Fall and Spring. 1-6 Credits

BI-404 Biology Seminar**LASC Categories:** CAP**Prerequisites:** BI-202, BI-203, BI-204, BI-200 or BI-161 BI-162 with a grade of C- or above. Senior Standing also required

Preparation and presentation of biological topics, chosen with the advice and consent of a faculty advisor.

Fall and Spring and every year. 2 Credits

BI-408 Directed Study: Biology

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

Other or on demand. 1-3 Credits

BI-410 Biochemistry I**LASC Categories:** NLL**Prerequisites:** CH 201 with a grade of C- or above.

The chemistry of proteins, nucleic acids, carbohydrates, and lipids; enzymes, biological oxidations; and correlations in intermediary metabolism. Three hours of lecture and a three-hour laboratory per week. [Cross listed as CH410.]

Fall and Spring and every year. 4 Credits

BI-430 Field Biology for Majors**Prerequisites:** BI-202 with a minimum grade of C-.

Study-Abroad Field Biology course for Biology majors. Course explores the intersection of human activities and environmental preservation, with an in-depth discussion of topics in organismal biology, ecology, biodiversity and biogeography.

Spring only and every year. 4 Credits

BI-440 Advanced Research Experience for Undergraduates**Prerequisites:** BI-205 along with 3 Biology courses at WSU. Consent of instructor required. Junior/Senior standing required.

Advanced lab and/or field based research on a specific research topic under the supervision of a faculty member.

Fall and Spring. 1-6 Credits

Program Learning Outcomes

- Demonstrate a working knowledge of the following core content areas:
 - Cell and molecular biology;
 - Characteristics of organisms, including human biology;

- Principles of heredity and the evolution of life;
- Interactions among species within ecosystems.
- Demonstrate competence in processes and practices used by professionals in the field of biology, including:
 - Proper use of tools, equipment, materials, and safety procedures to execute laboratory and other experimental techniques;
 - Application of analytical skills to gather, organize, interpret and evaluate scientific data;
 - Application of critical thinking skills to design appropriate experiments to answer scientific questions and solve problems.
- Be able to effectively communicate biological observations and concepts to both lay and scientific audiences through written scientific genres (e.g. lab report/research report, literature review, poster presentation) and oral presentations.
- Be able to discuss the historical and contemporary social implications of biology, including:
 - The effects of human activities on the environment;
 - Ethical issues that influence decisions related to biology.

Bioinformatics Minor for Biology/Biotechnology Majors

The purpose of this interdisciplinary minor is to prepare students to enter the computer-intensive fields of bioinformatics, computational biology, computational chemistry, and molecular modeling, including genomics and proteomics. With the ever-increasing number of fully sequenced genomes, including the human genome, biological databases have grown at such a rate that storing, organizing, indexing, and ultimately mining the data have become key to answering biological questions. The methodologies of genomics, transcriptomics, and proteomics analyze genome structures, patterns of gene expression, and protein structure and function, respectively. Information obtained by computational biology and computational chemistry is used in the design of new drugs to treat a variety of diseases.

Major drug and biotechnology companies are eager to hire people trained in the combination of biology and computer science skills that this minor provides.

Bioinformatics Minor for Biology/Biotechnology Majors Program Requirements

Code	Title	Credits
CS-135	Programming for Non-CS Majors	3
BT-378	Bioinformatics (can double count as an upper-level elective or the major.)	4
<i>Research/Internship in Bioinformatics</i>		2-3
BI-240	Research Experience	
BI-403	Internship: Biology	
BI-440	Advanced Research Experience for Undergraduates	
CS-498	Internship: Computer Science	
CS-499	Independent Study: Computer Science	
CH-480	Internship: Chemistry	
<i>Electives - take 3 courses (only one BI/BT course which will not double count in the major)</i>		9-10
CS-131	Data Visualization and Statistical Analysis	
CS-234	Data Mining for Non-Cs Majors	
BT-350	Genomics	
BI-354	Systematics and Evolution	
BI-401	Selected Topics: Biological Sciences (as approved by the Bioinformatics advisory board)	
MA-260	Linear Algebra	
MA-302	Probability and Statistics (can substitute for MA-150 as ancillary requirement for the major)	
MA-303	Mathematical Modeling	
PH-134	Computing Ethics	
Total Credits		18-20

- Understand the intersectionality of biology, computer science, and mathematics in the context of the field

- Utilize existing tools to evaluate bioinformatics data, discover patterns, and draw conclusions
- Communicate bioinformatics information in both written and oral forms
- Develop laboratory skills that are used in the bioinformatics field

Bioinformatics Minor for Chemistry Majors

The purpose of this interdisciplinary minor is to prepare students to enter the computer-intensive fields of bioinformatics, computational biology, computational chemistry, and molecular modeling, including genomics and proteomics. With the ever-increasing number of fully sequenced genomes, including the human genome, biological databases have grown at such a rate that storing, organizing, indexing, and ultimately mining the data have become key to answering biological questions. The methodologies of genomics, transcriptomics, and proteomics analyze genome structures, patterns of gene expression, and protein structure and function, respectively. Information obtained by computational biology and computational chemistry is used in the design of new drugs to treat a variety of diseases. Major drug and biotechnology companies are eager to hire people trained in the combination of biology and computer science skills that this minor provides.

Bioinformatics Minor for Chemistry Majors Program Requirements

Code	Title	Credits
CS-135	Programming for Non-CS Majors	3
BI-141	Intro to Cellular and Molecular Biology	4
BI-203	Genetics	4
BT-378	Bioinformatics	4
<i>Electives - take two courses</i>		<i>5-8</i>
CS-131	Data Visualization and Statistical Analysis	
CS-234	Data Mining for Non-CS Majors	
BT-350	Genomics	
BI-354	Systematics and Evolution	

BI-401	Selected Topics: Biological Sciences (as approved by the Bioinformatics advisory board)
MA-260	Linear Algebra
MA-302	Probability and Statistics
MA-303	Mathematical Modeling
CH-350	Medicinal Chemistry (will not double count as an elective for the major)
PH-134	Computing Ethics
<i>Research/Internship in Bioinformatics</i>	
BI-240	Research Experience
BI-403	Internship: Biology
BI-440	Advanced Research Experience for Undergraduates
CS-498	Internship: Computer Science
CS-499	Independent Study: Computer Science
CH-480	Internship: Chemistry (will not double count as an elective for the major)

Total Credits **20-23**

1. Understand the intersectionality of biology, computer science, and mathematics in the context of the field
2. Utilize existing tools to evaluate bioinformatics data, discover patterns, and draw conclusions
3. Communicate bioinformatics information in both written and oral forms
4. Develop laboratory skills that are used in the bioinformatics field

Bioinformatics Minor for Computer Science Majors

The purpose of this interdisciplinary minor is to prepare students to enter the computer-intensive fields of bioinformatics, computational biology, computational chemistry, and molecular modeling, including genomics and proteomics. With the ever-increasing number of fully sequenced genomes, including the human genome, biological databases have grown at such a rate that storing, organizing, indexing, and ultimately mining the data have become key to answering biological questions. The methodologies of genomics, transcriptomics, and

proteomics analyze genome structures, patterns of gene expression, and protein structure and function, respectively. Information obtained by computational biology and computational chemistry is used in the design of new drugs to treat a variety of diseases.

Major drug and biotechnology companies are eager to hire people trained in the combination of biology and computer science skills that this minor provides.

Bioinformatics Minor for Computer Science Majors

Program Requirements

Code	Title	Credits
Courses with an asterisk can double count for ancillary/lab science requirements for the major)		
BI-141	Intro to Cellular and Molecular Biology (*)	4
BI-203	Genetics (*)	4
BT-378	Bioinformatics (*)	4
<i>Research/Internship in Bioinformatics</i>		2-3
BI-240	Research Experience	
BI-403	Internship: Biology	
BI-440	Advanced Research Experience for Undergraduates	
CS-498	Internship: Computer Science	
CS-499	Independent Study: Computer Science	
CH-480	Internship: Chemistry	
<i>Electives - take 2 courses</i>		6-8
BT-350	Genomics	
BI-354	Systematics and Evolution	
BI-401	Selected Topics: Biological Sciences (as approved by the Bioinformatics advisory board)	
MA-260	Linear Algebra	
MA-302	Probability and Statistics	
MA-303	Mathematical Modeling	
PH-134	Computing Ethics	
Total Credits		20-23

1. Understand the intersectionality of biology, computer science, and mathematics in the context of the field
2. Utilize existing tools to evaluate bioinformatics data, discover patterns, and draw conclusions

3. Communicate bioinformatics information in both written and oral forms
4. Develop laboratory skills that are used in the bioinformatics field

Bioinformatics Minor for non-Biology, Biotechnology, Chemistry, or Computer Science Majors

The purpose of this interdisciplinary minor is to prepare students to enter the computer-intensive fields of bioinformatics, computational biology, computational chemistry, and molecular modeling, including genomics and proteomics. With the ever-increasing number of fully sequenced genomes, including the human genome, biological databases have grown at such a rate that storing, organizing, indexing, and ultimately mining the data have become key to answering biological questions. The methodologies of genomics, transcriptomics, and proteomics analyze genome structures, patterns of gene expression, and protein structure and function, respectively. Information obtained by computational biology and computational chemistry is used in the design of new drugs to treat a variety of diseases. Major drug and biotechnology companies are eager to hire people trained in the combination of biology and computer science skills that this minor provides.

Bioinformatics Minor (for majors other than Biology, Biotechnology, Chemistry, or Computer Science)

Program Requirements

Code	Title	Credits
CS-135	Programming for Non-CS Majors	3
BI-141	Intro to Cellular and Molecular Biology	4
BI-203	Genetics	4
BT-378	Bioinformatics	4
<i>Electives - take two courses</i>		5-8
CS-131	Data Visualization and Statistical Analysis	
CS-234	Data Mining for Non-Cs Majors	
BT-350	Genomics	
BI-354	Systematics and Evolution	

BI-401	Selected Topics: Biological Sciences (as approved by the Bioinformatics advisory board)	
MA-260	Linear Algebra	
MA-302	Probability and Statistics	
MA-303	Mathematical Modeling	
CH-450	Computational Chemistry	
PH-134	Computing Ethics	
<i>Research/Internship in Bioinformatics</i>		
BI-240	Research Experience	
BI-403	Internship: Biology	
BI-440	Advanced Research Experience for Undergraduates	
CS-498	Internship: Computer Science	
CS-499	Independent Study: Computer Science	
CH-480	Internship: Chemistry	
Total Credits		20-23

1. Understand the intersectionality of biology, computer science, and mathematics in the context of the field
2. Utilize existing tools to evaluate bioinformatics data, discover patterns, and draw conclusions
3. Communicate bioinformatics information in both written and oral forms
4. Develop laboratory skills that are used in the bioinformatics field

Biology Major

Requirements for a Major in Biology

Code	Title	Credits
Required Biology courses		
		(38 credits)
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
BI-200	Human Biology (OR BI-161 AND BI-162 (Human Anatomy & Physiology I & II))	4
BI-202	Principles of Ecology	4
BI-203	Genetics	4
BI-204	Microbiology	4

BI-404	Biology Seminar	2
3 Upper Division Electives (300 or 400 level lab courses)		12
Ancillary Requirements		(29 credits)
MA-150	Statistics I	3
MA-190	Pre-calculus (or Higher)	4
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
PY-221 & PY-222	General Physics I and General Physics II	8
or PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	
Total Credits		67

Students who also complete CH-203 and CH-204, and 3 additional credits in 200-level or higher chemistry courses can earn a chemistry minor.

Biology Upper-Level Electives

Code	Title	Credits
<i>Cellular & Molecular Pathways</i>		
BI-306	Developmental Biology	4
BI-324	Endocrinology	4
BI-341	Mycology	4
BI-371	Advanced Topics in Cell and Molecular Biology	4
BI-372	Immunology	4
BI-375	Virology	4
BI-398	Cancer Biology	4
BT-375	Tissue Culture	4
BT-376	Biotechnology	4
BT-377	Fermentation Technology	4
BT-378	Bioinformatics	4
BI/CH-410	Biochemistry I	4
Organismal & Ecological Systems		(48 credits)
BI-301	Topics in Invertebrate Zoology	4
BI-303	Parasitology	4
BI-304	Comparative Vertebrate Anatomy	4
BI-315	Comparative Neurobiology	4
BI-321	Comparative Physiology	4
BI-331	Marine Biology	4

BI-333	Topics in Vertebrate Zoology	4
BI-334	Wildlife Biology	4
BI-340	Plant Sciences	4
BI-344	Soil Biology	4
BI-360	Animal Behavior	4
BI-380	Biodiversity and Conservation Biology	4

(Note: Pre-med and graduate school candidates should also take CH-203 & CH-204 in addition to CH-201 and CH-202)

A minimum of three upper division laboratory courses (BI 300- or BI 400-level) are to be selected. Students must take at least one course from each category. Additional upper level elective courses or graduate research/internships are strongly encouraged. The courses should be selected with the advice and consent of the faculty advisor. A grade point average of 2.0 must be maintained in biology courses and in the ancillary science and mathematics courses. Students considering graduate and professional work should take, as a recommended minimum, calculus and introduction to computer science.

Sample Timeline for Completion of Degree

Year One

Semester One		Credits
BI-140	Introduction to Organismal Biology	4
CH-120	General Chemistry I	4
EN-101	College Writing I ¹	3
MA-190	Pre-calculus	4
LASC	First-Year Seminar (p. 41)	3
Credits		18

Semester Two

BI-141	Intro to Cellular and Molecular Biology	4
CH-121	General Chemistry II	4
EN-102	College Writing II ¹	3
MA-150	Statistics I	3
Credits		14

Year Two

Semester Three

BI-204	Microbiology	4
CH-201	Organic Chemistry I (lecture) ₅	3

LASC	LASC Elective (ICW) (p. 46) ⁴	3
LASC	LASC Elective (CON) (p. 38) ⁴	3
LASC	LASC Elective (USW) (p. 51) ₄	3

Credits 16

Semester Four

BI-203	Genetics	4
CH-202	Organic Chemistry II (lecture) ₅	3
LASC	LASC Elective (GP) (p. 42) ⁴	3
LASC	LASC Elective (CA) (p. 39) ⁴	3
LASC	LASC Elective (ICW) (p. 46)	3

Credits 16

Year Three

Semester Five

BI-202	Principles of Ecology	4
PY-221	General Physics I ^{6,7}	4
LASC	Ancillary or LASC Distribution (p. 37) ⁴	3
LASC	LASC Elective (TLC) (p. 53) ⁴	3

Credits 14

Semester Six

BI-200	Human Biology ⁴	4
BI-3XX+	300 or 400 Major Elective	
PY-222	General Physics II ⁶	4
LASC	LASC Elective (HBS) (p. 44) ⁴	3

Credits 11

Year Four

Semester Seven

BI-3XX+	300 or 400 Major Elective Lab	4
BI-3XX+	300 or 400 Major Elective Lab	4
LASC	LASC Elective (p. 37) ⁴	3
SELECT	General Elective	3

Credits 14

Semester Eight

BI-3XX+	300 or 400 Major Elective Lab	4
BI-404	Biology Seminar ⁸	2
SELECT	Additional Science	4
SELECT	General Elective	3

Credits 13

Total Credits 116

¹ EN-101 and EN-102 satisfy LASC Writing.

² MA-190 requires an Accuplacer score of 6 or higher.

³ MA-150 requires an Accuplacer score of 4 or higher.

⁴ The sequence of LASC courses is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

⁵ Pre-med and Graduate school candidates should also take CH-203 & CH-204 in addition to CH-201 and CH-202. 200 level Biology courses may be taken in any order.

⁶ Physics Requirements: PY-221 & PY-222 OR PY-241 & PY-242 satisfies LASC NSP.

⁷ All biology core courses must be completed before taking BI-404 (BI-140, BI-141, BI-200 or BI-161 & BI-162, BI-202, BI-203, BI-204).

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Cellular & Molecular Biology Minor

The Cellular & Molecular Biology minor will give you broad understanding of the foundational building blocks of all life, making connections between molecules, cells, and tissues, and exploring their functions in healthy and diseased states. The minor curriculum will develop your critical thinking and communication skills, as well as training you in modern laboratory techniques used in the field to prepare you for a multitude of careers in the life sciences, healthcare, education, and beyond. One course in chemistry or biochemistry is required, but there are several options to fulfill this requirement, making this minor accessible to students pursuing many different majors. Not open to Biology or Biotechnology minors.

Code	Title	Credits
Required Courses		(12 credits)
<i>One course from:</i>		4
CH-120	General Chemistry I	
CH-112	Survey of Chemistry	
BI-410	Biochemistry I ¹	

BI-141	Intro to Cellular and Molecular Biology	4
BI-203	Genetics	4
Electives - three courses from (including one at the 300 or 400 level):		(0 credits)
Microbiology - only one course from this group		
BI-112	Diseases and Mankind	
BI-204	Microbiology	
BI-206	Medical Microbiology	
BI-207	Public Health Microbiology	
Electives		
BI-240	Research Experience	
BI-303	Parasitology	
BI-306	Developmental Biology	
BI-324	Endocrinology	
BI-341	Mycology	
BI-342	Plant Physiology	
BI-344	Soil Biology	
BI-354	Systematics and Evolution	
BI-371	Advanced Topics in Cell and Molecular Biology	
BI-372	Immunology	
BI-375	Virology	
BI-398	Cancer Biology	
BI-410	Biochemistry I	
BT-350	Genomics	
BT-376	Biotechnology	
BT-378	Bioinformatics	
Or another course approved by the Biology Chair		
Total Credits		24

¹ Chemistry majors should take Biochemistry I as BI-410 and count it towards the minor rather than the major.

1. Students will be able to describe the structure and functions of biological macromolecules and how they come together to form the structures and perform the fundamental activities of cells.
2. Students will be able to describe the pathways of information flow in cells.
3. Students will be able to relate the behaviors of molecules and cells to features of whole organisms.

- Students will demonstrate competence in basic cell and molecular biology laboratory skills, including: pipetting, microscopy, cellular fractionation, molecular separation, performing enzymatic reactions, etc.
- Students will be able to relate their knowledge of cell and molecular biology to topics that are important in everyday life.

Ecology Minor

The Ecology minor will provide you with a broad understanding of the fundamental ecological processes that shape the diversity, distribution, and abundance of organisms across the planet. Through a combination of classroom learning, fieldwork, and laboratory experiments, this minor will provide you with the practical and quantitative skills to collect, analyze, and interpret ecological data. The minor emphasizes critical thinking, problem solving, and communication skills that will prepare you well for a diversity of career paths, including environmental science, natural resource management, and conservation. Not open to Biology majors.

Code	Title	Credits
BI-140	Introduction to Organismal Biology	4
BI-202	Principles of Ecology	4
MA-150 or MA-302	Statistics I Probability and Statistics	3
GS-165 or CS-135	Geographic Information Systems I Programming for Non-CS Majors	4
Minor Electives		
Select 2 of the following:		(8 credits)
BI-301 or BI-304 or BI-331 or BI-333 or BI-334 or BI-340 or BI-360 or BI-380	Topics in Invertebrate Zoology Comparative Vertebrate Anatomy Marine Biology Topics in Vertebrate Zoology Wildlife Biology Plant Sciences Animal Behavior Biodiversity and Conservation Biology	8
Total Credits		23

- Identify and describe the mechanisms that influence the structure and function of ecological systems
- Critically evaluate the primary literature in ecology
- Analyze complex ecological data-sets

Honors Program in Biology

Honors in Biology is a distinction bestowed on those outstanding undergraduate Biology majors who have demonstrated distinct competence in overall biology coursework and who have completed an independent research project of substantial merit. This program offers motivated students the opportunity to develop research and communication skills in preparation for graduate school or a professional career. For more information and specific program requirements, contact Dr. Randall Tracy in the Biology Department. Students considering working towards Honors in Biology should take BI-205: Research Techniques and Experimental Design in the spring semester of either their second or third year.

Requirements for the Honors Program in Biology

Code	Title	Credits
Required Biology courses		(38 credits)
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
BI-200	Human Biology	4
BI-202	Principles of Ecology	4
BI-203	Genetics	4
BI-204	Microbiology	4
BI-404	Biology Seminar	2
3 Upper Division Electives (300 or 400 level lab courses)		12
Ancillary Requirements		(29 credits)
MA-150	Statistics I	3
MA-190	Pre-calculus (or Higher)	4
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6

178 **Biology Major and Prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Sciences**

PY-221 & PY-222 or PY-241 & PY-242	General Physics I and General Physics II Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	8
Honors Program Requirements		(3-8 credits)
BI-205	Research Techniques and Experimental Design	2
BI-440	Advanced Research Experience for Undergraduates	1-6
Total Credits		70-75

¹ "Commendation in Biology" requires 3 credits of BI-440 and a minimum 3.0 GPA in biology courses. "Honors in Biology" requires 5 credits of BI-440 and a minimum of 3.5 GPA in biology courses.

Students who also complete CH-203 and CH-204 can earn a chemistry minor.

For more information and specific program requirements, contact Dr. Randall Tracy in the Department of Biology.

Biology Major and Prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Sciences

Requirements for a Major in Biology and to meet the prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Sciences

Code	Title	Credits
Required Biology courses		
		(38 credits)
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4

BI-200	Human Biology (Or BI-161 Human Anatomy and Physiology I and BI-162 Human Anatomy & Physiology II (8 credits)	4
BI-202	Principles of Ecology	4
BI-203	Genetics	4
BI-204	Microbiology	4
BI-404	Biology Seminar	2
3 Upper Division Electives (300 or 400 level lab courses)		12
Ancillary Requirements		(29 credits)
MA-150	Statistics I	3
MA-190	Pre-calculus (or Higher)	4
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
PY-221 & PY-222 or PY-241 & PY-242	General Physics I and General Physics II Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	8

Accelerated Pharmacy Program		(9 credits)
CH-203	Organic Chemistry Laboratory I	2
MA-200	Calculus I	4
Math or Computer Science Elective (e.g.: MA-190, MA-201, CS-101)		3
Total Credits		76

Department of Biology: WSU/ MCPHS 3+3 Curriculum Guide for Biology Majors Sample Timeline for Completion of Degree

Year One		
Semester One		Credits
EN-101	College Writing I	3
CH-120	General Chemistry I	4
BI-140	Introduction to Organismal Biology	4
LASC	First-Year Seminar (p. 41)	3
MA-200	Calculus I	4
Credits		18

Semester Two		
EN-102	College Writing II	3
CH-121	General Chemistry II	4
BI-141	Intro to Cellular and Molecular Biology	4
MA-201	Calculus II	4
LASC	Distribution Elective (CON) ¹	3
Credits		18

Year Two		
Semester Three		
BI-203	Genetics	4
CH-201 & CH-203	Organic Chemistry I (lecture) and Organic Chemistry Laboratory I	5
PY-221 or PY-241	General Physics I ² or Physics I (Mechanics)	4
LASC	Distribution Elective (HBS) (p. 44)	3
Credits		16

Semester Four		
BI-204	Microbiology	4
CH-202 & CH-204	Organic Chemistry II (lecture) and Organic Chemistry Laboratory II	5
PY-222 or PY-242	General Physics II ² or Physics II (Electricity, Magnetism and Optics)	4
LASC	LASC Elective (ICW) (p. 46)	3
Credits		16

Year Three		
Semester Five		
BI-200	Human Biology	4
MA-150	Statistics I	3
LASC	Distribution Elective (USW) (p. 51)	3
LASC	Distribution Elective (GP) (p. 42)	3
BI-202	Principles of Ecology	4
Credits		17

Semester Six		
LASC	Distribution Elective (CA) (p. 39)	4
BI-404	Biology Seminar	2
Optional	Upper Level Elective (Optional)	4
LASC	Distribution Elective (TLC) (p. 53)	3

LASC	Distribution Elective (p. 37)	3
Credits		16
Total Credits		101

¹ **Winter session or Summer after 1st and 2nd years:** one course that meets LASC requirements (6 credits total). LASC requirements should include: Introduction to Psychology, Introduction to Sociology, a course that fulfills the Constitutions, Economics, and an upper level (beyond first semester) behavioral science (Psychology or Sociology).

² PY-241 and can be taken in place of PY-221 and PY-222, however these should be taken concurrently with or after calculus. The 200 level Biology courses may be taken in any order.

Note: Total Credits taken at WSU=105. Remaining credits are transferred from MCPHS and fulfill upper level biology electives.

Students interested in pursuing the 3+3 Pharmacy program should meet with Dr. Daron Barnard in the Biology Department as early as possible in their undergraduate studies to ensure they are on track to apply for the program in the fall of their third year.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/ major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Psychobiology Minor

Psychobiology, the study of human and animal biology and behavior, is an interdisciplinary minor offered at Worcester State consisting of 6-7 classes (18-24 credits), with significant course contributions from the Biology and Psychology Departments. The Psychobiology minor allows students to explore the links between mind, body, and behavior, learning from accomplished faculty with expertise in the areas of neuroscience, animal behavior, human perception, cognition, and learning along with other specialties within psychology and biology.

Introductory courses include both Biology and Psychology, grounding students in the basics of both disciplines. Advanced courses provide an in-depth understanding of the nervous system, evolutionary biology, cellular physiology, and sensation and perception. Students will have the opportunity for hands-on learning to put course concepts into action.

All students are eligible to pursue the Psychobiology minor by following either the General Track or one of two specialized tracks: Biology Major Track or Psychology Major Track. These tracks are specialized to assure that students who major in Biology and Psychology receive an appropriate breadth of experiences within the field of Psychobiology to complement their chosen major.

Requirements for a Psychobiology Minor General Track

(Available to all majors except Biology and Psychology)

Code	Title	Credits
Core		(11 credits)
PS-101	General Psychology	3
BI-116	Animal Biology	4
PB-200	Introduction to Psychobiology	4
Electives		(10-11 credits)
Students must select ONE course from Group A, ONE course from Group B, and ONE course from Group C:		10-11
<i>Group A (200-level)</i>		
PS-280	Sensation and Perception	
BI-200	Human Biology	
<i>Group B (300-level Psychology)</i>		
PS-325	Psychology of Learning	
PS-230	Brain and Behavior	
<i>Group C (300-level Biology w/lab)</i>		
BI-315	Comparative Neurobiology	
BI-360	Animal Behavior	
Capstone		(2 credits)
PB-400	Capstone in Psychobiology	2
Total Credits		23-24

Biology Major Track (Only available to Biology majors)

Code	Title	Credits
Core/Foundation		(16 credits)
PS-101	General Psychology	3
PB-200	Introduction to Psychobiology	4
PS-280	Sensation and Perception	3
PS-325	Psychology of Learning	3
PS-230	Brain and Behavior	3
Capstone		(2 credits)
PB-400	Capstone in Psychobiology	2
Total Credits		18

Psychology Major Track (Only available to Psychology majors)

Code	Title	Credits
Core/Foundation		(20 credits)
BI-116	Animal Biology	4
PB-200	Introduction to Psychobiology	4
BI-200	Human Biology	4
BI-315	Comparative Neurobiology	4
BI-360	Animal Behavior	4
Capstone		(2 credits)
PB-400	Capstone in Psychobiology	2
Total Credits		22

Note: Completing this minor also satisfies the LASC requirements of HBSP, NSP w/ Lab (2x), and the capstone requirement.

1. Students will demonstrate a working knowledge of the following core content areas, as they specifically pertain to the relationship between biological and psychological functioning in human and non-human animals: cellular and molecular neurobiology, evolution, sensory and motor systems, learning and memory, mental disorders, and social behavior
2. Students will use and evaluate contemporary theories to explain and make novel predictions regarding the relationship between biological and psychological functioning.

3. Students will integrate core concepts from biological and psychological approaches to explain the bidirectional interaction between biological and psychological functioning, including articulating the relationship between structure and function, as well as similarities and differences across human and non-human animals.
4. Students will conduct basic psychobiology research, use scientific reasoning to interpret claims, justify methodological decisions, and utilize proper laboratory protocols.
5. Students will demonstrate effective communication of scientific information through clear and concise written communication and oral presentations for various audiences.
6. Students will collaborate successfully on group activities
7. Students will conduct themselves respectfully toward others in the context of scientific discussions and debates.
8. Students will demonstrate self-reflection through the incorporation of feedback from educators and peers
9. Students will describe, explain, and practice ethical standards and integrity within the discipline of psychobiology.
10. Students will discuss historical and contemporary examples of the impact of psychobiological research on society.

Biotechnology

Department of Biology: Biotechnology Major

The Biotechnology major is housed in the Biology Department but is sponsored jointly by the departments of Biology (p. 164) and Chemistry (p. 190). The Biotechnology major is designed to meet the need for skilled laboratory associates in the experimental laboratory and manufacturing facilities of the biotechnology industry. Biotechnology graduates are trained in tissue culture, molecular biology, protein purification, analytical chemistry, and regulatory affairs and are eligible for internships in local biotechnology companies. Graduates are qualified for careers in research and development, quality assurance, quality control, and manufacturing, as well as for further graduate or professional education. Students who meet the requirements for the 4+ Program in Biotechnology may complete both B.S. and M.S. degrees in Biotechnology in approximately 5 years, beginning to take graduate courses in their fourth year of study. Students interested in the health professions may opt for a major in Biotechnology with a concentration in Pre-medicine, and those interested in applying computer-based analysis to biological problems may complete a minor in Bioinformatics, sponsored jointly with the Computer Science Department. Biotechnology majors are not eligible for a Chemistry minor.

- 4+1 BS/MS Program in Biotechnology (p. 184)
- Biotechnology (p. 185)
- Honors Program in Biotechnology (p. 188)
- Major in Biotechnology and prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Sciences (p. 188)
- Major in Biotechnology, Concentration in Bioinformatics (p. 189)
- Major in Biotechnology, Concentration in Pre-Medicine (p. 297)

Faculty

Maura Collins, Professor (2001), B.S., Worcester Polytechnic Institute; M.S., Ph.D. Rutgers University

Roger S. Greenwell, Co-Coordinator of the Biotechnology Program, Associate Professor (2014), B.S., Western Kentucky University; Ph.D., University of Wisconsin-Madison

Jeffrey C. Nichols, Professor (2006), B.A., Texas Tech University; Ph.D., Rice University

Weichu Xu, Co-Coordinator of the Biotechnology Program, Associate Professor (2016), B.S., Suzhou University Suzhou China; M.S., Ph.D., Chinese Academy of Sciences

Courses

BT-101 Introduction to Forensic Sciences

LASC Categories: NSP, HBS, LAB

Prerequisites: Math placement code of 3 or higher. Survey of forensic case studies and the laboratory techniques used to solve crimes including microscopy, chromatography, ballistics and DNA analysis.

Every year. 4 Credits

BT-240 Research Experience for Undergraduates

Lab and/or field based research on a specific research topic under the supervision of a faculty member. Permission of instructor and department chair required.

Fall and Spring. 1-6 Credits

BT-350 Genomics

Prerequisites: BI-141 and BI-203.

This course will examine the structure and function of genomes, as well as the tools and techniques of this multidisciplinary and growing field, with emphasis on how bioinformatic approaches can be utilized to address biological problems at the level of the entire genome. A major topic will be the application of computer-based techniques for the identification, comparison, and analysis of genomes and their products. Three lecture hours and three laboratory hours per week.

Fall and Spring and every 2-3 years. 4 Credits

BT-360 Introduction to Bioprocessing**LASC Categories:** NLL

Prerequisites: BI-204 (or BI-206 and BI-212) with a grade of C- or higher as a prerequisite or CH/BI-410 as a corequisite.

This laboratory course covers the process development and manufacturing of biologics. It includes process development, upstream, downstream and other topics central to large scale production. At the end of the course, students will see the importance of every step from discovery to bulk fill in providing safe drugs to market. Fall only and every 2-3 years. 4 Credits

BT-375 Tissue Culture**LASC Categories:** NLL

Prerequisites: BI-204 (or BI-206 and BI-212) and CH-210 with grades of C- or higher.

A review of the methods of animal and plant tissue culture. Media preparation, aseptic techniques and cell culture technology. Three lecture hours and three laboratory hours per week.

Spring only and every year. 4 Credits

BT-376 Biotechnology**LASC Categories:** NLL

Prerequisites: CH-120, CH-121, BI-141 and BI-204 (or BI-206 and BI-212) with grades of C- or above.

Principles, applications of recombinant DNA (molecular/microbial aspects). The Biotechnology industry including bioreactor manufacturing standards and government rules. Three lecture hours and three laboratory hours per week.

Fall only and every year. 4 Credits

BT-378 Bioinformatics**LASC Categories:** NLL

Prerequisites: BI-141 and BI-203 with a grade of C- or above.

Provides an overview of Bioinformatics including database structure, genomics, computational biology and proteomics. Three lecture hours and three laboratory hours per week.

Every 2-3 years. 4 Credits

BT-408 Directed Study: Biotechnology

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

Other on or demand. 3 Credits

BT-410 Biotechnology Seminar**LASC Categories:** CAP

Up-to-date developments in Biotechnology; repatriation and presentation of technical literature. Students will study new techniques and procedures used by the industry.

Spring only and every year. 1-4 Credits

BT-440 Advanced Research Experience

Prerequisites: BI-205. Instructor permission required. Junior/Senior standing required.

Advanced lab and/or field based research on a specific research topic under the supervision of a faculty member. Permission of instructor and department chair required.

Fall and Spring. 1-6 Credits

BT-450 Internship in Biotechnology

Qualified upper-level biotechnology majors can learn experimental techniques by working in a company laboratory or a professional manufacturing environment. Permission of faculty sponsor and department chair required.

Fall and Spring. 3-6 Credits

Program Learning Outcomes

- Apply broad knowledge of the sciences as they apply to biotechnology, including the following core content areas:
 - Cell biology
 - General chemistry principles
 - Molecular biology and genomics
 - Biochemistry
 - Physics and mathematics
 - The application of cells and organisms for industrial purposes
- Think critically and apply analytical skills
 - Gather, organize, interpret and evaluate data
 - Design appropriate experiments to test a hypothesis
 - Employ reason and logic, analyze pros and cons, and evaluate the validity of conclusions
- Perform laboratory techniques and practices used in the field
 - Proper use of tools, equipment/instrumentation, and materials
 - Demonstration of safety procedures.
- Effectively communicate scientific information to lay and scientific audiences using written and oral forms of communication.

- Prepare poster presentation
- Prepare written material (reports, SOPs, etc.)
- Prepare oral presentations
- Exhibit an awareness of the social implications of biotechnology including how biotechnology shaped human development and the ethics of biotechnology, by addressing
 - The effect of biotechnology on the environment
 - The ethical issues that influence decisions related to biotechnology
 - The impact of biotechnology on society

4+1 BS/MS Program in Biotechnology

The Combined 4+ BS/MS Program in Biotechnology is open to students who have demonstrated strong academic achievement in the undergraduate Biotechnology major. Students accepted into the program take three courses (up to 12 credits) that count toward both the undergraduate and graduate degrees. Students typically should apply in the fall semester of their junior year. Transfer students should meet with the graduate program coordinator prior to applying. The first three years follow the same curriculum as the Biotechnology BS Program. Students typically begin MS thesis research in the summer after they complete their undergraduate degree, but are strongly encouraged to begin research as an undergraduate. The program may be completed in about 5 years, inclusive of summer graduate courses and/or graduate research. Application requirements include a minimum of 3.0 GPA, two letters of recommendation, and the GRE.

Recommended Timeline for Completion of BS/MS Program

Year One

Semester One		Credits
EN-101	College Writing I	3
CH-120	General Chemistry I	4
MA-180 or MA-190	Introduction to Functions (LASC QR) or Pre-calculus	3-4
LASC	LASC Elective (CON) (p. 38)	3
LASC	First-Year Seminar (p. 41)	3
Credits		16-17

Semester Two

EN-102	College Writing II	3
CH-121	General Chemistry II	4
MA-190 or MA-200	Pre-calculus or Calculus I	4
BI-141	Intro to Cellular and Molecular Biology	4
Credits		15

Year Two

Semester Three

CH-201	Organic Chemistry I (lecture)	3
CH-203	Organic Chemistry Laboratory I	2
BI-204	Microbiology	4
MA-200	Calculus I ((or LASC Elective))	4
EN-252 or EN-253 or CS-120	Technical Writing or Business Communications or Microcomputer Applications	3
Credits		16

Semester Four

MA-150	Statistics I	3
MA-201	Calculus II	4
LASC	LASC Elective (p. 37)	3
LASC	LASC Elective (p. 37)	3
Select one of the following:		3-5
CH-202 & CH-204	Organic Chemistry II (lecture) and Organic Chemistry Laboratory II	
LASC	LASC Elective (p. 37)	
Credits		16-18

Year Three

Semester Five

CH-210	Chemical Analysis: an Introduction to Modern Methods	5
PY-221	General Physics I	4
LASC	LASC Elective (p. 37)	3
LASC	LASC Elective (p. 37)	3
Credits		15

Semester Six

CH-410	Biochemistry I	4
PY-222	General Physics II	4
LASC	LASC Elective (p. 37)	3
LASC	LASC Elective (p. 37)	3
Credits		14

Year Four

Semester Seven

BI-521	Biotechnology and DNA	4
BI-440	Advanced Research Experience for Undergraduates	1-6
BI-3XX	Major Upper Level Elective	4
LASC	LASC Elective (p. 37)	3
LASC	LASC Elective (p. 37)	3
Credits		15-20

Semester Eight

BI-527	Tissue Culture Techniques	3
BI-440	Advanced Research Experience for Undergraduates	3
BT-410	Biotechnology Seminar	1
BT-5XX	Major Upper Level Elective	
SELECT	Major or LASC Elective	3
Credits		10

Summer I

BT-9XX	Graduate Level Elective	3
Credits		3

Summer II

BI-996	Thesis Research I (or BT-9XX Graduate Level Elective)	3
Credits		3

Year Five

Semester One

BI-942 or BI-943	Biostatistical Analysis or Experimental Design	3
BI-9XX	Graduate Level Elective	3

Select One of the Following

BI-996	Thesis Research I	3
BI-997	Thesis Research II	4
Credits		13

Semester Two

BI-998	Thesis Writing	2
BI-9XX:Graduate Level Elective		3
BI-997	Thesis Research II (or BI-9XX Graduate Level Elective)	4
Credits		9
Total Credits		145-153

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission

shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Biotechnology Requirements for a Major in Biotechnology

Code	Title	Credits
BI-141	Intro to Cellular and Molecular Biology	4
BI-204	Microbiology	4
BT-375	Tissue Culture	4
BT-376	Biotechnology	4
BT-410	Biotechnology Seminar	1
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-203	Organic Chemistry I (lecture) and Organic Chemistry Laboratory I	5
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-410	Biochemistry I	4
Major Electives		(8 credits)
Select 8 credits from the following electives:		8
BI-313		
BI-398	Cancer Biology	
BI-372	Immunology	
BI-371	Advanced Topics in Cell and Molecular Biology	
BI-375	Virology	
CH-350	Medicinal Chemistry	
CH-202 & CH-204	Organic Chemistry II (lecture) and Organic Chemistry Laboratory II (5)	
PY-310	Modern Physics	
CH-411	Biochemistry II	
BT-377	Fermentation Technology	
BT-378	Bioinformatics	
BT-450	Internship in Biotechnology	
CH-335	Green Chemistry	
CH-450	Computational Chemistry	
CH-455	Special Topics in Chemistry (Organometallics in Organic Synthesis)	

And certain other BI-300, CH-300 and PY-300 level courses with Biotech coordinator approval.

Ancillary courses		(26 credits)
MA-150	Statistics I	3
MA-190	Pre-calculus (may be waived)	4
MA-200	Calculus I	4
MA-201	Calculus II	4
or BI-203	Genetics	
Select one of the following:		3
EN-252	Technical Writing	
EN-253	Business Communications	
CS-120	Microcomputer Applications	
Select one of the following:		8
PY-221 & PY-222	General Physics I and General Physics II (8)	
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics) (8)	
Total Credits		73

Sample Timeline for Completion of Degree

Year One

Semester One		Credits
EN-101	College Writing I ¹	3
CH-120	General Chemistry I	4
MA-180 or MA-190	Introduction to Functions (LASC QR) ² or Pre-calculus	3-4
LASC	LASC Elective (HBS) (p. 44)	3
LASC	First-Year Seminar (p. 41)	3
Credits		16-17

Semester Two

EN-102	College Writing II ¹	3
CH-121	General Chemistry II	4
MA-190 or MA-200	Pre-calculus (LASC QR) or Calculus I	4
BI-141	Intro to Cellular and Molecular Biology	4
Credits		15

Year Two

Semester Three		
BI-204	Microbiology	4
CH-201	Organic Chemistry I (lecture)	3
CH-203	Organic Chemistry Laboratory I	2

Select One of the Following 3-4

LASC	LASC Elective (p. 37) ³	
MA-200	Calculus I	

Select One of the Following 3

EN-252	Technical Writing	
EN-253	Business Communications	
CS-120	Microcomputer Applications	

Credits 15-16

Semester Four

LASC	LASC Elective (p. 37)	3
LASC	LASC Elective (p. 37)	3
MA-150	Statistics I ⁴	3

Select One of the Following 4

BI-203	Genetics	
MA-201	Calculus II	

Select One of the Following 3-5

LASC	LASC Elective (p. 37)	
CH-202 & CH-204	Organic Chemistry II (lecture) and Organic Chemistry Laboratory II	

Credits 16-18

Year Three

Semester Five

CH-210	Chemical Analysis: an Introduction to Modern Methods	5
PY-221	General Physics I (NSP)	4
LASC	LASC Elective (p. 37) ³	3
LASC	LASC Elective (p. 37) ³	3

Credits 15

Semester Six

CH-410	Biochemistry I	4
PY-222	General Physics II (NSP)	4
LASC	LASC Elective (p. 37) ³	3
LASC	LASC Elective (p. 37) ³	3

Credits 14

Year Four

Semester Seven

BT-376	Biotechnology	4
BI-440	Advanced Research Experience for Undergraduates	1-6
BI/BT-3XX+	BI or BT Upper Level Elective	4
LASC	LASC Elective (p. 37) ³	3
LASC	LASC Elective (p. 37) ³	3

Credits 15-20

Semester Eight

BT-375	Tissue Culture	4
BI-440	Advanced Research Experience for Undergraduates	1-6
BT-410	Biotechnology Seminar	1-4
LASC	LASC Elective (p. 37) ³	3
SELECT	LASC or Major Elective	3
Credits		12-20
Total Credits		118-135

- ¹ EN-101 and EN-102 satisfies LASC writing.
² MA-180 requires Accuplacer score of 5 or higher.
³ The sequence of LASC courses marked with ³ is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.
⁴ MA-150 requires an Accuplacer score of 4 or higher.

Course	Title	Credits
Year One		
Semester One		
EN-101	College Writing I ¹	3
CH-120	General Chemistry I	4
MA-180 or MA-190	Introduction to Functions (LASC QR) ² or Pre-calculus	3-4
LASC	LASC Elective (HBS) (p. 44)	3
LASC	First-Year Seminar (p. 41)	3
Credits		16-17
Semester Two		
EN-102	College Writing II ¹	3
CH-121	General Chemistry II	4
MA-190 or MA-200	Pre-calculus (LASC QR) or Calculus I	4
BI-141	Intro to Cellular and Molecular Biology	4
Credits		15
Year Two		
Semester Three		
BI-204	Microbiology	4
CH-201	Organic Chemistry I (lecture)	3
CH-203	Organic Chemistry Laboratory I	2
Select One of the Following		3-4
LASC	LASC Elective (p. 37) ³	
MA-200	Calculus I	
Select One of the Following		3

EN-252	Technical Writing	
EN-253	Business Communications	
CS-120	Microcomputer Applications	
Credits		15-16
Semester Four		
LASC	LASC Elective (p. 37)	3
LASC	LASC Elective (p. 37)	3
MA-150	Statistics I ⁴	3
Select One of the Following		4
BI-203	Genetics	
MA-201	Calculus II	
Select One of the Following		3-5
LASC	LASC Elective (p. 37)	
CH-202 & CH-204	Organic Chemistry II (lecture) and Organic Chemistry Laboratory II	
Credits		16-18
Year Three		
Semester Five		
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
PY-221	General Physics I (NSP)	4
LASC	LASC Elective (p. 37) ³	3
LASC	LASC Elective (p. 37) ³	3
Credits		15
Semester Six		
CH-410	Biochemistry I	4
PY-222	General Physics II (NSP)	4
LASC	LASC Elective (p. 37) ³	3
LASC	LASC Elective (p. 37) ³	3
Credits		14
Year Four		
Semester Seven		
BT-376	Biotechnology	4
BI-440	Advanced Research Experience for Undergraduates	1-6
BI/BT-3XX+	BI or BT Upper Level Elective	4
LASC	LASC Elective (p. 37) ³	3
LASC	LASC Elective (p. 37) ³	3
Credits		15-20
Semester Eight		
BT-375	Tissue Culture	4
BI-440	Advanced Research Experience for Undergraduates	1-6
BT-410	Biotechnology Seminar	1-4

LASC	LASC Elective (p. 37) ³	3
SELECT	LASC or Major Elective	3
Credits		12-20
Total Credits		118-135

¹ EN-101 and EN-102 satisfies LASC writing.

² MA-180 requires Accuplacer score of 5 or higher.

³ The sequence of LASC courses marked with ³ is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

⁴ MA-150 requires an Accuplacer score of 4 or higher.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Honors Program in Biotechnology

Honors in Biotechnology is a distinction bestowed on those outstanding undergraduate Biotechnology majors who have demonstrated distinct competence in overall biotechnology course work and who have completed an independent research project of substantial merit. This program offers motivated students the opportunity to develop research and communication skills in preparation for graduate study or a professional career. For more information about the specific program requirements, please contact Dr. Randall Tracy in the Biology Department. Students considering working towards Honors in Biotechnology should take BI-205: Research Techniques and Experimental Design in the spring semester of either their second or third year.

Requirements for the Honors Program in Biotechnology

- A written thesis describing the student's original research
- Grade point average in major and ancillary courses of at least 3.5
- Successful completion of BI-205

- Enrollment in a minimum of one semester of independent study credit (BI-440) totaling at least 4 credits

Major in Biotechnology and prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Sciences

Requirements for a Major in Biotechnology and to meet the prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Sciences (MCPHS)

Code	Title	Credits
Requirements for a Major in Biotechnology		(39 credits)
BI-141	Intro to Cellular and Molecular Biology	4
BI-204	Microbiology	4
BT-375	Tissue Culture	4
BT-376	Biotechnology	4
BT-410	Biotechnology Seminar	1
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-203	Organic Chemistry I (lecture) and Organic Chemistry Laboratory I	5
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-410	Biochemistry I	4
Major Electives		(8 credits)
Select two of the following electives:		8
BI-313		
BI-398	Cancer Biology	
BI-372	Immunology	
BI-371	Advanced Topics in Cell and Molecular Biology	
BI-375	Virology	

CH-350	Medicinal Chemistry
CH-202	Organic Chemistry II (lecture)
CH-204	Organic Chemistry Laboratory II
PY-310	Modern Physics
CH-411	Biochemistry II
BT-377	Fermentation Technology
BT-378	Bioinformatics
BT-450	Internship in Biotechnology
CH-335	Green Chemistry
CH-450	Computational Chemistry
CH-455	Special Topics in Chemistry (Organometallics in Organic Synthesis)

And certain other BI 300, CH 300 and PY 300 level courses with Biotech coordinator approval.

Ancillary courses		(32 credits)
MA-150	Statistics I	3
MA-190	Pre-calculus (may be waived)	4
MA-200	Calculus I	4
MA-201	Calculus II	4
or BI-203	Genetics	
MA-150	Statistics I	3
Select one of the following sequences:		8
PY-221 & PY-222	General Physics I and General Physics II (8)	
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics) (8)	
CS-120	Microcomputer Applications	3
EN-252 or EN-253	Technical Writing Business Communications	3
Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science University		(14 credits)
BI-140	Introduction to Organismal Biology	4
BI-200 or BI-161	Human Biology Human Anatomy and Physiology I	4
CH-202	Organic Chemistry II (lecture)	3
Math or Computer Science Elective (e.g.: MA-190, MA-202, CS-120)		3
Total Credits		93

Major in Biotechnology, Concentration in Bioinformatics

This concentration has been replaced by the Bioinformatics Minor for Biology/Biotechnology Majors (p. 171).

Chemistry

Department of Chemistry

The chemistry program provides education and training to students who wish to pursue careers in chemistry, biotechnology, medicine, dentistry, allied health fields, science teaching, environmental science, materials science, and engineering. Chemistry is considered the central science because it is required for a full understanding of many other sciences as well as medicine. The Chemistry Department offers courses for general education and for majors in chemistry, biology, biotechnology, and nursing. The chemistry department offers in-depth offerings in the areas of biochemistry, green chemistry and environmental chemistry, materials science and inorganic chemistry. The department offers opportunities for undergraduate research in organic chemistry, bioanalytical chemistry, nanoscience, and molecular modeling. The Chemistry Department promotes green chemistry in its curriculum and research. Majors in chemistry may be eligible for the Accelerated Pharmacy Program with the Massachusetts College of Pharmacy and Health Sciences. In addition, students may opt to major in Chemistry with a concentration in Pre-Medicine.

Certification by the American Chemical Society: The Chemistry Department at Worcester State University is approved by the American Chemical Society (ACS).

The chemistry curriculum is reviewed by the ACS Committee on Professional Training on a five-year cycle and reports are made to the ACS annually.

Undergraduate chemistry majors who have demonstrated academic excellence and interest in research may participate in the Chemistry Honors Program. The department has a chapter of the Gamma Sigma Epsilon National Honor Society in chemistry for those who qualify.

- Bioinformatics Minor for Chemistry Majors (p. 172)
- Chemistry (p. 194)
- Chemistry Honors Program (p. 196)
- Major in Chemistry and prerequisites for the Accelerated Pharmacy Program (p. 197)
- Major in Chemistry, Concentration in Medicinal Chemistry (p. 197)
- Minor in Chemistry (p. 198)
- Minor in Chemistry for the Medical Professions (p. 199)
- Minor in Pharmaceutical Science (p. 199)
- Minor in STEM (p. 199)

Faculty

Jeremy R. Andreatta, Professor (2012), B.S., Tarleton University; Ph.D., Texas A&M University

Meghna Dilip, Department Chair, Professor (2008), B.S., University of Madras, India; M.S., Anna University India; M.S., Ph.D., University of Alabama

Eihab Jaber, Professor (2006), B.A., Hunter College; M.S., Ph.D., State University of New York Stony Brook

Margaret E. Kerr, Professor (2000), B.S., University of Maine; Ph.D., Wesleyan University

Susan Mitroka-Batsford, Professor (2013), B.A., Rutgers University; Ph.D., Virginia Polytechnic Institute and State University

Kathleen Murphy, Associate Professor (2014), B.S., College of William and Mary; M.S., Ph.D., University Of Massachusetts, Amherst

Jeffry C. Nichols, Professor (2006), B.A., Texas Tech University; Ph.D., Rice University

Joseph G. Quattrucci, Professor (2011), B.A., University of Southern Maine; Ph.D., University of Massachusetts Amherst

Weichu Xu, Co-Coordinator of the Biotechnology Program, Associate Professor (2016), B.S., Suzhou University Suzhou China; M.S., Ph.D., Chinese Academy of Sciences

Courses

CH-106 Paper Or Plastics?

LASC Categories: NSP

Students will study modern issues related to chemistry. These will include sustainability, green chemistry, climate change and the ozone layer. Every year. 3 Credits

CH-112 Survey of Chemistry**LASC Categories:** LAB, NSP

Chemical and physical properties of inorganic, organic and biochemical compounds with implications for human health and environment. Ancillary course - Nursing program. Three lecture hours and three laboratory hours per week. Fall and Spring and every year. 4 Credits

CH-120 General Chemistry I**LASC Categories:** NLL, QR**Prerequisites:** Math placement exam score of 5 or above required.

Modern survey of chemistry. Topics include chemical equations, properties of gases, atomic structure, periodic table, chemical bonding, chemistry of carbon. Three lecture hours and three laboratory hours per week. CH-120 and CH-121 provide the foundation for further courses in chemistry. Every year. 4 Credits

CH-121 General Chemistry II**LASC Categories:** NLL

Prerequisites: CH-120 with a minimum grade of C-. Continuation of CH-120. Topics include elements of thermodynamics, acids and bases, reaction rates, oxidation-reduction reactions, and electrochemistry. Three hours of lecture and a three-hour laboratory per week. Spring only and every year. 4 Credits

CH-193 Special Topics in Chemistry for First Year Students**LASC Categories:** FYS

Introductory level course covering topics of special interest to first-year students. Every year. 3 Credits

CH-201 Organic Chemistry I (lecture)

Prerequisites: CH-120 and CH-121 with a C- or above. Structure, reactions, mechanisms, and stereochemistry of the alkanes, alkenes, alkynes, dienes, alkyl halides. Introduction to aromatic chemistry. Every year. 3 Credits

CH-202 Organic Chemistry II (lecture)

Prerequisites: CH-201 with a C- or above. Continuation of CH-201. Reactions and mechanisms of aromatic chemistry; structures and reactions of alcohols, ethers, carboxylic acids, aldehydes, ketones. Every year. 3 Credits

CH-203 Organic Chemistry Laboratory I**LASC Categories:** NLL**Prerequisites or Corequisite:** CH-201 with a C- or above.

Techniques of preparation, purification, and identification of aliphatic compounds. One four-hour laboratory per week. Every year. 2 Credits

CH-204 Organic Chemistry Laboratory II**LASC Categories:** NLL**Prerequisites:** CH-203 with a C- or above.**Prerequisites or Corequisite:** Corequisite: CH-202 (C- or better)

Application of basic and more advanced techniques to increasingly complicated synthetic problems. One four-hour laboratory per week. Every year. 2 Credits

CH-210 Chemical Analysis: an Introduction to Modern Methods**LASC Categories:** NLL, WAC**Prerequisites:** CH-120, CH-121 (minimum grade C-), and EN-102.

Introduction to modern methods of chemical analysis including gravimetry, acid-base and redox titrations, potentiometry, UV-visible and atomic absorption spectrophotometry, and gas and HPLC chromatography. Three lecture hours and four laboratory hours per week. Every year. 5 Credits

CH-215 Science of Stuff**LASC Categories:** NSP, LAB

Students will engage in both lecture and hands-on activities to explore the synthesis/production, and properties of the "stuff" that makes up the world around us (e.g. concrete, plastic, paper, etc.). There will be a focus on the application of the scientific method, scientific reporting, and increasing scientific literacy by accessing the primary literature, studying current events, and the public perception of "science". Every year. 4 Credits

CH-250 Instrumental Technology for Forensic Analysis**LASC Categories:** NSP, QAC, LAB**Prerequisites:** CH-120 and CH-121, minimum grade C- or take CH-112, minimum grade C-.

Introduction to instrumental techniques used to analyze crime scene evidence. Includes HPLC, IR spectrometry, Atomic spectroscopy, and GC-MS. Three lecture hours and three lab hours per week. Other or on demand. 4 Credits

CH-260 Chemistry Literature Seminar**Prerequisites:** CH-201 and CH-203

This course will serve to provide a foundation for chemistry majors in searching, evaluating, and using up-to-date chemical literature resources. Additionally, students will gain first-hand experience in scientific word processing, production of presentations (posters and slide shows), presentation (written and oral) scientific data, and chemical drawing software. This course will also introduce students to the wide variety of career and post-bachelor degree opportunities for chemists in addition to the different fields of chemistry (organic, inorganic, biochemistry, physical, analytical, etc.).

Spring only and every year. 1 Credit

CH-290 Ind Study: Chemistry

Students will be introduced to the concepts of laboratory research through involvement in an original research project.

Fall and Spring and every year. 1-6 Credits

CH-301 Physical Chemistry I (Lecture Only)**Prerequisites:** CH-120, CH-121, MA-200, MA-201, PY-241, and PY-242 with a C- or above.

Study of quantum theory, chemical bonding, spectroscopy, molecular structure, and computational molecular modeling. Three lecture hours per week.

Every year. 3 Credits

CH-302 Physical Chemistry II (Lecture Only)**Prerequisites:** CH-301 with a grade of C- or better.

Continuation of CH-301. Study of first, second, and third laws of thermodynamics, and of chemical solution, and phase equilibria. Three lecture hours per week.

Every year. 3 Credits

CH-303 Physical Chemistry Laboratory I**LASC Categories:** NLL**Prerequisites or Corequisite:** CH-301 with a C- or above.

Laboratory deals with methods of physical measurement of chemical systems and their application to the determination of molecular structure, spectroscopy and thermodynamic data. One four-hour laboratory per week, lecture is CH301. Other on demand. 2 Credits

CH-312 Tackling Global Issues using STEM**Prerequisites:** Complete 15 credits at the 100/200 level in at least 4 categories from the STEM minor.

The STEM Seminar is aimed to engage cohorts of students to develop and communicate solutions to real-world problems using the knowledge they've garnered during the courses above but also bringing the advanced skills they've gained during their major coursework to bear on a problem of their choosing. They will gain first-hand experience in choosing and defining a problem, identifying the issues that need to be addressed, developing plausible solutions, and communicating those ideas/solutions to a broad audience. Rotating global issues will be chosen each semester.

Every year. 3 Credits

CH-320 Environmental Chemistry**LASC Categories:** NLL**Prerequisites:** CH-120 and CH-121 with a C- or above.

Chemistry of the atmosphere, soil, and natural water systems, air and water pollution, water treatment, hazardous wastes and pollution control. Lab techniques including sampling and analysis of environmental media. Lecture 3 hours per week and Lab will meet once a week for 3 hours.

Fall only and every year. 4 Credits

CH-330 Environmental Toxicology**Prerequisites:** CH-201 or CH-320 with a C- or above.

Topics include the pharmacological and biochemical properties of toxins and the effects of toxins on human health, including the assessment of risk(s).

Every 2-3 years. 3 Credits

CH-335 Green Chemistry**Prerequisites:** CH-201 or CH-320 with a C- or above.

This course will provide an understanding of the fundamentals of green chemical design that either eliminates or reduces the use or generation of hazardous substances. Three hours of lecture/lab per week.

Every 2-3 years. 3 Credits

CH-340 Advanced Inorganic Chemistry**Prerequisites:** CH-120, CH-121, CH-201, or CH-202, with a C- or above. CH-301 recommended.

This course is a survey of the chemistry of the inorganic elements, focusing on the relationship between electronic structure, physical properties, and reactivity across the periodic table.

Every 2-3 years. 3 Credits

CH-350 Medicinal Chemistry

Prerequisites: CH-201 and CH-202 with a C- or above.

A study of how drugs work and the science and technology of modern drug discovery illustrated with case histories. Three lecture hours per week.

Every 2-3 years. 3 Credits

CH-355 Molecular Pharmacology

Prerequisites: CH-201, CH-202, BI-141, with a C- or above.

Prerequisites or Corequisite: CH-410, with a C- or above.

Course examines the interdisciplinary science of pharmacology from a chemical perspective. Topics include pharmacotherapeutics, pharmacokinetics, pharmacodynamics, pharmacognosy, pharmacy and toxicology. Three lecture hours per week.

Every 2-3 years. 3 Credits

CH-360 Introduction to Materials Science

Prerequisites: CH-120, CH-121 and either PY-221 and PY-222 or PY-241 and PY-242 with a C- or above.

Physical structure of solids. Electrical, magnetics, thermal, and optical properties of solids, liquids, and soft matter. Structure-property relationships in materials.

Every year. 3 Credits

CH-370 Introduction to Nuclear Science

Prerequisites: CH-120, CH-121, MA-200, and either PY-221 and PY-222 or PY-241 and PY-242 with a C- or above.

Fundamentals of nuclear science. Topics include nuclear structure and forces, radioactive decays, nuclear reactions, and modern applications.

Every 2-3 years. 3 Credits

CH-402 Advanced Organic Chemistry

Prerequisites: CH-202 and CH-204 with a C- or above.

This advanced organic chemistry course will continue the study of synthetic organic reactions and mechanisms: stereochemical features including conformation and stereoelectronic effects; reaction dynamics and special reactive intermediates.

It is a course built on the foundation of Organic Chemistry I & II and is appropriate for upper-level undergraduates. This course will also be an immersive overview of organic reactivity, the use and synthetic manipulations of functional groups, and total synthesis tactics.

Alternating and other or on demand. 3 Credits

CH-408 Directed Study: Chemistry

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3-4 Credits

CH-410 Biochemistry I

LASC Categories: NLL

Prerequisites: CH-201 with a C- or above.

The chemistry of proteins, nucleic acids, carbohydrates, and lipids; enzymes, biological oxidations; and correlations in intermediary metabolism. Three hours of lecture and a three-hour laboratory per week.

Every year. 4 Credits

CH-411 Biochemistry II

LASC Categories: NLL

Prerequisites: CH-410 or BI-410 with a C- or above.

The generation and storage of metabolic energy; biosynthesis of macromolecular precursors, DNA, RNA, and protein; and biochemical regulation. Three hours of lecture and three hours of lab per week.

Every 2-3 years. 4 Credits

CH-435 Advanced Laboratory Experience

LASC Categories: LAB, NLL

Prerequisites: CH-204 and CH-210 and CH-303 CH-303 with a C- or above.

Problem based laboratory class that incorporates topics from the various disciplines within chemistry. This course requires laboratory skills learned in previous lab courses. Students will devise and execute their own experiments associated with the topics being covered. This course is intended to provide a more realistic approach to solving research type problems. With guidance from the instructors, students will bring their project to completion and present their findings.

Spring only and every 2-3 years. 2 Credits

CH-440 Organometallics for Organic Synthesis**Prerequisites:** CH-201 CH-201 with a C- or above.

Have you ever wondered about the elements below carbon on the periodic table that we never talk about in organic chemistry? Now is your chance to learn about the transition metals and the role they play in organic synthesis. We will learn about organometallic complexes and how they are used in modern industrial processes. Knowledge of 18-electron complexes, ligand types, and organometallic mechanisms will allow us to study catalysis and its role in the manufacture of modern commodity products such as polymers, pharmaceuticals, and fine chemical precursors.

Fall only and every 2-3 years. 3 Credits

CH-450 Computational Chemistry**Prerequisites:** CH-301 with a C- or above.

Modern theoretical methods used in studying molecular structure, bonding, and reactivity. Application of these theories to various chemical systems.

Every 2-3 years. 3 Credits

CH-455 Special Topics in Chemistry

Exploration of frontier areas of chemistry, including chemical kinetics, quantum chemistry, polymers, spectroscopy, materials science, environmental bioinorganic and medicinal bioinorganic and medicinal chemistry. Prerequisites: 18 credits in Chemistry and consent of Department.

Every 2-3 years. 3-4 Credits

CH-470 Instrumental Analysis**LASC Categories:** NLL**Prerequisites:** CH-120, CH-121, and CH-210 or CH-301 with a C- or above.

Advanced level survey of instrumental methods of separation and analysis including spectrophotometry, potentiometry, polarography, and chromatography. Laboratories are project-oriented. Two lecture hours and six laboratory hours per week.

Every 2-3 years. 4 Credits

CH-475 Chemistry Seminar**LASC Categories:** CAP

Prerequisites: CH-260 and 25 credits in Chemistry. Contemporary developments in chemistry, review of technical literature in both print and electronic format, preparation and presentation of technical paper. [Prerequisite: Successful completion of 25 Chemistry credits or special permission of instructor.]

Every year. 1 Credit

CH-480 Internship: Chemistry

Project completed at an institution other than Worcester State by a student with a non-Worcester State sponsor and Worcester State liaison. Every year. 1-6 Credits

CH-492 Advanced Chemistry Research Methods

Students develop and execute a research project in a field of chemistry under the direction of a faculty member. This may include the development of a formal research proposal in collaboration with the faculty mentor, conducting needed background literature search, data collection through appropriate lab experiments and, analysis of data and production of a research paper summarizing the findings.

Permission of instructor.

Every year. 1-6 Credits

Program Learning Outcomes

- Describe properties of matter, explain the changes it undergoes and calculate the energy associated with these changes
- Identify appropriate equipment to perform analyses and safely execute a previously published procedure with minimal input from the instructor
- Read and communicate accurate scientific information to different audiences using a variety of media (lab reports, scientific reviews, oral presentations)
- Define green chemistry and critically assess greenness of a process
- Apply critical thinking and logical reasoning skills to chemical systems

Chemistry

Students must earn a C- or higher in all prerequisite courses in order to register for a chemistry or ancillary course.

Requirements for a Major in Chemistry

Code	Title	Credits
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6

CH-203 & CH-204	Organic Chemistry Laboratory I and Organic Chemistry Laboratory II	4
CH-301 & CH-302	Physical Chemistry I (Lecture Only) and Physical Chemistry II (Lecture Only)	6
CH-260	Chemistry Literature Seminar	1
CH-303	Physical Chemistry Laboratory I	2
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-475	Chemistry Seminar	1
Plus a minimum of 12 credits at the 300 level or above, at least one of which must be a lab course. Internships and Independent Study may contribute no more than 3 credits toward this requirement.		12
Ancillary Courses		(16 credits)
MA-200 & MA-201	Calculus I and Calculus II	8
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	8
Total Credits		61

To complete a chemistry degree certified by the American Chemical Society, students should complete all of the requirements for the Chemistry Major, plus CH-340, CH-410, CH-470, CH-492, and one of the following: CH-335, CH-350, CH-355, CH-411, CH-435, CH-450, or CH-295. By completing 6 credits of CH-492, students will also be eligible for Chemistry Honors.

Sample Timeline for Completion of Degree

Year One

Semester One		Credits
LASC	First-Year Seminar (p. 41)	3
EN-101	College Writing I	3
CH-120	General Chemistry I	4
MA-200	Calculus I (LASC QR or Math according to accuplacer score) ¹	4
LASC	Distribution Elective (p. 37)	3
Credits		17

Semester Two

EN-102	College Writing II	3
LASC	U.S. Constitution	3
CH-121	General Chemistry II	4
MA-201	Calculus II (LASC QR or Math according to accuplacer score) ¹	4
LASC	Distribution Elective (p. 37)	3
Credits		17

Year Two

Semester Three

CH-201	Organic Chemistry I (lecture)	3
CH-203	Organic Chemistry Laboratory I	2
PY-241	Physics I (Mechanics) (LASC NSP QLAC) ^{1,2}	4
CH-210 or MA-200	Chemical Analysis: an Introduction to Modern Methods (LASC WAC) ³ or Calculus I	4-5
LASC	Distribution Elective (p. 37)	3
Credits		16-17

Semester Four

CH-202	Organic Chemistry II (lecture)	3
CH-204	Organic Chemistry Laboratory II	2
CH-260	Chemistry Literature Seminar	1
PY-242	Physics II (Electricity, Magnetism and Optics) (LASC NSP) ^{1,2}	4
CH3XX/4XX	Chemistry Upper-level Elective or Calculus II (if not taken previously)	3-4
LASC	Distribution Elective (p. 37)	3
Credits		16-17

Year Three

Semester Five

CH-301	Physical Chemistry I (Lecture Only)	3
CH-303	Physical Chemistry Laboratory I	2
LASC	Distribution Elective or Chemical Analysis (if not taken previously) ⁴	5
SELECT	Free Elective	3
SELECT	Free Elective	3
Credits		16

Semester Six

CH-302	Physical Chemistry II (Lecture Only)	3
CH3XX/4XX	Chemistry Upper Level Elective	3-4
LASC	Distribution Elective (p. 37)	3
LASC	Distribution Elective (p. 37)	3
SELECT	Free Elective	3
Credits		15-16

Year Four**Semester Seven**

CH-475	Chemistry Seminar ⁵	2
CH3XX/4XX	Chemistry Upper Level Elective	3-4
LASC	Distribution Elective (p. 37)	3
SELECT	Free Elective	3
SELECT	Free Elective	3
Credits		14-15

Semester Eight

CH3XX/4XX	Chemistry Upper Level Elective	3-4
SELECT	Free Elective (Chemistry or other)	3-4
SELECT	Free Elective (Chemistry or other)	3-4
SELECT	Free Elective	3
Credits		12-15
Total Credits		123-130

¹ It is recommended that students take Calculus (MA-200/MA-201) in their first-year and calculus-based physics (PY-241/PY-242) in their second year. This gives the best preparation for physical chemistry in the third year. EN-101 satisfies LASC writing and MA-200/MA-201 satisfies QR.

² PY-241/PY-242 each satisfies NSP. CH-210 satisfies WAC.

³ If not taken previously.

⁴ 3 + 3 Pre-Pharmacy students must take Chemistry Seminar in the Fall semester of Junior year. Others take in Senior year.

⁵ Students who have not taken Chemistry Seminar (a Capstone Experience) must take it in their senior year Fall semester.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students

with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Chemistry Honors Program

The Chemistry Honors Program is an upper-level program designed to challenge students majoring in chemistry to excel in their course work, extend their program beyond the basic requirements of the major, and complete an independent research project including a written thesis. The Chemistry Honors Program rewards and recognizes students for so doing. Students are required to have a 3.5 GPA in chemistry and ancillary courses and a 3.2 GPA overall.

Requirements for the Chemistry Honors Program

Students would need to complete the following courses in chemistry:

Code	Title	Credits
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
CH-203 & CH-204	Organic Chemistry Laboratory I and Organic Chemistry Laboratory II	4
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-301 & CH-302	Physical Chemistry I (Lecture Only) and Physical Chemistry II (Lecture Only)	6
CH-260	Chemistry Literature Seminar	1
CH-303	Physical Chemistry Laboratory I	2
CH-475	Chemistry Seminar	1
<i>300- and 400-level electives</i>		
The following two courses must be taken as part of the required 12 credits of 300 and 400-level electives:		12
CH-340	Advanced Inorganic Chemistry	

CH-410	Biochemistry I	
<i>Research</i>		
CH-492	Advanced Chemistry Research Methods	1-6
Total Credits		46-51

In addition, students would be expected to complete the ancillary requirements for the chemistry major in calculus and physics.

Major in Chemistry and prerequisites for the Accelerated Pharmacy Program

(Please see program description (p. 61) in this catalog.)

Requirements for a Major in Chemistry and to meet the prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Sciences

Code	Title	Credits
Chemistry Major Core		
		(33 credits)
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
CH-203 & CH-204	Organic Chemistry Laboratory I and Organic Chemistry Laboratory II	4
CH-301 & CH-302	Physical Chemistry I (Lecture Only) and Physical Chemistry II (Lecture Only)	6
CH-260	Chemistry Literature Seminar	1
CH-303	Physical Chemistry Laboratory I	2
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-475	Chemistry Seminar	1

Prerequisites for the Accelerated Pharmacy Program		(28 credits)
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
PY-241	Physics I (Mechanics)	4
MA-200	Calculus I	4
MA-201	Calculus II	4
BI-204	Microbiology	4
PY-242	Physics II (Electricity, Magnetism and Optics)	4
Total Credits		61

Students must earn a C- or higher in all prerequisite courses in order to register for a chemistry or ancillary course.

Major in Chemistry, Concentration in Medicinal Chemistry

In addition to courses required for the Chemistry Major, 12 additional credits are required for the Medicinal Chemistry Concentration.

Code	Title	Credits
<i>Required Courses</i>		
CH-350	Medicinal Chemistry	3
CH-402	Advanced Organic Chemistry	3
<i>Chemistry Elective</i>		
Take one course from the following:		
CH-355	Molecular Pharmacology	3-4
or CH-410	Biochemistry I	
or CH-440	Organometallics for Organic Synthesis	
or CH-450	Computational Chemistry	
or CH-450	Computational Chemistry	
or CH-455	Special Topics in Chemistry	
<i>Lab Requirement</i>		
CH-435	Advanced Laboratory Experience	2-3
or CH-450	Computational Chemistry	
or CH-492	Advanced Chemistry Research Methods	

Minor in Chemistry

The chemistry minor provides students with a solid foundation in the discipline of chemistry with a strong emphasis on the development of laboratory skills. The minor will allow students to understand chemistry as a central science and relate it to everyday life and the environment. Students will develop the skills to think critically and quantitatively evaluate data using the scientific method. Students who are interested in applying the scientific methodology to solve problems should pursue this minor.

Requirements for a Minor in Chemistry

Code	Title	Credits
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
Thirteen (13) additional credits in 200-level or higher chemistry courses		13
The courses at the 200-level or higher must include: a lab at 200-level or higher and at least 3 credits at 300-level or higher.		
Total Credits		21

Minor in Chemistry for the Medical Professions

Code	Title	Credits
CH-120	General Chemistry I	4
CH-121	General Chemistry II	4
CH-201	Organic Chemistry I (lecture)	3
CH-203	Organic Chemistry Laboratory I	2
CH-202	Organic Chemistry II (lecture)	3
CH-204	Organic Chemistry Laboratory II	2
CH-410	Biochemistry I	4
BI-211	Pre-Medical Seminar: Preparing for a Career in Medicine	1

These courses satisfy the requirements for the minor. However, to apply to medical, dental, or veterinary school, additional courses must be completed, including BI 140, BI 141, PY 221 or PY 241, PY 222 or PY 242, and MA 190. MA 150, MA 200, and PS 101 are strongly recommended. Specific courses should be planned with the guidance of a member of the Pre-Medical Advisory Committee.

Total Credits 23

Minor in Pharmaceutical Science

The Pharmaceutical Science minor includes advanced coursework covering aspects of drug design and synthesis, mechanisms of drug action, pharmacology and toxicology. The minor will allow students to gain critical skills in these areas and will allow students to pursue diverse positions in industrial, academic, or other research environments within the areas of drug discovery, development, and commercialization. This minor is particularly suited for Biotechnology majors who may want to explore opportunities in advanced drug discovery.

Minor in Pharmaceutical Science

Code	Title	Credits
<i>Required Courses</i>		
CH-202	Organic Chemistry II (lecture)	3
CH-204	Organic Chemistry Laboratory II	2
CH-350	Medicinal Chemistry	3
CH-355	Molecular Pharmacology	3

<i>Electives - 7 credits from:</i>		7
CH-330	Environmental Toxicology	
CH-402	Advanced Organic Chemistry	
CH-411	Biochemistry II	
CH-435	Advanced Laboratory Experience	
CH-440	Organometallics for Organic Synthesis	
CH-470	Instrumental Analysis	
CH-480 or CH-492	Internship: Chemistry Advanced Chemistry Research Methods	
Total Credits		18

Minor in STEM

The STEM minor provides students with a broad foundation of scientific knowledge. The minor reinforces the scientific method across disciplines, and allows students to gain increased scientific literacy across the disciplines. Students also will learn to communicate science to a diverse audience.

Code	Title	Credits
Requirements		(18 credits)

Choose 5 courses including one lab science. No more than two from Chemistry, Biology, Computer Science, Physics or DEEP. 15

Chemistry

CH-106	Paper Or Plastics?	
CH-112	Survey of Chemistry	
CH-120	General Chemistry I	

Biology (BI-104 must be taken with BI-103 to count in the minor.)

BI-101	Concepts of Biology	
BI-103	The Human Animal	
BI-104	The Human Animal Laboratory	
BI-111	Social Biology	
BI-112	Diseases and Mankind	
BI-114	Plants and Human Affairs	
BI-116	Animal Biology	
BI-117	Humans and the Environment	
BI-118	Dinosaurs	
BI-119	Biology of Sex	
BI-120	Darwinian Revolution	
BI-125	Women in Science	

BI-130	Field Biology
BI-140	Introduction to Organismal Biology
BI-141	Intro to Cellular and Molecular Biology
BI-205	Research Techniques and Experimental Design
BI-266	Biology of Aging

Computer Science

CS-101	Basics of Computer Science
CS-131	Data Visualization and Statistical Analysis
CS-135	Programming for Non-CS Majors
CS-140	Introduction to Programming
CS-141	Data Cleaning and Preprocessing
CS-155	Computer Networking and Security
CS-234	Data Mining for Non-Cs Majors
CS-265	Database Applications
CS-282	Unix Systems Programming
CS-286	Database Design and Applications

Physics

PY-101	Introduction to Astronomy
PY-105	Concepts in Physics I
PY-114	Physics of Waves
PY-221	General Physics I
PY-241	Physics I (Mechanics)

DEEP

EV-120	Integrated Environmental Science for Educators
EV-130	Environmental Problems and Solutions
EV-150	Environmental Science
GS-101 or GS-110	Physical Geography Meteorology
GS-140	Physical Geology
GS-165	Geographic Information Systems I
GS-210	Geomorphology
GS-225	Oceanography
GS-230	Biogeography
GS-235	Contemporary Climate Change
GS-250	Hydrology
GS-260	Introduction to Soil Science

GS-270	The Sedimentary Record	
<i>STEM Minor Seminar</i>		
CH-312	Tackling Global Issues using STEM	3
Total Credits		18

Communication Sciences and Disorders

Department of Speech-Language-Hearing Sciences (formerly Communication Sciences and Disorders)

Mission: The Department of Speech-Language-Hearing Sciences serves to meet the needs of its students by providing a rigorous, scientifically sound, culturally responsive, evidence-based education with experiential learning opportunities. In doing so, students receive the opportunity to gain the knowledge and skill necessary for personal, professional, and intellectual achievement within their community.

Vision: The Department of Speech-Language-Hearing Sciences will be a respected partner in the community by fostering academic, research, and clinical excellence, as well as engaged citizenship. Students are prepared to be valued members and leaders of their communities.

- 4+1 Masters in Communication Sciences and Disorders (p. 209)
- Communication Sciences and Disorders Major (p. 204)
- Communication Sciences and Disorders Honors Program (p. 206)
- Communication Sciences and Disorders Minor (p. 207)
- Interdisciplinary Minor in Disabilities Studies (p. 207)
- Normal and Disordered Speech, Language and Hearing Minor (p. 208)

Faculty and Instructors

Suzanne Crawford-Stacy, Clinical Instructor (2013), B.S., Worcester State University; M.S., University of Vermont

Kristina A. Curro, Department Chair, Associate Professor (2015), B.A., University of Rochester; M.A., University of Massachusetts-Amherst; Ph.D., University of Massachusetts-Amherst

Keith N. Darrow, Professor (2010), B.S., University of Massachusetts; M.S., Brooklyn College; Ph.D., Massachusetts Institute of Technology and Harvard Medical School

Colleen Karow, Associate Professor (2017), B.A., M.A., Western Illinois University; Ph.D., University of Texas at Austin

Andrea Quinn, Center Director (2023), B.A., Northeastern University, M.S. Massachusetts-General Hospital Institute of Health Professions

Jaime L. Marino, Clinical Instructor (2021), B.A., Simmons College; M.S., Worcester State University

Kenneth S. Melnick, Associate Professor (2004), B.A., University of Michigan; M.A., University of Cincinnati; Ph.D., Vanderbilt University

Kym Meyer, Assistant Professor (2022), B.A., Hofstra University; M.S., Gallaudet University; Ph.D., University of Massachusetts-Amherst

Athena Reese, Clinical Instructor (2023), B.A., University of Louisville; M.S. University of North Texas

Samantha L. Scripture, Assistant Professor (2022), B.A., Elms College; M.A., University of Massachusetts-Amherst; Ph.D., University of Massachusetts-Amherst

Courses

CD-100 Introduction to Human Communication and its Disorders

LASC Categories: HBS, ICW

Nature and causes of organic and functional speech/language and hearing problems, general awareness of diagnostic and therapeutic techniques. Fall and Spring and every year. 3 Credits

CD-103 Language Science

LASC Categories: TLC

Introduction to basic linguistic knowledge including theoretical areas of pragmatics, semantics, syntax, morphology and phonology in a multicultural perspective.

Fall and Spring and every year. 3 Credits

CD-105 Phonetics

Introduction to the study of English speech sounds, their articulation and acoustic characteristics, and speech transcription using the International Phonetic Alphabet.

Fall and Spring and every year. 3 Credits

CD-110 Anatomy and Physiology of Speech And Hearing

LASC Categories: NSP, TLC

Normal anatomy and physiology of the speech and hearing mechanisms with emphasis on respiration, phonation, resonance, articulation, and audition.

Fall and Spring and every year. 3 Credits

CD-115 Normal Development of Speech and Language

An in-depth coverage of the normal acquisition and development of speech and language, including phonology, morphology, syntax, and semantics.

Fall and Spring and every year. 3 Credits

CD-120 An Introduction to American Sign Language

An introduction to American Sign Language; vocabulary, grammar and colloquialism as used in the Deaf community. Deaf culture, history, and social justice themes will be introduced through readings and movies.

Fall and Spring and every year. 3 Credits

CD-193 Special Topics in Communication Sciences And Disorders for First-Year Students

LASC Categories: FYS

Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.

Every year. 3 Credits

CD-201 Hearing Science

LASC Categories: QAC

Prerequisites: CD-110. Math placement code of 3 needed.

Basic information to understand concepts in audiology: physical concepts, acoustics, psychoacoustics, measurement of sound and speech perception theories.

Fall and Spring and every year. 3 Credits

CD-202 Speech Science

Prerequisites: CD-110 and CD-105 (new number)/ CD-205 (old number) with C or above and Math placement code of 3 needed.

Basic information to understand concepts in speech; physical and psychophysical bases, linguistic and psycholinguistic aspects and clinical instruments.

Fall and Spring and every year. 3 Credits

CD-203 Language Science

LASC Categories: TLC

Basic linguistic knowledge including theoretical areas of pragmatics, semantics, syntax, morphology and phonology in a multicultural perspective.

Fall and Spring and every year. 3 Credits

CD-207 Intermediate Sign Language

Prerequisites: CD-120 with a grade of C or above.

Students gain more facility in sign usage. Receptive and expressive vocabularies are expanded and fluency increased.

Spring only and every year. 3 Credits

CD-230 Neuroscience for Communication Sciences and Disorders

LASC Categories: NSP

Prerequisites: CD-110

Structure and function of the nervous system and its relation to normal and disordered speech, language, and hearing.

Fall and Spring and every year. 3 Credits

CD-301 Directed Observations

LASC Categories: WAC

Prerequisites: EN-102

Prerequisites or Corequisite: CD-305 CD-310 CD-320

Beginning aspects of clinical issues including objectives, rapport and timing. Therapy/diagnostic sessions will be viewed and highlighted by the instructor.

Spring only and every year. 2 Credits

CD-305 Introduction to Audiology

Prerequisites: CD-201 with a minimum grade of C.

Introduction to audiometric testing techniques and interpretation as related to ear pathologies.

Spring only and every year. 3 Credits

CD-310 Language Disorders

Prerequisites: CD-100 CD-103 CD-110 CD-115 CD-205 CD-202 with a minimum grade of C.

Examination of the processes interfering with normal language acquisition and the disorders which disturb established language skills in children and adults.

Spring only and every year. 3 Credits

CD-320 Speech Disorders

Prerequisites: CD-100 CD-110 CD-115 CD-201 CD-202 CD-205 with a minimum grade of C.

Study of the theoretical bases of articulation, voice and fluency disorders. Etiology, characteristics, evaluation and rehabilitation of these disorders. Spring only and every year. 3 Credits

CD-400 Introduction to Aural Rehabilitation

LASC Categories: DAC

Prerequisites: CD-201 CD-202 CD-305 CD-310 CD-320 with a minimum grade of C.

Study of the theoretical bases of the characteristics, evaluation and treatment of individuals with hearing impairment across the life span.

Fall only and every year. 3 Credits

CD-401 Advanced Directed Observations

LASC Categories: WAC

Prerequisites: CD-301 with a minimum grade of C and EN-102/EN-250

Advanced aspects of clinical issues including procedures and material selection. Therapy/diagnostic sessions will be viewed and highlighted by the instructor.

Fall only and every year. 2 Credits

CD-408 Directed Study: Communication Sciences and Disorders

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

CD-410 Professional Guidelines and Skills

LASC Categories: CAP

Prerequisites: CD-305 CD-310 CD-320 with a minimum grade of C.

Exploration of topics related to career preparation, personal wellness and professional practice in communication sciences & disorders and allied fields.

Fall only and every year. 3 Credits

CD-475 Selected Topics in Communication Sciences and Disorders

Prerequisites: CD-310 CD-320 with a minimum grade of C.

Selection of topics of mutual interest to the student and faculty. Timely topics and issues will be covered. Spring only and every year. 3 Credits

CD-490 Independent Study in Communication Sciences and Disorders

The student will pursue an area of special interest in speech pathology or audiology through research or field experience, under faculty supervision. Junior and senior majors only.

Fall and Spring and every year. 1-6 Credits

Program Goals

- Students will demonstrate knowledge and skills of the science underlying human communication, including anatomy and physiology, speech science, phonetics, language science, hearing science, and neuroscience.
- Students will demonstrate introductory knowledge and application regarding etiology and characteristics of communication disorders.
- Students will demonstrate introductory knowledge and application of assessment, prevention, and intervention of communication disorders.
- Students will demonstrate pre-professional written and oral language skills pertaining to communication sciences and disorders.
- Students will develop critical thinking skills pertaining to their understanding of the normal and disordered processes of communication.

Program Learning Outcomes

- Students will demonstrate growth in understanding and application of knowledge associated with anatomy and physiology of the speech and hearing mechanisms and processes.
- Students will demonstrate growth in understanding and application of knowledge and skills associated with phonetics.
- Students will demonstrate growth in understanding and application of knowledge associated with speech science.
- Students will demonstrate growth in understanding and application of knowledge associated with language science.
- Students will demonstrate growth in understanding and application of knowledge associated with hearing science.

- Students will demonstrate growth in understanding and application of knowledge associated with neuroscience.
- Students will demonstrate growth in understanding and applying knowledge regarding etiology and characteristics of communication disorders
- Students will demonstrate growth in understanding and applying knowledge of assessment, prevention, and intervention of communication disorders
- Students will demonstrate growth in pre-professional written language skills pertaining to communication sciences and disorders
- Students will demonstrate growth in pre-professional oral language skills pertaining to communication sciences and disorders
- Students will apply critical thinking skills pertaining to communication sciences and disorders

Communication Sciences and Disorders Major

The undergraduate program immerses students in an academically rigorous and challenging course of study. Students learn about the normal development and processes of speech, language, and hearing, as well as its disorders across the lifespan. In addition to the courses offered within the Department of Speech-Language-Hearing Sciences, students are required to take courses in biological sciences, physical sciences, behavioral sciences, and mathematics.

The undergraduate curriculum allows the opportunity for students who may be interested to study abroad or be part of the National Student Exchange. The second semester of year one or the first semester of year two or three are good choices for these pursuits. Students must plan their semester away with their department advisor at least one year in advance to assure that they complete their major requirements in a timely manner. The curriculum also allows students to declare a minor in an area of interest.

Overall, the Communication Sciences and Disorders major provides students with knowledge and skills that enable them to do well in either graduate school or in the work place. Students will have an excellent liberal arts education with a strong basis of normal

and disordered communication. Students acquire interpersonal, critical thinking, and problem-solving skills, as well as scientific reasoning, strong writing ability, and strong presentation skills.

The Speech-Language-Hearing Sciences Department's Program Goals ensure that students will be able to demonstrate knowledge and skills of the science underlying human communication, including anatomy and physiology, speech science, phonetics, language science, and hearing science. Students will also be able to demonstrate knowledge of the etiology, characteristics, assessment, prevention, and intervention of communication disorders. In addition, students will demonstrate written language, oral language, and critical thinking skills pertaining to normal and disordered communication.

Requirements for Major in Communication Sciences and Disorders

Code	Title	Credits
CD-100	Introduction to Human Communication and its Disorders	3
CD-103	Language Science	3
CD-110	Anatomy and Physiology of Speech And Hearing	3
CD-115	Normal Development of Speech and Language	3
CD-201	Hearing Science	3
CD-202	Speech Science	3
CD-205	Phonetics	3
CD-230	Neuroscience for Communication Sciences and Disorders	3
CD-301	Directed Observations	2
CD-305	Introduction to Audiology	3
CD-310	Language Disorders	3
CD-320	Speech Disorders	3
CD-400	Introduction to Aural Rehabilitation	3
CD-401	Advanced Directed Observations	2
CD-410	Professional Guidelines and Skills	3

CD-475	Selected Topics in Communication Sciences and Disorders	3
Total Credits		46

Students must obtain a minimum grade of a C in any prerequisite major course. In addition, a major course may be repeated only once to obtain a passing grade.

Out of department requirements include the following courses: one biological science (human or animal based), one physical science (introductory physics or chemistry course), MA-180, one statistics, and two behavioral sciences of which one must be in developmental psychology. These requirements cannot be taken pass/fail. Advisors in the Department of Communication Sciences and Disorders will help students choose appropriate courses in these areas.

Department of Communication Sciences and Disorders Sample Timeline for Completion of Degree

Year One

Semester One		Credits
LASC	First-Year Seminar LASC FYS	3
EN-101	College Writing I (LASC WRI)	3
CD-100	Introduction to Human Communication and its Disorders	3
MA-180	Introduction to Functions (LASC QR) ¹	3
Biological Science (LASC NSP & Lab)		
Select one of the following		4
BI-103 & BI-104	The Human Animal and The Human Animal Laboratory	
BI-101	Concepts of Biology	
Credits		16

Semester Two

EN-102	College Writing II (LASC WR II)	3
CD-103	Language Science	3
CD-110	Anatomy and Physiology of Speech And Hearing	3
LASC	LASC Elective (USW) (p. 51) ²	3
Statistics		

MA-150 or PS-275	Statistics I (LASC QR) ¹ or Psychological Statistics	3
Credits		15

Year Two

Semester Three

CD-201	Hearing Science ⁴	3
CD-205	Phonetics	3
LASC	LASC Elective (GP) (p. 42) ²	3
LASC	LASC Elective (CA) (p. 39) ²	3
PS-101	General Psychology (LASC HBS)	3
Credits		15

Semester Four

CD-115	Normal Development of Speech and Language	3
CD-202	Speech Science	3
PS-210	Developmental Psychology	3

Physical Science

Select one of the following: (LASC NSP) ³		4
PY-105	Concepts in Physics I	
PY-114	Physics of Waves	
CH-112	Survey of Chemistry	
LASC	LASC Elective (TLC) (p. 53) ²	3
Credits		16

Year Three

Semester Five

CD-230	Neuroscience for Communication Sciences and Disorders	3
LASC	LASC Elective (NSP) (p. 49) ²	3
LASC	LASC Elective (ICW) (p. 46) ²	3
LASC	LASC Elective (CON) (p. 38) ²	3
SELECT	General Elective	3
Credits		15

Semester Six

CD-301	Directed Observations ⁶	2
CD-310	Language Disorders ⁶	3
CD-320	Speech Disorders ⁶	3
CD-305	Introduction to Audiology ⁶	3
LASC	Distribution Elective (p. 37)	3
SELECT	General Elective	3
Credits		17

Year Four

Semester Seven

CD-401	Advanced Directed Observations	2
--------	--------------------------------	---

CD-400	Introduction to Aural Rehabilitation	3
CD-410	Professional Guidelines and Skills	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		14
Semester Eight		
CD-475	Selected Topics in Communication Sciences and Disorders	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Total Credits		123

¹ MA-180 requires a math placement code of 5 or higher. MA-150 requires a math placement code of 4 or higher. PS-275 requires a math placement code of 3 or higher.

² LASC courses indicated with ² are suggestions and serve as a reminder that LASC Distribution Electives must be taken to satisfy the LASC requirements.

³ See advisor for a full list of approved courses.

⁴ CD-201 requires a math placement code of 3 or higher.

⁵ CD-202 requires a math placement code of 3 or higher.

⁶ CD-301, CD-305, CD-310 and CD-320 are corequisite courses.

Note:

1. Most major courses have prerequisites that must be completed before enrolling into the subsequent course.
2. Once major and LASC requirements are satisfied, students may elect any courses of interest to fulfill a minimum of 120 credits for graduation.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/

major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Communication Sciences and Disorders Honors Program

The Speech-Language-Hearing Sciences (SLHS) Honors Program is intended for outstanding students within the SLHS major. Students completing the requirements will graduate with departmental honors. Applicants must submit a letter of application to the SLHS Undergraduate Committee, a research proposal, and a letter of support from a faculty sponsor. Applications are due November 1st for Spring semester and April 1st for Fall semester.

Requirements for the Communication Sciences and Disorders Honors Program

To be part of the program, CSD students must have:

- A minimum GPA of 3.5
- No grade less than a B in all CSD courses and non-CSD required courses
- Completed a total of 60 credits
- Completed the following prior to application:

Code	Title	Credits
CD-110	Anatomy and Physiology of Speech And Hearing	3
CD-115	Normal Development of Speech and Language	3
CD-201	Hearing Science	3
CD-202	Speech Science	3
CD-205	Phonetics	3
CD-230	Neuroscience for Communication Sciences and Disorders	3

Once accepted into the CSD Honors Program, students will:

- Complete a research project in collaboration with a CSD faculty mentor
- Present the project in at least one venue

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required

for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Communication Sciences and Disorders Minor

The Communication Sciences and Disorders Minor was designed for those students who may be interested in applying to a Graduate Program in Speech-Language Pathology or Audiology. Note that some courses in this minor have prerequisites. See a Speech-Language-Hearing Sciences Department advisor for assistance with course selection and graduate program requirements.

21 credits within the department.

The Communication Sciences and Disorders (CSD) Minor was designed for students who may be interested in applying to a Graduate Program in Speech-Language Pathology or Audiology. Note that some courses in this minor have prerequisites. See a CSD advisor for assistance with course selection and graduate program requirements.

Requirements for a Communication Sciences and Disorders Minor

21 credits within the department.

Code	Title	Credits
Required Courses		(21 credits)
CD-110	Anatomy and Physiology of Speech And Hearing	3
CD-115	Normal Development of Speech and Language	3
CD-201	Hearing Science	3
CD-202	Speech Science	3
CD-205	Phonetics	3
CD-230	Neuroscience for Communication Sciences and Disorders	3
CD-305	Introduction to Audiology	3
Total Credits		21

The minimum grade requirement for a course to count toward the minor is a "C".

Interdisciplinary Minor in Disabilities Studies

This interdisciplinary minor will explore various topics that focus on disabilities and provide the students with an understanding of disability issues in today's society. This minor provides the students with a unique understanding as it draws from a variety of disciplines across the university. It allows students to gain knowledge and skills from numerous perspectives including: social sciences, humanities, natural sciences and education.

Students will take 6 courses for 18 credits. At least one course must be at the 200/300 level.

Required Courses

Code	Title	Credits
CD-100	Introduction to Human Communication and its Disorders	3
CS-124	Health Informatics	3
PS-101	General Psychology	3

One Ethics Course Required

Code	Title	Credits
HC-228	Health Ethics	3
PH-131	Medical Ethics	3

Select at least two of the courses

Code	Title	Credits
BI-112	Diseases and Mankind	3
CD-120	An Introduction to American Sign Language	3
ED-206	Development and Learning of Typical and Atypical Children Birth to Age 8	3
ED-285	Understanding and Supporting Children And Youth With Disabilities	3
PS-222	Introduction to Health Psychology	3
PS-240	Introduction to Abnormal Psychology	3

PS-310	Development of Exceptional Children/Youth	3
SO-215	Medical Sociology	3
SO-255	Sociology of Disability	3

NOTES:

Students must take the four required courses (CD 100, CS 124, PS 101 and HC 228 or PH 131) for 12 credits, plus two from the approved list (6 credits).

CD majors must take the three required courses (CS 124, PS 101 and HC 228 or PH 131 – CD 100 is required of the major), plus three from the approved list (9 credits).

PBH majors must take the four required courses (CD 100, CS 124, PS 101, and PH 131 – HC 228 is required of the major), plus two from the approved list (6 credits).

PS majors must take the three required courses (CD 100, CS 124 and HC 228 or PH 131 – PS 101 is required for the major), plus three from the approved list (9 credits).

Elective Courses		(3 credits)
Take one of the following courses		3
CD-305	Introduction to Audiology	
CD-310	Language Disorders	
CD-320	Speech Disorders	
Total Credits		18

Normal and Disordered Speech, Language and Hearing Minor

Students will obtain basic knowledge in human communication sciences with an emphasis on understanding either speech and language disorders or hearing disorders. See a CSD advisor for assistance with course selection.

Code	Title	Credits
Required Courses		(15 credits)
CD-100	Introduction to Human Communication and its Disorders	3
CD-110	Anatomy and Physiology of Speech And Hearing	3
CD-115	Normal Development of Speech and Language	3
CD-230	Neuroscience for Communication Sciences and Disorders	3
CD-103 or CD-201	Language Science Hearing Science	3

4+1 Masters in Communication Sciences and Disorders

Program Requirements: Students would be eligible to apply if they meet the following conditions:

- Earned an cumulative GPA requirement of 3.5 in Worcester State University’s undergraduate Communication Sciences and Disorders major.
- Has completed a minimum of 60 credits
- Two letters of recommendation, one must be from a department member
- Include any transcripts from other accredited undergraduate programs
- Completion of the graduate application essay
- Completion of the SLP Cover Sheet (included with the typical graduate SLP program application)

Conditional acceptance: Undergraduate students will maintain their conditional acceptance in the graduate SLP program so long as the student meets the following criteria:

- Maintains an cumulative GPA of 3.5 or higher,
- Earns a B- or higher in 500-level courses (this requirement is aligned with the current graduate program policy requiring students to earn a B- or higher to be considered a passing grade)
- Successfully completes the undergraduate degree in the time stated.

Upon completion of the BS, the student will be matriculated into the MS-SLP program.

Cross-Listed Courses: Students who are accepted into the 4+1.5 program will complete up to 12 credits cross listed between undergraduate and graduate programs.

Application Review: Applications for this program will be accepted between Feb 1 and March 1 (unless March 1 falls on a weekend, in which case it will be moved to the next business day). These applications will be reviewed by the graduate SLP admissions

committee, separately from the cohort of traditional applications for the graduate SLP program received before Feb 1. Decision letters will be sent out in April and require students to accept or deny admissions by May 15th. **Note** - this new 4+ program will accommodate undergraduate students that graduate in the Fall or Spring term, i.e. December or May, respectively.

Plan of Study - May Graduates

Year One

Semester One		Credits
EN-101	College Writing I	3
CD-100	Introduction to Human Communication and its Disorders	3
BI-103 or MA-180	The Human Animal or Introduction to Functions	3
BI-104	The Human Animal Laboratory	1
CD-193	Special Topics in Communication Sciences And Disorders for First-Year Students	3
LASC/Minor		3
Credits		16

Semester Two

EN-102	College Writing II	3
CD-103	Language Science	3
CD-110	Anatomy and Physiology of Speech And Hearing	3
LASC/Minor		3
Physical Science		4
Credits		16

Year Two

Semester Three

CD-201	Hearing Science	3
CD-105	Phonetics	3
PS-101	General Psychology	3
MA-180 or BI-103	Introduction to Functions ^{and} BI-104 1 credit or The Human Animal	3
LASC/Minor		3
Credits		15

Semester Four

CD-115	Normal Development of Speech and Language	3
CD-202	Speech Science	3

PS-210	Developmental Psychology	3
MA-150	Statistics I	3
LASC/Minor		3

Credits 15

Year Three

Semester Five

CD-230	Neuroscience for Communication Sciences and Disorders	3
LASC/Minor		3
LASC/Minor		3
LASC/Minor		3
LASC/Minor		3

Credits 15

Semester Six

APPLY HERE

CD-301	Directed Observations	2
CD-305	Introduction to Audiology	3
CD-310	Language Disorders	3
CD-320	Speech Disorders	3
LASC/Minor		3
LASC/Minor		3

Credits 17

Summer

CD-901	Intro to Graduate and Clinical Skills <small>as CD-501</small>	2
--------	--	---

Credits 2

Year Four

Semester Seven

CD-400	Introduction to Aural Rehabilitation	3
CD-401	Advanced Directed Observations	2
CD-410	Professional Guidelines and Skills	3
CD-921	Language Disorders in Children <small>as CD-521</small>	3
LASC/Minor		3

Credits 14

Semester Eight

CD-475	Selected Topics in Communication Sciences and Disorders	3
CD-922	Language Disorders in Adults <small>as CD-522</small>	3
CD-940	Evaluation and Diagnosis in Speech-Language Pathology <small>as CD-540</small>	3

LASC/Minor 3

LASC/Minor 3

UNDEGRADUATE COMMENCEMENT

Credits 15

Summer

CD-924	Voice Disorders	3
CD-947	Augmentative/Alternative Communication	1
Elective		1

Credits 5

Year Five

Summer

CD-937	Counseling in Communication Disorders	2
CD-946	Organization of Speech Language Programs In Schools	1
CD-926	Reading and Writing Disabilities	2
CD-991	Speech-Language-Hearing Practicum: Externships	3

Year 6 - FALL

CD-925	Motor Speech Disorders	3
CD-991	Speech-Language-Hearing Practicum: Externships	3

Credits 14

Fall

CD-920	Speech-Sound Disorders and Differences	3
CD-950	Cognitive Communication Disorders	3
CD-923	Fluency Disorders	3
CD-990	Speech-Language-Hearing Practicum: On-Campus Clinic	3

Credits 12

Spring

CD-928	Aural Rehabilitation	3
CD-980	Research in Communication Sciences and Disorders	3
CD-929	Dysphagia	3
CD-990	Speech-Language-Hearing Practicum: On-Campus Clinic	3

Credits 12

Total Credits 168

Plan of Study - December Graduates

Year One

Semester One		Credits
EN-101	College Writing I	3
CD-100	Introduction to Human Communication and its Disorders	3
BI-103 or MA-180	The Human Animal or Introduction to Functions	3
BI-104	The Human Animal Laboratory	1
CD-193	Special Topics in Communication Sciences And Disorders for First-Year Students	3
LASC/Minor		3
Credits		16

Semester Two

EN-102	College Writing II	3
CD-103	Language Science	3
CD-110	Anatomy and Physiology of Speech And Hearing	3
LASC/Minor		3
Physical Science		4
Credits		16

Year Two

Semester Three

CD-105	Phonetics	3
CD-201	Hearing Science	3
PS-101	General Psychology	3
MA-180 or BI-103	Introduction to Functions ^{and} BI-104 - 1 credit or The Human Animal	3
Credits		12

Semester Four

CD-115	Normal Development of Speech and Language	3
CD-202	Speech Science	3
PS-210	Developmental Psychology	3
MA-150	Statistics I	3
LASC/Minor		3
Credits		15

Year Three

Semester Five

CD-230	Neuroscience for Communication Sciences and Disorders	3
--------	---	---

LASC/Minor	3
LASC/Minor	3
LASC/Minor	3
LASC/Minor	3

Credits 15

Semester Six

APPLY HERE

CD-301	Directed Observations	2
CD-305	Introduction to Audiology	3
CD-310	Language Disorders	3
CD-320	Speech Disorders	3
CD-475	Selected Topics in Communication Sciences and Disorders	3
LASC/Minor		3

Credits 17

Summer

CD-901	Intro to Graduate and Clinical Skills ^{as CD-501}	2
--------	--	---

Credits 2

Year Four

Semester Seven

CD-400	Introduction to Aural Rehabilitation	3
CD-401	Advanced Directed Observations	2
CD-410	Professional Guidelines and Skills	3
CD-921	Language Disorders in Children ^{as CD-521}	3

UNDERGRADUATE COMMENCEMENT

Credits 11

Semester Eight

CD-922	Language Disorders in Adults	3
CD-940	Evaluation and Diagnosis in Speech-Language Pathology	3
CD-980	Research in Communication Sciences and Disorders	3

Credits 9

Summer

CD-924	Voice Disorders	3
CD-947	Augmentative/Alternative Communication	1

Elective 1

Credits 5

Year Five		
Summer		
CD-937	Counseling in Communication Disorders	2
CD-946	Organization of Speech Language Programs In Schools	1
CD-926	Reading and Writing Disabilities	2
CD-991	Speech-Language-Hearing Practicum: Externships	3
Year 6 - FALL		
CD-925	Motor Speech Disorders	3
CD-991	Speech-Language-Hearing Practicum: Externships	3
Credits		14
Fall		
CD-920	Speech-Sound Disorders and Differences	3
CD-950	Cognitive Communication Disorders	3
CD-923	Fluency Disorders	3
CD-990	Speech-Language-Hearing Practicum: On-Campus Clinic	3
Credits		12
Spring		
CD-928	Aural Rehabilitation	3
CD-929	Dysphagia	3
CD-990	Speech-Language-Hearing Practicum: On-Campus Clinic	3
Credits		9
Total Credits		153

Plan of Study - Psychology Minor

Year One		
Semester One		
EN-101	College Writing I	3
CD-100	Introduction to Human Communication and its Disorders	3
BI-103 or MA-180	The Human Animal or Introduction to Functions	3
BI-104	The Human Animal Laboratory	1
CD-193	Special Topics in Communication Sciences And Disorders for First-Year Students	3

LASC/Minor		3
Credits		16
Semester Two		
EN-102	College Writing II	3
CD-103	Language Science	3
CD-110	Anatomy and Physiology of Speech And Hearing	3
LASC/Minor		3
Physical Science		4
Credits		16

Year Two		
Semester Three		
CD-105	Phonetics	3
CD-201	Hearing Science	3
PS-101	General Psychology	3
MA-180 or BI-103	Introduction to Functions ^{and} BI-104 1 credit or The Human Animal	3
LASC/Minor		3
Credits		15

Semester Four		
CD-115	Normal Development of Speech and Language	3
CD-202	Speech Science	3
PS-210	Developmental Psychology	3
MA-150	Statistics I	3
LASC/Minor		3
Credits		15

Year Three		
Semester Five		
CD-230	Neuroscience for Communication Sciences and Disorders	3
LASC/Minor		3
LASC/Minor		3
PS-XXX Psychology Elective		3
PS-XXX Psychology Elective		3
Credits		15

Semester Six		
APPLY HERE		
CD-301	Directed Observations	2
CD-305	Introduction to Audiology	3
CD-310	Language Disorders	3
CD-320	Speech Disorders	3
PS-XXX Psychology Elective		3
LASC/Minor		3
Credits		17

Summer		
CD-901	Intro to Graduate and Clinical Skills <small>as CD-501</small>	2
Credits		2

Year Four**Semester Seven**

CD-400	Introduction to Aural Rehabilitation	3
CD-401	Advanced Directed Observations	2
CD-410	Professional Guidelines and Skills <small>as CD-521</small>	3
CD-921	Language Disorders in Children <small>as CD-521</small>	3
LASC/Minor		3
Credits		14

Semester Eight

CD-475	Selected Topics in Communication Sciences and Disorders	3
CD-922	Language Disorders in Adults <small>as CD-522</small>	3
CD-940	Evaluation and Diagnosis in Speech-Language Pathology <small>as CD-540</small>	3
LASC/Minor		3
PS-XXX Psychology Elective		3

UNDERGRADUATE COMMENCEMENT

Credits		15
Summer		
CD-924	Voice Disorders	3
CD-947	Augmentative/Alternative Communication	1
Elective		1
Credits		5

Year Five**Summer**

CD-937	Counseling in Communication Disorders	2
CD-946	Organization of Speech Language Programs In Schools	1
CD-926	Reading and Writing Disabilities	2
CD-991	Speech-Language-Hearing Practicum: Externships	3

Year 6 - FALL

CD-925	Motor Speech Disorders	3
--------	------------------------	---

CD-991	Speech-Language-Hearing Practicum: Externships	3
Credits		14

Fall

CD-920	Speech-Sound Disorders and Differences	3
CD-950	Cognitive Communication Disorders	3
CD-923	Fluency Disorders	3
CD-990	Speech-Language-Hearing Practicum: On-Campus Clinic	3
Credits		12

Spring

CD-928	Aural Rehabilitation	3
CD-980	Research in Communication Sciences and Disorders	3
CD-929	Dysphagia	3
CD-990	Speech-Language-Hearing Practicum: On-Campus Clinic	3
Credits		12
Total Credits		168

Computer Science

Department of Computer Science

The Computer Science program offers an undergraduate education that promotes lifelong intellectual growth and prepares students for professional careers and advanced study. The program is grounded in the principles, theories, and application of the science of computing with special emphasis in the areas of Big Data Analytics and Software Development.

Students will develop the ability to effectively apply discipline knowledge to solve real-world problems, adapt as the field changes, and make ethical decisions. The curriculum provides the foundations of team skills and allows students to improve their interpersonal skills and professional attitudes. Students will have an opportunity to participate in an internship and in undergraduate research.

A laptop computer running Windows, macOS, or Linux is required for courses in the Computer Science program. 16GB of memory is suggested. A Chromebook will not work.

- Computer Science Major (p. 217)
- Computer Science Major, Concentration in Big Data Analytics (p. 219)
- Computer Science Major, Concentration in Software Development (p. 221)
- Computer Science Minor (p. 223)
- Bioinformatics Minor for Computer Science Majors (p. 172)
- Data Science Mino (p. 224)r

Faculty

Ali Al-Faris, Assistant Professor (2021), B.S., College of Electronic Technology at Bani-Walid, Libya; M.S., University of Technology, Malaysia; Ph.D., University of Science, Malaysia

Nada AlSallami, Associate Professor (2019), B.S., University of Technology, Iraq; M.S., University of Technology, Iraq; Ph.D., University of Technology, Iraq

Elena Braynova, Department Chair, Professor (2003), M.S., State University of New York, Buffalo; M.S., Ph.D., Moscow State University, Russia

Saba Kadady, Instructor (2022), B.S., MS., Al Nahrain University, Iraq

Karl R. Wurst, Professor (1999), B.S., Central Connecticut State University; M.S., Ph.D., University of Connecticut

Courses

CS-101 Basics of Computer Science

LASC Categories: QR

Prerequisites: Familiarity with basic computer operations. Pass math placement test with code of 3 or above, or a passing grade in a college level math course.

A survey course that provides a foundation in computer science by presenting a practical and realistic understanding of the field.

Fall and Spring and every year. 3 Credits

CS-120 Microcomputer Applications

LASC Categories: QR

Prerequisites: Familiarity with basic computer operations. Pass math placement test with code of 3 or above, or a passing grade in a college level math course.

Learning state-of-the-art application packages including but not limited to word processing, file and database management systems and spreadsheets.

Fall and Spring and every year. 3 Credits

CS-124 Health Informatics

LASC Categories: QR

Prerequisites: Familiarity with basic computer operations. Pass math placement test with code of 3 or above, or a passing grade in a college level math course.

Use of computers and information systems in health care. Databases and spreadsheets. electronic health records. [Credit will not be awarded for both CS-120 and CS-124.]

Spring only and every year. 3 Credits

CS-131 Data Visualization and Statistical Analysis

LASC Categories: QR

Prerequisites: Familiarity with basic computer operations such as using a text editor, saving and opening files, and MA 150 or MA 302 or EC 150 or PS 275 or SO 275 or familiarity with basics of Statistics. The course focuses on basic data visualization methods; basic statistical analysis; use of R; current visualization and statistical analysis tools.

Every year. 3 Credits

CS-135 Programming for Non-CS Majors**LASC Categories:** QR**Prerequisites:** Familiarity with basic computer operations. Pass math placement test with code of 3 or above, or a passing grade in a college level math course.

Introduction to programming. Emphasis on practical skills, working with data sets, doing analysis and visualization. No prior programming experience required.

Fall only and every year. 3 Credits

CS-140 Introduction to Programming**LASC Categories:** NLL**Prerequisites or Corequisite:** CS-101

Introduction to fundamental structures and concepts of Computer Science including object-oriented programming; three lecture hours and one two-hour laboratory.

Every year. 4 Credits

CS-141 Data Cleaning and Preprocessing**Prerequisites:** Familiarity with basic computer operations such as using a text editor, saving and opening files, and Math placement code of 3 or above or successful completion of a College level Math course.

The course focuses on basic data cleaning and preprocessing tasks, basic methods to perform them; methods to generalize and summary data.

Every year. 3 Credits

CS-155 Computer Networking and Security**LASC Categories:** QR

This course covers network protocols and the Internet; computer security fundamentals.

Spring only and every year. 3 Credits

CS-161 Web Design Using HTML

Introduces concepts needed for creation, design and implementation of effective web pages. Latest versions of mark-up language(s) will be used.

Every year. 3 Credits

CS-165 Digital Forensics**Prerequisites:** CS-155

Digital forensics investigation; data acquisition; processing crime and incident scenes; multiple operating systems and file formats; digital forensics tools, analysis and validation.

Every year. 3 Credits

CS-193 Special Topics in Computer Science for First Year Students**LASC Categories:** FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

3 Credits

CS-225 Discrete Structures I**Prerequisites:** MA 180 or math placement code 6 or above.

Asymptotic notation, sequences, recursions and methods to solve them, proof techniques, relations, functions, sets and their basic properties.

Every year. 3 Credits

CS-234 Data Mining for Non-Cs Majors**Prerequisites:** MA 150 or MA 302 or EC 150 or PS 275 or SO 275 or familiarity with basic statistical methods, and familiarity with basic computer operations such as using a text editor, saving and opening files.

This course introduces basic Data Mining problems and methods to solve them: Classification, Numerical Prediction, Clustering, Association Rule Mining.

Every year. 3 Credits

CS-242 Data Structures**LASC Categories:** QAC**Prerequisites:** CS-140.**Prerequisites or Corequisite:** Pre-requisite or co-requisite of CS-225.

Introduces time complexity and covers fundamental data structures: lists, stacks, queues, search trees, dictionaries, priority queues, B-trees and inverted files.

Every year. 3 Credits

CS-248 Algorithm Analysis**Prerequisites:** CS-242**Prerequisites or Corequisite:** CS-295.

Different algorithm design strategies, sorting, searching graph algorithms, parallel algorithms, algorithm complexity, Turing machines, NP-hard and NP-complete problems.

Every year. 3 Credits

CS-254 Computer Organization and Architecture**LASC Categories:** NLL**Prerequisites:** CS-140 EN-102.**Prerequisites or Corequisite:** Pre-requisite or co-requisite of CS-295.

Combinational and sequential circuits, assembly language programming, digital computer architecture, instruction sets, addressing modes, memory hierarchies, I/O, and control circuits. Three lecture hours and two laboratory hours per week. Fall only and every year. 4 Credits

CS-265 Database Applications**LASC Categories:** QR

Prerequisites: Familiarity with basic computer operations. Pass math placement test with code of 3 or above, or a passing grade in a college level math course.

This course introduces basic database concepts and teaches how to create and manage a database; relational databases, use SQL; NoSQL databases. Credit will not be awarded for both CS 265 and CS 286.

Fall only and every 2-3 years. 3 Credits

CS-282 Unix Systems Programming

Prerequisites: CS-135 with a minimum grade of C-, or CS-140 with a minimum grade of C-, or CS-242.

Problem solving and software design using C; introduction to UNIX programming utilities and text manipulation; low-level system programming in UNIX and C.

Spring only and every year. 3 Credits

CS-286 Database Design and Applications**Prerequisites:** CS-135 or CS-140

Covers relational databases; database design using ER model; query processing using SQL; NoSQL databases. Credit will not be awarded for both CS 265 and CS 286.

Fall only and every year. 3 Credits

CS-295 Discrete Structures II**Prerequisites:** CS-225

Logic, basic counting techniques, probabilities, basic graph theory.

Every year. 3 Credits

CS-297 Selected Topics in Computer Science

Topics of mutual interest to students and faculty.

Other or on demand. 1-4 Credits

CS-335 Networking and Web Security**Prerequisites:** CS-282

This course covers web and security problems, solutions, and techniques. Encryption, worms, viruses, firewall, safe practices, etc. are covered.

Every 2-3 years. 3 Credits

CS-343 Software Construction, Design and Architecture**Prerequisites:** CS-286**Prerequisites or Corequisite:** CS-348

Software construction techniques and tools, software architectures and frameworks, design patterns, object-oriented design and programming. efficiency, reliability and maintainability of software.

Fall only and every year. 3 Credits

CS-348 Software Process Management**Prerequisites:** CS-140.**Prerequisites or Corequisite:** PH-134 or UR-230.

Project management including planning, progress measurement, estimation, and risk assessment.

Functional and non-functional requirements.

Software licenses, contracts and intellectual property.

Fall only and every year. 3 Credits

CS-373 Operating Systems**Prerequisites:** CS-254 and CS-282

Hardware and Software as an integrated system; development of system software for process management, resource allocation, memory management and I/O processing. [Formerly CS 385 Operating Systems]

Every year. 3 Credits

CS-383 Cloud, Parallel and Distributed Computing**Prerequisites or Corequisite:** CS-135 or CS-140 or CS-141.

The course introduces basics of Cloud Computing and fundamental computing technologies used for Big Data platforms such as Parallel, Distributed Computing.

Spring only and every year. 3 Credits

CS-405 Data Communications and Networking**Prerequisites:** CS-373

Data transmission, encoding, interfacing, synchronization, data-link control, multiplexing, networking, circuit switching, packet switching, radio and satellite, local area networks, network access protocols.

Other or on demand and other or on demand. 3 Credits

CS-408 Directed Study: Computer Science

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

CS-443 Software Quality Assurance and Testing

Prerequisites: CS-242 and CS-295

Requirements analysis and test plan design. Testing strategies and techniques. Test coverage using statistical techniques. Code reviews and inspections. Spring only and every year. 3 Credits

CS-448 Software Development Capstone

LASC Categories: CAP

Prerequisites: CS-343

Prerequisites or Corequisite: CS-373 and CS-443 as prereq or coreq.

Development of a significant software system, following appropriate project and team management techniques. Requirements, design, implementation, quality assurance, professional, social and ethical issues.

Every year. 3 Credits

CS-453 Data Mining

Prerequisites or Corequisite: CM-110, UR-230 or PH-134 Take MA-150 or MA-302;

Topics include data warehousing and mediation techniques; data mining methods: rule-based learning; decision trees, association rules and sequence mining.

Fall only and every year. 3 Credits

CS-472 Robotics

Prerequisites: CS-282

Design and implementation of robotic systems, sensors and sensing, effectors, mechanics, control strategies and architectures, hardware and software issues.

Other or on demand and other or on demand. 3 Credits

CS-483 Big Data Analytics Capstone

LASC Categories: CAP

Prerequisites: CS-453

Prerequisites or Corequisite: CS-383

The course introduces methods and techniques used for Big Data analysis. The course discusses Analytics tools for a variety of data applications and includes a major team project.

Every year. 3 Credits

CS-497 Selected Topics: Computer Science

Prerequisites: CS-282

Selection of topics of mutual interest to student and faculty.

Other or on demand. 1-6 Credits

CS-498 Internship: Computer Science

Prerequisites: 21 credit hours in Computer Science courses including CS-282

Working in and for an organization where skills can be tested in real situations in order to gain experience, increase knowledge in various functional areas, and establish important contacts with an organization.

Every year. 3 Credits

CS-499 Independent Study: Computer Science

Prerequisites: 18 credit hours in Computer Science including CS-282.

An opportunity for advanced students to examine topics not normally taught in other mathematics or computer courses. Geared to the interests of both the student and the instructor.

Every year. 1-6 Credits

Program Learning Outcomes

- Analyze a problem, design/develop multiple solutions and evaluate and document the solutions based on the requirements.
- Communicate effectively in both oral and written form.
- Identify professional and ethical considerations and apply ethical reasoning to technological solutions to problems.
- Demonstrate an understanding of and appreciation for the importance of negotiation, effective work habits, leadership, and good communication with teammates and stakeholders.
- Learn new models, techniques, and technologies as they emerge and appreciate the necessity of such continuing professional development.

Computer Science Major

Program Outcomes for the Major in Computer Science

Upon completion of the Computer Science Major students will be able to:

- Analyze a problem, develop/design multiple solutions, and evaluate and document the solutions based on the requirements.
- Communicate effectively both in written and oral form.
- Identify professional and ethical considerations and apply ethical reasoning to technological solutions to problems.
- Demonstrate an understanding of and appreciation for the importance of negotiation, effective work habits, leadership, and good communication with teammates and stakeholders.
- Learn new models, techniques, and technologies as they emerge and appreciate the necessity of such continuing professional development.

It is highly recommended that entering students have four years of high school mathematics including the equivalent of pre-calculus.

Students wishing to apply courses transferred from other institutions to the Computer Science major should meet with the department chair to determine the applicability of the courses before registering for any Computer Science courses at Worcester State University.

A laptop computer running Windows, macOS, or Linux is required for courses in the Computer Science program. 16GB of memory is suggested. A Chromebook will not work.

Requirements for a Major in Computer Science

Students must complete a core of twelve Computer Science courses, one of the two Computer Science concentrations (Big Data Analytics or Software Development), one Computer Science Elective courses, and 31 credits of Ancillary courses.

If a CS student completed two of the CS concentrations, he/she will be able to declare another concentration and one of the courses in the subsequent concentration can be used to fulfill the three credits of required CS electives.

Code	Title	Credits
Core Courses		(38 credits)
CS-101	Basics of Computer Science	3

CS-140	Introduction to Programming	4
CS-155	Computer Networking and Security	3
CS-225	Discrete Structures I	3
CS-242	Data Structures	3
CS-248	Algorithm Analysis	3
CS-254	Computer Organization and Architecture	4
CS-282	Unix Systems Programming	3
CS-286	Database Design and Applications	3
CS-295	Discrete Structures II	3
CS-348	Software Process Management	3
CS-373	Operating Systems	3
Elective Courses		(3 credits)
Credits in Computer Science courses at the 300 level or above ¹		3
Required CS Concentration		(9 credits)
One of the CS Concentrations (Big Data Analytics or Software Development)		9
Ancillary Requirements ²		(31 credits)
CM-110	Public Speaking	3
EN-252	Technical Writing	3
UR-230	Technology, Public Policy and Urban Society	3
or PH-134	Computing Ethics	
MA-150	Statistics I ³	3
or MA-302	Probability and Statistics	
MA-200	Calculus I	4
2 lab science courses		8
2 approved math or science course chosen from a department-approved list of courses ⁴		7
Total Credits		81

¹ Up to 3 credits of Internship (CS-498) and up to 3 credits of Independent Study (CS-499) may be used to satisfy the major elective requirements.

² 31 credits (may apply to LASC requirements). These ancillary courses cannot be taken on a pass/fail basis

³ Students planning a Mathematics minor or a Computer Science/Mathematics double major should take MA-302.

⁴ Students planning a Mathematics minor or a Computer Science/Mathematics double major should take math courses required for the Mathematics minor/major.

Computer Science Major, Concentration in Big Data Analytics

Data is being generated at high speed, in large volumes, and by a variety of systems around the world. In such a data-driven and information-centric world, the ability to analyze information and make informed decisions is crucial to every field including business, medicine, the sciences, entertainment, and government. This concentration provides students with the skills, techniques, and knowledge needed to pursue a career in this field.

Program Outcomes for the Major in Computer Science, Concentration in Big Data Analytics

Graduates of the Big Data Analytics Concentration will be able to (in addition to the Computer Science Major Program Learning Outcomes):

- Apply basic models, methods, programming languages, and tools for data storage, management and processing.
- Apply current data visualization techniques, programming languages, and tools.
- Apply basic statistical data analysis methods, programming languages, and tools.
- Apply cloud and distributed computing techniques, tools, and services to solve real-world Big Data problems.
- Evaluate, select, and apply data mining models, methods, and tools for real-world problems.
- Evaluate, select, and apply tools and technologies to analyze and solve Big Data problems.

A laptop computer running Windows, macOS, or Linux is required for courses in the Computer Science program. 16GB of memory is suggested. A Chromebook will not work.

Requirements for the Concentration in Big Data Analytics

Code	Title	Credits
Core Courses		(38 credits)
CS-101	Basics of Computer Science	3
CS-140	Introduction to Programming	4
CS-155	Computer Networking and Security	3
CS-225	Discrete Structures I	3
CS-242	Data Structures	3
CS-248	Algorithm Analysis	3
CS-254	Computer Organization and Architecture	4
CS-282	Unix Systems Programming	3
CS-286	Database Design and Applications	3
CS-295	Discrete Structures II	3
CS-348	Software Process Management	3
CS-373	Operating Systems	3
Elective Courses		(3 credits)
Credits in Computer Science courses at the 300 level or above ¹		3
Ancillary Requirements ²		(31 credits)
CM-110	Public Speaking	3
EN-252	Technical Writing	3
UR-230	Technology, Public Policy and Urban Society	3
or PH-134	Computing Ethics	
MA-150	Statistics I ³	3
or MA-302	Probability and Statistics	
MA-200	Calculus I	4
2 lab science courses		8
2 approved math or science course chosen from a department-approved list of courses ⁴		7
Requirements for the Concentration in Big Data Analytics		(9 credits)
CS-383	Cloud, Parallel and Distributed Computing	3
CS-453	Data Mining	3
CS-483	Big Data Analytics Capstone	3
Total Credits		81

¹ Up to 3 credits of Internship (CS-498) and up to 3 credits of Independent Study (CS-499) may be used to satisfy the major elective requirements.

² 31 credits (may apply to LASC requirements). These ancillary courses cannot be taken on a pass/fail basis

³ Students planning a Mathematics minor or a Computer Science/Mathematics double major should take MA-302.

⁴ Students planning a Mathematics minor or a Computer Science/Mathematics double major should take math courses required for the Mathematics minor/major.

Department of Computer Science: Big Data Analytics Concentration Sample Timeline for Completion of Degree

This four-year plan assumes a Math Placement score of at least 6.

Year One

Semester One		Credits
CS-101	Basics of Computer Science	3
EN-101	College Writing I	3
MA-190	Pre-calculus (or Math/ Science Course) ^{1,2}	4
LASC	First-Year Seminar (FYS) (p. 41)	3
LASC	LASC Elective (CON) (p. 38) ³	3
Credits		16

Semester Two

CS-140	Introduction to Programming	4
CS-155	Computer Networking and Security	3
EN-102	College Writing II	3
MA-200	Calculus I	4
Credits		14

Year Two

Semester Three

CS-225	Discrete Structures I	3
CS-242	Data Structures	3
CS-286	Database Design and Applications	3
EN-252	Technical Writing	3

UR-230 or PH-134	Technology, Public Policy and Urban Society or Computing Ethics	3
---------------------	---	---

Credits 15

Semester Four

CS-282	Unix Systems Programming	3
CS-295	Discrete Structures II	3
CM-110	Public Speaking	3
LASC	LASC Elective (GP) (p. 42) ³	3
LASC	LASC Elective (CA) (p. 39)	3

Credits 15

Year Three

Semester Five

CS-248	Algorithm Analysis	3
CS-254	Computer Organization and Architecture	4
CS-348	Software Process Management	3
MA-150 or MA-302	Statistics I ⁴ or Probability and Statistics	3
LASC	Lab Science (DAC)	3

Credits 16

Semester Six

CS-373	Operating Systems	3
CS-383	Cloud, Parallel and Distributed Computing	3
LASC	Math or Science course ²	3-4
LASC	Lab Science (NSP) (p. 49)	4
LASC	LASC Elective (USW) (p. 51) ³	3

Credits 16-17

Year Four

Semester Seven

CS-453	Data Mining	3
LASC	LASC Elective (NSP) (p. 49) ³	4
SELECT	General Elective	3
SELECT	General Elective	3

Credits 13

Semester Eight

CS-483	Big Data Analytics Capstone	3
LASC	LASC Elective (ICW) (p. 46) ³	3
SELECT	300+ Level Elective in Major	3
SELECT	General Elective	3
SELECT	General Elective	3

Credits 15

Total Credits 120-121

¹ If the students math placement score requires her/him to take MA-190, it should be taken this semester, so that MA-200 can be taken in the Spring semester. EN-101 & EN-102 satisfy LASC writing requirements.

² All Math and Science courses must be selected from a list of department approved courses.

³ The sequence of LASC courses marked with ³ is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements

⁴ Students planning a Mathematics minor or a Computer Science/Mathematics double major should take MA-302.

Note:

The sequence of LASC courses marked with ³ is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

Once LASC requirements are satisfied, students may select general requirements. Please refer to the University Catalog for specific curriculum details regarding major and LASC requirements.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Computer Science Major, Concentration in Software Development

Software systems impact all aspects of life, from phones, to cars, to work lives, and beyond. Software developers analyze the software and infrastructure needs of people and organizations and then coordinate the design, implementation, and testing of the solutions. This concentration provides students with the skills, techniques, and knowledge needed to pursue a career in this field.

Program Outcomes for the Major in Computer Science, Concentration in Software Development

Graduates of the Software Development Concentration will be able to (in addition to the Computer Science Major Program Learning Outcomes):

- Work with stakeholders to specify, design, develop, test, modify, and document a software system.
- Organize, plan, follow, and improve on, appropriate software development methodologies and team processes for a software project.
- Evaluate, select, and use appropriate tools for source code control, build, test, deployment, and documentation management.
- Evaluate, select, and apply appropriate testing techniques and tools, develop test cases, and perform software reviews.
- Apply professional judgement, exhibit professional behavior, and keep skills up-to-date

A laptop computer running Windows, macOS, or Linux is required for courses in the Computer Science program. 16GB of memory is suggested. A Chromebook will not work.

Requirements for the Concentration in Software Development

12 credits in addition to the Core, Elective, and Ancillary courses.

Code	Title	Credits
Core Courses		(38 credits)
CS-101	Basics of Computer Science	3
CS-140	Introduction to Programming	4
CS-155	Computer Networking and Security	3
CS-225	Discrete Structures I	3
CS-242	Data Structures	3
CS-248	Algorithm Analysis	3
CS-254	Computer Organization and Architecture	4

CS-282	Unix Systems Programming	3
CS-286	Database Design and Applications	3
CS-295	Discrete Structures II	3
CS-348	Software Process Management	3
CS-373	Operating Systems	3
Elective Courses		(3 credits)
Credits in Computer Science courses at the 300 level or above ¹		3
Ancillary Requirements²		(31 credits)
CM-110	Public Speaking	3
EN-252	Technical Writing	3
UR-230	Technology, Public Policy and Urban Society	3
or PH-134	Computing Ethics	
MA-150	Statistics I ³	3
or MA-302	Probability and Statistics	
MA-200	Calculus I	4
2 lab science courses		8
2 approved math or science course chosen from a department-approved list of courses ⁴		7
Requirements for the Concentration in Software Development		(9 credits)
CS-343	Software Construction, Design and Architecture	3
CS-443	Software Quality Assurance and Testing	3
CS-448	Software Development Capstone	3
Total Credits		81

¹ Up to 3 credits of Internship (CS-498) and up to 3 credits of Independent Study (CS-499) may be used to satisfy the major elective requirements.

² 31 credits (may apply to LASC requirements). These ancillary courses cannot be taken on a pass/fail basis

³ Students planning a Mathematics minor or a Computer Science/Mathematics double major should take MA-302.

⁴ Students planning a Mathematics minor or a Computer Science/Mathematics double major should take math courses required for the Mathematics minor/major.

Department of Computer Science: Software Development Concentration

Sample Timeline for Completion of Degree

This four-year plan assumes a Math Placement score of at least 6.

Year One

Semester One		Credits
CS-101	Basics of Computer Science	3
EN-101	College Writing I	3
MA-190	Pre-calculus (or Math/ Science Course) ^{1,2}	4
LASC	Freshman Seminar (FYS)	3
LASC	LASC Elective (CON) (p. 38) ³	3
Credits		16

Semester Two

CS-140	Introduction to Programming	4
CS-155	Computer Networking and Security	3
EN-102	College Writing II	3
MA-200	Calculus I (QR)	4
Credits		14

Year Two

Semester Three

CS-225	Discrete Structures I	3
CS-242	Data Structures	3
CS-286	Database Design and Applications	3
EN-252	Technical Writing	3
UR-230	Technology, Public Policy and Urban Society (HBS) or Computing Ethics	3
Credits		15

Semester Four

CS-282	Unix Systems Programming	3
CS-295	Discrete Structures II	3
CM-110	Public Speaking (TLC)	3
LASC	LASC Elective (GP) (p. 42) ³	3
LASC	LASC Elective (CA) (p. 39)	3
Credits		15

Year Three

Semester Five

CS-248	Algorithm Analysis	3
CS-254	Computer Organization and Architecture	4

CS-348	Software Process Management	3
MA-150 or MA-302	Statistics I ⁴ or Probability and Statistics	3
LASC	LASC Elective (p. 37)	3
Credits		16

Semester Six

CS-373	Operating Systems	3
CS-443	Software Quality Assurance and Testing	3
LASC	Math or Science course ²	3-4
LASC	Lab Science (NSP) (p. 49)	4
LASC	LASC Elective (USW) (p. 51) ³	3
Credits		16-17

Year Four

Semester Seven

CS-343	Software Construction, Design and Architecture	3
LASC	LASC Elective (NSP) (p. 49) ³	4
SELECT	General Elective	3
SELECT	General Elective	3
Credits		13

Semester Eight

CS-448	Software Development Capstone	3
LASC	LASC Elective (ICW) (p. 46) ³	3
SELECT	300+ Level Elective in Major	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Total Credits		120-121

¹ If the students math placement score requires her/him to take MA-190, it should be taken this semester, so that MA-200 can be taken in the Spring semester. EN-101 & EN-102 satisfy LASC writing requirements.

² All Math and Science courses must be selected from a list of department approved courses.

³ The sequence of LASC courses marked with ³ is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements

⁴ Students planning a Mathematics minor or a Computer Science/Mathematics double major should take MA-302.

Note:

Once LASC requirements are satisfied, students may select general requirements. Please refer to the University Catalog for specific curriculum details regarding major and LASC requirements.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/ major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Computer Science Minor Requirements for a Minor in Computer Science

Code	Title	Credits
CS-101	Basics of Computer Science	3
CS-135	Programming for Non-CS Majors	3-4
or CS-140	Introduction to Programming	
CS-155	Computer Networking and Security	3
PH-134	Computing Ethics (Or take a 200+ level CS course)	3
or UR-230	Technology, Public Policy and Urban Society	
Take a 3-4 credit 200 + level CS course		3-4
Take a 300+ level CS course		3
Total Credits		18-20

Students in the Computer Science Minor will be able to:

- Understand basic concepts in variety of Computer Science fields.
- Understand basic syntax of programming languages and apply a programming language to solve real-world problems.
- Understand the fundamentals of networks, protocols, the Internet and computer security.
- Analyze a problem, develop/design multiple solutions, and evaluate and document the solutions based on the requirements.

- Communicate effectively both in written and oral form.
- Learn new models, techniques, and technologies as they emerge and appreciate the necessity of such continuing professional development.
- Identify professional and ethical considerations and apply ethical reasoning to technological solutions to problems.

Data Science Minor

Code	Title	Credits
CS-131	Data Visualization and Statistical Analysis	3
CS-141	Data Cleaning and Preprocessing	3
CS-265	Database Applications	3
CS-234	Data Mining for Non-Cs Majors	3
or CS-453	Data Mining	
CS-383	Cloud, Parallel an Distributed Computing	3
UR-230	Technology, Public Policy and Urban Society	3
or PH-134	Computing Ethics	
Total Credits		18

Students in the Computer Science Data Science Minor will be able to:

- Clean and preprocess a given dataset for further analysis.
- Analyze a given dataset using visualization, statistical analysis and Data Mining/Machine Learning methods.
- Manage and process data stored in relational and NoSQL databases.
- Apply basic Cloud, Parallel and Distributive Computing methods solving a Big Data problem.
- Communicate effectively both in written and oral form.
- Learn new models, techniques, and technologies as they emerge and appreciate the necessity of such continuing professional development.
- Apply ethical principals working with data.

Environmental Science

Department of Earth, Environment, and Physics

Environmental Science is an interdisciplinary science major for students interested in the exploration of human interactions with the natural world. Course work includes fundamental concepts in biology, chemistry, earth science, and physics and emphasizes an interdisciplinary approach to environmental science. The major provides a broad foundation, introducing students to scientific techniques, analyses, and tools for assessing human impacts on environmental systems and for mitigating or remediating environmental harm. Hands-on field and laboratory investigations of environmental systems are emphasized in course work and through opportunities for guided research with faculty mentors.

The Environmental Science major provides a pathway into a variety of careers and graduate programs. The major is appropriate for students interested in careers in education, environmental conservation, natural resource management, environmental consulting, planning, and a wide variety of specialized scientific disciplines. Environmental science majors are well prepared for graduate studies in the earth and environmental sciences as well as diverse fields such as business, law, environmental management, or sustainability studies. Students are encouraged to participate in study abroad opportunities to develop a global awareness of environmental issues and approaches to solving these issues.

Undergraduate Environmental Science majors who have demonstrated academic excellence and an interest in Environmental Science research may participate in the Honors in Environmental Science program

- Environmental Science Honors Program (p. 229)
- Environmental Science Major (p. 229)
- Environmental Science Minor (p. 231)

Faculty

Anne Armstrong, Assistant Professor (2022), B.A., Hamilton College; M.P.S., SUNY College of Environmental Science and Forestry; M.S., Ph.D., Cornell University

Andrew Burkhardt, Assistant Professor (2022), B.S., University of Michigan; M.S., Ph.D., University of Virginia

Meghna Dilip, Department Chair, Professor (2008), B.S., University of Madras, India; M.S., Anna University India; M.S., Ph.D., University of Alabama

Allison Dunn, Department Chair, Professor (2007), B.A., Oberlin College; M.A., Ph.D., Harvard University

William Hansen, Professor (2005), B.A., State University of New York Albany; M.A., Hunter College; Ph.D., City University of New York Graduate Center

Matthew Kaufman, Assistant Professor (2023), B.S.E.S., Keene State College; Ph.D., University of Texas at Austin's Jackson School of Geosciences

Margaret E. Kerr, Professor (2000), B.S., University of Maine; Ph.D., Wesleyan University

Nabin K. Malakar, Associate Professor (2017), M.S., Ph.D., University at Albany, State University of New York (SUNY)

Kathleen Murphy, Associate Professor (2014), B.S., College of William and Mary; M.S., Ph.D., University Of Massachusetts, Amherst

Steven J. Oliver, Professor (2003), B.A., University of Montana; Ph.D., Boston University

Laura C. Reynolds, Assistant Professor (2020), B.A., Dartmouth College; Ph.D., University of California

Randall Tracy, Professor (2003), B.S., M.S., University of Connecticut; Ph.D., Arizona State University

Sebastian Velez, Professor (2012), B.S., University of Puerto Rico; M.S., University of Notre Dame; Ph.D., Harvard University

Courses

EV-110 Meteorology

LASC Categories: NSP

Understanding the atmosphere and worldwide weather, Earth-Sun relationships, atmospheric humidity and precipitation, air pressure and winds, circulation of the atmosphere, climate change, air pollution, stratospheric ozone depletion, and extreme weather.

Fall and Spring and every year. 3 Credits

EV-120 Integrated Environmental Science for Educators

LASC Categories: NSP, LAB

Introduction to the scientific method. Physical, biological and earth sciences as applied to problems in environmental science. Three lecture hours and Two laboratory hours per week.

Fall and Spring and every year. 4 Credits

EV-130 Environmental Problems and Solutions

LASC Categories: NSP, WAC

Prerequisites: Writing II

The course is an introduction to human impacts on the earth and ecosystem processes. The complexity of these issues is examined through a series of case studies examining global, regional and local issues.

Fall and Spring and every year. 3 Credits

EV-150 Environmental Science

LASC Categories: NSP

Interdisciplinary scientific study of human impacts on natural systems. Introduction to fundamental concepts and tools of environmental impact analysis.

Fall and Spring and every year. 3 Credits

EV-193 Special Topics in Environmental Science For First Year Students

LASC Categories: FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

Other or on demand. 3 Credits

EV-199 Special Topics in Environmental Science

Lecture or laboratory course in selected areas of Environmental Science presented by departmental instructor. Topics will be announced in advance.

1-6 Credits

EV-210 Chemical Analysis: an Introduction to Modern Methods

LASC Categories: NLL, WAC

Prerequisites: CH-120, CH-121 (minimum grade C-), and EN-102.

Introduction to modern methods of chemical analysis including gravimetry, acid-base and redox titrations, potentiometry, UV-visible and atomic absorption spectrophotometry, and gas and HPLC chromatography. Three lecture hours and four laboratory hours per week. [Cross-listed with CH-210.]

Every year. 5 Credits

EV-218 Introduction to Remote Sensing

LASC Categories: NSP

Prerequisites: GS-101 or GS-140 or EV-150 or BI-101 or BI-140

Introduction to the use and analysis of remotely sensed images such as aerial photographs and satellite imagery. [Cross-listed with GS-218.]

Every year. 3 Credits

EV-220 Energy and the Environment

LASC Categories: NSP

Prerequisites: A college level math course or a math placement code 3.

Explore the important questions surrounding energy, environment, and climate.

Fall only and every 2-3 years. 3 Credits

EV-230 Biogeography

Prerequisites: GS-101 or GS-110 or BI-101 or BI-140

The distribution patterns of plants and animals, processes affecting this distribution, and how these patterns change in space and time. [Cross-listed with GS-230.]

Every 2-3 years. 3 Credits

EV-235 Contemporary Climate Change

Prerequisites: GS-101 or GS-110 or EV-150 or CH-106.

The global climate system, factors influencing climate, recent climate change and the role of human activity. [Cross-listed with GS-235.]

Every 2-3 years. 3 Credits

EV-301 Topics in Invertebrate Zoology**LASC Categories:** NLL**Prerequisites:** BI-140 and BI-202 with a grade of C- or above.

Considers anatomy, taxonomy (including selected articles of the international code of zoological nomenclature), natural history, and evolutionary relationships of selected invertebrate phyla. Three hours of lecture and a three-hour laboratory per week. [Cross-listed with BI-301.]

Spring only and every 2-3 years. 4 Credits

EV-320 Environmental Chemistry**LASC Categories:** NLL**Prerequisites:** CH-120 and CH-121 with a grade of C- or above.

Chemistry of the atmosphere, soil, and natural water systems, air and water pollution, water treatment, hazardous wastes and pollution control. Lab techniques including sampling and analysis of environmental media. Lecture 3 hours per week and Lab will meet once a week for 3 hours. [Cross-listed with CH-320.]

Fall only and every year. 4 Credits

EV-330 Environmental Toxicology**Prerequisites:** CH-201 or CH-320 with a grade of C- or above.

Topics include the pharmacological and biochemical properties of toxins and the effects of toxins on human health, including assessment of risk(s). [Cross-listed with CH-330.]

Every 2-3 years. 3 Credits

EV-331 Marine Biology**LASC Categories:** NLL**Prerequisites:** BI-140 and BI-202 with a grade of C- or above.

Considers the marine environment, its flora and fauna, distribution and production of plankton- nekton-benthos, zoogeography, bioeconomic factors and potential. Three lecture hours and a three-hour laboratory per week. [Cross-listed with BI-331.]

Every 2-3 years. 4 Credits

EV-333 Topics in Vertebrate Zoology**LASC Categories:** NLL**Prerequisites:** BI-140 and BI-202 with grade of C- or above.

Life histories, adaptations, distribution, systematics, and economic importance of selected vertebrates taxa. Each semester will focus on a particular taxon. Three hours of lecture and a three-hour laboratory per week. [Cross-listed with BI-333.]

Every 2-3 years. 4 Credits

EV-334 Wildlife Biology**LASC Categories:** NLL**Prerequisites:** BI-140 and BI-202 with grade of C- or above.

Theory and Practice of wildlife management.

Considers procedures for collection and analysis of field and laboratory data on vertebrate game populations useful to wildlife biologists. Three hours of lecture and a three-hour laboratory per week.

[Cross-listed with BI-334.]

Every 2-3 years. 4 Credits

EV-335 Hydrogeology**Prerequisites:** GS-140 or GS-250 and a math

placement exam score of 3, or a college level math course.

Underground water and its movement. Aquifer identification and test; wells, contamination and remediation, ground water as a geologic agent.

[Cross-listed with GS-335.]

Every 2-3 years. 3 Credits

EV-340 Plant Sciences**LASC Categories:** NLL**Prerequisites:** BI-140 and BI-202 with a grade of C- or above.

Morphology, anatomy, physiology of flowering plants with studies on life cycles, ecological relationships, biochemical processes and evolution of plant diversity. Three lecture hours and three laboratory hours per week. [Cross-listed with BI-340.]

Every 2-3 years. 4 Credits

EV-344 Soil Biology**LASC Categories:** NLL**Prerequisites:** BI-140, BI-141, BI-204, CH-120, and CH-121 with a grade of C- or above.

Includes study of nutrient cycling, relations between plants, animals, and microbes, ecology of polluted soils and soil biotechnology. Three lecture hours and three laboratory hours per week. [Cross-listed with BI-344.]

Every 2-3 years. 4 Credits

EV-345 Green Chemistry**LASC Categories:** NLL**Prerequisites:** CH-201 or CH-320 with a grade of C- or above.

This course will provide an understanding of the fundamentals of green chemical design that either eliminates or reduces the use of generation of hazardous substances. Three hours of lecture/lab per week. [Cross-listed with CH-335.]

Every 2-3 years. 3 Credits

EV-348 Fundamentals of Earth Data Analytics**LASC Categories:** NSP, QR, QAC, LAB**Prerequisites:** GS-101 Take 1 course from Subject GS and level 200.

The theory and practice of data analytics using remote sensing and in-situ earth observations, and communicating the science.

Every 2-3 years. 4 Credits

EV-360 Animal Behavior**LASC Categories:** NLL**Prerequisites:** BI-202 or PB-200 with a grade of C- or above.

Survey of ethology and behavioral ecology from an historical and evolutionary perspective. Laboratory involves observation, recording and analysis of animal behavior. Three lecture hours and three laboratory hours per week. [Cross-listed with BI-360.]

Every 2-3 years. 4 Credits

EV-370 Lakes & Environmental Change**LASC Categories:** WAC, NLL**Prerequisites:** GS-140 Take one earth science course at the 200-level or above.

Modern physical, biogeochemical, and sedimentary processes in lakes. Lake sediments as archives of past climate and environmental change. Includes fieldwork. [Cross-listed with GS-370.]

Every 2-3 years. 4 Credits

EV-380 Biodiversity and Conservation Biology**LASC Categories:** LAB, NLL**Prerequisites:** BI-140, BI-141, BI-202, and BI-203 with a grade of C- or above.

A theoretical and quantitative approach to species, genetic, ecosystem and community diversity in the context of modern conservation biology principles. Three lecture hours and three laboratory hours per week. [Cross-listed with BI-380.]

Every 2-3 years. 4 Credits

EV-400 Environmental Science Seminar**LASC Categories:** CAP**Prerequisites:** 50 credits in the major. Students with senior standing who have completed the core courses.

Capstone course for Environmental Science majors. Creation and presentation of a review or research paper and career preparation.

Fall and Spring and every year. 3 Credits

EV-408 Directed Study: Environmental Science

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3-4 Credits

EV-410 Independent Study in Environmental Science

Opportunity for advanced students to pursue a topic of special interest involving extensive reading, experimentation, and research.

1-6 Credits

EV-412 Special Topics in Environmental Science

Intended for the undergraduate who wishes to undertake study of selected topics in Environmental Science of mutual interest to student and faculty.

1-6 Credits

EV-420 Advanced Environmental Research and Fieldwork

Lab and or field-based research on a specific environmental topic under supervision of a faculty member. [Permission of instructor.]

Other or on demand and other or on demand. 1-6 Credits

EV-460 Internship: Environmental Science

Students assigned to various government and private agencies under joint supervision of agency and faculty. Major GPA of 3.0 or above required.

Other or on demand. 1-6 Credits

Program Learning Outcomes

- Demonstrate a command of fundamental concepts of earth science, biology, chemistry, physics, and mathematics as applied to environmental problems.
- Demonstrate expertise in an environmental focus area.
- Apply the scientific method to solve environmental problems.

- Locate, evaluate, and utilize various information sources and content.
- Communicate environmental data and concepts.
- Obtain entry level employment and/or gain admission into graduate school.

Environmental Science Honors Program

Requirements for the Environmental Science Honors Program

Environmental Science Honors Students will:

- Complete an original research project.
- Defend the project before an approved review committee (consisting of the faculty sponsor, one other department faculty member, one faculty member from outside the department).
- Present the project in at least one venue external to WSU.

Timeline for the Environmental Science Honors Program

Applications are submitted to the department chair by the deadline and are reviewed by the geography faculty within two weeks of submission. Applications will be accepted in the Fall and Spring semesters.

Application Deadline:

- For Fall Review: November 1 each year.
- For Spring Review: April 1 each year.

Faculty Review:

- Fall Faculty Review: November 21 each year.
- Spring Faculty Review: April 15 each year.

Application Criteria:

- Completed 75 credits (approximately spring of junior year)
- Completed environmental science core courses through 7 of the 10 credits of Intermediate courses
- A 3.5 GPA in the major. Students with a 3.0 major GPA and a faculty sponsor may petition for admission.

Applicants will Submit:

- Application letter
- Research proposal
- Letter from a faculty sponsor

Environmental Science Major

Requirements for a major in Environmental Science

Code	Title	Credits
Core Courses		(31 credits)
<i>Foundation Courses</i>		
EV-150	Environmental Science	3
GS-140	Physical Geology	4
<i>Intermediate Courses</i>		
GE-258	Global Environmental Change	3
Select two of the following:		6
GS-225	Oceanography	
GS-250	Hydrology	
<i>Advanced Courses</i>		
Environmental science electives approved by the student's advisor. ¹		12
<i>Capstone</i>		
EV-400	Environmental Science Seminar	3
Ancillary Courses		(31 credits)
BI-140	Introduction to Organismal Biology	4
BI-202	Principles of Ecology	4
CH-120	General Chemistry I	4
CH-121	General Chemistry II	4
GS-165	Geographic Information Systems I	4
MA-150	Statistics I	3
or MA-302	Probability and Statistics	
MA-190	Pre-calculus	4
or MA-200	Calculus I	
PY-221	General Physics I	4
or PY-241	Physics I (Mechanics)	
Total Credits		62

¹ Must include at least two 300- or 400-level courses and at least one lab course. No more than 5 credits may be from internship, independent study, and/

or independent research courses. Students may count one environmental course with a prefix other than BI, CH, EV, or GS towards their environmental science electives. A list of courses counting as electives will be made available prior to pre-registration each semester.

Students in the Environmental Science major are not required to take LASC NSP or QR courses outside of the major. Students are required to meet with their department advisor to review their upcoming semester academic choices.

Department of Earth, Environment and Physics - Environmental Science Major

Sample Timeline for Completion of Degree

Year One

Semester One		Credits
EV-150	Environmental Science (LASC: NSP)	3
GS-140	Physical Geology (LASC: LAB)	4
MA-150 or MA-302	Statistics I (LASC: QR) or Probability and Statistics	3
EN-101	College Writing I	3
LASC	First-Year Seminar (FYS) (p. 41)	3
Credits		16

Semester Two

BI-140	Introduction to Organismal Biology (LASC: NSP LAB)	4
MA-190 or MA-200	Pre-calculus (LASC: QR) ¹ or Calculus I	4
EN-102	College Writing II	3
LASC	LASC Elective (CON) (p. 38) ²	3
LASC	LASC Elective (DIV) ²	3
Credits		17

Year Two

Semester Three

CH-120	General Chemistry I	4
GS-165	Geographic Information Systems I (LASC: NSP)	4
GS-250	Hydrology	3
LASC	LASC Elective (USW) (p. 51) ²	3

LASC	LASC Elective (HBS) (p. 44) ²	3
Credits		17

Semester Four

CH-121	General Chemistry II	4
GS-225	Oceanography	3
BI-202	Principles of Ecology	4
LASC	LASC Elective (ICW) (p. 46) ²	3
LASC	LASC Elective (GP) (p. 42) ²	3
Credits		17

Year Three

Semester Five

CS-135	Programming for Non-CS Majors	3
PY-221	General Physics I	4
SELECT	BI-2XX, CH2XX, EV-2XX, or GS-2XX Major Elective ³	3-4
LASC	LASC Elective (CA) (p. 39) ²	3
SELECT	Minor/Elective	3
Credits		16-17

Semester Six

GE-258	Global Environmental Change	3
SELECT	BI-2XX, CH2XX, EV-2XX, or GS-2XX Major Elective ³	3-4
LASC	LASC Elective (TLC) (p. 53) ²	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		15-16

Year Four

Semester Seven

SELECT	BI-3XX, CH-3XX, EV-3XX, or GS-3XX Major Elective ³	3-4
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		12-13

Semester Eight

EV-400	Environmental Science Seminar	3
SELECT	BI-3XX, CH-3XX, EV-3XX, or GS-3XX Major Elective ³	3-4
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		12-13
Total Credits		122-126

¹ May also be any MA course above 200.

² The sequence of LASC courses marked with ² is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

³ Must include at least two 300- or 400-level courses and at least one lab course. No more than 5 credits may be from internship, independent study, and/or independent research courses. Students may count one environmental course with a prefix other than BI, CH, EV, or GS towards their environmental science electives. A list of courses counting as electives will be made available prior to pre-registration each semester.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Environmental Science Minor Requirements for Minor in Environmental Science (19-20 Credits)

Code	Title	Credits
EV-150	Environmental Science	3
GS-101	Physical Geography	3
or GS-140	Physical Geology	
or GS-110	Meteorology	
BI-202	Principles of Ecology	4
or GS-230	Biogeography	
GS-225	Oceanography	3
or GS-250	Hydrology	
or GS-260	Introduction to Soil Science	

Two EV electives: one 200 level or above, one 300 level or above. Minor must include a 200 level or above lab course

Total Credits **19-20**

Geography and Earth Sciences

Department of Earth, Environment, and Physics

Geography is a science that examines physical and social processes and their interrelationships through the integrative concept of space. Earth systems science analyzes the systems and processes that shape the earth's surface including weather, climate, landforms, and hydrology. Human geography analyzes social processes such as globalization, demographics, urbanization, and construction of cultural identities. Environmental geography examines the interactions between social and physical systems. Geographers explore these processes using such tools as maps, geographic information systems, and remote sensing techniques.

Membership in Gamma Theta Upsilon, the international geography honor society, is available to distinguished students. Prospective members must have completed a minimum of 3 geography or earth science courses, have a GPA of at least 3.3 overall in those courses, and have completed at least 3 semesters of college course work. A prospective member is not required to be a geography major or minor. Undergraduate Geography majors who have demonstrated academic excellence and an interest in Geographic research may participate in the Honors in Geography program

Requirements for a Major

Minimum requirement for the major is completion of a six-course (18 credit) core curriculum and one of five concentrations. Students will declare a concentration in either General Geography, Environmental Studies, Geographic Information Systems, Earth System Science, or Earth Science Education. Study Away/Study Abroad is strongly encouraged for geography majors.

- Geography Honors Program (p. 236)
- Geography Major: Earth Science Education Concentration (p. 237)
- Geography Major: Earth System Science Concentration (p. 238)

- Geography Major: Environmental Studies Concentration (p. 240)
- Geography Major: General Geography Concentration (p. 241)
- Geography Major: Geographic Information Systems Concentration (p. 243)
- Geography Minor (p. 244)
- Geoscience Minor (p. 245)
- Geospatial Information Science Minor (p. 245)

Faculty

Anne Armstrong, Assistant Professor (2022), B.A., Hamilton College; M.P.S., SUNY College of Environmental Science and Forestry; M.S., Ph.D., Cornell University

Allison Dunn, Department Chair, Professor (2007), B.A., Oberlin College; M.A., Ph.D., Harvard University

William Hansen, Professor (2005), B.A., State University of New York Albany; M.A., Hunter College; Ph.D., City University of New York Graduate Center

Nabin K. Malakar, Associate Professor (2017), M.S., Ph.D., University at Albany, State University of New York (SUNY)

Laura C. Reynolds, Assistant Professor (2020), B.A., Dartmouth College; Ph.D., University of California

Courses

GE-102 Human Geography

LASC Categories: GP, HBS

Introduction to human geography, emphasizing globalization, human-environment relations, and spatial patterns of population, development, economics, politics, urbanization and culture. Fall and Spring and every year. 3 Credits

GE-130 Introduction to Energy Studies

Foundation concepts in energy studies. Overview of environmental and societal implications of energy systems - past, present and future. 3 Credits

GE-193 Special Topics in Geography for First- Year Students

LASC Categories: FYS

Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar. 3 Credits

GE-195 Special Topics

Introductory course to be offered on a trial basis. Topic to be announced in advance. 1-6 Credits

GE-200 Geography Literature Seminar

Prerequisites: GE-102 and GS-101 and GS-140 and GS-165

Geography majors will attend research seminars, conduct literature searches; identify relevant primary literature; read and take notes on primary literature; compile annotated bibliographies; create written syntheses.

Fall only and every year. 1 Credit

GE-214 Critical Cartographies: Digital Mapping and Spatial Data Visualization

Prerequisites: one course from the following: GE-102, GS-165, CM-100, CM-106, PO-130, SO-100, SO-193, SO-200, UR-101, UR-193, UR-201 GS-165.

This course introduces the fundamental theories, art and science of map making using web-based platforms. It provides an interdisciplinary approach for students to learn both practical and conceptual skills to collect, interpret and present data in the form of online, interactive maps and data visualizations. Every 2-3 years. 3 Credits

GE-250 Urban Geography

LASC Categories: HBS

Prerequisites: GE-102 or GL/GE-102 or UR-101
World urbanization, location, and central place concepts, economy of cities, land use patterns, urban, physical, and societal environmental problems. Every 2-3 years. 3 Credits

GE-258 Global Environmental Change

Prerequisites: GE-102 or GL/GE-102 or GS-101 or GL-150 or EV-150 or UR-101 or CH-106

An introduction to the science, political economy and ethics of global environmental change. Every year. 3 Credits

GE-285 Sustainable Communities

LASC Categories: HBS, USW

Prerequisites: GE-102 or GL/GE-102 or GL-150 or EC-110 or EC-120.

Exploration of changes in U.S. and global economic landscape, 1970 to present. Approaches to sustainable economic development. Every 2-3 years. 3 Credits

GE-290 Conservation & Natural Res Mgt**LASC Categories:** TLC

Through a multidisciplinary approach, students in this conservation management course will explore various theoretical frameworks and practical strategies for effective conservation management, including rational planning, adaptive management, stakeholder engagement, and structured decision making. Students will critically analyze past and present conservation management approaches and assess their applicability to current environmental issues in our local community and beyond. Through case studies, discussions, and project-based learning, students will apply their understanding of conservation management approaches to propose management plans that address real-world conservation challenges.

Other or on demand. 3 Credits

GE-299 Special Topics

Intermediate level course to be offered on a trial basis. Topic to be announced in advance.

1-6 Credits

GE-307 American Public Lands: Environmental Issues

Prerequisites: GE-258 or permission of instructor.

Exploration of the environmental management issues on U.S. public lands such as national parks, national forests BLM lands.

3 Credits

GE-312 Sustainable Food Systems

Prerequisites: GE-102 or a 200 level GE, GS, SO or UR course.

Overview of the structure, evolution, costs and benefits of the global food system. Exploration of local and global alternatives.

Every 2-3 years. 3 Credits

GE-400 Geography Seminar

LASC Categories: CAP

Prerequisites: GE-102, GS-101, GS-140, GS-216, and GE-212 or GE-315

Capstone course for geography majors. Students prepare a comprehensive term paper and present on the topic. Course includes portfolio and career development.

Fall and Spring and every year. 3 Credits

GE-408 Directed Study: Geography

Directed study offers students the opportunity to complete an existing course with an established syllabus under the direction and with the agreement of a faculty member.

3 Credits

GE-410 Independent Study: Geography

Opportunity for advanced students to pursue a topic of special interest involving extensive reading, experimentation, and research.

Every year. 1-6 Credits

GE-420 Advanced Geoscience Research and Fieldwork

Lab and/or field-based research on a specific geoscience topic under supervision of a faculty member. [Permission of instructor.]

1-6 Credits

GE-450 Readings and Directed Research

Directed study on selected topics; open to senior majors.

3 Credits

GE-460 Internship: Geography

Students assigned to various government and private agencies under joint supervision of agency and faculty. Major GPA of 3.0 or above required.

1-6 Credits

GE-470 Selected Topics: Geography

Prerequisites: GE-102 or GL/GE-102

Topic or subject to be announced in advance; topic to be relevant to student needs and interests and availability of professor.

1-6 Credits

GS-101 Physical Geography

LASC Categories: NSP

Geographic principles of location; characteristics of landforms, soil, climate, minerals, water, flora, and fauna. [Formerly GE101.]

Fall and Spring and every year. 3 Credits

GS-110 Meteorology

LASC Categories: NSP, QAC

Understanding the atmosphere and worldwide weather, Earth-Sun relationships, atmospheric humidity and precipitation, air pressure and winds, circulation of the atmosphere, climate change, air pollution, stratospheric ozone depletion, and extreme weather.

Fall and Spring and every year. 3 Credits

GS-140 Physical Geology**LASC Categories:** LAB, NSP, QAC

Introduction to geological science: rocks and minerals, internal and external geologic processes, topographic map and air photo analysis, local field study. Three hours lecture and two hours laboratory per week.

Fall and Spring and every year. 4 Credits

GS-165 Geographic Information Systems I**LASC Categories:** NSP, LAB

Introduction to the use of geospatial technologies including geographic information systems and GPS.

Fall and Spring and every year. 4 Credits

GS-180 Field Geoscience**LASC Categories:** NSP, LAB

Field Geoscience course for EEP majors as well as non-majors. Course explores the intersection of human activities and the Earth's landscape and processes, with a basic introduction to topics in geology, mapping and landscape analysis. Includes lecture, labs and field activities. Introductory lectures lab and field work on or near the Worcester State campus and then an overnight trip of 1-10 days.

Other or on demand and every 2-3 years. 1-4 Credits

GS-193 First Year Seminar in Geography**LASC Categories:** FYS

Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.

3 Credits

GS-195 Special Topics

Introductory course to be offered on a trial basis.

Topic to be announced in advance.

1-6 Credits

GS-210 Geomorphology**LASC Categories:** NLL, QAC

Prerequisites: GS-101 or GS-140 and an accuplacer score of 3 or one college level Math course.

The study of landforms and the processes that form them. Labs focus on interpretation of maps and aerial photographs. Three hour lecture and two hour laboratory.

Every 2-3 years. 4 Credits

GS-217 Spatial Data Methods**LASC Categories:** QR**Prerequisites:** GS-165

Introduction to the methods used in GIS programming and quantitative geospatial analysis.

Every 2-3 years. 3 Credits

GS-218 Introduction to Remote Sensing**LASC Categories:** NSP

Prerequisites: GS-101 or GS-140 or EV-150 or BI-101 or BI-140

Introduction to the use and analysis of remotely sensed images such as aerial photographs and satellite imagery.

Every 2-3 years. 3 Credits

GS-225 Oceanography**LASC Categories:** QAC, NSP, LAB**Prerequisites:** GS-101 or GS-140.

This class will introduce you to the geological, physical, and climatic aspects of oceanography and the many ways the world ocean affects our daily lives. Topics include ocean waves and currents, marine geology and sediments, tides, coastal processes and hazards, and sea level change. Course includes field trips.

Spring only and every year. 3 Credits

GS-230 Biogeography**Prerequisites:** GS-101 or GS-110 or BI-101 or BI-140

The distribution patterns of plants and animals, processes affecting this distribution, and how these patterns change in space and time.

Every 2-3 years. 3 Credits

GS-235 Contemporary Climate Change**Prerequisites:** GS-101 or GS-110 or EV-150 or CH-106.

The global climate system, factors influencing climate, recent climate change and the role of human activity.

Every 2-3 years. 3 Credits

GS-245 Planetary Geology**Prerequisites:** GS-140 or PY-101

Solar system formation and evolution with emphasis on planetary interiors and surface features.

Every 2-3 years. 3 Credits

GS-250 Hydrology**LASC Categories:** LAB**Prerequisites:** GS-101 or GS-140 or GS-110 or EV-150

This course examines Earth's freshwater and its processes as it moves between Earth's atmosphere, surface, and subsurface. Explores the interactions of precipitation, surface runoff, infiltration, streamflow, and groundwater flow. Topics include hydrograph analysis, runoff estimations, groundwater-surface water interactions, groundwater flow, water quality assessment, and water resources assessment.

Course includes field trips.

Fall only and every year. 3 Credits

GS-270 Sediments and Soils**LASC Categories:** NSP, LAB**Prerequisites:** GS-140.

This laboratory class will introduce you to how sediments and soils form and transform over time. The class will include laboratory and field investigations of modern sedimentary environments and local soils, following standardized protocols used by government agencies and environmental companies.

Spring only and every 2-3 years. 3 Credits

GS-299 Special Topics

Intermediate level course to be offered on a trial basis. Topic to be announced in advance.

1-6 Credits

GS-318 Geographic Information Systems II**Prerequisites:** GS-165

Advanced production of digital choropleth maps on PCs using a GIS vector oriented software.

Every 2-3 years. 3 Credits

GS-328 Digital Landscape Analysis**Prerequisites:** GS 165 and one 200 level GS course.

Computer based methods of representing, storing and analyzing landscape features. Explores technologies such as LiDAR and Unmanned Aerial Vehicles for gathering landscape data and the use of geospatial tools to analyze and represent landscape features. 3 hours of lecture and 2 hours of lab.

Every 2-3 years. 4 Credits

GS-335 Hydrogeology**Prerequisites:** GS-140 or GS-250 and a math placement test score of 3, or a college level math course.

Underground water and its movement. Aquifer identification and test; wells, contamination and remediation, ground water as a geologic agent.

Fall only and other or on demand. 3 Credits

GS-338 Atmospheric Sciences**Prerequisites:** # GS-101 # Take CH-120 or CH-112;

Atmospheric Science introduces students to the physics and chemistry of the atmosphere, and examines the science behind current issues such as global climate change, air pollution, and reductions in stratospheric ozone. Atmospheric physics includes both weather (clouds, rain, winds) and climate (weather averaged over longer timescales, as well as trends in climate over time). Atmospheric chemistry investigates processes controlling the chemical composition of the atmosphere, including related processes in the and biosphere, as well as anthropogenic pollution (smog, stratospheric ozone loss, etc.)

Every 2-3 years. 3 Credits

GS-340 Special Topics: Advanced Earth Science

Advanced course to be offered on a trial basis. Topic to be announced in advance.

1-6 Credits

GS-348 Fundamentals of Earth Data Analytics**LASC Categories:** NSP, QR, QAC, LAB**Prerequisites:** GS-101 Take 1 course; From Subjects GS; From Levels 200;

The theory and practice of data analytics using remote sensing and in-situ earth observations, and communicating the science.

Fall only and every year. 4 Credits

GS-370 Lakes & Environmental Change**LASC Categories:** WAC, NLL**Prerequisites:** GS-140 Take one earth science course at the 200-level or above.

Modern physical, biogeochemical, and sedimentary processes in lakes. Lake sediments as archives of past climate and environmental change. Includes fieldwork.

Every 2-3 years. 4 Credits

GS-380 Advanced Field Geoscience**LASC Categories:** NLL**Prerequisites:** GS 140 and one other 200 level GS course.

Field Geoscience course for EEP majors. Course explores the intersection of human activities and the Earth's landscape and processes examining advanced topics in geology, mapping and landscape analysis. Includes lecture, labs and field activities. Introductory lectures lab and field work on or near the Worcester State campus and then an overnight trip to field sites, 1-10 days depending on the number of credits.

Other or on demand and every 2-3 years. 1-4 Credits

GS-400 Senior Seminar**LASC Categories:** CAP**Prerequisites:** GE-102 GS-101 GS-140 GS-165 and GE-200 and senior standing

Capstone course for geography majors. Students prepare a comprehensive term paper and present on the topic. Course includes portfolio and career development.

Fall and Spring and every year. 3 Credits

GS-408 Directed Study: Earth Science Or Geoscience

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

Other or on demand and every year. 1-4 Credits

GS-410 Independent Study: Earth Science-Geoscience

Opportunity for advanced students to pursue an earth science or geoscience topic of special interest involving extensive reading, experimentation, and research.

Fall and Spring and every year. 1-4 Credits

GS-420 Advanced Geoscience Research and Fieldwork

Lab and or field-based research on a specific geoscience topic under supervision of a faculty member. [Permission of instructor.]

1-6 Credits

GS-450 Readings and Directed Research

Directed study on selected topics; open to senior majors.

3 Credits

GS-460 Internship: Geography

Students assigned to various government and private agencies under joint supervision of agency and faculty. Major GPA of 3.0 or above required.

Other or on demand. 1-6 Credits

GS-470 Selected Topics: Geography**Prerequisites:** GS-101 and one course from GS-210, GS-225, GS-230, GS-235, GS-250, GS-260, GS-290 or GS-310

Topic or subject to be announced in advance; topic to be relevant to student needs and interests and availability of professor.

1-6 Credits

Program Learning Outcomes

- Demonstrate a command of geographic terminology and fundamental concepts
- Apply the scientific method to analyze and address geographic problems
- Communicate geographic data and concepts
- Locate, evaluate, and utilize various information sources and data
- Demonstrate an understanding of Earth and society as a set of interconnected, dynamic physical and human systems
- Obtain entry level employment and/or gain admission into graduate school

Geography Honors Program

The Geography Honors Program is intended for outstanding majors interested in research as well as those who plan to pursue an advanced degree. Honors students will complete an original research project, defend the project before an approved review committee, and present the project in at least one venue external to WSU. Applicants should have completed the geography core courses through GE-200 and have 75 credits overall.

Applicants should have a 3.5 GPA in the major although students with a 3.0 major GPA and a faculty sponsor may petition for admission. Application materials are available from the department chair.

Geography Major: Earth Science Education Concentration

Requirements for a Major

Minimum requirement for the major is completion of a six-course (18 credit) core curriculum and one of five concentrations. Students will declare a concentration in either General Geography, Environmental Studies, Geographic Information Systems, Earth System Science, or Earth Science Education. Study Away/Study Abroad is strongly encouraged for geography majors.

Code	Title	Credits
Core Courses (18 credits)		
GS-101 or EV-150	Physical Geography Environmental Science	3
GE-102	Human Geography	3
GS-140	Physical Geology	4
GS-165	Geographic Information Systems I	4
GE-200	Geography Literature Seminar	1
GE/GS-400	Geography Seminar	3
Requirements for the Concentration in Earth Science Education		(48 credits)
<i>Ancillary requirements (may apply to LASC requirements)</i>		
MA-190	Pre-calculus (or any MA course at 200 level or above)	4
BI-140	Introduction to Organismal Biology	4
BI-202	Principles of Ecology	4
PY-101	Introduction to Astronomy	3
Select one of the following:		8
PY-221 & PY-222	General Physics I and General Physics II (8)	
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics) (8)	
<i>Required courses</i>		
GS-110	Meteorology	3
GS-225	Oceanography	3
GS-250	Hydrology	3
GS-270	The Sedimentary Record	4
<i>Electives</i>		

4 earth science electives at the 200+ level, including one earth science course at the 300+ level. PY-217 and PY-250 may be counted towards this requirement. No more than one geography (GE) or geospatial course can be counted toward this requirement

Total Credits 66

Geography Major: Earth Science Education concentration

Sample Timeline for Completion of Degree

Year One

Semester One		Credits
LASC	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I	3
PY-101	Introduction to Astronomy (LASC: NSP)	3
GS-101 or EV-150	Physical Geography or Environmental Science	3
LASC	LASC Elective (CA) (p. 39) ¹	3
Credits		15

Semester Two

EN-102	College Writing II	3
LASC	LASC Elective (CON) (p. 38) ¹	3
GS-165	Geographic Information Systems I	4
GE-102	Human Geography (LASC: HBS)	3
GS-140	Physical Geology (LASC: LAB)	4
Credits		17

Year Two

Semester Three

GS-110	Meteorology	3
GS-230	Biogeography	3
BI-140	Introduction to Organismal Biology	4
PY-250	Observational Astronomy	3
LASC	LASC Elective (DIV) ¹	3
Credits		16

Semester Four

GS-210	Geomorphology	4
GS-225	Oceanography	3
MA-180	Introduction to Functions (if needed (LASC: QR); or take BI-202)	3

LASC	LASC Elective (ICW) (p. 46) ¹	3
LASC	LASC Elective (GP) (p. 42) ¹	3
Credits		16
Year Three		
Semester Five		
GE-200	Geography Literature Seminar	1
GS-250	Hydrology	3
MA-190	Pre-calculus (LASC: QR)	4
LASC	LASC Elective (TLC) (p. 53) ¹	3
GS 2XX+:Earth Science Elective		3
Credits		14
Semester Six		
GS 2XX+	Earth Science Elective	3
CH-112	Survey of Chemistry	4
BI-202	Principles of Ecology	4
LASC	LASC Elective (USW) (p. 51) ¹	3
Minor/Elective		3
Credits		17
Year Four		
Semester Seven		
GS 3xx+	Earth Science Elective	3
PY-221	General Physics I	4
GS-270	The Sedimentary Record	4
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		17
Semester Eight		
GS-400	Senior Seminar	3
GS 2xx+	Earth Science Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
PY-222	General Physics II	4
Credits		16
Total Credits		128

¹ The sequence of LASC courses marked with ¹ is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission

shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Geography Major: Earth System Science Concentration

Requirements for a Major

Minimum requirement for the major is completion of a six-course (18 credit) core curriculum and one of five concentrations. Students will declare a concentration in either General Geography, Environmental Studies, Geographic Information Systems, Earth System Science, or Earth Science Education. Study Away/Study Abroad is strongly encouraged for geography majors.

Code	Title	Credits
Core Courses		(18 credits)
GS-101 or GS-110 or EV-150	Physical Geography Meteorology Environmental Science	3
GE-102	Human Geography	3
GS-140	Physical Geology	4
GS-165	Geographic Information Systems I	4
GE-200	Geography Literature Seminar	1
GE/GS-400	Geography Seminar	3
Requirements for the Concentration in Earth System Science		(32 credits)
<i>Required core courses</i>		
GS-210	Geomorphology	4
GS-225	Oceanography	3
GS-230	Biogeography	3

Core electives

14 upper level credits at the 200+ level, including 3 earth science credits at the 300+ level. No more than one geography (GE) or Geospatial course can be counted toward this requirement.	14
---	----

Ancillary requirements (may apply to LASC requirements)

MA-190	Pre-calculus	4
Select one of the following:		4
CH-112	Survey of Chemistry	
CH-120	General Chemistry I	

PY-221	General Physics I	
PY-241	Physics I (Mechanics)	
Total Credits		50

Geography Major: Earth System Science Concentration

Sample Timeline for Completion of Degree

Year One

Semester One		Credits
EN-101	College Writing I	3
GE-102	Human Geography (LASC: HBS)	3
GS-101 or GS-110 or EV-150	Physical Geography (LASC: NSP) or Meteorology or Environmental Science	3
MA-190	Pre-calculus (LASC: QR)	4
LASC	First-Year Seminar (FYS) (p. 41)	3
Credits		16

Semester Two

EN-102	College Writing II	3
GS-140	Physical Geology (LASC: LAB)	4
LASC	LASC Elective (CON) (p. 38)	3
LASC	LASC Elective (QR) (p. 50)	3
GS-165	Geographic Information Systems I	4
Credits		17

Year Two

Semester Three

GS-210	Geomorphology	4
CH-112 or CH-120 or PY-221 or PY-241	Survey of Chemistry (LASC: LAB) or General Chemistry I or General Physics I or Physics I (Mechanics)	4
GE-200	Geography Literature Seminar	1
LASC	LASC Elective (DIV) ¹	3
SELECT	Minor/Elective	3
Credits		15

Semester Four

GS-225	Oceanography	3
GS-230	Biogeography	3
SELECT	Minor/Elective	3
LASC	LASC Elective (ICW) (p. 46) ¹	3

LASC	LASC Elective (GP) (p. 42) ¹	3
Credits		15

Year Three

Semester Five

SELECT	Earth System Science Elective	3
SELECT	Earth System Science Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
LASC	LASC Elective (CA) (p. 39) ¹	3
Credits		15

Semester Six

SELECT	Earth System Science Elective	3
SELECT	Earth System Science Elective	3
LASC	LASC Elective (USW) (p. 51) ¹	3
LASC	LASC Elective (TLC) (p. 53) ¹	3
SELECT	Minor/Elective	3
Credits		15

Year Four

Semester Seven

SELECT	Earth System Science Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		15

Semester Eight

GE-400	Geography Seminar (CAP)	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		15
Total Credits		123

¹ The sequence of LASC courses marked with ¹ is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required

for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Geography Major: Environmental Studies Concentration

Requirements for a Major

Minimum requirement for the major is completion of a six-course (18 credit) core curriculum and one of five concentrations. Students will declare a concentration in either General Geography, Environmental Studies, Geographic Information Systems, Earth System Science, or Earth Science Education. Study Away/Study Abroad is strongly encouraged for geography majors.

Code	Title	Credits
Core Courses		
		(18 credits)
GS-101 or GS-110 or EV-150	Physical Geography Meteorology Environmental Science	3
GE-102	Human Geography	3
GS-140	Physical Geology	4
GS-165	Geographic Information Systems I	4
GE-200	Geography Literature Seminar	1
GE/GS-400	Geography Seminar	3
Requirements for the Environmental Studies Concentration		(18-24 credits)
GE-258	Global Environmental Change	3
Two or three physical geography or GIS courses (GS prefix, 200-400 level)		6-9
Three or four environmental studies courses (GE prefix, 200-400 level) ¹		9-12
Total Credits		36-42

¹ At least 9 environmental studies credits at the 200+ level, including 3 at the 300+ level. With advisor approval, students may count environmental studies courses from other departments towards this requirement.

Geography Major: Environmental Studies Concentration

Sample Timeline for Completion of Degree

Year One

Semester One		Credits
EN-101	College Writing I	3
GE-102	Human Geography (LASC: HBS)	3
GS-101 or GS-110 or EV-150	Physical Geography (LASC: NSP) or Meteorology or Environmental Science	3
LASC	First-Year Seminar (FYS) (p. 41) ¹	3
LASC	LASC Elective (QR) (p. 50) ¹	3
Credits		15

Semester Two

EN-102	College Writing II	3
GS-140	Physical Geology	4
LASC	LASC Elective (CON) (p. 38) ¹	3
LASC	LASC Elective (QR) (p. 50) ¹	3
LASC	LASC Elective (GP) (p. 42) ¹	3
Credits		16

Year Two

Semester Three

GS-165	Geographic Information Systems I	4
GE	Environmental Elective	3
GE or GS	Environmental or Physical Elective	3
GE-200	Geography Literature Seminar	1
LASC	LASC Elective (ICW) (p. 46) ¹	3
LASC	LASC Elective (CA) (p. 39) ¹	3
Credits		17

Semester Four

GE-258	Global Environmental Change	3
GS	Physical or GIS Elective	3

LASC	LASC Elective (LAB) ¹	3-4
LASC	LASC Elective (USW) (p. 51) ¹	3
LASC	LASC Elective (TLC) (p. 53) ¹	3
Credits		15-16

Year Three

Semester Five

GE	Environmental Elective	3
LASC	LASC Elective (HBS) (p. 44) ¹	3
LASC	LASC Elective (QR) (p. 50) ¹	3
LASC	LASC Elective (DIV) ¹	3
SELECT	Minor/Elective	3
Credits		15

Semester Six

GS	Physical or GIS Elective	3
GE	Environmental Elective	3
LASC	LASC Elective (p. 37) ¹	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		15

Year Four

Semester Seven

SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		12

Semester Eight

GE-400	Geography Seminar (CAP)	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		15
Total Credits		120-121

¹ The sequence of LASC courses marked with ¹ is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/

major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Geography Major: General Geography Concentration Requirements for a Major

Minimum requirement for the major is completion of a six-course (18 credit) core curriculum and one of five concentrations. Students will declare a concentration in either General Geography, Environmental Studies, Geographic Information Systems, Earth System Science, or Earth Science Education. Study Away/Study Abroad is strongly encouraged for geography majors.

Code	Title	Credits
Core Courses		(18 credits)
GS-101 or GS-110 or EV-150	Physical Geography Meteorology Environmental Science	3
GE-102	Human Geography	3
GS-140	Physical Geology	4
GS-165	Geographic Information Systems I	4
GE-200	Geography Literature Seminar	1
GE/GS-400	Geography Seminar	3
Requirements for the Concentration in General Geography		(15 credits)
At least one advanced course (200-400 level) in each of the following, including one class at the 300+ level:		
Physical Geography		3
Human Geography		3
Three advanced GS and/or GE courses		9
Total Credits		33

Geography Major: General Geography Concentration ¹ Sample Timeline for Completion of Degree

Year One

Semester One		Credits
EN-101	College Writing I	3
GE-102	Human Geography (LASC: HBS)	3
GS-101 or GS-110 or EV-150	Physical Geography (LASC: NSP) or Meteorology or Environmental Science	3
LASC	First-Year Seminar (p. 41) ¹	3
LASC	LASC Elective (QR) (p. 50) ¹	3
Credits		15

Semester Two

EN-102	College Writing II	3
GS-140	Physical Geology (LASC: LAB)	4
LASC	LASC Elective (CON) (p. 38) ¹	3
LASC	LASC Elective (QR) (p. 50) ¹	3
LASC	LASC Elective (GP) (p. 42) ¹	3
Credits		16

Year Two

Semester Three

GS-165	Geographic Information Systems I	4
GE-200	Geography Literature Seminar	1
GS/GE	Elective (200 level or above)	3
LASC	LASC Elective (ICW) (p. 46) ¹	3
LASC	LASC Elective (CA) (p. 39) ¹	3
Credits		14

Semester Four

GS/GE	Elective (200 level or above)	3
LASC	LASC Elective (TLC) (p. 53) ¹	3
LASC	LASC Elective (USW) (p. 51) ₁	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		15

Year Three

Semester Five

GS/GE	Elective (200 level or above)	3
GS/GE	Elective (200 level or above)	3
LASC	LASC Elective (DIV) ¹	3-4

SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		15-16

Semester Six

GS/GE	Elective (200 level or above)	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		15

Year Four

Semester Seven

SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		15

Semester Eight

GE-400 or GS-400	Geography Seminar or Senior Seminar	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		15
Total Credits		120-121

¹ The sequence of LASC courses marked with ¹ is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Geography Major: Geographic Information Systems Concentration

Requirements for a Major

Minimum requirement for the major is completion of a six-course (18 credit) core curriculum and one of five concentrations. Students will declare a concentration in either General Geography, Environmental Studies, Geographic Information Systems, Earth System Science, or Earth Science Education. Study Away/Study Abroad is strongly encouraged for geography majors.

Code	Title	Credits
Core Courses (18 credits)		
GS-101 or GS-110 or EV-150	Physical Geography Meteorology Environmental Science	3
GE-102	Human Geography	3
GS-140	Physical Geology	4
GS-165	Geographic Information Systems I	4
GE-200	Geography Literature Seminar	1
GE/GS-400	Geography Seminar	3
Requirements for the Concentration in Geographic Information Systems (GIS)		(27 credits)
<i>Required core courses</i>		
GS-218	Introduction to Remote Sensing	3
GS-318	Geographic Information Systems II	3
<i>Select one of the following:</i>		3
GS/GE-410	Independent Study: Earth Science- Geoscience	
GS/GE-450	Readings and Directed Research	
GS/GE-460	Internship: Geography	
<i>Core electives</i>		
4 courses at the 200+ level in either physical or human geography. Students are encouraged to focus on one area.		12
<i>Ancillary Courses</i>		
To be taken by the time the student has 21 credits in the major		

CS-135	Programming for Non-CS Majors	3
MA-150	Statistics I	3
Total Credits		45

Geography Major: GIS Concentration

Sample Timeline for Completion of Degree

Year One

Semester One		Credits
LASC	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I	3
MA-150	Statistics I (LASC: QR)	3
GE-102	Human Geography (LASC: HBS)	3
GS-101 or GS-110 or EV-150	Physical Geography (LASC: NSP) or Meteorology or Environmental Science	3
Credits		15

Semester Two

EN-102	College Writing II	3
GS-165	Geographic Information Systems I	4
GS-140	Physical Geology (LASC: LAB)	4
LASC	LASC Elective (CON) (p. 38) ¹	3
LASC	LASC Elective (USW) (p. 51) ¹	3
Credits		17

Year Two

Semester Three

GS-218	Introduction to Remote Sensing	3
CS-135	Programming for Non-CS Majors (LASC: QR)	3
LASC	LASC Elective (TLC) (p. 53) ¹	3-4
LASC	LASC Elective (CA) (p. 39) ¹	3
SELECT	Minor/Elective	3
Credits		15-16

Semester Four

GS-318	Geographic Information Systems II	3
GS/GE 2XX+	Elective	3
LASC	LASC Elective (ICW) (p. 46) ¹	3
LASC	LASC Elective (GP) (p. 42) ¹	3

SELECT	Minor/Elective	3
Credits		15
Year Three		
Semester Five		
GE-200	Geography Literature Seminar	1
GS/GE 2XX+	Elective	3
GS/GE 2XX+	Elective	3
LASC	LASC Elective (DIV) ¹	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		16
Semester Six		
GS/GE 2XX+	Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		15
Year Four		
Semester Seven		
Select one of the following:		3
GE-410 or GS-410	Independent Study: Geography or Independent Study: Earth Science- Geoscience	
GE-450 or GS-450	Readings and Directed Research or Readings and Directed Research	
GE-460 or GS-460	Internship: Geography or Internship: Geography	
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		15
Semester Eight		
GS-400	Senior Seminar	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
SELECT	Minor/Elective	3
Credits		12
Total Credits		120-121

¹ The sequence of LASC courses marked with ¹ is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Geography Minor

Requirements for the Geography Minor

Code	Title	Credits
GS-101	Physical Geography	3
GE-102	Human Geography	3
GS-165	Geographic Information Systems I	4
Three electives, 200 level or above, one of which must be at the 300 or 400 level.		9
Total Credits		19

Geoscience Minor

Code	Title	Credits
<i>Students must take 18 or more total credits for the geoscience minor.</i>		
Required Courses:		
GS-140	Physical Geology	4
GS-420	Advanced Geoscience Research and Fieldwork	3-6
or		
GS-460	Internship: Geography	
or		
GS-410	Independent Study: Earth Science- Geoscience	
Elective Courses		
Choose 8-11 or more credits from the following courses:		8-11
GS-165	Geographic Information Systems I	
GS-180	Field Geoscience	
GS-210	Geomorphology	
GS-225	Oceanography	
GS-245	Planetary Geology	
GS-250	Hydrology	
GS-270	The Sedimentary Record	
GS-335	Hydrogeology	
GS-348	Fundamentals of Earth Data Analytics	
GS-370	Lakes & Environmental Change	
GS-299	Special Topics	
GS-380	Advanced Field Geoscience	
GS-408	Directed Study: Earth Science Or Geoscience	
Total Hours		18 or More

<i>Elective Courses (choose four, including at least one course at the 300 level or higher)</i>		
GS-217	Spatial Data Methods	3
GS-218	Introduction to Remote Sensing	3
GS-318	Geographic Information Systems II	3
GS-328	Digital Landscape Analysis	4
GS-348	Fundamentals of Earth Data Analytics	4
GS-410	Independent Study: Geography (& GE-410 OR GS-460 & GE-460)	3
Total Credits		19-20

Geospatial Information Science Minor

Requirements for a Minor in Geospatial Information Science

Code	Title	Credits
Required Courses		
GE-102	Human Geography	3
or UR-101	Introduction to Urban Studies	
GS-165	Geographic Information Systems I	4

Health Sciences

Department of Health Sciences

The Department of Health Sciences offers the following programs in health: 1) Bachelor of Science in Public Health; with an option of a concentration in Health Education. Students with the concentration can pursue a minor in secondary Education; and 2) a dual-degree Bachelor of Science in Public Health with a Bachelor of Science in Nursing at the Massachusetts College of Pharmacy and Health Sciences University.

Major courses provide basic knowledge and practice skills that prepare students to pursue careers in a variety of public health related professions. Membership in a national health honor society, Eta Sigma Gamma, is available to students who maintain a minimum 3.0 average.

All health courses in the major, minor, and concentration require a minimum grade of 2.0. Courses may not be taken pass/fail; courses may be repeated. Required ancillary courses must average an overall minimum of 2.0. In the Public Health/Pre-Nursing program. Students must receive a minimum grade of C in each course.

Students in this department may major or minor in public health. No student may do both.

Public Health graduates who pursued the Health Education Concentration are eligible to take the Certified Health Education Specialist exam (CHES) administered by the National Commission for Health Education Credentialing (NCHEC).

- Public Health - Pre-Nursing Program (p. 251)
- Public Health Major (p. 253)
- Public Health Major, Concentration in Health Education (p. 257)
- Public Health Minor (p. 257)

Faculty

Mariana Calle, Professor (2012), B.S., University of Buenos Aires, Argentina; M.S., Ph.D., University of Connecticut

Elinor Fondell, Assistant Professor (2021), B.S., Stockholm University; Ph.D., Karolinska Institutet, Stockholm, Sweden

Syamak Moattari, Associate Professor (2015), M.D., Shahid Beheshti Medical University; Ph.D., Boston University

Andrew J. Piazza, Department Chair, Associate Professor (2017), B.S., M.S., University of Florida; Ph.D., University of Alabama

Shaylyne Shuler, Visiting Assistant Professor (2023), B.S., B.S., B.I.S., Weber State University; M.A., Ph.D., Northern Arizona University

Jaime F. Vallejos, Associate Professor (2017), B.S., M.D., University of Nicaragua; M.P.H., University of Massachusetts Amherst

Courses

HC-201 Introduction to Public Health

This course is an overview and will focus on populations, prevention, and the evidence-based practice of public health.
Every year. 3 Credits

HC-202 Introduction to Global Health

LASC Categories: GP, ICW, DIV, DAC

The course introduces students to the main concepts of public health and the critical links between public health and social and economic development. Students get an overview of the determinants of health, how health status is measured, and the influences of various factors, including cultural, historic, geographic, social, economic, and political issues on the health of individuals and communities. The course also introduces students to key concerns regarding nutrition, reproductive health, infectious disease, and chronic diseases. The course will be global in coverage but with an important focus on the developing world and on the health of the poor.
Fall and Spring and every year. 3 Credits

HC-203 Introduction to Epidemiology

LASC Categories: ICW, NSP, QAC, GP

Prerequisites: any Math course and HC-201.

Basic epidemiologic concepts are covered and application of concepts to everyday problems; e.g., hazards in food supplies and risks associated with lifestyle.

Every year. 3 Credits

HC-220 Health Policy**Prerequisites:** HE-100

Examination of the process and factors that influence formulation, implementation and modification of health policy in the United States.

Fall and Spring and every year. 3 Credits

HC-228 Health Ethics**Prerequisites:** HE-100 or HC-201

Ethical issues in health including genetic research, euthanasia, medical intervention and reproductive technologies as well as professional ethics.

Fall and Spring and every year. 3 Credits

HC-234 Multiculturalism and Health

Examination of diverse ethnic/racial and cultural beliefs and practices affecting health and illness

Spring only and every year. 3 Credits

HC-245 Introduction to Public Health Research**Prerequisites:** EN-252

This course introduces students to health sciences research. Students will develop critical skills including effectively navigating and interpreting information, distinguishing between high quality and low quality sources of evidence. Students will gain an understanding of the importance of staying actively informed of current events relevant to public health and how informed public health professionals can seek out high quality news on public health as well as discern effective from misleading news relevant to public health policy. Students also will spend extensive time exploring the difference between information found on internet searches and social media versus reliable health agency information.

Spring only and every year. 3 Credits

HC-338 Peer Education Training**Prerequisites:** HE-100

Emphasis on student development of practical skills to implement programming centered on peer education programs and focused on preventative health.

Other or on demand. 3 Credits

HC-340 Global Perspective in Public Health**LASC Categories:** GP, ICW

Seminar course for students accepted into a global service learning trip during the academic year. It is designed to prepare students through curriculum-based learning, the components of service learning; ethical partnering with vulnerable communities, and the cultural/historical/political and economic factors that impact health and healthcare policies within the population where immersion takes place. There will be self-reflection and integration of learning through journal writing, critical thinking and exercises formal preparation for service in the host country and final paper at the end of the semester.

Other or on demand and every year. 3 Credits

HC-345 Introduction to the U.S. Health Care System**Prerequisites:** HC-201

This course is an overview of the U.S. health care system (USHCS) and its components. Subjects to be reviewed include how social determinants of health influence access to health care and the role of healthcare providers and their effect in the health care system. The history of USHCS, the financing of services, types of services offered as well as access and quality of these services. Understanding these topics will help formulate an understanding of how the USHCS functions and the factors involved in the delivery of healthcare services.

Fall only and every year. 3 Credits

HC-350 Group Process**Prerequisites:** HE-100

A didactic and experiential examination of various theories of group dynamics and their application to the facilitation of health-related groups. Research paper.

Fall and Spring and every year. 3 Credits

HC-403 Department Workshop: Community Health

The subject matter of this course will be reflective of the changing issues within the field of community health.

Other or on demand. 3 Credits

HC-408 Directed Study: Public Health

Directed study offers students who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

HC-415 Community Health Planning and Promotion

Prerequisites: 4 courses in the major at 200 level or above.

Emphasis on community analysis; defining and verifying community health problems and establishing goals and objectives. Research paper. Fall and Spring and every year. 3 Credits

HC-425 Research Seminar

LASC Categories: CAP, WAC

Prerequisites: HC-228 or PH-131, HC 203 and one of the following MA-150, PS-275 or SO-275.

Students will be required to produce a proposal for a research study based on a community public health issue.

Every year. 3 Credits

HC-430 Health Promotion Program Implementation & Evaluation

Prerequisites: HC-245 and HC-415

The success of a well-planned health promotion program depends on effective implementation and evaluation procedures. This course will review the process of program planning and explore implementation and evaluation strategies. This course will equip students to collect, analyze, interpret, and disseminate evidence of a program's effectiveness to relevant stakeholders. The course will culminate with a written evaluation plan and mock poster presentation delivered to an audience of peers.

Fall and Spring and every year. 3 Credits

HC-445 Pre-Practicum Seminar

Prerequisites or Corequisite: HC-415

Discussion of career opportunities in the public health field, professional development, and graduate coursework in the health sciences field. This mandatory class should be taken the semester before registering for the practicum.

Fall and Spring and every year. 1 Credit

HC-450 Practicum: Community Health

LASC Categories: CAP, WAC

Prerequisites: 24 credits in HE/HC courses and EN-102

Field experience in which students will select a community health speciality area and spend a semester pursuing their goal through participation. See HE 440 Practicum in Health.

Every year. 3-6 Credits

HE-100 Personal Health

LASC Categories: ICW

Physical, mental, and emotional aspects of well-being and how to maintain and increase the quality of one's lifestyle.

Fall and Spring and every year. 3 Credits

HE-120 Health and Nutrition

LASC Categories: ICW

Nutritional needs, weight control, healthy diets, myths, and nutritional aids to better health.

Fall and Spring and every year. 3 Credits

HE-140 Creative Arts and Health

LASC Categories: CA

An experiential and didactic introduction to the separate arts therapies: movement, art, music and language arts, emphasizing the creative process.

Every year. 3 Credits

HE-150 Health and Physical Education for the Teacher

The planning, development, implementation and evaluation of comprehensive health education programs.

Every year. 3 Credits

HE-170 Humans in Motion

Concepts of the human neuro-musculoskeletal system which provide function and health across the life span under normal and stress conditions.

Every year. 3 Credits

HE-193 First Year Seminar Health

LASC Categories: FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

3 Credits

HE-200 Consumer Health

Current information and guidelines to reliable sources necessary to develop intelligent consumers capable of wisely selecting health products and services.

Fall and Spring and every year. 3 Credits

HE-205 Principles & Foundations of Health Promotion

This course serves as an introduction to the field of health education/promotion with consideration of philosophies, current trends, issues, and opportunities in the field.

Spring only and every year. 3 Credits

HE-208 Systems of Addictions Treatment**Prerequisites:** HE-285 or CJ-285

This course provides an overview of counseling modalities and techniques used in addiction treatment and recovery settings, including for those with co-occurring disorders. A family systems approach will be employed to understand how the Criminal Justice System, the Mental Health System, and the larger community relate. Legal and regulatory restrictions, ethical codes, and legal sanctions also are discussed.

Fall and Spring and every year. 3 Credits

HE-210 Women's Health Issues

Overview of women's health issues: women in the health marketplace, a woman's right to control her body, media images and illness, eating disorders, therapy, alcohol, aging and the women's health movement.

Fall and Spring and every year. 3 Credits

HE-220 Mental Health Education**LASC Categories:** HBS, ICW**Prerequisites:** HE-100

Examination of mental health as a variable: its creation and the obstacles to good mental health and positive self-concept.

Fall and Spring and every year. 3 Credits

HE-225 Advanced Nutrition: The Prevention and Treatment of Obesity**LASC Categories:** ICW**Prerequisites:** HE-120

This course examines the role of nutrition in the prevention and treatment of a major public health issue: obesity. The course builds on basic nutrition principles and their application to weight management and eating behaviors. Emphasis will be on the consequences of obesity on cardiovascular and other chronic diseases. Body weight regulation concepts will include, but are not limited to, body weight assessment, energy metabolism, regulation of eating behavior, energy nutrients, and the role of diet/physical activity in weight management.

Spring only and every year. 3 Credits

HE-230 Human Sexuality and Sex Education**Prerequisites:** HE-100

Focus on the need for and understanding of sex education, along with the process of implementing sexuality education, with emphasis upon teacher preparation.

Every year. 3 Credits

HE-240 Writing and Learning From Experience I**LASC Categories:** WAC**Prerequisites:** EN-102 and instructor permission

Prepares students to write analytically about their experience and to apply their learning to courses and competencies in the major.

Every year. 3 Credits

HE-242 Writing and Learning From Experience II**LASC Categories:** TLC**Prerequisites:** HE-240 and Instructor permission

Integrating experiential essays inot longer narratives, developing themes and conceptual frameworks; applying experiential learning to courses, competencies in the major.

Every year. 3 Credits

HE-260 First Aid: Advanced Theory and Skill

Common emergencies, cardiopulmonary resuscitation, auto extraction, and emergency childbirth. Opportunity for instructor rating.

Fall and Spring and other or on demand. 3 Credits

HE-270 Psychopharmacology**LASC Categories:** NSP**Prerequisites:** PS-101

This course will explore the effects of psychotropic drugs on the brain and subsequent effects on behavior.

Fall and Spring and every year. 3 Credits

HE-275 Fitness for Life**Prerequisites:** HE-120

Knowledge of health-related fitness components and their effect on total wellness; emphasis on developing personalized fitness program, namely cardiovascular endurance.

Every year. 3 Credits

HE-280 Individual Stress Management and Relaxation

Strategies and techniques for increasing stress resistance based on psychophysiological research.

Fall and Spring and every year. 3 Credits

HE-285 Drugs and Society

Drug use and abuse, and implications for the individual and society.

Fall only and every year. 3 Credits

HE-325 Sports Nutrition**LASC Categories:** ICW, QAC**Prerequisites:** HE-120

The course is designed to examine the role of nutrition in exercise metabolism and to explore the link between basics of exercise physiology concepts and nutrition. This course includes the application of nutrition principles to maintain optimum health and to enhance athletic performance from a healthy, adequate, and personalized diet. Sports nutrition concepts include, but are not limited to, body composition, nutritional supplements, energy balance, and nutritional needs for physically active people and athletes.

Spring only and every 2-3 years. 3 Credits

HE-330 Health Communication**Prerequisites:** HE-100 or HC-201, and HC-203

This course focuses on the growing field of health communication and examines theories of interpersonal, organizational, and mass communication relevant to the professional communicator in the health field. Reviews strategies of persuasion, the relationship between knowledge, attitudes, beliefs, values, and behavior, as well as the changing nature of health and health delivery. Students will explore current health issues in varied communication contexts, such as interpersonal, group, and organizational and be introduced to Social Marketing, Social Media, Public Speaking, and Communication Toolkits.

Spring only and every year. 3 Credits

HE-340 Health Counseling**Prerequisites:** PS 101

A study of the counseling implications involved in health. Awareness of the counseling process and referral.

Other or on demand. 3 Credits

HE-350 Community Health Education**LASC Categories:** GP, DAC, ICW**Prerequisites:** HE-100

Opportunity for exploration of on-going community health education programs, and their impact upon that community. Prerequisite: Advanced standing
Every year. 3 Credits

HE-354 Addictions Counseling of Individuals and Families**LASC Categories:** ICW**Prerequisites:** HE-285 or CJ-285

This course provides students with an applied understanding of counseling skills, techniques, and strategies in addiction treatment. The psychology of addictions and various treatment modalities are discussed. Engagement, assessment, treatment planning, brief and ongoing treatment, continuing care, and work with special populations are considered. Dialectical behavior therapy, cognitive-behavioral, mindfulness practice techniques, and motivational interviewing concepts are introduced, and students apply them in role-playing scenarios. Boundaries, ethics, and counselor self-awareness are also covered.

Fall and Spring and every year. 3 Credits

HE-390 Environmental Health**Prerequisites:** HE-100 or HC-201

Examination of the issues affecting the environment and their impact on our health.

Fall and Spring and every year. 3 Credits

HE-400 Special Topics**LASC Categories:** ICW

Current issues in Health.

Every year. 3 Credits

HE-406 The 12 Core Functions of Addictions Counseling**Prerequisites:** 4 groups Take CJ-285 or HE-285; Take CJ-208 or HE-208; Take HE-270 or PS-270; Take CJ-354 or HE-354;

This culminating course prepares students to enter the field of substance use disorders and/or addictions counseling through an intensive review of the 12 Core Functions of Addictions Counseling. Students further develop the skill sets from prior coursework to serve as a foundation for gaining practical experience in addictions counseling.

Fall and Spring and every year. 3 Credits

HE-407 Pre-Practicum Seminar in Addictions Counseling

Prerequisites: PS-101 Take HE-285 or CJ-285; Take HE-270 or PS-270; Take HE-208 or CJ-208; Take HE-354 or CJ-354; # Take HE-406 or CJ-406;

Prerequisites or Corequisite: HE-406 or CJ-406

The course is designed for students who wish to complete the course Practicum in Addictions Counseling in pursuit of CADC licensure. Students are prepared for fieldwork through practice of counseling techniques, reviews of case studies, and study of counseling theories. All core functions of addictions counseling are reviewed and reinforced, with particular emphasis on assessment, counseling, and case management. Students practice in role play using a variety of modalities while considering the needs of special populations and the opportunities and constraints of various treatment settings. Ethical and legal considerations for addictions counselors are also explored.

Fall and Spring and every year. 3 Credits

HE-408 Directed Study: Health

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

HE-409 Practicum in Addictions Counseling

Prerequisites: HE-407 or CJ-407

Field experience in which students complete 150 hours of direct care experience in a substance use disorders counseling setting. To qualify for CADC licensure, the practicum must be repeated for a total of 300 hours and 6 credits. Course may be repeated.

Fall and Spring and every year. 3 Credits

HE-440 Practicum in Health

LASC Categories: CAP, WAC

A field experience option required of all Health Studies majors. Prerequisite: Advanced standing

Fall and Spring and every year. 3 Credits

HE-450 Independent Study in Health

Creative, independent learning experiences designed and initiated by the health majors.

Fall and Spring and every year. 1-6 Credits

Program Learning Outcomes

- Identify personal, social, and environmental determinants of population health.
- Critically evaluate health-related information.
- Conduct public health research.
- Apply and evaluate evidence-based population health improvement strategies.
- Employ community organization strategies to address determinants of health.
- Advocate for social changes that improve population health, equity, and diversity.

Public Health - Pre-Nursing Program

The Public Health - Pre-Nursing Program is a dual-degree based on a formal affiliation agreement that admits a limited number of students into an articulated program that begins with 83 credits at WSU in the Public Health/Pre-Nursing program and continues with the accelerated Bachelor of Nursing program at the Massachusetts College of Pharmacy and Health Sciences University ("MCPHS University") Worcester or Manchester, NH campus. At the completion of the appropriate 37 credits (of the 63 required) at MCPHS University, the student transfers those credits back to WSU and earns a Bachelor of Science in Public Health. The student then completes the additional number of appropriate credits (26) at MCPHS University to earn the B.S. in Nursing. Students should see the advisor in the Health Sciences department assigned to the program.

The Bachelor of Science in Public Health requires the following 83 credits at WSU followed by the 63 credits in Nursing which will be taken at the MCPHS University campus in either Worcester or Manchester, NH.

WSU Dual Degree Entrance Requirements

High School GPA 3.0 and SAT CR and MA total of 1000 (or ACT 21). Students for whom English is not their first language must also submit a TOEFL with a score of 213 or higher or a minimum of 90 on the iBT.

An Intent to Transfer/Enroll at MCPHS University form must be submitted by May 1 for fall enrollment and by September 1 for spring enrollment and must include an official WSU transcript.

Admission to the accelerated BSN program is also contingent upon a satisfactory pre-admission interview conducted by MCPHS University at the campus to which a student intends to transfer and is subject to availability of openings in the program.

The MCPHS University Worcester /Manchester Admissions Committee retains the right to make the final decision on each student's transfer application.

The **B.S. in Public Health at WSU** is earned upon the successful completion of 37 credits at MCPHS University. The WSU Registrar requires an official transcript.

WSU Curriculum Requirements

- Complete 83 required credits at WSU with a minimum GPA of 2.5 during either 4 semesters and 2 summer sessions or 5 semesters.
- No grade below a C (2.0) in Public Health major courses or required ancillary courses -

Code	Title	Credits
BI-161	Human Anatomy and Physiology I	4
BI-162	Human Anatomy and Physiology II	4
BI-206	Medical Microbiology	4
CH-112	Survey of Chemistry	4
PS-210	Developmental Psychology	3
PS-275 or MA-150	Psychological Statistics Statistics I	4

- Courses may not be re-taken.
- Transfer ancillary courses require prior written approval of MCPHS University.
- LASC courses may receive grades lower than C or be taken pass/fail.

Requirements Completed at WSU (83)

Year One		Credits
Semester One		
FYS	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I	3
HC-201	Introduction to Public Health	3
HI-111 or HI-112	US History to 1877 or US History 1865 to the Present	3
PS-101	General Psychology	3
Credits		15
Semester Two		
BI-161	Human Anatomy and Physiology I	4
CH-112	Survey of Chemistry	4
EN-102	College Writing II	3
HE-100	Personal Health	3
Credits		14
Semester Three		
PS-210	Developmental Psychology	3
SO-100	Introduction to Sociology	3
LASC	LASC Elective (QR) (p. 50)	3
Credits		9
Year Two		
Semester Four		
BI-162	Human Anatomy and Physiology II	4
BI-206	Medical Microbiology	4
HC-202	Introduction to Global Health	3
HC-415	Community Health Planning and Promotion	3
PS-275 or MA-150	Psychological Statistics or Statistics I	4
Credits		18
Semester Five		
HE-120	Health and Nutrition	3
HC-203	Introduction to Epidemiology	3
HC-425	Research Seminar	3
HE-390	Environmental Health	3
LASC	LASC Elective (CA) (p. 39)	6
LASC	LASC Elective (GP) (p. 42)	6
Credits		18
Semester Six		
HE-210	Women's Health Issues	3
LASC	LASC Elective (TLC) (p. 53)	6

LASC	LASC Elective (USW) (p. 51)	
	Credits	9
	Total Credits	83

Students in Track I will complete the above courses with the addition of two summer sessions at WSU.

Students in Track II will complete the above courses during a third Fall semester at WSU.

Requirements Completed at MCPHSU

Fall or Spring		Credits
NUR 205	Nursing History, Knowledge & Narrative	3
NUR 208	Essential Concepts of Nursing	3
NUR215/215L	Nursing Skills & Technologies	4
NUR 226	Pathophysiology & Pharmacology	6
	Credits	16
Spring or Summer		
NUR 325/335L	Provider of Care I: Adult & Elder Health	8
NUR350	Scholarly Inquiry	3
	Credits	11
Summer or Fall		
NUR 330	Nursing History, Knowledge & Narrative	3
NUR 335	Essential Concepts of Nursing	6
NUR 345	Nursing Skills & Technologies	6
	Credits	15
Fall or Spring II		
NUR 425	Provider of Care IV: Community/Home Health	8
NUR 445	Provider of Care V: Coordinator of Care	6
NUR 450	Member of a Profession: Capstone Project	4
	Credits	18
	Total Credits	60

Please see LASC section of this catalog for information on the Liberal Arts and Sciences Curriculum (LASC) and for policies governing the use of major courses toward LASC requirements.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Public Health Major

The goal of the Public Health Major is to prepare health practitioners in the public health disciplines of wellness, health promotion, and holistic disease prevention as well as in community health services through cooperative, multi-disciplinary experiences. Coursework focuses on examining the social, behavioral, and environmental determinants associated with pressing health problems to plan, implement, and evaluate appropriate health promotion programs and preventive services to improve population health.

Requirements for the Public Health Major

Code	Title	Credits
Major Required Courses		
		(31-34 credits)
HC-201	Introduction to Public Health	3
HC-202	Introduction to Global Health (DAC)	3
HC-203	Introduction to Epidemiology (GP, NSP, QAC, ICW)	3
HC-228	Health Ethics	3
	or PH-131 Medical Ethics	
HC-245	Introduction to Public Health Research	3
HE-390	Environmental Health	3
HC-415	Community Health Planning and Promotion	3
HC-425	Research Seminar (CAP/WAC)	3
HC-430	Health Promotion Program Implementation & Evaluation	3
HC-445	Pre-Practicum Seminar	1
HC-450	Practicum: Community Health (CAP/WAC)	3-6

Electives (31-38 credits)

*Majors Electives (Group 1)*¹

Select one or two courses from the following:		3-6
HE-120	Health and Nutrition	
HC-220	Health Policy	
HC-234	Multiculturalism and Health	
HC-350	Group Process	
HE-350	Community Health Education (GP, ICW, DAC)	
HC-403	Department Workshop:Community Health	
HE-450	Independent Study in Health	

*Interdisciplinary Electives (Group 2)*¹

See Health Sciences Department for list of approved courses.	9-13
--	------

Required Ancillary Courses

BI-161	Human Anatomy and Physiology I	4
BI-162	Human Anatomy and Physiology II (NSP Lab)	4
CH-112	Survey of Chemistry	4
EN-252	Technical Writing	3
PS-275	Psychological Statistics (QR/QAC or MA/QR)	4
or MA-150	Statistics I	
or SO-275	Social and Behavioral Statistics	

Total Credits 62-72

¹ Students must take at least one course from Group 1 with a maximum of two. Eligible courses for Group 1 are HE-120 and any 200-level course offered by the Health Sciences Department. Students must take the remaining major elective courses (3 to 4 courses) from Group 2. Eligible courses for Group 2 are any 200-level course outside of the Health Sciences Department. For Group 2, each elective must come from a different department.

Department of Health Sciences: Public Health Sample Timeline for Completion of Degree

Year One		Credits
Semester One		
LASC	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I (WR)	3
MA 1XX	Any Math Course (MA/QR)	3

HC-201	Introduction to Public Health	3
LASC	LASC Elective (ICW) (p. 46)	3
Credits		15

Semester Two

EN-102	College Writing II (WR)	3
PS-101	General Psychology (HBS)	3
HC-202	Introduction to Global Health (DAC)	3
CH-112	Survey of Chemistry (NSP #1)	4
BI-161	Human Anatomy and Physiology I	4
Credits		17

Year Two

Semester Three

LASC	Distribution Elective (CON)	3
HC-203	Introduction to Epidemiology (GS, NSP, QAC, ICW)	3
BI-162	Human Anatomy and Physiology II (NSP #2)	4
LASC	Distribution Elective (CA) (p. 39)	3
EN-252	Technical Writing	3
Credits		16

Semester Four

LASC	Distribution Elective (GP) (p. 42)	3
HC-228 or PH-131	Health Ethics or Medical Ethics	3
HC-245	Introduction to Public Health Research	3
Elective	Major/Interdisciplinary Elective #1	3
PS-275 or MA-150	Psychological Statistics (QR #2/QAC) or Statistics I	4
Credits		16

Year Three

Semester Five

LASC	Distribution Elective (TLC) (p. 53)	3
Elective	Major/Interdisciplinary Elective #2	3
Elective	Distribution Elective #3	3
HE-390	Environmental Health	3
Elective Course		3
Credits		15

Semester Six

LASC	Distribution Elective (USW (p. 51))	3
HC-425	Research Seminar	3
Elective	Major/Interdisciplinary Elective #3	3
Elective	Distribution Elective (p. 37)	3
Elective	Distribution Elective (p. 37)	3
Credits		15

Year Four**Semester Seven**

HC-415	Community Health Planning and Promotion	3
HC-445	Pre-Practicum Seminar	1
HC-430	Health Promotion Program Implementation & Evaluation	3
Elective	Distribution Elective (p. 37)	3
Elective	Distribution Elective (p. 37)	3
Elective:Major/Interdisciplinary Elective #4		
Elective	Major/Interdisciplinary Elective #5	3
Credits		16

Semester Eight

HC-450	Practicum: Community Health	3
Elective	Distribution Elective (p. 37)	3
Elective	Distribution Elective (p. 37)	3
Elective	Free Elective	3
Credits		12
Total Credits		122

Note: LASC Distribution Electives, do not have to follow this order.

Please see LASC section of this catalog for information on the Liberal Arts and Sciences Curriculum (LASC) and for policies governing the use of major courses toward LASC requirements.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

HC-201 Introduction to Public Health

This course is an overview and will focus on populations, prevention, and the evidence-based practice of public health.
Every year. 3 Credits

HC-202 Introduction to Global Health

LASC Categories: GP, ICW, DIV, DAC
The course introduces students to the main concepts of public health and the critical links between public health and social and economic development. Students get an overview of the determinants of health, how health status is measured, and the influences of various factors, including cultural, historic, geographic, social, economic, and political issues on the health of individuals and communities. The course also introduces students to key concerns regarding nutrition, reproductive health, infectious disease, and chronic diseases. The course will be global in coverage but with an important focus on the developing world and on the health of the poor.
Fall and Spring and every year. 3 Credits

HC-203 Introduction to Epidemiology

LASC Categories: ICW, NSP, QAC, GP
Prerequisites: any Math course and HC-201.
Basic epidemiologic concepts are covered and application of concepts to everyday problems; e.g., hazards in food supplies and risks associated with lifestyle.
Every year. 3 Credits

HC-220 Health Policy

Prerequisites: HE-100
Examination of the process and factors that influence formulation, implementation and modification of health policy in the United States.
Fall and Spring and every year. 3 Credits

HC-228 Health Ethics

Prerequisites: HE-100 or HC-201
Ethical issues in health including genetic research, euthanasia, medical intervention and reproductive technologies as well as professional ethics.
Fall and Spring and every year. 3 Credits

HC-234 Multiculturalism and Health

Examination of diverse ethnic/racial and cultural beliefs and practices affecting health and illness
Spring only and every year. 3 Credits

HC-245 Introduction to Public Health Research**Prerequisites:** EN-252

This course introduces students to health sciences research. Students will develop critical skills including effectively navigating and interpreting information, distinguishing between high quality and low quality sources of evidence. Students will gain an understanding of the importance of staying actively informed of current events relevant to public health and how informed public health professionals can seek out high quality news on public health as well as discern effective from misleading news relevant to public health policy. Students also will spend extensive time exploring the difference between information found on internet searches and social media versus reliable health agency information. Spring only and every year. 3 Credits

HC-338 Peer Education Training**Prerequisites:** HE-100

Emphasis on student development of practical skills to implement programming centered on peer education programs and focused on preventative health.

Other or on demand. 3 Credits

HC-340 Global Perspective in Public Health**LASC Categories:** GP, ICW

Seminar course for students accepted into a global service learning trip during the academic year. It is designed to prepare students through curriculum-based learning, the components of service learning; ethical partnering with vulnerable communities, and the cultural/historical/political and economic factors that impact health and healthcare policies within the population where immersion takes places. There will be self-reflection and integration of learning through journal writing, critical thinking and exercises formal preparation for service in the host country and final paper at the end of the semester.

Other or on demand and every year. 3 Credits

HC-345 Introduction to the U.S. Health Care System**Prerequisites:** HC-201

This course is an overview of the U.S. health care system (USHCS) and its components. Subjects to be reviewed include how social determinants of health influence access to health care and the role of healthcare providers and their effect in the health care system. The history of USHCS, the financing of services, types of services offered as well as access and quality of these services. Understanding these topics will help formulate an understanding of how the USHCS functions and the factors involved in the delivery of healthcare services.

Fall only and every year. 3 Credits

HC-350 Group Process**Prerequisites:** HE-100

A didactic and experiential examination of various theories of group dynamics and their application to the facilitation of health-related groups. Research paper.

Fall and Spring and every year. 3 Credits

HC-403 Department Workshop:Community Health

The subject matter of this course will be reflective of the changing issues within the field of community health.

Other or on demand. 3 Credits

HC-408 Directed Study: Public Health

Directed study offers students who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

HC-415 Community Health Planning and Promotion**Prerequisites:** 4 courses in the major at 200 level or above.

Emphasis on community analysis; defining and verifying community health problems and establishing goals and objectives. Research paper. Fall and Spring and every year. 3 Credits

HC-425 Research Seminar**LASC Categories:** CAP, WAC**Prerequisites:** HC-228 or PH-131, HC 203 and one of the following MA-150, PS-275 or SO-275.

Students will be required to produce a proposal for a research study based on a community public health issue.

Every year. 3 Credits

HC-430 Health Promotion Program Implementation & Evaluation

Prerequisites: HC-245 and HC-415

The success of a well-planned health promotion program depends on effective implementation and evaluation procedures. This course will review the process of program planning and explore implementation and evaluation strategies. This course will equip students to collect, analyze, interpret, and disseminate evidence of a program's effectiveness to relevant stakeholders. The course will culminate with a written evaluation plan and mock poster presentation delivered to an audience of peers.

Fall and Spring and every year. 3 Credits

HC-445 Pre-Practicum Seminar

Prerequisites or Corequisite: HC-415

Discussion of career opportunities in the public health field, professional development, and graduate coursework in the health sciences field. This mandatory class should be taken the semester before registering for the practicum.

Fall and Spring and every year. 1 Credit

HC-450 Practicum: Community Health

LASC Categories: CAP, WAC

Prerequisites: 24 credits in HE/HC courses and EN-102

Field experience in which students will select a community health speciality area and spend a semester pursuing their goal through participation. See HE 440 Practicum in Health.

Every year. 3-6 Credits

Public Health Major, Concentration in Health Education

Complete all Public Health major required and ancillary courses.

Concentration in Health Education (Total: 15 credits):

Substitute Public Health major/interdisciplinary electives with the following courses:

Code	Title	Credits
HE-100	Personal Health	3
HE-120	Health and Nutrition	3
HE-205	Principles & Foundations of Health Promotion	3

HE-330	Health Communication	3
HC/HE elective		3
Total Credits		15

NOTE: For students enrolled in a MINOR IN SECONDARY EDUCATION:

Minor in Secondary Education will have CH112 waived and they can take HE285 Drugs and Society instead

Minor in secondary Education will have the HC-445 Pre-practicum and HC450-Practicum waived (4 credits)

Minor in secondary Education will present a CPR certification when submitting the intent to graduate form

Public Health Minor

Note: Students may not major **and** minor in this discipline.

The Public Health Minor is designed to develop an in-depth understanding of the core areas and competencies of the public health discipline by introducing students to various determinants affecting health from global, national, community, and local perspectives.

Requirements for the Public Health Minor

Code	Title	Credits
Requirements		(21 credits)
HC-201	Introduction to Public Health	3
HC-202	Introduction to Global Health	3
HC-203	Introduction to Epidemiology	3
HC-415	Community Health Planning and Promotion	3
Electives	from HE and HC Health courses	9
Total Credits		21

Mathematics

Department of Mathematics

The Department prepares its students for advanced study and research as well as for careers in business, industry, government, and teaching. Students are encouraged to seek the advice of their faculty advisor in the selection of a concentration and elective courses that will best prepare them for their career choices.

Mathematics is the language of science and also plays a key role in many of the social sciences. An understanding of mathematics provides a powerful approach to solving problems through organization, simplification, and abstraction. In today's job market, individuals with highly developed analytical and problem-solving skills are in great demand. Therefore, there are numerous career options for students who choose to major in mathematics.

The Mathematics Department offers two majors. One is a Mathematics Major with four possible concentrations: Traditional, Secondary Education, Statistics and Modeling, and Actuarial Studies. The other is Mathematics for Elementary Education which also requires a student to complete the Elementary Education Major.

Computer software is used in many courses. These programs include Maple, Geogebra, Sage, SPSS, Matlab, Geometer's Sketchpad, and DPGraph.

Mathematics Placement

All new students should take the math placement exam. Results will be used to determine appropriate course placement. To take a mathematics course (except MA-105) at Worcester State University, students must complete the placement test process prior to registration. Students who have graduated from high school with at least a 2.7 overall high school GPA within the last three years are eligible for MA-105.

- Actuarial Mathematics Minor (p. 262)
- Applied Mathematics Minor (p. 262)
- Mathematics for Elementary Education (p. 262)
- Mathematics Major: Concentration in Actuarial Studies (p. 264)

- Mathematics Major: Concentration in Secondary Education (p. 265)
- Mathematics Major: Concentration in Statistics and Modeling (p. 267)
- Mathematics Major: Concentration in Traditional Mathematics (p. 268)
- Mathematics Minor (p. 270)
- Middle School Mathematics Minor (p. 270)

Faculty

Kyle T. Allaire, Assistant Professor (2020), B.A., M.A., Rhode Island College; Ph.D., University of Connecticut

Timothy Antonelli, Associate Professor (2015), B.S.E., Duke University; Ph.D., North Carolina State University

Noah Daleo, Associate Professor (2015), B.S., Kennesaw State University; Ph.D., North Carolina State University

Mary S. Fowler, Professor (2004), B.A., New York University; M.S., Ph.D., Carnegie Mellon University

Maria G. Fung, Professor (2008), B.A., Clark University; M.S., Ph.D., Cornell University

Elizabeth Gilbert, Associate Professor (2016), B.S., M.S., Villanova University; Ph.D., Temple University

Hy Ginsberg, Professor (2011), B.S., State University of New York Stony Brook; M.S., Ph.D., University of Vermont

Jason A. Hardin, Associate Professor (2014), B.A., University of Cincinnati; M.S., Ph.D., University of Nebraska Lincoln

Caitlin Krul, Associate Professor (2016), B.S., Salem State College; M.S., Ph.D., University of Rhode Island

Eileen B. Perez, Developmental Mathematics Program Director, Professor (2013), B.S., M.S. Union College; Ed.D., Nova Southeastern University

Hansun T. To, Professor (2004), B.A., Rosemont College; M.A., Ph.D., Temple University

Michael Winders, Department Chair, Professor (2004), B.S., M.S., Ph.D., University of Iowa

Courses

MA-098 Developmental Math: Arithmetic

Prerequisites: Pass math placement test with a code of 1 or above.

Whole numbers, fractions, decimals, percents, rates, ratios, proportions, word problems, graphs, tables, signed numbers, variables and expressions. [credits are developmental]

Fall and Spring and every year. 3 Credits

MA-099 Developmental Math: Algebra

Prerequisites: Pass math placement test with a code 2 or above

A review of arithmetic and elementary algebra preliminary to MA110. Three developmental credits, not counted toward degree. [credits are developmental]

Fall and Spring and every year. 3 Credits

MA-105 Survey of Mathematics

LASC Categories: QR

Prerequisites: Math placement exam code 3 or higher, or a weighted high school GPA of 2.7 or higher within the past 3 years

Financial management, probability theory, voting methods and apportionment, and other topics selected to improve the quantitative literacy of students. Not for mathematics majors.

Fall and Spring and every year. 3 Credits

MA-107 Mathematical Explorations-- Invitation To Effective Thinking

LASC Categories: QR

Prerequisites: Math placement exam code 3 or higher, or a weighted high school GPA of 2.7 or higher within the past 3 years.

Analysis of mathematical topics including (but not limited to) logical thinking, elementary number theory, concepts of infinity, geometry gems, modeling through graphs, fractals, and uncertainty.

Fall and Spring and every year. 3 Credits

MA-130 Number and Operations for Teachers

LASC Categories: QR

Prerequisites: Pass math placement test with code 5 or above

Develops understanding of the mathematical content of number and operations at the deep level required for successful elementary and middle school teaching.

Fall and Spring and every year. 3 Credits

MA-131 Patterns, Functions and Algebra for Teachers

LASC Categories: QR

Prerequisites: MA-130 Minimum grade C

Develops understanding of the mathematical content of patterns, functions and algebra at the deep level required for successful elementary and middle school teaching. Credit will not be awarded for MA-180 (formerly MA-110) and MA 131.

Fall and Spring and every year. 3 Credits

MA-132 Geometry, Measurement, Probability and Statistics for Teachers

LASC Categories: QR

Prerequisites: MA-130 with a C or above.

Develops understanding of the mathematical content of geometry, measurement, probability and statistics at the deep level required for successful elementary and middle school teaching.

Fall and Spring and every year. 3 Credits

MA-150 Statistics I

LASC Categories: QR

Prerequisites: Pass Math Placement Test with code 4 or above

Descriptive techniques, elementary probability, distribution of the sample mean, confidence intervals, hypothesis testing of the means of one and two samples, linear regression and correlation. Credit will not be awarded for both MA-150 and MA-302.

Fall and Spring and every year. 3 Credits

MA-180 Introduction to Functions

LASC Categories: QR

Prerequisites: Pass math placement exam with a score of 5 or above.

Properties, graphing, and applications of linear, quadratic, polynomial, rational, exponential, and logarithmic functions; systems of linear equations.

Fall and Spring and every year. 3 Credits

MA-190 Pre-calculus

LASC Categories: QR, NLL

Prerequisites: MA 110 or MA-180 with a grade of at least C- or math placement exam code 6 or above Review of exponential and logarithmic functions; trigonometric functions, identities, and equations; systems of linear equations and inequalities; and applications.

Fall and Spring and every year. 4 Credits

MA-193 Special Topics in Math for First Year Students**LASC Categories:** FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

3 Credits

MA-200 Calculus I**LASC Categories:** QR, NLL**Prerequisites:** MA 190 with a grade of at least C- or math placement exam code 7

Limits, continuity, differentiation and integration of functions, the Fundamental Theorem of Calculus, L'Hôpital's Rule, applications including related rates, optimization, and area. Credit will not be given for both MA-200 and MA-202.

Fall and Spring and every year. 4 Credits

MA-201 Calculus II**LASC Categories:** QR, NLL**Prerequisites:** MA 200 with a grade of at least C- Techniques of integration, infinite sequences and series, power series, applications including volume and functional approximation.

Fall and Spring and every year. 4 Credits

MA-202 Business Calculus**LASC Categories:** QR, NLL**Prerequisites:** MA-180 with a grade of at least C- or math placement exam code 6 or above Review of functions, limits, derivatives, integration and introduction to multivariate calculus. Business applications of these topics.

Fall and Spring and every year. 4 Credits

MA-240 Theory of Proof**LASC Categories:** NLL**Prerequisites:** MA-200 minimum grade C- Logic and Proof, Set Theory, Math Induction, Relations, Functions, Sequences and Convergence, Limits and Continuity, Congruences, Introductions to Groups.

Fall and Spring and every year. 4 Credits

MA-260 Linear Algebra**Prerequisites:** MA 240 with a grade of at least C. Solutions of simultaneous equations by means of matrices and determinants; vector spaces, linear transformations; also, as time permits, characteristic values, bilinear and quadratic forms.

Fall only and every year. 3 Credits

MA-302 Probability and Statistics**Prerequisites:** MA 200 with a grade of at least C- Descriptive statistics, probability theory, combinatorics, correlation, regression and inference techniques. Credit will not be awarded for both MA-150 and MA-302.

Fall only and every year. 3 Credits

MA-303 Mathematical Modeling**Prerequisites:** MA 201 with a grade of at least C- The development, analysis, and application of continuous and discrete-time models from the physical, financial, and life sciences.

Spring only and every year. 3 Credits

MA-304 Data Analysis**LASC Categories:** NLL**Prerequisites:** MA-302 CS-135 Minimum grade C-; Case studies combining applied statistics, mathematical statistics, mathematics, computing, and communications to simulate work experience of a practicing statistician.

Spring only and every year. 4 Credits

MA-309 Topics in Mathematics for Middle and Secondary Teachers**Prerequisites:** MA 240 with a grade of C or better. MA 340 is highly recommended.

Students will strengthen and expand their knowledge of the mathematics taught in middle/high school. Specific emphasis will be placed on topics in geometry and trigonometry.

Spring only and every year. 3 Credits

MA-310 Calculus III**LASC Categories:** NLL**Prerequisites:** MA 201 with a grade of at least C- Vectors, parametric equations, polar, cylindrical and spherical coordinates, multivariable functions, properties and applications, partial derivatives, multiple integrals.

Fall only and every year. 4 Credits

MA-320 Ordinary Differential Equations**Prerequisites:** MA-201 with a grade of at least B-. Techniques for solving first- and second-order ordinary differential equations, including Laplace transformations, numerical approximations and graphical techniques.

Spring only and every year. 3 Credits

MA-327 Combinatorics and Graph Theory**Prerequisites:** MA-240 with a grade of C or above.

The course will examine various topics from combinatorics and graph theory, including enumeration, recurrence relations, generating functions, graphs and their properties (e.g., planarity, colorability), and trees. The course will have an emphasis on both proof writing and computation. Spring only and every year. 3 Credits

MA-340 Modern Geometry**Prerequisites:** MA 240 with a grade of at least C.

Topics from Euclidean and non-Euclidean geometry. Spring only and every year. 3 Credits

MA-360 Number Theory**Prerequisites:** MA 240 with a grade of at least C.

Divisibility properties of integers, prime numbers, the Euclidean algorithm, the unique factorization theorem, congruences, Diophantine equations, number theoretic functions.

Fall only and every year. 3 Credits

MA-380 Probability**Prerequisites:** MA 310 with a grade of at least C-

Probability concepts including: counting, conditional probability, independence, expectation and variance of univariate and multivariate distributions. This is the first course in a two-course sequence that prepares students for the first actuarial exam.

Fall only and every year. 3 Credits

MA-382 Actuarial Preparation Workshop**Prerequisites:** MA-310 with a B- or greater and approval of Math Chair

This course supports students as they prepare for either of the following actuarial exams: Probability Exam P or Financial Mathematics Exam FM. Focus will be on developing the required mathematical competencies, professionalism and communication of mathematical concepts consistent with actuarial industry standard, networking towards the acquisition of an internship or job in the actuarial field.

Spring only and every year. 3 Credits

MA-405 Abstract Algebra**Prerequisites:** MA 240 with a grade of at least B- and MA 260 with a grade of at least C-

Introduction to groups, rings, and fields.

Spring only and every year. 3 Credits

MA-408 Directed Study: Mathematics

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

1-6 Credits

MA-410 Real Analysis**Prerequisites:** MA 310 and MA-240 with a grade of at least B-

Rigorous treatment of sequences, topology of the real numbers, continuity; also, as time allows, differentiation, integration.

Fall only and every year. 3 Credits

MA-425 Mathematical Statistics**Prerequisites:** MA-240 and MA-310 with a minimum grade of B-, and MA-380 with a minimum grade of C-

A rigorous treatment of statistical inference including: maximum likelihood estimators, sufficiency, consistency, hypothesis tests, likelihood ratio tests and Bayesian inference.

Spring only and every year. 3 Credits

MA-470 Capstone Experience**LASC Categories:** CAP, WAC**Prerequisites:** Senior standing within the major.

EN-102 or EN-250

Students complete an independent mathematics research/problem-solving project, including oral presentations and a final written paper.

Fall only and every year. 3 Credits

MA-497 Selected Topics in Mathematics**Prerequisites or Corequisite:** MA-240 and MA-260 (MA-260 may be taken concurrently). Pre-requisite will vary according to content.

Selection of topics of mutual interest to students and faculty.

3 Credits

MA-498 Internship: Mathematics

Working in and for an organization where ones skills can be tested in real-world situations. Students will have an opportunity to gain experience, to increase knowledge in various functional areas, and establish important contacts with an organization. [Consent of instructor.]

3 Credits

MA-499 Independent Study in Mathematics

Offers advanced students an opportunity to examine topics not normally covered in other mathematics courses. Geared to interests of both the student and the instructor.

Fall and Spring and every year. 1-6 Credits

Program Learning Outcomes

- Apply mathematical reasoning to critically approach, analyze, and solve problems.
- Organize mathematical thought and effectively communicate ideas using written and oral arguments.
- Use appropriate technology to explore and solve mathematical problems.
- Recognize and contribute to the various roles of mathematics in society.
- Be prepared for a career or graduate study in mathematics or a related field.

Actuarial Mathematics Minor

Requirements for a Actuarial Mathematics Minor

Code	Title	Credits
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-310	Calculus III	4
MA-380	Probability	3
MA-382	Actuarial Preparation Workshop	3
Total Credits		18

Applied Mathematics Minor

Requirements for Applied Mathematics Minor

Code	Title	Credits
MA-190	Pre-calculus	4
or MA-310	Calculus III	
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-302	Probability and Statistics	3
or MA-303	Mathematical Modeling	
MA-320	Ordinary Differential Equations	3
Total Credits		18

Mathematics for Elementary Education

The Mathematics for Elementary Education Major

This major serves as a second major for Elementary Education majors. It prepares pre-service teachers to be mathematical leaders in elementary schools.

Admission Requirements for the Mathematics Major

Rigorous high school coursework with above-average grades in mathematics and/or computer science courses.

Requirements for the Mathematics for Elementary Education Major

Code	Title	Credits
MA-130	Number and Operations for Teachers	3
MA-131	Patterns, Functions and Algebra for Teachers	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
MA-190	Pre-calculus	4
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-240	Theory of Proof	4
MA-302	Probability and Statistics	3
MA-303	Mathematical Modeling	3
MA-360	Number Theory	3
ED-425	Sem: Applying Ed Principles	3
ED-435	Practicum in Teaching: Elementary School	9
Total Credits		46

Note: The pre-requisite for MA-190 is MA-180. However, credit will not be given for both MA-131 and MA-180. If a student wishes to register for MA-190 upon completion of MA-131, he/she must receive a C- or better in MA-131 and complete a packet of supplementary materials that will be reviewed by either the MA-190 instructor or department chair.

MA-130, MA-131, and MA-132 must be completed with grades of at least B-, a student may retake any one of these courses at most once to increase a grade below a C-, and may retake at most two of these courses.

MA-190, MA-200, and MA-240 must be completed with grades of at least C-, a student may retake any one of these courses at most once to increase a grade below a C-, and may retake at least two of these courses.

Students taking ED-425 and ED-435 must complete all prerequisite coursework for the Elementary Education Major Teacher Licensure Program and pass 053 Mathematics (Elementary) MTEL.

Sample Timeline for the Mathematics for Elementary Education Major

Year One

Semester One		Credits
MA-130	Number and Operations for Teachers (QR)	3
ED-150 or ED-155	Introduction to the Teaching Profession (ICW) or Teaching and Learning in Elementary School	3
PS-101	General Psychology (HBS)	3
EN-101	College Writing I (WR)	3
FYS	First-Year Seminar (FYS) (p. 41)	3
Credits		15

Semester Two

MA-131	Patterns, Functions and Algebra for Teachers (QR)	3
MA-190	Pre-calculus	4
PS-210	Developmental Psychology	3
EN-102	College Writing II (WR)	3
HI-111	US History to 1877 (CON)	3
Credits		16

Year Two

Semester Three

MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
MA-200	Calculus I	4
ED-250	Educational Psychology	3
HI-112	US History 1865 to the Present (USW)	3

MU-237	Music in the Elementary School (CA)	3
--------	-------------------------------------	---

Credits 16

Semester Four

MA-201	Calculus II	4
ED-261	Introduction to the Foundations of Reading	3
ED-271	International and Comparative Education (GP)	3
ED-275	Curr/Instr in Elementary Ed	3
EV-120	Integrated Environmental Science for Educators (NSP LAB)	4

Credits 17

Year Three

Semester Five

MA-240	Theory of Proof	4
MA-302	Probability and Statistics	3
ED-304	Best Practices for English Language Learners (TLC)	3
ED-306	Elementary Reading, Language Arts and Literature	6

Credits 16

Semester Six

MA-303	Mathematical Modeling	3
ED-320	Elementary Science	3
GS-101	Physical Geography (NSP)	3
ED-325	Elementary Mathematics	3
LASC	LASC Elective (DIV)	3

Credits 15

Year Four

Semester Seven

MA-360	Number Theory	3
ED-330	Elementary Social Studies and Multiculturalism	3
ED-375	Prepracticum: Instruction, Classroom Management, and Family and Community Engagement in the Elementary School	3
SELECT	General Elective	3
SELECT	General Elective	3

Credits 15

Semester Eight

ED-425	Sem: Applying Ed Principles	3
--------	-----------------------------	---

ED-435	Practicum in Teaching: Elementary School (Capstone)	9
Credits		12
Total Credits		122

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Mathematics Major: Concentration in Actuarial Studies

Admission Requirements for the Mathematics Major

Rigorous high school coursework and strong SAT scores with above average grades in mathematics and computer science courses.

Requirements for Mathematics Major: Concentration in Actuarial Studies

Core Courses Math Major: 22 credits (including Ancillary)

Code	Title	Credits
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-240	Theory of Proof	4
MA-260	Linear Algebra	3
MA-310	Calculus III	4
MA-470	Capstone Experience	3
Total Credits		22

**Requirements for the Concentration in Actuarial
Sciences: 19 credits**

Code	Title	Credits
MA-302	Probability and Statistics	3
MA-303	Mathematical Modeling	3
MA-304	Data Analysis	4

MA-380	Probability	3
MA-382	Actuarial Preparation Workshop	3
MA-425	Mathematical Statistics	3
Total Credits		19

Ancillary Requirements: 30 credits

Code	Title	Credits
EC-110	Introduction to Microeconomics	3
EC-120	Introduction to Macroeconomics	3
EC-200	Intermediate Macroeconomics	3
EC-201	Intermediate Microeconomics	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-316	Financial Management	3
BA-404	Corporate Finance	3
CS-265	Database Applications	3
CS-135	Programming for Non-CS Majors	3
Total Credits		30

Total Credits: 71

MA-200, MA-201 and MA-240 must be completed with grades of at least C- by the end of the sophomore year. A student may only retake any of these courses at most once to increase a grade below C-; and may retake at most two of these courses to increase a grade below C-.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Department of Mathematics: Mathematics Major Concentration in Actuarial Sciences Sample Timeline for Completion of Degree

Year One

Semester One		Credits
MA-200	Calculus I	4
CS-135	Programming for Non-CS Majors (QR)	3

EC-110	Introduction to Microeconomics	3
EN-101	College Writing I	3
LASC	First-Year Seminar (FYS) (p. 41)	3

Credits 16

Semester Two

MA-201	Calculus II	4
MA-240	Theory of Proof	4
EC-120	Introduction to Macroeconomics	3
EN-102	College Writing II	3
LASC	LASC Elective (CON) (p. 38)	3

Credits 17

Year Two

Semester Three

MA-310	Calculus III	4
MA-302	Probability and Statistics	3
BA-210	Financial Accounting I	3
LASC	LASC Elective (CA) (p. 39)	3
LASC	LASC Elective (USW) (p. 51)	3

Credits 16

Semester Four

MA-304	Data Analysis	4
MA-382	Actuarial Preparation Workshop	3
BA-220	Financial Accounting II	3
LASC	LASC Elective (NSP) (p. 49)	3
LASC	LASC Elective (GP) (p. 42)	3

Credits 16

Year Three

Semester Five

MA-380	Probability	3
MA-260	Linear Algebra	3
CS-265	Database Applications	3
LASC	LASC Elective (TLC) (p. 53)	3
LASC	LASC Elective (NSP LAB) (p. 48)	4

Credits 16

Semester Six

MA-303	Mathematical Modeling	3
EC-200	Intermediate Macroeconomics	3
BA-316	Financial Management	3
LASC	LASC Elective (ICW) (p. 46)	3
LASC	LASC Elective (HBS) (p. 44)	3

Credits 15

Year Four

Semester Seven

MA-470	Capstone Experience	3
EC-201	Intermediate Microeconomics	3
LASC	LASC Elective (DIV)	3
SELECT	General Elective	3

Credits 12

Semester Eight

BA-404	Corporate Finance	3
MA-425	Mathematical Statistics	3
SELECT	General Elective	3
SELECT	General Elective	3

Credits 12

Total Credits 120

Mathematics Major: Concentration in Secondary Education

Admission Requirements for the Mathematics Major

Rigorous high school coursework and strong SAT scores with above average grades in mathematics and computer science courses.

Requirements for a Major in Mathematics

Students must complete a core of six mathematics courses and one computer science class and in addition select one of three concentrations.

Code	Title	Credits
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-240	Theory of Proof	4
MA-260	Linear Algebra	3
MA-310	Calculus III	4
MA-470	Capstone Experience	3
<i>Ancillary Course</i>		
CS-135	Programming for Non-CS Majors	3
Total Credits		25

MA-200, MA-201 and MA-240 must be completed with grades of at least C- by the end of the sophomore year. A student may only retake any of

these courses at most once to increase a grade below C-; and may retake at most two of these courses to increase a grade below C-.

Requirements for the Concentration in Secondary Education

Code	Title	Credits
MA-302	Probability and Statistics	3
MA-309	Topics in Mathematics for Middle and Secondary Teachers	3
MA-340	Modern Geometry	3
MA-405 or MA-410	Abstract Algebra Real Analysis	3
MA-360	Number Theory	3
MA-303	Mathematical Modeling	3
Total Credits		18

It is recommended that students planning to take the Massachusetts Test for Educator Licensure (MTEL) for high school certification also complete a physics course. A secondary education minor, 4+ in Secondary Education or Post Baccalaureate initial license program through the education department are also required for licensure as a math teacher.

It is recommended that students planning to take the Massachusetts Test for Educator Licensure (MTEL) for high school certification also complete a physics course.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Department of Mathematics: Mathematics Major Concentration in Secondary Education Sample Timeline for Completion of Degree

Year One

Semester One		Credits
MA-200	Calculus I	4
CS-135	Programming for Non-CS Majors (QR)	3
EN-101	College Writing I	3
LASC	First-Year Seminar (FYS) (p. 41)	3

LASC	LASC Elective (GP) (p. 42)	3
Credits		16

Semester Two

MA-201	Calculus II	4
MA-240	Theory of Proof	4
EN-102	College Writing II	3
LASC	LASC Elective (CON) (p. 38)	3
SELECT	General Elective	3

Credits 17

Year Two

Semester Three

MA-310	Calculus III	4
MA-260	Linear Algebra	3
LASC	LASC Elective (NSP) (p. 49)	3
LASC	LASC Elective (CA) (p. 39)	3
LASC	LASC Elective (DIV)	3

Credits 16

Semester Four

MA-303	Mathematical Modeling	3
MA-309	Topics in Mathematics for Middle and Secondary Teachers	3
LASC	LASC Elective (NSP LAB) (p. 48)	4
LASC	LASC Elective (USW) (p. 51)	3
SELECT	General Elective	3

Credits 16

Year Three

Semester Five

MA-302	Probability and Statistics	3
MA-360	Number Theory	3
LASC	LASC Elective (HBS) (p. 44)	3
SELECT	General Elective	3
SELECT	General Elective	3

Credits 15

Semester Six

MA-340	Modern Geometry	3
MA-405	Abstract Algebra ¹	3
LASC	LASC Elective (ICW) (p. 46)	3
LASC	LASC Elective (TLC) (p. 53)	3
SELECT	General Elective	3

Credits 15

Year Four

Semester Seven

MA-410	Real Analysis ¹	3
MA-470	Capstone Experience	3
SELECT	General Elective	3

SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Semester Eight		
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		12
Total Credits		122

¹ Only one of MA-405 or MA-410 is required.

Once LASC requirements are satisfied, students may select general requirements. Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Students should consult with their advisors about minoring in secondary education.

Mathematics Major: Concentration in Statistics and Modeling

Admission Requirements for the Mathematics Major

Rigorous high school coursework with above-average grades in mathematics and/or computer science courses.

Requirements for a Major in Mathematics

Students must complete a core of six mathematics courses and one computer science class and in addition select one of three concentrations.

Code	Title	Credits
Core Courses		(25 credits)
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-240	Theory of Proof	4
MA-260	Linear Algebra	3
MA-310	Calculus III	4
MA-470	Capstone Experience	3

<i>Ancillary Course</i>		
CS-135	Programming for Non-CS Majors	3
Total Credits		25

MA-200, MA-201 and MA-240 must be completed with grades of at least C- by the end of the sophomore year. A student may only retake any of these courses at most once to increase a grade below C-; and may retake at most two of these courses to increase a grade below C-.

Requirements for the Concentration in Statistics and Modeling

Code	Title	Credits
CS-265	Database Applications	3
MA-302	Probability and Statistics	3
MA-303	Mathematical Modeling	3
MA-304	Data Analysis	4
MA-327	Combinatorics and Graph Theory	3
MA-380	Probability	3
MA-410	Real Analysis	3
Total Credits		22

Department of Mathematics: Mathematics Major Concentration in Statistics and Modeling Sample Timeline for Completion of Degree

Year One		
Semester One		Credits
MA-200	Calculus I	4
CS-135	Programming for Non-CS Majors (QR)	3
EN-101	College Writing I	3
LASC	First-Year Seminar (FYS) (p. 41)	3
LASC	LASC Elective (CA) (p. 39)	3
Credits		16
Semester Two		
MA-201	Calculus II	4
MA-240	Theory of Proof	4
EN-102	College Writing II	3
LASC	LASC Elective (CON) (p. 38)	3
LASC	LASC Elective (USW) (p. 51)	3
Credits		17

Year Two**Semester Three**

MA-260	Linear Algebra	3
MA-302	Probability and Statistics	3
MA-310	Calculus III	4
CS-265	Database Applications	3
LASC	LASC Elective (NSP) (p. 49)	3
Credits		16

Semester Four

MA-304	Data Analysis	4
LASC	LASC Elective (NSP LAB) (p. 48)	4
SELECT	General Elective	3
SELECT	General Elective	3
Credits		14

Year Three**Semester Five**

MA-380	Probability	3
LASC	LASC Elective (GP) (p. 42)	3
LASC	LASC Elective (ICW) (p. 46)	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15

Semester Six

MA-303	Mathematical Modeling	3
MA-327	Combinatorics and Graph Theory	3
LASC	LASC Elective (TLC) (p. 53)	3
LASC	LASC Elective (HBS) (p. 44)	3
SELECT	General Elective	3
Credits		15

Year Four**Semester Seven**

MA-410	Real Analysis	3
MA-470	Capstone Experience	3
LASC	LASC Elective (DIV)	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15

Semester Eight

SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		12

Total Credits **120**

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Mathematics Major: Concentration in Traditional Mathematics

Admission Requirements for the Mathematics Major

Rigorous high school coursework with above-average grades in mathematics and/or computer science courses.

Requirements for a Major in Mathematics

Students must complete a core of six mathematics courses and one computer science class and in addition select one of three concentrations.

Code	Title	Credits
Core Courses		(25 credits)
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-240	Theory of Proof	4
MA-260	Linear Algebra	3
MA-310	Calculus III	4
MA-470	Capstone Experience	3
<i>Ancillary Course</i>		
CS-135	Programming for Non-CS Majors	3
Total Credits		25

MA-200, MA-201 and MA-240 must be completed with grades of at least C- by the end of the sophomore year. A student may only retake any of these courses at most once to increase a grade below C-; and may retake at most two of these courses to increase a grade below C-.

Requirements for a Concentration in Traditional Mathematics

Code	Title	Credits
<i>Required courses:</i>		
MA-320	Ordinary Differential Equations	3
MA-405	Abstract Algebra	3
MA-410	Real Analysis	3
<i>Take two courses from the following:</i>		6
MA-327	Combinatorics and Graph Theory	
MA-340	Modern Geometry	
MA-360	Number Theory	
Three additional credits of mathematics at the 300 or 400 level (this can include the third of MA-327, MA-340, and MA-360 not used above), to be chosen in consultation with the academic advisor.		3
Total Credits		18

Department of Mathematics: Mathematics Major Traditional Concentration Sample Timeline for Completion of Degree

Year One

Semester One		Credits
MA-200	Calculus I	4
CS-135	Programming for Non-CS Majors (QR)	3
EN-101	College Writing I	3
LASC	First-Year Seminar (FYS) (p. 41)	3
LASC	LASC Elective (NSP) (p. 49)	3
Credits		16
Semester Two		Credits
MA-201	Calculus II	4
MA-240	Theory of Proof	4
EN-102	College Writing II	3
LASC	LASC Elective (CON) (p. 38)	3
LASC	LASC Elective (CA) (p. 39)	3
Credits		17

Year Two

Semester Three		Credits
MA-260	Linear Algebra	3
MA-310	Calculus III	4
LASC	LASC Elective (NSP LAB) (p. 48)	4

LASC	LASC Elective (USW) (p. 51)	3
LASC	LASC Elective (GP) (p. 42)	3
Credits		17

Semester Four

MA-320	Ordinary Differential Equations ¹	3
MA-327 or MA-340	Combinatorics and Graph Theory or Modern Geometry	3
LASC	LASC Elective (DIV)	3
LASC	LASC Elective (TLC) (p. 53)	3
SELECT	General Elective	3
Credits		15

Year Three

Semester Five

MA-360	Number Theory	3
MA	300 Level Elective in Major	3
LASC	LASC Elective (HBS) (p. 44)	3
SELECT	General Elective	3
SELECT	General Elective	3

Credits		15
----------------	--	-----------

Semester Six

MA-405	Abstract Algebra	3
MA-320	Ordinary Differential Equations ¹	3
LASC	LASC Elective (ICW) (p. 46)	3
SELECT	General Elective	3
SELECT	General Elective	3

Credits		15
----------------	--	-----------

Year Four

Semester Seven

MA-410	Real Analysis	3
MA-470	Capstone Experience	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3

Credits		15
----------------	--	-----------

Semester Eight

SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3

Credits		12
----------------	--	-----------

Total Credits		122
----------------------	--	------------

¹ MA-320 is offered every other Spring.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Mathematics Minor

Requirements for a Traditional Minor in Mathematics

Code	Title	Credits
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-240	Theory of Proof	4
Minimum of 6 credits at level of MA 260 or above including 3 credits at the level of MA 300 or above		6
Total Credits		18

Middle School Mathematics Minor

Requirements for a Math for K-8 Minor

Code	Title	Credits
MA-130	Number and Operations for Teachers	3
MA-131	Patterns, Functions and Algebra for Teachers	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
MA-200	Calculus I	4
MA-240	Theory of Proof	4
MA-309	Topics in Mathematics for Middle and Secondary Teachers	3
Total Credits		20

Nursing

Dr. Lillian R. Goodman Department of Nursing

Accreditation

- Full approval status from the Commonwealth of Massachusetts Board of Registration in Nursing located at 239 Causeway St. Boston, MA 02114
- The baccalaureate degree program in nursing at Worcester State University is accredited by the Commission on Collegiate Nursing Education (ccneaccreditation.org)
- Member of the Massachusetts Association of Colleges of Nursing (MACN).

General Information

Admissions

The nursing program leads to a Bachelor of Science degree.

The program offers three tracks in the undergraduate major in nursing: **Track One** is for the student who is seeking initial baccalaureate education in the nursing profession. **Track Two** is for the student who has obtained licensure as a registered nurse who has graduated from an Associate Degree or Diploma accredited program and is pursuing a baccalaureate degree. **Track Three** is for the student who has obtained licensure as a licensed practical nurse and graduated from an accredited LPN program and is pursuing a baccalaureate degree.

Mission Statement

The mission of the Dr. Lillian R. Goodman Department of Nursing is in keeping with the Worcester State University mission with the emphasis on developing the professional nurse who values lifelong intellectual growth and global awareness. The Department of Nursing fosters the professional growth of faculty and students through excellence in teaching and learning, rooted in scholarship and community service related to the discipline of nursing.

Undergraduate Program Outcomes

The Department of Nursing prepares individuals for the roles and responsibilities of professional nursing through an undergraduate program leading to the Bachelor of Science degree.

The program outcomes of the undergraduate program are as follows:

1. Provide comprehensive, holistic care that is grounded in the biological sciences, the arts, and humanities.
2. Demonstrate an understanding of a variety of organizational structures, missions, visions, philosophies, and values.
3. Utilize current theoretical, scientific, and research knowledge toward evidence-based professional practice.
4. Demonstrate competence in utilizing information technology resources to advance professional practice
5. Comply with the Standards of Professional Nursing Practice.
6. Implement effective inter-professional communication when working with the health care team.
7. Implement evidence-based practice to guide the nursing process toward culturally sensitive, individual, and population-focused care.
8. Apply the professional standards of moral, ethical, and legal conduct to practice.
9. Demonstrate clinical competency, accountability, and ethical decision-making as an entry-level, novice professional nurse.

The nursing department has department-specific policies which are found in the Department of Nursing Undergraduate and Graduate Student Policy Handbooks. These policies include, but are not limited to, the following: progression and retention, classroom and clinical behavior, academic honesty, professional behavior, and CORI/drug screening/health requirements. The department reserves the

right to modify policies and the curriculum during students' enrollment. Sufficient notice of any change will be provided to students.

Progression in the program requires a successful grade of C or above in and completion of all pre and corequisite courses. A grade of 80 or above is required in all nursing (NU) courses and all clinical placements require a grade of "passing" (P).

Good Moral Character Required for Licensure

In compliance with policy of the Massachusetts State Board of Nursing, all applicants/students are informed that completion of the BS degree does not guarantee admittance to the registered nurse licensure examination. According to Board Licensure Policy 00-01, any individual convicted of a felony or misdemeanor conviction and/or who has been disciplined by a licensure/certification body must be evaluated by the Board to determine a licensure applicant's compliance with the "good moral character" licensure requirement established at Massachusetts General Laws, Chapter 112, section 74 and 74A. Any individual who has been convicted of a felony or misdemeanor conviction, and/or who has been disciplined by a licensure/certification body, or whose ability to practice professional nursing is adversely affected by a physical or mental disability/illness that may endanger the health and/or safety of a person should seek special advising prior to enrolling in any professional nursing program in Massachusetts. Individuals convicted of certain criminal convictions are permanently excluded from nurse licensure in Massachusetts.

All students in the nursing program will be required to have periodic Criminal Offender Record Information (CORI) checks requested by the department and/or clinical agencies. This background check is a computerized search to determine if an individual has any convictions, outstanding warrants, or pending complaints. The information from these records is confidential and is destroyed when students graduate. **Progression and mandatory clinical placements in the nursing program are contingent on a "no report" CORI check result.** Clinical agencies may independently perform CORI checks on students and are not required to accept a student with a CORI report indicating that an offense exists. The department is not responsible for alternate clinical placements for students who cannot be placed in an agency related to a CORI offense report. Students

have an obligation to inform the department chair if any legal issues arise while in the program that are reportable on a CORI. For more information please see www.mass.gov/eohhs/gov/departments/dph/programs/hcq/dhpl/nursing/licensing/good-moral-character-requirements-for-licensure.html

Health Care Agency Requirements: Health, Drug Screening, and Other

Nursing students will be placed in a variety of health care settings. Each agency has requirements, which students must fulfill before they are allowed placement. This list may include, but is not limited to, the following; physical exam, immunizations, agency-specific orientation, CORI, SORI, and drug screening. Progression and mandatory clinical placements in the nursing program are contingent on meeting all agency and departmental requirements. If a student is denied placement by an agency for any reason, including a positive drug or CORI report, the nursing department is not responsible for providing alternate clinical placements.

Clinical Course Requirements for ALL Nursing Tracks:

All newly admitted students will be required to participate in an online documentation tracking system and provide the documentation listed below. Students are required to maintain compliance (updated documentation) for the entirety of the program. Information for accessing the online documentation tracking system will be provided by the clinical resource coordinator. Requirements that must be electronically submitted include:

1. Current, unencumbered license to practice as a Registered Nurse in the Commonwealth of MA.
2. **CPR:** American Heart Association BLS for Health Care Provider is the only accepted certification
3. **Health Information Disclosure Form**
4. **Proof of Health Insurance**
5. **Physical Exam**
6. **Hepatitis B Immunization Series & positive titer**
7. **MMR (Measles, Mumps, and Rubella).** Documentation of 2 doses or positive titers for each

8. **Varicella.** Documentation of 2 doses or positive titer. History of disease is not accepted

9. **Tuberculosis**

A. All students with no past history of positive tuberculosis (TB) screening test must provide documentation of annual TB screening. Any student with a TB screening that is greater than 12 months old must provide baseline TB screening through IRGA (Interferon Gamma Release Assay) or a 2 -step TST (tuberculin Skin Test)

B. Students who have been vaccinated with BCG (Bacillus Calmette-Guerin) and are accustomed to obtaining chest x-rays are required to have a baseline TB screening. BCG is no longer considered to be a protective measure against TB or a contradiction to TB screening. Should the result be positive, a chest x-ray and a doctor's note is required to rule out active disease

10. **Tdap** (Tetanus/Diphtheria/Pertussis) vaccine, if it has been 5 years or more since the last dose of Td

11. **Flu Vaccine** for the current flu season or signed declaration (medical exclusion only)

12. Completed **COVID-19 Vaccine & Booster**

1. Initial:
 - Two doses of Pfizer or Moderna
 - One dose of Janssen
2. Booster
 - 5 months from last dose if Moderna or Pfizer
 - 2 Months from last dose if Janssen

Please note that Clinical facilities may stipulate additional requirements for which documentation must be provided. Also, many of these requirements need to be updated annually or biannually. It is the students' responsibility to submit updated records.

1. Criminal Offender Record Investigation (CORI) is required for all students
2. Sexual Offender Record Investigation (SORI) and/or drug screening may be required by health care agencies

3. Professional liability insurance is renewed annually provided by Worcester State University

Student Organizations

National Student Nurses' Association

This student-led organization is actively involved in outreach leadership development. Membership is mandatory for matriculated students in Track I and Track III programs.

Sigma Theta Tau International: Iota Phi Chapter-at-Large

The International Honor Society for Nurses provides leadership and scholarship in practice, education, and research to enhance the health of all people. Students are selected for membership into the local chapter of the Iota Phi Chapter-at-Large based on academic and personal criteria.

Requirements for Graduation

For the Bachelor of Science Degree with a major in Nursing students must complete:

- A minimum of 120 credits
- Each nursing course with a minimum grade of 80 and a "pass" in each clinical component
- All Nursing Department and Worcester State University requirements
- "Intent to Graduate" form

Transfer credits are determined by the transfer admission department and the nursing program administrator upon receipt of the student's official transcripts.

Students enter as Freshmen (In the Fall of year 1)

- Must complete all courses listed in Year One in order to move to Sophomore level.

Nursing courses must be taken in sequence, but LASC courses can be taken at any time after freshmen year (unless otherwise specified).

- All nursing courses must have a minimum grade of 80 (B-)
- All prerequisites must have a minimum grade of C (see below)

The following courses must have a minimum grade requirement of C:

- Human Anatomy & Physiology I and II with lab
- Survey of Chemistry with lab
- Medical Microbiology with lab
- English Composition I and II
- General Psychology
- Statistics I & QR Elective
- Health and Nutrition
- Intro to Sociology

Students are required to meet with their department advisor during the fall and spring preregistration periods to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation. To receive a baccalaureate degree from Worcester State University (WSU), students must complete 30 of last 40 credits at WSU. WSU will transfer a maximum of 72 credits from an accredited associates degree college.

All first-time, full-time students will declare a major with a minor or a double major by the completion of their first 45 credits. Any minor can be chosen but there are many that fit well with the nursing major. Each student shall meet with an advisor to help guide them through the process of choosing a minor.

- Fast-Track Program (RN-to-MS) (p. 279)
- Track One (Undergraduate BS Program) (p. 279)
- Track Two (RN-to-BS Program) (p. 282)
- Track Three (LPN-to-BS Program) (p. 283)

Faculty

Fatima Alzyoud, Assistant Professor (2022), B.S.N. Jordan University of Science and Technology; M.S.N. Jordan University of Science and Technology; Ph.D. University of Massachusetts Dartmouth

Lisa Cappabianca, Instructor (2021), A.D.N. Becker College; B.S.N. Western Governors University; M.S.N. Worcester State University; D.N.P.(c) University of Massachusetts Worcester

William Chadbourne, Instructor (2015), A.S.N. Mount Wachusett Community College; B.S.N. Worcester State College; M.S.N. Worcester State University; Ph.D.(abd) University of Massachusetts Lowell

Stephanie Chalupka, Professor (2008), A.S.N. Quinsigamond Community College; B.S.N. Worcester State College; M.S.N. Boston College; Ed.D. University of Massachusetts Amherst

Amanda Cornine, Assistant Professor (2016), A.S.N. Central Maine Medical Center School of Nursing; B.F.A. University of Maine at Farmington; B.S.N. University of Massachusetts Boston; M.S.N. Framingham State University; Ph.D. University of Massachusetts Worcester

Theresa M. Khoury, Assistant Professor (2017), A.S. Bunker Hill Community College; A.S.N. Laboure College; B.S.N. Curry College; M.S.N. Framingham State College; D.N.P. Regis College

Angela Latter, Instructor (2017), B.S.N. Worcester State University; M.S.N. Worcester State University; Ph.D.(abd) University of Massachusetts Worcester

Carol McLaughlin, Visiting Instructor (2021), A.D.N. Quinsigamond Community College; B.S.N. Worcester State University; M.S.N. Worcester State University; Ph.D.(c) University of Massachusetts Worcester

Julia McNeil, Instructor (2018), B.S.N. Austin Peay State University; M.S.N. University of Phoenix; Ph.D. (abd) University of Connecticut

Michelle Paik Page, Program Administrator, Chairwoman, Assistant Professor (2014), B.S.N. Hawaii Pacific University; M.S.N. Framingham State University; D.N.P. Regis College

Ann-Marie Reynolds-Lynch, Associate Professor (2022), A.D.N. Becker College; B.S.N. Worcester State University; M.S.N. Worcester State University; D.N.P. University of Massachusetts Worcester

Sunny Ruggeri, Instructor (2022), B.S. Physics SungKyunKwan University; M.S. Energy Science SungKyunKwan University; A.D.N. Bridgeport Hospital School of Nursing; M.S.N. Sacred Heart University; Ph.D. University of Missouri Kansas City

Janna Trombley, Instructor (2016), B.S.N. University of Vermont; M.S.N. Worcester State University; Ph.D. (abd) University of Massachusetts Worcester

Courses

NU-193 Special Topics in Nursing for First Year Students

LASC Categories: FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

Every year. 3 Credits

NU-200 Introduction to Professional Nursing I

LASC Categories: NLL

Prerequisites: BI-161, BI-162, BI-206, CH-112, EN-101, EN-102

Prerequisites or Corequisite: NU-206 and HE-120.

Nursing is introduced as an art and science focusing on critical thinking and decision making. clinical occurs in on-campus labs and long-term care facilities.

Fall only and every year. 5 Credits

NU-203 Transition from LPN to Professional Nursing

Prerequisites: BI-161 BI-162 CH-112 EN-101 EN-102.

Prerequisites or Corequisite: BI-206 MA-150 PS-101

This course focuses on the transitions from the Licenssed Practical Nurse to the Baccalaureate prepared Registered Nurse.

Fall only and every year. 1 Credit

NU-206 Principles of Pathophysiology and Pharmacology I

Prerequisites: BI-161 and BI-162 and CH-112 and BI-206 and EN-102

Prerequisites or Corequisite: NU-200 and HE-120

This course is a two semester continuation course which combines assessment of the human conditions which result in pathophysiology. The pharmacological therapies are integrated into the content.

Fall only and every year. 3 Credits

NU-210 Introduction to Professional Nursing II

LASC Categories: NLL

Prerequisites: NU-200 NU-206 SO-100 PS-101

Corequisites: NU-216

Health of individuals and families is assessed. Communication, physical assessment, nursing process and other skills for professional practice are introduced. Medication calculations continue and the administration of medication is introduced. Lecture, an on-campus laboratory on physical assessment and off-campus clinical experiences in sub-acute care agencies are included in this course.

Spring only and every year. 5 Credits

NU-213 Health Assessment (Track III)

Prerequisites: NU-203 and NU-206, Track III only.

The LPN student will develop an increased knowledge base and skills related to performing a complete health assessment including a physical exam on the adult patient.

Spring only and every year. 3 Credits

NU-216 Principles of Pathophysiology and Pharmacology II

Prerequisites: NU-200 PS-101 SO-100 NU-206

Corequisites: NU 210 must be completed as a co-requisite.

The focus of this course is on the study of relationships of pathophysiology to pharmacotherapy. Students examine health problems across the lifespan which result in alterations in human functioning. The therapeutic pharmacological interventions which promote the reparative process are integrated into the content

Spring only and every year. 3 Credits

NU-309 Nursing Science I: Obstetrics (Track I)

LASC Categories: NLL

Prerequisites: NU-210 and NU-216

Students will apply the nursing process when caring for the childbearing family patients. Concepts of wellness, disease and health behaviors will be examined as the nursing process is operationalized in the care of the child-bearing family. Lecture and off-campus clinical experiences in maternal-child health nursing are included in this course.

Fall only and every year. 4.5 Credits

NU-310 Nursing Science I: Medical-Surgical Nursing (Track I)

LASC Categories: NLL

Prerequisites: NU-210 and NU-216

Students will apply the nursing process when caring for the adult medical-surgical patients. Concepts of wellness, disease and health behaviors will be examined as the nursing process is operationalized in the care of adult medical-surgical patients. Lecture and off-campus clinical experiences in medical-surgical nursing are included in this course.

Fall only and every year. 4.5 Credits

NU-311 Nursing Science I: Medical-Surgical Nursing (Track III)**LASC Categories:** NLL**Prerequisites:** NU-203, NU-213 and NU-216

Students will apply the nursing process when caring for adult medical-surgical patients. Concepts of wellness, disease and health behaviors will be examined as the nursing process is operationalized in the care of adult medical-surgical patients. Lecture and off-campus clinical experiences in medical-surgical nursing are included in this course.

Fall only and every year. 3.5 Credits

NU-312 Nursing Science I: Obstetrics (Track III)**LASC Categories:** NLL**Prerequisites:** NU-203 and NU-213 and NU-216

Students will apply the nursing process when caring for the childbearing family patients. Concepts of wellness, disease and health behaviors will be examined as the nursing process is operationalized in the care of the child-bearing family. Lecture and off-campus clinical experiences in maternal-child health nursing are included in this course.

Fall only and every year. 3.5 Credits

NU-315 Group Communication Seminar I**Prerequisites:** NU-310 NU-430**Prerequisites or Corequisite:** NU-340

The focus of this course is on effectively assessing, analyzing and problem solving the processes of group interactions with peers in the classroom in order to integrate this information into various health care settings.

Spring only and every year. 1 Credit

NU-332 Transition to Baccalaureate Nursing**Prerequisites:** EN-102 BI-161 BI-162 PS-101 SO-100 BI-206 MA-150.**Prerequisites or Corequisite:** NU-333 and NU-334

This course focuses on nursing knowledge and theory as foundations of professional nursing. The elements of the Department of Nursing's conceptual nursing practice model are analyzed and examined in terms of nursing, diagnostic, and teaching-learning processes. Legal, ethical and environmental factors are studied in relation to their impact on person/environment unity. The format is a hybrid or blended format.

Fall only and every year. 3 Credits

NU-333 Nursing Informatics (Track II)**LASC Categories:** QR**Prerequisites:** MA-150 BI-161 BI-162 EN-101 EN-102 PS-101 SO-100 BI-206**Prerequisites or Corequisite:** NU-332 and NU-334

Nursing Informatics combines knowledge and skills from nursing science, computer science, information science and cognitive science to design and implement automated systems that support the nursing process in the delivery of healthcare services. Students will explore their own role as nurses in implementing patient-centered care in an environment of advancing technology. Students will critically evaluate health information systems and their role in patient safety, safe medication administration, maintenance of patient privacy, data security, and efficacy of health care processes. Meets online.

Fall only and every year. 3 Credits

NU-334 Selected Mechanisms of Disease and Related Pharmacology (Track II)**Prerequisites:** MA-150 BI-161 BI-162 EN-101 EN-102 PS-101 SO-100 BI-206.

The focus of this course is on the study of the interrelatedness of pathophysiology and pharmacodynamics. This nursing focus examines health problems across the lifespan which produce alterations in human functioning and the subsequent response, along with the pharmacological management of these problems. Interventions focus on the reparative process. Meets in a blended/hybrid format.

Fall only and every year. 3 Credits

NU-340 Nursing Science II: Pediatrics (Track I)**LASC Categories:** NLL, DIV, DAC**Prerequisites:** NU-210 NU-216 NU-309 NU-310 NU-430 Take EN-250 EN-202 or EN-102;**Prerequisites or Corequisite:** NU-315

Concepts of wellness, disease, and health behavior are examined as the nursing process is operationalized in the care of acutely ill pediatric patients. Lecture and an off-site clinical experience are included in this course.

Spring only and every year. 4.5 Credits

NU-342 Health Assessment (Track II)**LASC Categories:** NLL**Prerequisites:** NU-332 and NU-333 and NU-334**Corequisites:** NU-430 and NU-432

The nursing process is used as the organizing framework to identify person/environment unity of individuals. A variety of skills and theories relevant to professional nursing practice are utilized. The student will develop an increased knowledge base and skills related to performing a complete physical examination of the adult and pediatric client. The format is a weekly three-hour lab/lecture on campus. Spring only and every year. 4 Credits

NU-344 Nursing Science II: Medical/Surgical Nursing (Track III)**LASC Categories:** NLL**Prerequisites:** NU-203 and NU-216 and NU-213 and NU-311 and NU-312 and NU-430

Concepts of wellness, disease, and health behaviors are examined as the nursing process is operationalized in the care of the acutely ill medical-surgical patients. Lecture and an off-campus clinical experience are included in this course. Spring only and every year. 3.5 Credits

NU-345 Nursing Science II: Medical/Surgical Nursing (Track I)**LASC Categories:** NLL**Prerequisites:** NU-210 and NU-216 and NU-309 and NU-310 and NU-430

Concepts of wellness, disease, and health behavior are examined as the nursing process is operationalized in the care of the acutely ill medical-surgical patients. Lecture and an off-site clinical experience are included in this course. Spring only and every year. 4.5 Credits

NU-346 Nursing Science II: Pediatrics (Track III)**LASC Categories:** NLL, DIV, DAC**Prerequisites:** NU-203 and NU-213 and NU-216 and NU-311 and NU-312 and NU-430

Concepts of wellness, disease, and health behavior are examined as the nursing process is operationalized in the care of pediatric patients. Lecture and an off-site clinical experience are included in this course. Spring only and every year. 3.5 Credits

NU-357 Global Perspectives in Health**LASC Categories:** GP, ICW

Interactive course preparing students for global service immersion experience in partnership with host country.

Other or on demand. 3 Credits

NU-408 Directed Study: Nursing

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

NU-415 Group Communication Seminar II**Prerequisites:** NU-315 and NU-430**Prerequisites or Corequisite:** NU-440

The independent and interdependent role of the professional nurse as an agent of change is examined.

Fall only and every year. 1 Credit

NU-430 Research Seminar in Nursing (Track I and Track III)**LASC Categories:** QAC**Prerequisites:** NU-210, NU-216 and MA-150. Or take NU-203, NU-213 and MA-150.**Prerequisites or Corequisite:** NU-310 (Track 1 Student) or NU-311 (Track III Student)

The focus is on the development of the student as a consumer of nursing research and the utilization of research findings in practice.

Fall only and every year. 3 Credits

NU-431 Research Seminar in Nursing (Track II)**LASC Categories:** QAC**Prerequisites:** NU-332 and NU-333 and NU-334 and MA-150

The focus is on the development of the student as a consumer of nursing research and the utilization of research findings in practice.

Spring only and every year. 3 Credits

NU-432 Advanced Nursing Perspectives in Chronic Illness (Track II)**LASC Categories:** DAC, DIV

The focus of this course is on the study and practice of nursing directed at health promotion/prevention/restoration of clients with chronic person/environment disunity. The format is a hybrid course.

Fall only and every year. 3 Credits

NU-440 Nursing Science III: Community/Public Health Nursing (Track I and Track III)**LASC Categories:** NLL**Prerequisites:** 1 group # Take NU-309 NU-310 NU-315 NU-340 NU-345 NU-430; # Take NU-311 NU-312 NU-430 NU-344 NU-346;

Students practice professional nursing concepts and identify multiple aspects of community and public health issues. Critical thinking and decision making skills are developed and applied. Lecture and off-campus clinical experiences are included in this course.

Fall only and every year. 4 Credits

NU-441 Nursing Science III: Mental Health Nursing (Track I and Track III)**LASC Categories:** NLL**Prerequisites:** Track I-take NU-309 and NU-310 and NU-315 and NU-340 and NU-430 and NU-345. Track III-take NU-311 and NU-312 and NU-346 and NU-430 and NU-344.

Students practice professional nursing concepts and identify multiple aspects of mental health issues. Critical thinking and decision making skills are developed and applied. Lecture and off-campus clinical experiences are included in this course.

Fall only and every year. 4 Credits

NU-450 Leadership in Nursing**LASC Categories:** WAC**Prerequisites:** NU-415 NU-440**Corequisites:** NU-460 NU-470 as a required corequisite

This course focuses on theories of leadership, management, delegation and supervision, which supports the knowledge skills and values integrated by the nurse into professional leadership behavior. Current trends in nursing and in research relating to nursing leadership and management are explored.

Spring only and every year. 3 Credits

NU-452 Professional Nursing Leadership and Organization (Track II)**Prerequisites:** NU-342 and NU-430 and NU-432**Prerequisites or Corequisite:** NU-472 and NU-473 Hybrid Format.

Fall only and every year. 3 Credits

NU-460 Nursing Science IV**Prerequisites:** NU-415 NU-440**Corequisites:** NU-450 NU-470 as required corequisite

The focus is on the study and practice of nursing directed at health promotion/restoration of clients with chronic person/environment disunity. Complex health problems are studied in classrooms and clinical settings.

Spring only and every year. 3 Credits

NU-470 Nursing: Capstone**LASC Categories:** CAP, NLL**Prerequisites:** NU-415 NU-440**Corequisites:** NU-450 NU-460

This 7 credit course focuses on EB Practice in which students will demonstrate the integration and synthesis of all previous learning in the nursing major. Complex health problems will be studied in the clinical setting. Preceptorship opportunities are available to eligible students.

Spring only and every year. 7 Credits

NU-472 Community/Public Health Nursing (Track II)**LASC Categories:** CAP, NLL**Prerequisites:** NU-342 and NU-430 and NU-432**Prerequisites or Corequisite:** NU-452 and NU-473

The focus of this course is on the study and practice of community-oriented nursing. Theories and environmental factors which influence the health of communities are analyzed. The format is a four-hour lecture/seminar. Hybrid format.

Fall only and every year. 6 Credits

NU-473 Health Policy (Track II)**Prerequisites:** NU-342 and NU-430 and NU-432**Corequisites:** NU-452 and NU-472

This course introduces the basic framework for health policy with focus on research, review and analysis of the major components of the US health policies in health care. Online/blended format.

Fall only and every year. 3 Credits

NU-480 Independent Study in Nursing

Opportunities for students to engage in special studies in nursing according to individual interests and faculty availability.

Fall and Spring and every year. 1-6 Credits

Program Learning Outcomes

- Provide comprehensive, holistic care that is grounded in the biological sciences, arts, and humanities.

- Demonstrate an understanding of a variety of organizational structures, missions, visions, philosophies, and values.
- Utilize current theoretical, scientific, and research knowledge toward evidence based professional practice.
- Demonstrate competence in utilizing information technology resources to advance professional practice.
- Comply with the Standards of Professional Nursing Practice.
- Implement effective inter-professional communication when working with the health care team.
- Implement evidence based practice to guide the nursing process toward culturally sensitive, individual, and population focused care.
- Apply the professional standards of moral, ethical, and legal conduct to practice.
- Demonstrate clinical competency, accountability, and ethical decision making as a baccalaureate nurse.

Fast-Track Program (RN-to-MS)

The RN-to-MS Fast Track Program allows 6 graduate credits (500 Level) to be taken during the program to count toward both the Bachelor of Science and the Master of Science in Nursing degrees. These graduate credits may be completed when the RN meets the criteria for the Fast-Track program, completes an application for admission to the RN-to-MS Fast-Track Program, and receives final approval by the RN to BS coordinator. The RN-to-MS Fast-Track application process for the Worcester State On Campus program must be completed in the fall semester of the RN-to-BS studies (to the Graduate Nursing Program through the Graduate School).

Fast-track students must take courses in the M.S. program the semester after completing the B.S. degree. Otherwise 500 Level courses taken in the senior year will count only towards the RN-to-BS degree unless they are in excess of the credits required for the B.S. degree. All undergraduate degree requirements must be completed before students are permitted to take MS level courses beyond NU 530 and NU-551. Only course grades of B- or above will be counted towards the MS degree.

Track One (Undergraduate BS Program)

Track One Courses

Prerequisite courses to be successfully completed with a C or above by the end of Spring (May 30th) semester first-year:

Code	Title	Credits
BI-161 & BI-162	Human Anatomy and Physiology I and Human Anatomy and Physiology II	8
CH-112	Survey of Chemistry	4
EN-101 & EN-102	College Writing I and College Writing II	6
BI-206	Medical Microbiology	4

Corequisite courses to be successfully completed with a C or above by the end of Fall (December 31st) semester sophomore year:

Code	Title	Credits
PS-101	General Psychology	3
SO-100	Introduction to Sociology: Exploring Our Social World	3

Corequisite courses to be successfully completed with a C or above by the end of Spring (May 30th) semester sophomore year:

Code	Title	Credits
HE-120	Health and Nutrition	3
MA-150	Statistics I	3
QR Elective		3

Progression in the nursing majors depends upon satisfactory completion of all prerequisite, corequisite, and nursing courses. *Satisfactory* is defined by grade requirements and progression policies of the nursing department for those individual courses required for program completion.

Satisfactory is defined as:

1. "C" (\geq 74%) or higher in a pre- or corequisite non-NU course, and
2. "B-" (\geq 80%) or higher in every NU course, and
3. A "pass" in the clinical component of each NU course is required. If a "pass" is not achieved in the clinical component, this will result in a failure for the entirety of that NU course (grade of E on the transcript) and dismissal from the program. Progression in the nursing major is dependent upon the student maintaining a minimum grade of 80% in each nursing course and simultaneously meeting the satisfactory performance/objective requirements of each clinical portion of a course.

Repeating any nursing course or any pre- or corequisite course is a **one-time option** per the Department of Nursing. A failure of any combination of two prerequisite, corequisite, or nursing courses will result in a **dismissal** from the Nursing Program and will require a change of major.

Required Nursing Courses: 60 credits – All Nursing courses must be taken in sequence.

Code	Title	Credits
NU-200	Introduction to Professional Nursing I	5
NU-206	Principles of Pathophysiology and Pharmacology I	3
NU-210	Introduction to Professional Nursing II	5
NU-216	Principles of Pathophysiology and Pharmacology II	3
NU-309	Nursing Science I: Obstetrics (Track I)	4.5
NU-310	Nursing Science I: Medical-Surgical Nursing (Track I)	4.5
NU-315	Group Communication Seminar I	1
NU-340	Nursing Science II: Pediatrics (Track I)	4.5
NU-345	Nursing Science II: Medical/Surgical Nursing (Track I)	4.5
NU-415	Group Communication Seminar II	1
NU-430	Research Seminar in Nursing (Track I and Track III)	3

NU-440	Nursing Science III: Community/Public Health Nursing (Track I and Track III)	4
NU-441	Nursing Science III: Mental Health Nursing (Track I and Track III)	4
NU-450	Leadership in Nursing	3
NU-460	Nursing Science IV	3
NU-470	Nursing: Capstone	7
Total Credits		60

Students must achieve a minimum grade of 80 in each nursing course and each section of the course when a course has two distinct class/clinical components (NU-309, NU-310, NU-340, NU-345, NU-440, NU-441). The Department of Nursing has additional policies and procedures which are binding for nursing majors. Included in these policies are standards for progression in the nursing major. They are found in the Nursing Department's Student Handbook. All students receive a copy of the handbook at the start of the academic year and sign a note of receipt.

Nursing courses, prerequisite and corequisite courses may not be taken pass/fail and must meet the grade listed above in order to progress in program.

Transfer Students

Students taking general education courses in another college or university are required to contact the Worcester State University Admissions Office regarding matriculation and transfer of credits. Transfer students are accepted to the nursing major on a very limited, space-available basis. Students are admitted into the freshman or sophomore class level based on required course completion grades and space availability.

All transfer student applicants for Track One who have previously been enrolled in a nursing program in another college/university must submit, as part of their application, a letter from the dean or director of the nursing program indicating that they left in good standing and were eligible for readmission to that program.

Transfer students may only apply two (2) times for admission into the nursing major.

Dr. Lillian R. Goodman Department of Nursing Sample Timeline for Track I

Course	Title	Credits
Year One		
Semester One		
EN-101	College Writing I ¹	3
BI-161	Human Anatomy and Physiology I	4
CH-112	Survey of Chemistry (NSP)	4
FYS	First-Year Seminar (p. 41)	3
Credits		14
Semester Two		
EN-102	College Writing II ¹	3
BI-162	Human Anatomy and Physiology II (NSP)	4
BI-206	Medical Microbiology (NSP)	4
SO-100 or PS-101	Introduction to Sociology: Exploring Our Social World (HBS) or General Psychology	3
LASC Elective (Constitution)		3
Credits		17
Year Two		
Semester Three		
NU-200	Introduction to Professional Nursing I	5
NU-206	Principles of Pathophysiology and Pharmacology I	3
HE-120	Health and Nutrition (ICW)	3
Elective ²		2
SO-100 or PS-101	Introduction to Sociology: Exploring Our Social World (HBS) or General Psychology	3
Credits		16
Semester Four		
NU-210	Introduction to Professional Nursing II	5
NU-216	Principles of Pathophysiology and Pharmacology II	3
MA-150	Statistics I (QR) ³	3
LASC Elective (QR) (p. 50)		3
Credits		14

Year Three

Semester Five

NU-309	Nursing Science I: Obstetrics (Track I)	4.5
NU-310	Nursing Science I: Medical-Surgical Nursing (Track I)	4.5
NU-430	Research Seminar in Nursing (Track I and Track III) (QRAC)	3
LASC Elective ⁴		3
Credits		15

Semester Six

NU-340	Nursing Science II: Pediatrics (Track I) (DAC)	4.5
NU-345	Nursing Science II: Medical/Surgical Nursing (Track I)	4.5
NU-315	Group Communication Seminar I	1
LASC Elective ⁴		3
LASC Elective ⁴		3
Credits		16

Year Four

Semester Seven

NU-440	Nursing Science III: Community/Public Health Nursing (Track I and Track III)	4
NU-441	Nursing Science III: Mental Health Nursing (Track I and Track III)	4
NU-415	Group Communication Seminar II	1
LASC Arts Elective ⁵		3
Free Elective ⁵		3
Credits		15

Semester Eight

NU-460	Nursing Science IV	3
NU-450	Leadership in Nursing	3
NU-470	Nursing: Capstone	7
Credits		13
Total Credits		120

¹ EN-101 & EN-102 satisfies LASC writing.

² Pick 2 credit elective of your choice semester 3

³ MA-150 required Accuplacer score of 4 or higher

⁴ Junior Year Pick one (3 credit) course in: GP, TLC, USW

⁵ Senior Year Fall needs: 1 Creative Arts & Need one 3 credit Free Elective.

All LASC Electives should be complete by end of semester 7.

All Sciences and pre-requisites must be completed by May 30th with a grade of C or better to progress to Sophomore Year.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Track Two (RN-to-BS Program)

Admission Process

All students applying to the RN-BS program must hold a current unencumbered license to practice as an RN in the Commonwealth of Massachusetts. The RN-BS student applying to Worcester State University as a transfer student can receive up to 72 credits transferable from an accredited associate degree college and a maximum of 90 credits from four year colleges and universities. Students with a BA or BS degree in another major only need to complete the nursing courses and the prerequisite courses for the nursing major. Admission requirements include official high school and college transcripts and a minimum 2.5 GPA. Associate degree graduates and diploma graduates earn 29 nursing credits for NCLEX-RN licensure.

All Track Two courses are offered in a **hybrid** format (in-class and online).

The **full-time day program** offered at **WSU** is a three semester nursing program. Students are admitted into a cohort and class will be held either Tuesday or Thursday. Class times are scheduled 9am-4pm.

All applicants must complete the required components of the admission process prior to May 1st for consideration of admittance for that September. Students who wish to matriculate into the program and begin taking prerequisites or corequisites early, may be admitted as an early admission by completing the application process.

However, students **may not enter the nursing program of courses without first having completed all pre-requisites (including statistics) with a grade of C or higher.**

Students in the **Quinsigamond Community College-Worcester State University Mass Transfer Block Pathway** will adhere to the QCC-WSU articulation agreement.

Track Two Prerequisite Courses

These courses may be transferred if the student has previously taken the course (per college transfer policy) or may be taken at Worcester State University. Prerequisite, corequisite, and Nursing courses may not be taken pass/fail.

Code	Title	Credits
EN-101 & EN-102	College Writing I and College Writing II ¹	6
MA-150	Statistics I ^{2,3}	3
SO-100	Introduction to Sociology: Exploring Our Social World	3
PS-101	General Psychology	3
BI-161 & BI-162	Human Anatomy and Physiology I and Human Anatomy and Physiology II	8
BI-204 or BI-206	Microbiology and Medical Microbiology	4

¹ EN-101 may be waived.

² Prerequisite for NU-431

³ A passing grade for the WSC *Accuplacer* is required by for this course.

The Worcester State University Nursing program requires 31 credits. All nursing courses must be taken in sequence. All courses are hybrid unless otherwise noted. Students must achieve a minimum grade of 80 in each nursing course. Only one nursing course may be repeated to obtain the minimum grade or required GPA and must be repeated within the 2 years.

Sample RN-BS Curriculum - WSU Campus (Full-time Blended/Day)

Code	Title	Credits
Semester I (9 credits)		
NU-332	Transition to Baccalaureate Nursing	3
NU-333	Nursing Informatics (track 2)	3
NU-334	Selected Mechanisms of Disease and Related Pharmacology (track 2)	3
Semester II (10 credits)		
NU-342	Health Assessment (track 2)	4
NU-431	Research Seminar in Nursing (Track II)	3
NU-432	Advanced Nursing Perspectives in Chronic Illness (Track II)	3
Semester III (12 credits)		
NU-452	Professional Nursing Leadership and Organization (Track II)	3
or NU-551	Nursing Leadership and Administration	
NU-472	Community/Public Health Nursing (Track II)	6
NU-473	Health Policy (Track II) (On-Line)	3
or NU-530	Social Policy and Economics of the Health Care Delivery System	
Total Credits		31

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Track Three (LPN-to-BS Program)

The LPN to BS in Nursing Track III Program is designed for those students who have graduated from an accredited Licensed Practical Nursing

Program with an unencumbered LPN license. The program is designed to transition the Licensed Practical Nurse (LPN) to the role of the baccalaureate prepared Registered Nurse. Graduates of this program are prepared to meet societal healthcare needs in a variety of settings. Respect for diversity and social responsibility as well as a commitment to excellence in nursing care are emphasized.

Admissions Criteria

Final deadline for application is June 1

- Students accepted for Fall of each year
- Current unencumbered LPN License
- Graduate from an accredited LPN Program with Cumulative Grade Point Average (GPA) > 2.5
- Successful completion of the Nursing Acceleration Challenge Exams (NACE I, PN-RN)

Test Name	Minimum Score Required
Foundations of Nursing	72
Nursing Care of the Child	62
Nursing Care for the Childbearing Family	62

Registration and test dates can be found at <https://ondemand.questionmark.com/400030/ext/nlntesting/>.

Official transfer credit evaluations are conducted by the Registrar after admission to the University.

Code	Title	Credits
Required Pre-requisites for Admission to Track III Nursing Major (41 credits)		
BI-161	Human Anatomy and Physiology I	4
BI-162	Human Anatomy and Physiology II	4
BI-206	Medical Microbiology	4
CH-112	Survey of Chemistry	4
EN-101	College Writing I	3
EN-102	College Writing II	3
MA-150	Statistics I	3
PS-101	General Psychology	3
NLN NACE ENTRANCE EXAM		13

Requirements for the Track Three (LPN-to-BS Program)

Code	Title	Credits
NU-203	Transition from LPN to Professional Nursing	1
NU-206	Principles of Pathophysiology and Pharmacology I	3
NU-213	Health Assessment (track Iii)	3
NU-216	Principles of Pathophysiology and Pharmacology II	3
NU-311	Nursing Science I: Medical-Surgical Nursing (track Iii)	3.5
NU-312	Nursing Science I: Obstetrics Track III	3.5
NU-344	Nursing Science II: Medical/Surgical Nursing (Track III)	3.5
NU-346	Nursing Science Ii: Pediatrics (track Iii)	3.5
NU-430	Research Seminar in Nursing (track I and Track III)	3
NU-440	Nursing Science III: Community/Public Health Nursing (Track I and Track III)	4
NU-441	Nursing Science III: Mental Health Nursing (Track I and Track III)	4
NU-450	Leadership in Nursing	3
NU-460	Nursing Science IV	3
NU-470	Nursing: Capstone	7
HE-120	Health and Nutrition	3
SO-100	Introduction to Sociology	3
Total Credits		54

Sample Timeline for Track Three (LPN-to-BS Program)

Year One

Semester One		Credits
NU-206	Principles of Pathophysiology and Pharmacology I	3
NU-203	Transition from LPN to Professional Nursing	1
SO-100	Introduction to Sociology	3
LASC	LASC Elective (CON) (p. 38)	3
Credits		10

Semester Two

NU-216	Principles of Pathophysiology and Pharmacology II	3
NU-213	Health Assessment (track Iii)	3
HE-120	Health and Nutrition	3
LASC	LASC Elective (GP) (p. 42)	3
Credits		12

Year Two

Semester Three

NU-311	Nursing Science I: Medical-Surgical Nursing (track Iii)	3.5
NU-312	Nursing Science I: Obstetrics Track III	3.5
NU-430	Research Seminar in Nursing (track I and Track III)	3
LASC	LASC Elective (USW) (p. 51)	3
SELECT	Elective	3
Credits		16

Semester Four

NU-344	Nursing Science II: Medical/Surgical Nursing (Track III)	3.5
NU-346	Nursing Science Ii: Pediatrics (track Iii)	3.5
LASC:	LASC Elective (QR) (p. 50)	3
LASC	LASC Elective (CA) (p. 39)	3
SELECT	Elective (if needed)	3
Credits		16

Year Three

Semester Five

NU-440	Nursing Science III: Community/Public Health Nursing (Track I and Track III)	4
NU-441	Nursing Science III: Mental Health Nursing (Track I and Track III)	4
SELECT	Elective (if needed)	3
LASC	LASC Elective (TLC) (p. 53)	3
Credits		14

Semester Six

NU-460	Nursing Science IV	3
NU-450	Leadership in Nursing	3
NU-470	Nursing: Capstone	7
Credits		13
Total Credits		81

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Occupational Studies

Department of Occupational Therapy

The Combined Bachelor of Science in Occupational Studies/Master of Occupational Therapy (BSOS/MOT) 5.5-Year Program offers a stimulating and challenging curriculum that blends professional coursework with a traditional liberal arts education. Students begin by learning the philosophy and founding principles of occupational therapy along with acquiring a thorough understanding of biological, psychological, and social aspects of human beings. In upper-division coursework, students learn to apply this knowledge and develop occupational therapy clinical reasoning skills for evaluation of, and intervention with, persons across the lifespan. Students who are admitted into the undergraduate BSOS program are also conditionally admitted into the MOT graduate program. Upon successful completion of the major with a minimum BSOS major GPA of 3.2, students are fully admitted into the MOT graduate program. The MOT degree is granted upon successful completion of 33 credits of advanced coursework. Only graduates of the Master of Occupational Therapy Program are eligible to sit for the national examination administered by the National Board for Certification in Occupational Therapy.

A passing score on this examination allows the graduate to apply for a license to practice that is required by most states within the United States, including Massachusetts. For further information regarding certification, contact: NBCOT, One Bank Street, Suite 300, Gaithersburg, Maryland, 20878; (301)990-7979; www.nbcot.org.

The Combined Bachelor of Science in Occupational Studies/Master of Occupational Therapy (BSOS/MOT) Program is accredited by the Accreditation Council for Occupational Therapy Education. For further information regarding accreditation, contact: ACOTE, 7501 Wisconsin Avenue, Suite 510E, Bethesda, MD 20814. ACOTE's telephone, c/o AOTA, is (301)652-AOTA; www.acoteonline.org.

Program Application Process

Application to enter the Combined Bachelor of Science in Occupational Studies/Master of Occupational Therapy (BSOS/MOT) Program as a

first-year student is made through the Admissions Office at the time of application to Worcester State University. Students are encouraged to apply early, due to limited enrollment.

First-year students are admitted on the basis of high school rank and coursework relevant to the major.

Any individual who has been convicted of a felony or misdemeanor involving an act likely to affect professional practice should meet with the Department Chair prior to applying to the program. Prior incidents may affect eligibility for fieldwork, certification, and employment. A CORI check and/or drug test is typically required prior to Fieldwork Level I and Level II placements.

Policies

- All undergraduate occupational therapy prerequisite and major courses must be completed with a grade of C or better.
- Courses must be taken in the prescribed sequence, unless an exception is granted by the Department Chair.
- All undergraduate and graduate level coursework must be successfully completed before beginning Level II Fieldwork.
- The second Level II Fieldwork experience must be completed within 12 months of academic coursework.
- Eligibility to sit for the national certification examination requires successful completion of six-months of Level II Fieldwork.
- The Occupational Therapy Department has a student handbook that is updated yearly and contains department-specific policies. Each student is responsible for adhering to the policies. The Department reserves the right to modify policies and curriculum during a student's enrollment. Sufficient notice of any changes will be provided to the students.
- Bachelor of Science Occupational Studies Program (p. 289)

Faculty

Sarah E. DiMeo, Assistant Professor (2020), B.S., Utica College of Syracuse University; M.S., Tufts University; Ph.D., Texas Woman's University

Joanne Gallagher Worthley, Professor (1995), B.S., Quinnipiac College; M.S., Florida International University; Ed.D., Johnson & Wales University

Jessica O'Connor, Visiting Instructor (2019), B.S., University of New Hampshire

Tanya Trudell, Department Chair, Associate Professor (2015), B.A., Eastern Connecticut State University; M.O.T., Worcester State University; Ed.D., Johnson & Wales University

Jamie Wronka, Visiting Instructor (2022), B.S.O.T., M.S.O.T., University of New Hampshire

Courses

OT-101 Introduction of Occupational Studies of Wellness/Disability

Introduction to occupational therapy history, philosophy, wellness/illness/disability continuum, contexts, occupations, occupational performance, professionalism, and clinical reasoning.
Fall only and every year. 3 Credits

OT-102 Occupational Studies of Wellness/ Disability Groups

Exploration of professional theme: philosophy, wellness/illness/disability continuum using groups, occupational performance and activity, professionalism, and clinical reasoning.
Spring only and every year. 3 Credits

OT-193 First Year Seminar: Occupational Therapy

LASC Categories: FYS

Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

OT-203 Occupational Therapy Theories

Investigation of theories to occupational therapy, related to occupation, individual, and context. Includes current and developing models of practice.
Fall only and every year. 3 Credits

OT-211 Kinesiology Lab

Prerequisites or Corequisite: BI-271

Lab experiences and discussions will integrate biological knowledge of movement with occupational therapy concepts of performance and function. This course will provide students with the knowledge and skills necessary to evaluate range of motion, muscle strength, and posture. Functional abilities needed in daily activities will be analyzed.
Spring only and every year. 1 Credit

OT-301 Psychosocial Wellness/Disability

Prerequisites or Corequisite: OT-302 and OT-304

Historical themes of the profession, wellness/illness/disability continuum, occupation, and context as it applies to psychosocial performance in life roles.
Fall only and every year. 2 Credits

OT-302 Psychosocial Therapeutic Approaches

Prerequisites or Corequisite: OT-301 and OT-304

Occupational performance and context, professionalization, and clinical reasoning will be applied to practice models when addressing psychosocial health and illness.
Fall only and every year. 3 Credits

OT-304 Psychosocial Therapeutic Approaches Lab

Prerequisites or Corequisite: OT-301 and OT-302

Directed observation and participation in the clinical application of theories and methods of occupational therapy intervention with psychosocial disorders. Includes Fieldwork I.
Fall only and every year. 2 Credits

OT-312 Physiological Wellness/Disability

Prerequisites or Corequisite: OT-313 and OT-318 as co-requisites

Historical themes of the profession, wellness/illness/disability continuum, occupation, and context as it applies to physiological performance in life roles.
Spring only and every year. 2 Credits

OT-313 Physiological Therapeutic Approaches

Occupational performance and context, professionalism, and clinical reasoning will be applied to practice models when addressing physiological health and illness.
Spring only and every year. 3 Credits

OT-317 Research I

Prerequisites: MA-150 or PS-275

Course examines measurement issues, concerns, and tools; and why and how to use evidence in practice.
Fall only and every year. 3 Credits

OT-318 Physiological Therapeutic Approaches Lab

Directed observation and participation in the clinical application of theories and methods of occupational therapy intervention with physiological disorders. Includes Fieldwork I.
Spring only and every year. 2 Credits

OT-401 Occupational Performance & Context for Older Adults

Prerequisites or Corequisite: OT-402, OT-403 and OT-404

The wellness/illness/disability continuum will be applied to occupational performance in life roles for the older adult population.

Fall only and every year. 2 Credits

OT-402 Therapeutic Approaches for Older Adults

Prerequisites or Corequisite: OT-401 and OT-403

Occupational therapy strategies for older adults across the wellness/illness/disability continuum with emphasis on occupational performance/context and clinical reasoning.

Fall only and every year. 3 Credits

OT-403 Therapeutic Approaches Lab for Older Adults

Prerequisites or Corequisite: OT-401 and OT-402

Experiential learning with assessments and intervention approaches for older adults. Includes Fieldwork I.

Fall only and every year. 2 Credits

OT-404 Assistive Technology I

Prerequisites or Corequisite: OT-401, OT-402 and OT-403

Assistive technology related to the needs of the adult population will be explored.

Fall only and every year. 3 Credits

OT-407 Research II

Prerequisites: OT-317

Course examines research design, quantitative and qualitative, human subject protection, and program evaluation. Students will develop a research proposal.

Fall only and every year. 3 Credits

OT-408 Directed Study

1-3 Credits

OT-421 Occupational Performance and Context for Children/Adolescents

Prerequisites or Corequisite: OT-423, OT-424 and OT-427

Wellness/illness/disability continuum will be applied to performance in the life roles related to the child and adolescent populations.

Spring only and every year. 2 Credits

OT-423 Therapeutic Approaches Lab for Children/Adolescents

Prerequisites or Corequisite: OT-421

Directed observation and participation in the clinical application of theories and methods of occupational therapy intervention with the pediatric population. Includes Fieldwork I.

Spring only and every year. 2 Credits

OT-424 Assistive Technology II

Prerequisites or Corequisite: OT-421

Assistive technology applied to the occupational performance and context of the child and adolescent populations.

Spring only and every year. 3 Credits

OT-426 Organizational and Professional Issues I

Prerequisites or Corequisite: OT-421

Introduction to principles of organization, administration, and management applied to the delivery of occupational therapy services in various practice settings, work relationships, ethical issues, and laws influencing practice will also be discussed.

Spring only and every year. 3 Credits

OT-427 Therapeutic Approaches for Children/Adolescents

Occupational therapy strategies for child and adolescent populations across wellness/illness/disability continuum with emphasis on occupational performance and context.

Spring only and every year. 3 Credits

Program Learning Outcomes

- Demonstrate entry-level clinical reasoning skills.
- Identify, evaluate, and synthesize research for best clinical practice.
- Exhibit professional and ethical behaviors in a variety of settings (traditional, nontraditional, and emerging practice) and with diverse populations.
- Design, implement, and evaluate therapeutic interventions to increase occupational performance in accordance with the Occupational Therapy Practice Framework.
- Assume the responsibility for achieving and maintaining competence in lifelong learning by participating in professional development activities.

Bachelor of Science Occupational Studies Program

Requirements for the Major

The following courses are required:

Code	Title	Credits
OT Prerequisite Courses for the BSOS (27-28 credits)		
BI-161	Human Anatomy and Physiology I	4
BI-162	Human Anatomy and Physiology II	4
BI-215	Neuroscience	4
BI-271	Basic Kinesiology	3
PS-101	General Psychology	3
PS-210	Developmental Psychology	3
PS-322	Psychology of Aging	3
MA-150	Statistics I	3-4
or PS-275	Psychological Statistics	
OT Major Courses for the BSOS (53 credits)		
OT-101	Introduction of Occupational Studies of Wellness/ Disability	3
OT-102	Occupational Studies of Wellness/ Disability Groups	3
OT-203	Occupational Therapy Theories	3
OT-211	Kinesiology Lab	1
OT-301	Psychosocial Wellness/ Disability	2
OT-302	Psychosocial Therapeutic Approaches	3
OT-304	Psychosocial Therapeutic Approaches Lab	2
OT-312	Physiological Wellness/ Disability	2
OT-313	Physiological Therapeutic Approaches	3
OT-317	Research I	3
OT-318	Physiological Therapeutic Approaches Lab	2
OT-401	Occupational Performance & Context for Older Adults	2
OT-402	Therapeutic Approaches for Older Adults	3

OT-403	Ther App Lab for Older Adults	2
OT-404	Assistive Technology I	3
OT-407	Research II	3
OT-421	Occupational Performance and Context for Children/ Adolescents	2
OT-423	Therapeutic Approaches Lab for Children/Adolescents	2
OT-424	Assistive Technology II	3
OT-426	Organizational and Professional Issues I	3
OT-427	Therapeutic Approaches for Children/Adolescents	3
Total Credits		80-81

Department of Occupational Therapy: Occupational Studies Sample Timeline for Completion of Degree

Year One

Semester One		Credits
OT-101	Introduction of Occupational Studies of Wellness/ Disability	3
BI-161	Human Anatomy and Physiology I	4
PS-101	General Psychology (HBS) ¹	3
EN-101	College Writing I ²	3
LASC	First-Year Seminar (FYS) (p. 41)	3
Credits		16

Semester Two

OT-102	Occupational Studies of Wellness/ Disability Groups	3
BI-162	Human Anatomy and Physiology II (NSP) ¹	4
EN-102	College Writing II ²	3
LASC	LASC Elective (CON) (p. 38)	3
LASC	LASC Elective (QR) (p. 50) ¹	3
Credits		16

Year Two

Semester Three

OT-203	Occupational Therapy Theories	3
PS-210	Developmental Psychology (HBS) ¹	3
BI-215	Neuroscience	4

MA-150 or PS-275	Statistics I (QR) ¹ or Psychological Statistics	3-4
LASC	LASC Elective (USW) (p. 51) ¹	3
Credits		16-17
Semester Four		
OT-211	Kinesiology Lab	1
PS-322	Psychology of Aging	3
BI-271	Basic Kinesiology (NSP) ¹	3
LASC	LASC Elective (GP) (p. 42) ¹	3
LASC	LASC Elective (p. 37) ¹	3
Credits		13

Year Three**Semester Five**

OT-301	Psychosocial Wellness/ Disability	2
OT-302	Psychosocial Therapeutic Approaches	3
OT-304	Psychosocial Therapeutic Approaches Lab	2
OT-317	Research I	3
LASC	LASC Elective (CA) (p. 39) ¹	3
LASC	LASC Elective (TLC) (p. 53) ¹	3
Credits		16

Semester Six

OT-312	Physiological Wellness/ Disability	2
OT-313	Physiological Therapeutic Approaches	3
OT-318	Physiological Therapeutic Approaches Lab	2
LASC	LASC Elective (ICW) (p. 46) ¹	3
LASC	Diversity (DIV) ¹	3
SELECT	Course for Minor ¹	3
Credits		16

Year Four**Semester Seven**

OT-401	Occupational Performance & Context for Older Adults	2
OT-402	Therapeutic Approaches for Older Adults	3
OT-403	Ther App Lab for Older Adults	2
OT-404	Assistive Technology I	3
OT-407	Research II	3
SELECT	General Elective	3
Credits		16

Semester Eight

OT-421	Occupational Performance and Context for Children/ Adolescents	2
OT-427	Therapeutic Approaches for Children/Adolescents	3
OT-423	Therapeutic Approaches Lab for Children/Adolescents	2
OT-424	Assistive Technology II	3
OT-426	Organizational and Professional Issues I	3
Credits		13
Total Credits		122-123

¹ The sequence of LASC courses marked with ¹ is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

² EN-101 with EN-102 satisfies LASC Writing. By the end of Semester Two term, students must have an math placement code of 4 to take MA-150. Alternative in Fall 2 is PS-275.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Physics

Department of Earth, Environment and Physics

Worcester State University offers a wide variety of introductory courses in physics and astronomy suitable for students fulfilling requirements as part of the Liberal Arts and Sciences Curriculum. These courses also are components of many STEM majors.

Upper level courses are offered across physics and astronomy on a rotating basis. The Department of Earth, Environment, and Physics houses minors in both Physics and Astronomy.

Astronomy Minor (p. 293)

Physics Minor (p. 293)

Faculty

William Hansen, Professor (2005), B.A., State University of New York Albany; M.A., Hunter College; Ph.D., City University of New York Graduate Center

Maxim Lavrentovich, Assistant Professor (2023), B.A., Kenyon College; Ph.D., Harvard University

Nabin K. Malakar, Associate Professor (2017), M.S., Ph.D., University at Albany, State University of New York (SUNY)

Michael Ogunbunmi, Assistant Professor (2023), B.S., Ahmadu Bello University; M.S., African University of Science and Technology; Ph.D., University of Johannesburg

Ian W. Stephens, Assistant Professor (2020), B.S., Georgia Institute of Technology; Ph.D., University of Illinois at Urbana - Champaign

Courses

PY-101 Introduction to Astronomy

LASC Categories: NSP

Tools of the astronomer. The nature of stars, their location and cosmology. Planets and the solar system.

Fall and Spring and every year. 3 Credits

PY-105 How Stuff Works (concepts in Physics)

LASC Categories: NSP, LAB

Prerequisites: Math placement exam score of 3 or above or successful completion of college-level math class

Physics is all around you. It is in the sights you see, the sounds you hear, the things you feel, and even in your sense of taste. Stressing conceptual understanding and critical reasoning over quantitative analysis, this course aims to give students the background and habits of mind that will help them understand how the world works. Topics will include: Newton's Laws, energy, momentum, rotation, fluids, heat, and waves. The class is two hours lecture and one two-hour laboratory. Credit will not be awarded for more than one of PY 105, PY 221, and PY 241.

Spring only and every year. 3 Credits

PY-110 Astrophotography

LASC Categories: CA, NSP

The course aims to introduce the fundamental principles of astrophotography or imaging astronomical objects. We will be using optical telescopes to observe the night sky as well as the sun to understand astrophotography as a scientific tool to understand our universe.

Fall only and every 2-3 years. 3 Credits

PY-114 Physics of Waves

LASC Categories: NSP, QAC

Prerequisites: Math placement exam score of 3 or above or successful completion of a college-level math class.

Wave phenomena, including water waves, sound, acoustics, musical instruments, optics and quantum mechanics. Analysis of propagation, power, scattering and interference.

Spring only and every year. 3 Credits

PY-193 First Year Seminar

LASC Categories: FYS

Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.

Fall only and every 2-3 years. 3 Credits

PY-217 General Astronomy**LASC Categories:** NSP**Prerequisites:** MA-190 or an advanced calculus course (except MA 202). PY-101 suggested, but not required.

Algebra-based Astronomy course covering a breadth of topics, primarily focusing outside of the solar system. Topics include: nature and evolution of stars; supernova; white dwarfs, neutron stars, and black holes; galaxies, quasars, and dark matter; large scale structure of the universe; the Big Bang; and dark energy. Emphasis will be on the physical principles underlying the astronomical phenomena. Spring only and every 2-3 years. 3 Credits

PY-220 Energy and the Environment**LASC Categories:** NSP**Prerequisites:** A college level math course or a math placement code 3.

Explore the important questions surrounding energy, environment, and climate.

Fall only and every 2-3 years. 3 Credits

PY-221 General Physics I**LASC Categories:** LAB, NSP, QAC, QR**Prerequisites:** MA-190 (or higher), or a math placement code of 7.

Physics with algebra and trigonometry, including kinematics, dynamics, energy, momentum, gravity, oscillators, waves, and heat. Three hours lecture and two hours lab. Credit will not be awarded for more than one of PY 105, PY 221, and PY 241.

Fall and Spring and every year. 4 Credits

PY-222 General Physics II**LASC Categories:** LAB, NSP**Prerequisites:** PY-221 or PY-241.

Physics with algebra and trigonometry including electric and magnetic fields, resistance, capacitance, inductance, reflection, refraction, interference, relativity, and quantum physics. Three hours lecture and two hours laboratory. Credit will not be awarded for more than one of PY 106, PY 222, and PY 242.

Fall and Spring and every year. 4 Credits

PY-241 Physics I (Mechanics)**LASC Categories:** LAB, NSP, QAC**Prerequisites or Corequisite:** one semester of calculus either previous or concurrent to PY 241.

Physics with calculus, including kinematics, dynamics, energy, momentum, gravity, oscillators, waves and heat. Three hours lecture and two hours lab. Credit will not be awarded for more than one of PY 105, PY 221, and PY 241.

Fall only and every year. 4 Credits

PY-242 Physics II (Electricity, Magnetism and Optics)**LASC Categories:** LAB, NSP**Prerequisites:** PY-241 and one semester of calculus.

Physics with calculus including electric and magnetic fields, resistance, capacitance, inductance, reflection, refraction, interference, relativity and quantum physics. Three hours lecture and two hours lab.

Credit will not be awarded for more than one of PY 106, PY 222, and PY 242.

Spring only and every year. 4 Credits

PY-250 Observational Astronomy**LASC Categories:** LAB, QAC, NSP**Prerequisites:** MA-190

Orientation in the night sky. Use of telescopes and cameras. Conduct astronomical observations. Analysis and interpretation of astronomical data.

Spring only and every 2-3 years. 3 Credits

PY-297 Selected Topics in Physics

Lecture or laboratory course in a selected area in physics. Topics announced in advance. Prerequisite: Consent of Instructor.

1-6 Credits

PY-310 Modern Physics**Prerequisites:** MA-200 and either PY-222 or PY-242

Special relativity. The wave nature of matter, introductory quantum mechanics, and atomic physics. Condensed matter. Radioactivity. Nuclear and particle physics.

Fall only and every 2-3 years. 3 Credits

PY-360 Introduction to Materials Science**Prerequisites:** CH-120, CH-121, and either PY-221 and PY-222, or PY-241 and PY-242

Physical structures of solids. Electrical, magnetic, thermal and optical properties of solids, liquids and soft matter. Structure-property relationships in materials. Cross-listed with CH-360.

3 Credits

PY-370 Introduction to Nuclear Science

Prerequisites: CH-120, CH-121, MA-200, and either PY-221 and PY-222 or PY-241 and PY-242

Fundamentals of nuclear science. Topics include nuclear structure and forces, radioactive decays, nuclear reactions, and modern applications. Cross-listed with CH-370.

3 Credits

PY-408 Directed Study: Physics

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a physics faculty member.

3-4 Credits

PY-410 Independent Study: Physics

Opportunity for advanced students to pursue a topic of special interest involving extensive reading, experimentation, and research. Prerequisite: Consent of Instructor.

1-6 Credits

PY-415 Advanced Physics-Astronomy Research and Fieldwork

Students develop and execute a research project in physics or astronomy under the supervision of a physics faculty member. May include the development of a formal proposal, background literature search, data collection either in the field or in a laboratory, analysis and interpretation of data, and production of a research paper summarizing the findings.

Other or on demand and other or on demand. 1-6 Credits

PY-460 Physics Internship

Advanced students assigned to external public or private agency, working under agency and physics faculty supervision. Prerequisite: Consent of physics faculty.

1-4 Credits

Astronomy Minor

Students will study the breadth of Astronomy, including the following topics: nature and evolution of stars; astrobiology and astrochemistry; supernova; white dwarfs, neutron stars, and black holes; galaxies, quasars, and dark matter; large scale structure of the universe; the Big Bang; and dark energy.

Code	Title	Credits
<i>18 credits from the following areas:</i>		
Required Courses		4-7
PY-217	General Astronomy	
PY-408 or PY-410	Directed Study: Physics Independent Study: Physics	
Electives		11-14
PY-101	Introduction to Astronomy	
PY-110	Astrophotography	
PY-221 or PY-241	General Physics I Physics I (Mechanics)	
PY-222 or PY-242	General Physics II Physics II (Electricity, Magnetism and Optics)	
GS-245	Planetary Geology	
PY-250	Observational Astronomy	
PY-297	Selected Topics in Physics (approved Astronomy-based class)	

Physics Minor

A physics minor is useful in many technical fields because the study of physics develops an understanding of basic principles, mathematical modeling, and practical applications. Specific areas where a physics background is useful include imaging techniques in medicine and biology, analytical instrumentation in chemistry, remote-sensing techniques in the geosciences, and development of realistic physical models in computer science and mathematics.

Requirements for a Minor in Physics

18 credits in Physics including One of the following one year sequences:

Code	Title	Credits
PY-221 & PY-222	General Physics I and General Physics II	8
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	8

Pre-Medical Concentrations

Worcester State University offers specific pre-medical concentrations for students who major in Biology, Biotechnology, or Chemistry. The courses required for each concentration are listed under each program. Students interested in pursuing these concentrations should consult both their major advisor and the Chair of the Pre-medical and Pre-Dental Advisory Committee as soon as possible following matriculation. In addition, an advisory program open to all students interested in preparing for medical, dental, veterinary, pharmacy, physician assistant, physical therapy, or optometry studies is offered, coordinated by the Chair of the Pre-Medical and Pre-Dental Advisory Committee.

Pre-Medical Programs

- Major in Biology, Pre-Medical Concentration (p. 294)
- Major in Biotechnology, Pre-Medical Concentration (p. 297)
- Major in Chemistry, Pre-Medical Concentration
- Pre-Medical Courses For Non-Biology, Biotechnology, or Chemistry Majors

Pre-Medical Advisory Committee Members

Daron Barnard, Professor

Roger S. Greenwell, Associate Professor

Jennifer Hood-DeGrenier, Professor

Brittany Jeye, Assistant Professor

Margaret Kerr, Professor

Nabin Malakar, Associate Professor

Susan Mitroka-Batsford, Associate Professor

Jeffrey C. Nichols, Professor

Steven J. Oliver, Professor

Weichu Xu, Associate Professor

Biology Major, Concentration in Pre-Medicine

This concentration is intended for Biology majors who aspire to attend medical school, dental school, or veterinary school after completing their undergraduate degree. The concentration is a means to ensure that students have the best possible academic preparation and advising as they prepare for these post-graduate programs. The Pre-Medicine Concentration requirements include courses that are not part of the Biology major but are designated as core prerequisites for these professional schools as well as some additional courses that are not part of the core prerequisites but are strongly recommended. The concentration curriculum also includes a one-credit seminar taken during the sophomore or junior year that is designed to familiarize students with the requirements for admission to medical, dental, and veterinary schools. The seminar helps students develop personal plans for fulfilling these requirements so that they have the best possible chance of admission to post-graduate study.

Requirements for a Major in Biology, Concentration in Pre-Medicine

Requirements for a Major in Biology

Code	Title	Credits
Required Biology courses		(38 credits)
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
BI-200	Human Biology (OR BI-161 AND BI-162 (Human Anatomy & Physiology I & II))	4
BI-202	Principles of Ecology	4
BI-203	Genetics	4
BI-204	Microbiology	4
BI-404	Biology Seminar	2
3 Upper Division Electives (300 or 400 level lab courses)		12
Ancillary Requirements		(29 credits)
MA-150	Statistics I	3

MA-190	Pre-calculus (or Higher)	4
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
PY-221 & PY-222 or PY-241 & PY-242	General Physics I and General Physics II Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	8

Total Credits 67

Students who also complete CH-203 and CH-204, and 3 additional credits in 200-level or higher chemistry courses can earn a chemistry minor.

Biology Upper-Level Electives

Code	Title	Credits
<i>Cellular & Molecular Pathways</i>		
BI-306	Developmental Biology	4
BI-324	Endocrinology	4
BI-341	Mycology	4
BI-371	Advanced Topics in Cell and Molecular Biology	4
BI-372	Immunology	4
BI-375	Virology	4
BI-398	Cancer Biology	4
BT-375	Tissue Culture	4
BT-376	Biotechnology	4
BT-377	Fermentation Technology	4
BT-378	Bioinformatics	4
BI/CH-410	Biochemistry I	4
Organismal & Ecological Systems		(48 credits)
BI-301	Topics in Invertebrate Zoology	4
BI-303	Parasitology	4
BI-304	Comparative Vertebrate Anatomy	4
BI-315	Comparative Neurobiology	4
BI-321	Comparative Physiology	4
BI-331	Marine Biology	4
BI-333	Topics in Vertebrate Zoology	4
BI-334	Wildlife Biology	4
BI-340	Plant Sciences	4
BI-344	Soil Biology	4

BI-360	Animal Behavior	4
BI-380	Biodiversity and Conservation Biology	4

(Note: Pre-med and graduate school candidates should also take CH-203 & CH-204 in addition to CH-201 and CH-202)

A minimum of three upper division laboratory courses (BI 300- or BI 400-level) are to be selected. Students must take at least one course from each category. Additional upper level elective courses or graduate research/internships are strongly encouraged. The courses should be selected with the advice and consent of the faculty advisor. A grade point average of 2.0 must be maintained in biology courses and in the ancillary science and mathematics courses. Students considering graduate and professional work should take, as a recommended minimum, calculus and introduction to computer science.

Pre-Medical Concentration Requirements

Code	Title	Credits
MA-200	Calculus I	4
CH-203	Organic Chemistry Laboratory I	2
CH-204	Organic Chemistry Laboratory II	2
CH-410	Biochemistry I	4
BI-211	Pre-Medical Seminar: Preparing for a Career in Medicine	1

Total Credits 13

Note: Only Biology majors will be eligible for this concentration. The 13 credits specified for the concentration include the courses required for the concentration that are not required for the Biology major. Students will still have to complete all of the credits required for the major as well.

Sample Timeline for Completion of Degree

Year One		Credits
Semester One		
BI-140	Introduction to Organismal Biology	4
CH-120	General Chemistry I	4

EN-101	College Writing I ²	3
MA-190	Pre-calculus ³	4
LASC	First Year Seminar (FYS)	3
Credits		18
Semester Two		
BI-141	Intro to Cellular and Molecular Biology	4
CH-121	General Chemistry II	4
EN-102	College Writing II ²	3
MA-200	Calculus I	4
LASC	Elective (HBS) ⁴	3
Credits		18
Year Two		
Semester Three		
BI-204	Microbiology ⁶	4
CH-201	Organic Chemistry I (lecture)	3
CH-203	Organic Chemistry Laboratory I	2
PY-221 or PY-241	General Physics I ^{7,8} or Physics I (Mechanics)	4
MA-150	Statistics I	3
Credits		16
Semester Four		
BI-203	Genetics ⁶	4
CH-202	Organic Chemistry II (lecture)	3
CH-204	Organic Chemistry Laboratory II	2
PY-222 or PY-242	General Physics II ^{7,8} or Physics II (Electricity, Magnetism and Optics)	4
LASC	Elective (ICW) ⁵	3
BI-211	Pre-Medical Seminar: Preparing for a Career in Medicine	1
Credits		17
Year Three		
Semester Five		
BI-200	Human Biology ^{6,8}	4
CH-410	Biochemistry I ⁹	4
LASC	Elective (CON)	3
LASC	Elective (TLC)	3
Credits		14
Semester Six		
BI-202	Principles of Ecology ⁶	4
BI-3XX+	300 or 400 Major Elective	4
LASC	Elective (USW) ⁵	3
LASC	Elective (GP)	3
Credits		14

Year Four**Semester Seven**

BI-3XX+	300 or 400 Major Elective Lab	4
LASC	Elective (CA) ⁵	3
SELECT	Additional Science or Math	3-4
SELECT	General Elective	3
Credits		13-14

Semester Eight

BI-404	Biology Seminar ¹⁰	2
SELECT	Additional Science or Math	4
SELECT	General Elective	3
SELECT	General Elective	3
Credits		12
Total Credits		122-123

¹ This timeline should be followed by all students who intend to enter medical/dental/vet school the fall after graduation. Many students take a least a year between completion of their undergraduate degree and entry into one of these programs. In this case, the two physics courses can be taken in Year 3 instead of Year 2.

² EN-101 and EN-102 satisfy LASC Writing.

³ MA-190 requires an Accuplacer score of 6 or higher.

⁴ Pre-medical and pre-dental students should take either PY-101 (General Psychology) or SO-100 (Introduction to Sociology) to fulfill the HBS LASC requirement.

⁵ After the HBS course, other LASC courses can be taken in any order, but the listed serves as a reminder that LASC designated courses must be taken to satisfy each of the LASC requirements. Biology major courses satisfy the WAC and QAC categories. A DAC course must be taken outside of the major but can also count for a LASC content area.

⁶ This sequence of 200-level Biology core courses is suggested, but can be taken in any order.

⁷ Physics Requirements: PY-221 & PY-222 OR PY-241 & PY-242 satisfies LASC NSP.

⁸ BI-161/BI-162 cannot substitute for BI-200.

⁹ CH-410 counts as one of the 300/400-level Biology electives in the Cell and Molecular category.

¹⁰ All biology core courses must be completed before taking BI-404 (BI-140, BI-141, BI-200, BI-202, BI-203, BI-204).

Major in Biotechnology, Concentration in Pre-Medicine

This concentration is intended for Biotechnology majors who aspire to attend medical school, dental school, or veterinary school after completing their undergraduate degree. The concentration is a means to ensure that students have the best possible academic preparation and advising as they prepare for these post-graduate programs. The Pre-Medical Concentration requirements include courses that are not part of the Biotechnology major but are designated as core prerequisites for these professional schools, as well as some additional courses that are not part of the core prerequisites but are strongly recommended. The concentration curriculum also includes a one-credit seminar (BI-211) taken during the sophomore or junior year that is designed to familiarize students with the requirements for admission to medical, dental, and veterinary schools. The seminar helps students develop personal plans for fulfilling these requirements so that they have the best possible chance of admission to post-graduate study. An overall GPA of 3.2 and a combined biology/chemistry/physics/math GPA of 3.2 are required to take BI-211, reflecting the academic rigor needed to be a successful applicant to health professional programs.

Requirements for a Major in Biotechnology, Concentration in Pre-Medicine

Requirements for a Major in Biotechnology

Code	Title	Credits
BI-141	Intro to Cellular and Molecular Biology	4
BI-204	Microbiology	4
BT-375	Tissue Culture	4
BT-376	Biotechnology	4
BT-410	Biotechnology Seminar	1
CH-120 & CH-121	General Chemistry I and General Chemistry II	8

CH-201	Organic Chemistry I (lecture) and Organic Chemistry Laboratory I	5
--------	--	---

CH-210	Chemical Analysis: an Introduction to Modern Methods	5
--------	--	---

CH-410	Biochemistry I	4
--------	----------------	---

Major Electives	(8 credits)
-----------------	-------------

Select 8 credits from the following electives: 8

BI-313		
--------	--	--

BI-398	Cancer Biology	
--------	----------------	--

BI-372	Immunology	
--------	------------	--

BI-371	Advanced Topics in Cell and Molecular Biology	
--------	---	--

BI-375	Virology	
--------	----------	--

CH-350	Medicinal Chemistry	
--------	---------------------	--

CH-202 & CH-204	Organic Chemistry II (lecture) and Organic Chemistry Laboratory II (5)	
-----------------	--	--

PY-310	Modern Physics	
--------	----------------	--

CH-411	Biochemistry II	
--------	-----------------	--

BT-377	Fermentation Technology	
--------	-------------------------	--

BT-378	Bioinformatics	
--------	----------------	--

BT-450	Internship in Biotechnology	
--------	-----------------------------	--

CH-335	Green Chemistry	
--------	-----------------	--

CH-450	Computational Chemistry	
--------	-------------------------	--

CH-455	Special Topics in Chemistry (Organometallics in Organic Synthesis)	
--------	--	--

And certain other BI-300, CH-300 and PY-300 level courses with Biotech coordinator approval.

Ancillary courses	(26 credits)
-------------------	--------------

MA-150	Statistics I	3
--------	--------------	---

MA-190	Pre-calculus (may be waived)	4
--------	------------------------------	---

MA-200	Calculus I	4
--------	------------	---

MA-201	Calculus II	4
or BI-203	Genetics	

Select one of the following: 3

EN-252	Technical Writing	
--------	-------------------	--

EN-253	Business Communications	
--------	-------------------------	--

CS-120	Microcomputer Applications	
--------	----------------------------	--

Select one of the following: 8

PY-221 & PY-222	General Physics I and General Physics II (8)	
-----------------	--	--

PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics) (8)	
Total Credits		73

Pre-Medical Concentration Requirements

In addition to the requirements of the Biotechnology major, the following are required:

Code	Title	Credits
BI-140	Introduction to Organismal Biology	4
BI-203	Genetics	4
BI-211	Pre-Medical Seminar: Preparing for a Career in Medicine	1
CH-202	Organic Chemistry II (lecture)	3
CH-204	Organic Chemistry Laboratory II	2
Total Credits		14

Sample Timeline for Completion of Degree

Year One

Semester One		Credits
EN-101	College Writing I ¹	3
CH-120	General Chemistry I	4
MA-190	Pre-calculus ²	4
BI-140	Introduction to Organismal Biology	4
LASC	First Year Seminar (FYS)	3
	Credits	18

Semester Two

EN-102	College Writing II ¹	3
CH-121	General Chemistry II	4
MA-200	Calculus I	4
BI-141	Intro to Cellular and Molecular Biology	4
LASC	Elective (HBS) ³	3
	Credits	18

Year Two

Semester Three

BI-204	Microbiology	4
BI-211	Pre-Medical Seminar: Preparing for a Career in Medicine	1
CH-201	Organic Chemistry I (lecture)	3

CH-203	Organic Chemistry Laboratory I	2
PY-221 or PY-241	General Physics I or Physics I (Mechanics)	4
	Credits	14

Semester Four

PY-222 or PY-242	General Physics II or Physics II (Electricity, Magnetism and Optics)	4
CH-202	Organic Chemistry II (lecture)	3
CH-204	Organic Chemistry Laboratory II	2
MA-150	Statistics I ⁴	3
LASC	Elective (ICW) ³	3
	Credits	15

Year Three

Semester Five

CH-410	Biochemistry I	4
BI-203	Genetics	4
LASC	Elective (CON) ³	3
	Select one of the following:	3
EN-252	Technical Writing	
EN-253	Business Communications	
CS-120	Microcomputer Applications	
	Credits	14

Semester Six

CH-210	Chemical Analysis: an Introduction to Modern Methods	5
BI/BT-3XX+	BI or BT Upper Level Elective	4
LASC	Elective (TLC) ³	3
LASC	Elective (USW) ³	3
	Credits	15

Year Four

Semester Seven

BT-376	Biotechnology	4
BT-240 or BT-440	Research Experience for Undergraduates or Advanced Research Experience	1-6
BI/BT-3XX+	BI or BT Upper Level Elective	4
LASC	Elective (GP) ³	3
LASC	Elective (CA) ³	3
	Credits	15-20

Semester Eight

BT-375	Tissue Culture	4
--------	----------------	---

BT-240 or BT-440	Research Experience for Undergraduates ⁵ or Advanced Research Experience	1-6
BT-410	Biotechnology Seminar	1
SELECT	Free Elective	3
SELECT	Free Elective	3
Credits		12-17
Total Credits		121-131

¹ EN-101 and EN-102 satisfies LASC writing.

² MA-190 requires Accuplacer score of 6 or higher, or pass MA-180 with a C- or higher.

³ Pre-Medical and Pre-Dental students should take either PS-101 (General Psychology) or SO-100 (Introduction to Sociology) to fulfill the LASC HBS requirement. The sequence of LASC courses marked with ³ is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements. A course that satisfies the LASC DAC requirement must be taken, but may also count toward one of the LASC content areas; LASC WAC and QAC requirements are satisfied within the major requirements.

⁴ MA-150 requires an Accuplacer score of 4 or higher.

⁵ BT-240 (Research Experience for Undergraduates) is recommended research experience for majors. BT-440 (Advanced Research Experience) requires completion of BI-205 (Research Techniques and Experimental Design) and counts for the "Honors in Biotechnology" program.

Pre-Medical Courses For Non-Biology, Biotechnology, or Chemistry Majors

Students interested in preparing for medical, dental, veterinary, or pharmacy studies may pursue study in any of the academic majors offered at Worcester State University. Students interested in medicine, dentistry, veterinary medicine, optometry, podiatry, or osteopathy should consult both their major advisor and the Chair of the Pre-medical and Pre-Dental Advisory Committee as soon as possible following matriculation. Nearly all medical and dental schools require the following courses. However, it is the

students' obligation to check with the professional school(s) to which they intend to apply for exact requirements.

Code	Title	Credits
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
BI-203	Genetics ¹	4
CH-120	General Chemistry I	4
CH-121	General Chemistry II	4
CH-201 & CH-203	Organic Chemistry I (lecture) and Organic Chemistry Laboratory I	5
CH-202 & CH-204	Organic Chemistry II (lecture) and Organic Chemistry Laboratory II	5
CH-410	Biochemistry I ¹	4
MA-200	Calculus I	4
PS-101 or SO-100	General Psychology ¹ Introduction to Sociology: Exploring Our Social World	3
<i>One of the following:</i>		4
PY-221 & PY-222	General Physics I and General Physics II	
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	

¹ Not required but strongly recommended.

School of Humanities and Social Sciences

Dean

Dr. Russ Pottle

Mission Statement:

The School of Humanities and Social Sciences at Worcester State University cultivates intellectual growth, engaged citizenship, and professional accomplishment among faculty and students. Together, faculty and students encounter and analyze the variety of human experiences and human expression, the value of multiple perspectives, and the natures of social, economic, and political power. Through inspired teaching, research, scholarship, and creative work, they produce new knowledge and contribute to the common good. Through dedicated service, they benefit the community. In all these activities, students find passions and life paths.

Location

Sullivan Academic Center
Second Floor, Room S-210

Academic Departments

- Business Administration and Economics (p. 301)
- Communication (p. 316)
- Criminal Justice (p. 326)
- English (p. 344)
- History and Political Science (p. 363)
- Philosophy (p. 397)
- Psychology (p. 415)
- Sociology (p. 427)
- Urban Studies (p. 435)
- Visual and Performing Arts (p. 385)
- World Languages (p. 465)

Interdisciplinary Centers

- Center for Community Media
- Center for Entrepreneurship
- Translation Center
- Urban Action Institute

Business Administration

Department of Business Administration and Economics

The Business Administration program enables students to acquire competencies necessary to manage the business, human, financial, and technological resources of organizations. The major in Business Administration offers six concentrations: Management, Accounting, Finance, Marketing, International Business, and Entrepreneurial Studies and Small Business Management.

Admission Requirements

Application to the department after completion of the following prerequisite courses:

Code	Title	Credits
EC-110	Introduction to Microeconomics	3
EC-120	Introduction to Macroeconomics	3
EN-253	Business Communications	3
MA-150 or EC-150	Statistics I Statistics	3
MA-202 or EC-202	Business Calculus Introduction to Mathematical Economics	3-4
Total Credits		15-16

To be accepted to the major, a student must complete all prerequisite courses with a C (2.0) or better average. Prerequisite courses may be completed after acceptance with department approval.

- 4+1 Program (p. 306)
- Business Administration Major (p. 308)
- Business Administration Major, Concentration in Accounting (p. 310)
- Business Administration Major, Concentration in Entrepreneurial Studies and Small Business Management (p. 310)
- Business Administration Major, Concentration in Finance (p. 311)
- Business Administration Major, Concentration in International Business (p. 312)
- Business Administration Major, Concentration in Management (p. 313)

- Business Administration Major, Concentration in Marketing (p. 314)
- Business Administration Minor (p. 314)

Faculty

Abir A. Bukhatwa, Assistant Professor (2019), B.A., M.A., University of Benghazi; M.A., Ph.D., Clark University

Mary E. Clay, Department Chair, Professor (2012), B.S., Fitchburg State University; M.B.A., Anna Maria College; D.B.A., Argosy University; C.P.A., Commonwealth of Massachusetts

Laurie A. Dahlin, Professor (2001), B.S., Nichols College; M.B.A., Assumption College; D.B.A., Nova Southeastern University; C.M.A., Institute of Management Accountants

Paul A. Dubrey, Jr, Associate Professor (2016), B.S., Assumption College; M.B.A., Nichols College; C.P.A., Commonwealth of Massachusetts; D.B.A., Walden University

Bo Fan, Assistant Professor (2019), B.B.A., B.CST., Shenyang Institute of Technology; M.S., Ph.D., Southern New Hampshire University

Mark L. Love, Associate Professor (2006), B.S., M.B.A., Nichols College; C.P.A., Commonwealth of Massachusetts

Kaushik Mukherjee, Assistant Professor (2022), B.S., Jadavpur University; M.B.A., Xavier School of Management, India; Ph.D., University of Mississippi

Rodney Oudan, Professor (2005), PgCert., University of the West Indies, UWI; M.M., Cambridge College ; D.B.A., Nova Southeastern University

Miriam L. Plavin-Masterman, Professor (2013), B.S., Cornell University; M.B.A., Dartmouth College; M.A., Ph.D., Brown University

Elizabeth A. Siler, Professor (2008), B.A., Boston University; M.B.A., Simmons College; Ph.D., University of Massachusetts, Amherst

Lingling Wang, Associate Professor (2016), B.A., Xi'an International University; M.B.A., Ecuador Military School of Technology; M.S., D.B.A., Southern New Hampshire University

Elizabeth J. Wark, Professor (2007), B.A., Mount Holyoke College; M.B.A., University of Massachusetts; M.A., Ph.D., Clark University

Courses

BA-100 Introduction to Business

Introduction to basic concepts related to business practices; includes examination of local, regional and national organizations in the business world.
3 Credits

BA-193 Special Topics in Business First -Year Students

LASC Categories: FYS

Introductory level course covering topics of special interest to first-year students or offered only as a First-Year Seminar.
3 Credits

BA-200 Principles of Management

Study of management practices and behavior in organizational settings; emphasis on introduction to managerial principles, concepts and fundamentals.
3 Credits

BA-210 Financial Accounting I

Principles, concepts, procedures, and techniques of financial accounting necessary for preparation, understanding, and interpretation of accounting information.
3 Credits

BA-220 Financial Accounting II

Prerequisites: BA-210

Continuation of the topics covered in BA 210.
3 Credits

BA-230 Managerial Accounting

Prerequisites: BA-220

Analysis, interpretation and use of accounting data for effective managerial planning, control and decision-making.
3 Credits

BA-250 Analytical Techniques in Business

Prerequisites: BA-200 and BA-210.

Identification and analysis of common business problems using proper quantitative techniques and standard business software.
Fall and Spring and every year. 3 Credits

BA-300 Organization Theory

Prerequisites: BA-200

A macro examination of organizations utilizing current research findings based largely upon a systems/contingency framework, designed to improve organizational effectiveness.
3 Credits

BA-302 Introduction to Entrepreneurship

Students learn and explore the nature and challenges of entrepreneurship; explore the life cycle of opportunity-launch-growth-fruitage of the venture.
3 Credits

BA-303 Small Business Management

This course focuses on essential management skills relating to starting and managing a small business where one or few individuals provide initial financing.
3 Credits

BA-304 Women Entrepreneurs and Leaders

Students will focus on the research of women business leaders and the roles they have played in the global economy.
3 Credits

BA-305 Organizational Behavior

Prerequisites: BA-200

Study of organizational effectiveness and quality of working life, through individual, organizational, and contextual level theories and practices.
3 Credits

BA-306 Human Resource Management

Prerequisites: BA-305

An examination of human resource management including employment laws, recruiting/selection, training/development, and benefits/compensation administration.
3 Credits

BA-312 Operations Management I

Prerequisites: BA-200, and MA-150 or EC-207 or EC-150

Applied analysis of operations in service and production systems using quantitative models and calculus, inventory, work measurement, scheduling, quality control.
Fall and Spring and every year. 3 Credits

BA-316 Financial Management

LASC Categories: QAC

Prerequisites: BA-220

Financial analysis, working capital management, and basics of capital budgeting.
3 Credits

BA-318 Principles of Marketing

Prerequisites: BA-200, EC-110 and EC-120.

Overview of the full range of activities involved in marketing; develops an understanding of marketing strategy and processes.

3 Credits

BA-320 Business Law I

Prerequisites: BA-200

Introduction to legal concepts as applied to the study of contracts, personal property, sales, and the Uniform Commercial Code.

3 Credits

BA-321 Business Law II

Prerequisites: BA-320

Continuation of topics covered in BA320. Study of laws of partnerships and corporations.

3 Credits

BA-327 Ethical Decision Making in Business

Prerequisites: BA-200, BA-210, and BA-318

This course will identify, discuss, and analyze ethical issues faced by business professionals and discuss approaches for resolving ethical dilemmas.

3 Credits

BA-350 Business Information Systems and Applications

Prerequisites: BA-250.

Survey of automated business information systems and microcomputer applications with emphasis on business oriented software.

Fall and Spring and every year. 3 Credits

BA-351 Managing Ebusiness

Digitizing new forms of business organizations to create business-to-business partnerships, business-to-consumer relationships, pathways-to- profitability; legal,ethical, social, political and global issues.

3 Credits

BA-355 Insurance and Risk Management

Prerequisites: BA-200

This survey course covers the identification and evaluation of risk and techniques for the management of risk. Commercial and personal risks are studied from the points of view of the corporation, the individual, and the insurer. Areas of emphasis include commercial property, business liability, workers compensation, automobile, life, health, disability, and income insurance.

3 Credits

BA-362 Accounting for Non-Profit Organizations

Prerequisites: BA-371

Specialized area of accounting for unique requirements for non-profit organizations; includes analysis of budgeting, financial statements and other unique accounting requirements needed by management to assess the controls of a non-profit entity.

3 Credits

BA-370 Intermediate Accounting I

Prerequisites: BA-210 and BA-220

Accounting theory, principles, concepts, and procedures applied to balance sheet, and income statement accounts. Presentation and interpretation of financial reports.

3 Credits

BA-371 Intermediate Accounting II

Prerequisites: BA-370

Continuation of BA-370.

3 Credits

BA-372 Advanced Accounting I

Prerequisites: BA-370

Examines specialized topics in accounting including business combinations, partnerships, foreign currency transactions and translation, IFRS, nonprofit and governmental accounting.

3 Credits

BA-374 Cost Accounting

Prerequisites: BA-200, BA-210 and BA-220

Accounting for costs in business enterprises.

Emphasis placed on fundamental principles including job order, process, and standard costs.

3 Credits

BA-375 Federal Income Taxes I

Prerequisites: BA-370

A study of federal income taxation as applied to individuals.

3 Credits

BA-376 Auditing

Prerequisites: BA-370

Basic auditing concepts and developments and their application to the examination, evaluation, and reporting of financial data.

3 Credits

BA-377 Federal Income Taxes II

Prerequisites: BA-375

Federal income taxes for corporations and partnerships.

3 Credits

BA-380 Negotiations

Prerequisites: BA-200, BA-210, BA-220, BA-305, EC-110, and EC-120

This course focuses on effective negotiations, conflict management, and power and influence in organizational and other settings.

3 Credits

BA-385 Leadership

Prerequisites: BA-200 and BA-305

This course focuses on leadership theories, skills and applications. Self-assessment and reflection are important learning components of this course.

3 Credits

BA-390 Business and Social Research Methods

LASC Categories: WAC

Prerequisites: BA-200 and EN-102

An overview of research design approaches and the basic techniques of data collection employed by social scientists conducting empirical research.

3 Credits

BA-400 Management and Organizational Behavior I

Prerequisites: BA-305

Study of concepts, theory, research and operational problems of organizational behavior; work groups and intergroup behavior models.

3 Credits

BA-401 Management and Organizational Behavior II

Prerequisites: BA-400

Continuation of topics covered in BA 400 with additional theory and case studies; behavioral science/systems approach is taken.

3 Credits

BA-402 Designing the Business Plan

Prerequisites: BA-302 or consent of instructor.

Develop a complete business plan, including value propositions, market and product feasibility analyses, and projected financial statements.

Fall only and every year. 3 Credits

BA-404 Corporate Finance

Prerequisites: BA-316

Advanced capital budgeting, capital structure, long-term financing decisions, dividend policy, computer modeling, comprehensive financial strategy cases.

3 Credits

BA-406 Trends in Marketing

Prerequisites: BA-318

Integrates all aspects of marketing theory through readings, case studies, class projects, individual projects and computer simulation of marketing decisions.

3 Credits

BA-408 Directed Study: Business Administration

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

BA-414 Real Estate Investment

Prerequisites: BA-316

This course covers the fundamental concepts, principles, analytical methods, and tools used in making residential and commercial real estate investment decisions.

3 Credits

BA-415 Investment Analysis

Prerequisites: BA-316

Survey of investment vehicles, including stocks, bonds, real estate, commodities, mutual funds, and collectibles. Modern portfolio and valuation theories.

3 Credits

BA-416 Financial Markets and Institutions

Prerequisites: BA-316

Study of banks, investment banking, money markets, and the financial service industry as they affect long and short-term financing decisions.

3 Credits

BA-420 Marketing Research

Prerequisites: BA-318

Nature and scope of marketing research. Application of scientific methods, sources, and collection of data, reporting and evaluation.

3 Credits

BA-422 Retailing

Prerequisites: BA-318

Demand analysis, consumer behavior, planning, and control of the merchandising functions; retailing as a career.

3 Credits

BA-424 Advertising Management**Prerequisites:** BA-318

Advertising from a planning perspective. Advertising and professional promotion strategies with execution and control activities.

3 Credits

BA-426 Consumer Behavior**Prerequisites:** BA-318

The analysis of the consumer decision process as it affects marketing management decisions. Major factors of influence in this process will be studied including culture, social class, family, and reference groups.

3 Credits

BA-428 Business to Business Marketing**Prerequisites:** BA-318

Explores business markets that account for more than half the economic activity globally.

3 Credits

BA-429 Integrated Marketing Communications**Prerequisites:** BA-318

This course is designed for students who have an interest in increasing their knowledge of the marketing promotional process.

3 Credits

BA-430 Administrative Practices and Management**Prerequisites:** BA-305

Overview and analysis of human conduct in work-organization settings.

3 Credits

BA-434 Management and Corporate Responsibility**Prerequisites:** BA-200

The theoretical and practical relationships of corporate conflicts of interest, self-regulation, product liability, employee rights, etc., to management decisions.

3 Credits

BA-440 International Business and Management**Prerequisites:** BA-316 and BA-318

Study and analyze the nature, structures and strategies of international/global businesses. Examine international markets, economic systems, value-chains and core competencies of a firm.

3 Credits

BA-450 Health Systems in America

A course focusing on the administration of institutions in the health area.

3 Credits

BA-470 Current Issues in Finance and Business Administration**LASC Categories:** WAC**Prerequisites:** Complete Writing II and BA-305 and BA-316 and BA-318

This course provides a foundation in Information literacy related to the functional areas of Business Administration, with a particular focus in finance. The course examines current events in the business world and their applications to Accounting, Finance, Management, Marketing and/or Operations.

3 Credits

BA-474 Corporate Law**Prerequisites:** BA-320

Corporate powers and corporate management. Designed for future corporate executives and accountants.

3 Credits

BA-480 The Legal Environment of Business**Prerequisites:** BA-200

The impact of governmental regulation on business and its response will be evaluated by unique debate-type format.

3 Credits

BA-481 Independent Study in Business Administration**Prerequisites:** BA-200

Independent study in business administration, usually involving field work which is not an internship.

1-6 Credits

BA-482 Selected Topics in Business Administration**Prerequisites:** BA-305, BA-316, and BA-318

Selection of topics of mutual interest to the student and faculty.

1-6 Credits

BA-483 Internship in Health Administration

Practical experience in operations of health administration, internships within cooperative health facilities with on-site supervision and evaluation.

1-6 Credits

BA-486 Internship in Business Administration**Prerequisites:** BA-305, BA-316, and BA-318

Practical experience in operations of business. Internships within co-operative business firms with on-site supervision and evaluation.

1-12 Credits

BA-490 Business Strategy and Policy**LASC Categories:** CAP**Prerequisites:** BA-316 and BA-318

Capstone course integrating information provided in the functional areas such as finance, marketing, general management, business legal environment.
3 Credits

BA-491 Independent Study in Health Administration

Independent study in health, usually involving field work which is not an internship.
1-6 Credits

BA-492 Selected Topics in Health Administration

Selected topics in health administration of mutual interest to the student and faculty.
1-6 Credits

BA-494 International Marketing**Prerequisites:** EC-120 BA-318

With the rapid and continuous changes in global environment we will examine the complex issues in international marketing faced by today's manager.
3 Credits

Program Learning Outcomes

- Graduates have developed a basic foundation in the key functions of business – accounting, economics, finance, international business, management, management information systems, marketing, operations, and statistics.
- Graduates have demonstrated the leadership and business decision-making skills necessary to perform effectively in a professional context.
- Graduates have participated in experiential learning in at least one of the following ways: internships, class projects, simulations, interaction with members of the business community, and/or service leadership.
- Graduates will be able to analyze various problems and create realistic solutions, both individually and as part of teams and groups, using artifacts such as problem and case analysis, integrated modules, and consulting opportunities.
- Using appropriate technologies effectively, graduate will be able to communicate effectively their work orally and/or in written format to a diverse audience both internal and external to an organization.
- Graduates have been aware of globalization and its impacts on people, businesses, and the economy.
- Graduates have developed an understanding of team processes and dynamics and collaborative participation in group projects throughout the curriculum.
- Graduates have worked effectively in teams demonstrating leadership skills, social, collaborative, and interpersonal skills necessary for future professional growth and development.
- Graduates have developed an ethical perspective in legal business practices within domestic and global business environment and are exposed to values issues and application of values to business professions.

4+1 Program

The Department of Business Administration and Economics offers a 4+1 program that allows Business Administration majors with GPAs of 3.0 or higher to gain admission to the M.S. in Management during their junior year (they may apply once they have completed 75 credits or after the completion of eight Business Administration courses for transfer students) and to begin taking classes as a senior. In order to complete the joint degree, in the final year of their bachelor's work, students may take two graduate level courses (6 credits). Please see the note below regarding which graduate classes may also count within the undergraduate Business Administration major degree requirements. These graduate credits may be included in the undergraduate tuition of full-time state supported students. Students should take at least one summer class between the Spring of their undergraduate graduation and the Fall in which they embark on full-time graduate studies. Taking the graduate credits as an undergraduate and the summer class(es) may allow students to complete course requirements for the bachelor's and master's degree in five years (60 months). For more details, students should consult with the graduate coordinator of the M.S. in Management Program. Other courses may count in both the undergraduate and graduate programs with the permission of the graduate coordinator.

Undergraduate Business Administration majors who are accepted into the 4+1 program may take the following graduate courses (6 credits maximum) and count them in both their Business

Administration undergraduate major and M.S in Management program. These courses will appear at the 500 level on their undergraduate transcripts and will be transferred at the 900 level for the M.S in Management program once they have completed their Bachelor of Science degrees. Students must have permission of the graduate instructor and the M.S. in Management graduate coordinator to take any graduate classes before they have finished their undergraduate degree program.

Code	Title	Credits
BA-960	Leadership Theory and Skills (may count in the BA electives or in the management concentration)	3
BA-962	Ethics and Social Responsibility of Leadership (may count in the BA electives or in the management concentration)	3
BA-915	Corporate Finance (this may be counted as a substitute for BA-404 in the BA electives or within the finance concentration.)	3
BA-912	Marketing Management (this may count in the BA electives or within the marketing concentration)	3

The Department of Business Administration and Economics also offers a 4+1 program that allows declared Business Administration minors with GPAs of 3.0 or higher to gain admission to the M.S. in Management during their junior year (they may apply once they have completed 75 credits and after the completion of all Business Administration minor courses) and to begin taking classes as a senior. In order to complete the joint degree, in the final year of their bachelor’s work, students may take two graduate level courses (6 credits). Students must apply online for the M.S. in Management program and include 3 letters of recommendation and official transcripts from all colleges/universities that they have attended.

Code	Title	Credits
Business Administration Minor Requirements		(27 credits)
EC-150 or MA-150	Statistics Statistics I	3

EC-110	Introduction to Microeconomics	3
or EC-120	Introduction to Macroeconomics	
BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-250	Analytical Techniques in Business	3
Select any four additional BA courses		12
Students may choose one of the following EC courses as an elective BA minor course:		
EC-205	Money, Banking, and Monetary Policy	
EC-301	Economic Development	
EC-307	International Finance	
EC-308	International Trade	

Total Credits 27

Please note: Students may need to complete additional undergraduate prerequisites beyond minor courses in order to complete the full prerequisites for the M.S. in Management program. These prerequisites are listed in the catalog for the 3 tracks: Accounting, Leadership and Marketing.

Process for Business Minors to be eligible to apply for 4+1 option within the M.S. in Management Program. (Denotes this application process already in place for BA majors):**

1. Students must add a Business Minor to their degree audits.
2. Students must have completed at least 75 total credits.**
3. Students must have an overall GPA of 3.0 or higher.**
4. Students must apply online for the M.S. in Management program and include 3 letters of recommendation and official transcripts from all colleges/university that they have attended.**

5. Students must have completed all the courses in the Business Minor to be eligible to apply to the 4+1 option.

See below for a copy of the current Business Minor (27 credits).

- a. EC-150: Statistics (QR) or MA-150: Statistics I 3 credits

- b. EC-110: Introduction to Microeconomics (HBS)
3 credits
- or EC-120: Introduction to Macroeconomics (HBS)
- c. BA-200: Principles of Management
3 credits
- d. BA-210: Financial Accounting I
3 credits
- e. BA-250: Analytical Techniques in Business
3 credits
- Select any four additional BA courses
12 credits

Note: students may choose one of the following EC courses as an elective BA minor course.

- EC-205: Money, Banking, and Monetary Policy
- EC-301: Economic Development
- EC-307: International Finance
- EC-308: International Trade

6. Please note: Students may need to complete additional undergraduate prerequisites beyond the minor courses in order to complete the full prerequisites for the M.S. in Management program. These prerequisites are listed in the catalog for the 3 tracks: Accounting, Leadership and Marketing.

Business Administration Major

Requirements for a Major in Business Administration

48 credits in Business Administration, of which a minimum of 25 must be completed at Worcester State University.

Code	Title	Credits
Ancillary Courses		
(15-16 credits)		
EC-110	Introduction to Microeconomics	3
EC-120	Introduction to Macroeconomics	3
EN-253	Business Communications	3

MA-150	Statistics I	3
or EC-150	Statistics	
MA-202	Business Calculus	3-4
or EC-202	Introduction to Mathematical Economics	

Common Business Core (36 credits)

<i>Lower Division</i>		
BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-230	Managerial Accounting	3
BA-250	Analytical Techniques in Business	3

<i>Upper Division</i>		
BA-305	Organizational Behavior	3
BA-312	Operations Management I	3
BA-316	Financial Management	3
BA-318	Principles of Marketing	3
BA-350	Business Information Systems and Applications	3
BA-320	Business Law I	3
or BA-480	The Legal Environment of Business	
BA-490	Business Strategy and Policy	3

BA Electives (12 credits)

Other Upper Division (300-level or above)	12
Business Administration courses	

Total Credits 63-64

Note: A student may apply any two of the following EC courses towards the BA major as either part of the BA electives or as courses within either the Finance or International Business concentration or within the BA minor.

Code	Title	Credits
EC-205	Money, Banking, and Monetary Policy (Finance Concentration)	3
EC-301	Economic Development (International Business Concentration)	3
EC-307	International Finance (Finance or International Business Concentration)	3
EC-308	International Trade (International Concentration)	3

Once LASC requirements are satisfied, students may select general requirements.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/ major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Sample Timeline for Completion of Degree Business Administration

(For all students entering in Fall 2012 or later. LASC courses may be taken in a different sequence than shown below, pending course availability and student preferences.)

Year One		Credits
Semester One		
LASC	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I (WR)	3
BA-200	Principles of Management	3
EC-150 or MA-150	Statistics (QR) ¹ or Statistics I	3
EC-120 or EC-110	Introduction to Macroeconomics (HBS) or Introduction to Microeconomics	3
Credits		15
Semester Two		
EN-102	College Writing II (WR)	3
EC-120 or EC-110	Introduction to Macroeconomics (HBS) or Introduction to Microeconomics	3
LASC	LASC Elective (CON) (p. 38)	3
LASC	LASC Elective (p. 37)	3
BA-2XX+	200+ Major Elective	3
Credits		15
Year Two		
Semester Three		
EC-202 or MA-202	Introduction to Mathematical Economics or Business Calculus	3-4
EN-253	Business Communications	3

BA-210	Financial Accounting I	3
LASC	LASC Elective (USW) (p. 51)	3
LASC	LASC Elective (GP) (p. 42)	3
Credits		15-16
Semester Four		
BA-220	Financial Accounting II	3
BA-250	Analytical Techniques in Business	3
BA-318	Principles of Marketing	3
LASC	LASC Elective (NSP) (p. 49)	4
LASC	LASC Elective (TLC) (p. 53)	3
Credits		16
Year Three		
Semester Five		
BA-305	Organizational Behavior	3
BA-230 or BA-374	Managerial Accounting or Cost Accounting	3
BA-316	Financial Management	3
LASC	LASC Elective (NSP) (p. 49)	3-4
SELECT	General Elective	3
Credits		15-16
Semester Six		
BA-312	Operations Management I	3
BA-350	Business Information Systems and Applications	3
BA-320 or BA-480	Business Law I or The Legal Environment of Business	3
SELECT	BA Concentration Elective	3
SELECT	General Elective	3
Credits		15
Year Four		
Semester Seven		
BA-490	Business Strategy and Policy	3
SELECT	General Elective	3
LASC	LASC Elective (CA) (p. 39)	3
LASC	LASC Elective (ICW) (p. 46)	3
SELECT	General Elective	3
Credits		15
Semester Eight		
SELECT	BA Concentration Elective	3
SELECT	BA Concentration Elective	3
SELECT	General Elective	3
SELECT	General Elective	3

SELECT	General Elective	3
Credits		15
Total Credits		121-123

¹ One QR must be a MA course

Once LASC requirements are satisfied, students may select general requirements. Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Business Administration Major, Concentration in Accounting

Requirements for a Major in Business Administration, Concentration in Accounting

The Common Business Core together with four additional courses in the field of accounting chosen with the assistance of the advisor. Typical courses include:

Code	Title	Credits
Ancillary Courses		(15-16 credits)
EC-110	Introduction to Microeconomics	3
EC-120	Introduction to Macroeconomics	3
EN-253	Business Communications	3
MA-150	Statistics I	3
or EC-150	Statistics	
MA-202	Business Calculus	3-4
or EC-202	Introduction to Mathematical Economics	
Common Business Core		(36 credits)
<i>Lower Division</i>		
BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-230	Managerial Accounting	3
BA-250	Analytical Techniques in Business	3
<i>Upper Division</i>		

BA-305	Organizational Behavior	3
BA-312	Operations Management I	3
BA-316	Financial Management	3
BA-318	Principles of Marketing	3
BA-350	Business Information Systems and Applications	3
BA-320	Business Law I	3
or BA-480	The Legal Environment of Business	
BA-490	Business Strategy and Policy	3
Accounting Concentration Courses		(12 credits)
BA-370	Intermediate Accounting I	3
BA-371	Intermediate Accounting II	3
BA-375	Federal Income Taxes I	3
BA-376	Auditing	3
Total Credits		63-64

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Business Administration Major, Concentration in Entrepreneurial Studies and Small Business Management

Requirements for a Major in Business Administration, Concentration in Entrepreneurial Studies and Small Business Management

The common Business Core together with two required plus two additional courses in the field chosen with the assistance of the advisor from the list below:

Code	Title	Credits
Ancillary Courses		(15-16 credits)
EC-110	Introduction to Microeconomics	3

EC-120	Introduction to Macroeconomics	3
EN-253	Business Communications	3
MA-150	Statistics I	3
or EC-150	Statistics	
MA-202	Business Calculus	3-4
or EC-202	Introduction to Mathematical Economics	

Common Business Core (36 credits)

Lower Division

BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-230	Managerial Accounting	3
BA-250	Analytical Techniques in Business	3

Upper Division

BA-305	Organizational Behavior	3
BA-312	Operations Management I	3
BA-316	Financial Management	3
BA-318	Principles of Marketing	3
BA-350	Business Information Systems and Applications	3
BA-320	Business Law I	3
or BA-480	The Legal Environment of Business	
BA-490	Business Strategy and Policy	3

Entrepreneurial Studies and Small Business Management Requirements (12 credits)

BA-302	Introduction to Entrepreneurship	3
BA-402	Designing the Business Plan	3
Select two of the following:		6
BA-303	Small Business Management	
BA-304	Women Entrepreneurs and Leaders	
BA-351	Managing Ebusiness	
BA-420	Marketing Research	
SO-420	Seminar in Sociology	

Or any courses in the field as approved by BA program chair/instructor/advisor.

Total Credits 63-64

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/

major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Business Administration Major, Concentration in Finance

Requirements for Major in Business Administration, Concentration in Finance:

The common Business Core together with four additional courses in the field of Finance chosen with the assistance of the advisor from the list that follows:

Code	Title	Credits
Ancillary Courses (15-16 credits)		
EC-110	Introduction to Microeconomics	3
EC-120	Introduction to Macroeconomics	3
EN-253	Business Communications	3
MA-150	Statistics I	3
or EC-150	Statistics	
MA-202	Business Calculus	3-4
or EC-202	Introduction to Mathematical Economics	

Common Business Core (36 credits)

Lower Division

BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-230	Managerial Accounting	3
BA-250	Analytical Techniques in Business	3

Upper Division

BA-305	Organizational Behavior	3
BA-312	Operations Management I	3
BA-316	Financial Management	3
BA-318	Principles of Marketing	3
BA-350	Business Information Systems and Applications	3
BA-320	Business Law I	3
or BA-480	The Legal Environment of Business	
BA-490	Business Strategy and Policy	3

Finance Electives		(12 credits)
BA-404	Corporate Finance	3
Select three of the following: ¹		9
BA-355	Insurance and Risk Management	
BA-414	Real Estate Investment	
BA-415	Investment Analysis	
BA-470	Current Issues in Finance and Business Administration	
BA-486	Internship in Business Administration (related to finance)	
EC-205	Money, Banking, and Monetary Policy	
EC-306	Introduction to Econometrics	
EC-307	International Finance	
Total Credits		63-64

¹ No more than 2 of these may be EC courses.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Business Administration Major, Concentration in International Business

Requirements for Major in Business Administration, Concentration in International Business

The common Business Core together with four elective courses in the field of International Business chosen with the assistance of the advisor from the list that follows. A maximum of two of the EC courses listed below in the electives may be used.

Code	Title	Credits
Ancillary Courses (15-16 credits)		
EC-110	Introduction to Microeconomics	3
EC-120	Introduction to Macroeconomics	3
EN-253	Business Communications	3
MA-150	Statistics I	3
or EC-150	Statistics	
MA-202	Business Calculus	3-4
or EC-202	Introduction to Mathematical Economics	
Common Business Core		(39 credits)
<i>Lower Division</i>		
BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-230	Managerial Accounting	3
BA-250	Analytical Techniques in Business	3
<i>Upper Division</i>		
BA-305	Organizational Behavior	3
BA-312	Operations Management I	3
BA-316	Financial Management	3
BA-318	Principles of Marketing	3
BA-350	Business Information Systems and Applications	3
BA-320	Business Law I	3
or BA-480	The Legal Environment of Business	
BA-440	International Business and Management	3
BA-490	Business Strategy and Policy	3
International Business Electives		(9 credits)
Select three of the following:		9
BA-351	Managing Ebusiness	
BA-481	Independent Study in Business Administration	
BA-482	Selected Topics in Business Administration	
BA-486	Internship in Business Administration	
BA-494	International Marketing	
EC-301	Economic Development	

EC-307	International Finance	
EC-308	International Trade	
Total Credits		63-64

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/ major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Business Administration Major, Concentration in Management

Requirements for a Major in Business Administration, Concentration in Management

The Common Business Core together with four elective courses in the field of management chosen with the assistance of the advisor from the list below:

Code	Title	Credits
Ancillary Courses		(15-16 credits)
EC-110	Introduction to Microeconomics	3
EC-120	Introduction to Macroeconomics	3
EN-253	Business Communications	3
MA-150	Statistics I	3
or EC-150	Statistics	
MA-202	Business Calculus	3-4
or EC-202	Introduction to Mathematical Economics	
Common Business Core		(36 credits)

Lower Division

BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-230	Managerial Accounting	3
BA-250	Analytical Techniques in Business	3

Upper Division

BA-305	Organizational Behavior	3
BA-312	Operations Management I	3
BA-316	Financial Management	3
BA-318	Principles of Marketing	3
BA-350	Business Information Systems and Applications	3
BA-320	Business Law I	3
or BA-480	The Legal Environment of Business	
BA-490	Business Strategy and Policy	3

Management Electives (12 credits)

Select four of the following: 12

BA-300	Organization Theory	
BA-306	Human Resource Management	
BA-327	Ethical Decision Making in Business	
BA-380	Negotiations	
BA-385	Leadership	
BA-400	Management and Organizational Behavior I	
BA-401	Management and Organizational Behavior II	
BA-430	Administrative Practices and Management	
BA-434	Management and Corporate Responsibility	
BA-440	International Business and Management	
BA-481	Independent Study in Business Administration	
BA-482	Selected Topics in Business Administration	
BA-486	Internship in Business Administration	

Total Credits 63-64

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/ major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Business Administration Major, Concentration in Marketing

Requirements for a Major in Business Administration, Concentration in Marketing

The Common Business Core together with four additional courses in the field of marketing chosen with the assistance of the advisor from the list that follows:

Code	Title	Credits
Ancillary Courses		
EC-110	Introduction to Microeconomics	3
EC-120	Introduction to Macroeconomics	3
EN-253	Business Communications	3
MA-150	Statistics I	3
or EC-150	Statistics	
MA-202	Business Calculus	3-4
or EC-202	Introduction to Mathematical Economics	

Common Business Core (36 credits)

Lower Division

BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-230	Managerial Accounting	3
BA-250	Analytical Techniques in Business	3

Upper Division

BA-305	Organizational Behavior	3
BA-312	Operations Management I	3
BA-316	Financial Management	3
BA-318	Principles of Marketing	3
BA-350	Business Information Systems and Applications	3
BA-320	Business Law I	3
or BA-480	The Legal Environment of Business	
BA-490	Business Strategy and Policy	3

Marketing Concentration Courses (12 credits)

Select four of the following: 12

BA-406	Trends in Marketing
BA-420	Marketing Research
BA-422	Retailing
BA-424	Advertising Management
BA-426	Consumer Behavior
BA-428	Business to Business Marketing
BA-429	Integrated Marketing Communications
BA-486	Internship in Business Administration
BA-494	International Marketing

Total Credits 63-64

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Sigma Beta Delta, an international honor society in business, is available to outstanding students.

Business Administration Minor

Requirements for a Minor in Business Administration

Students must complete the three prerequisite courses with a C (2.0) or better average.

Requirements for a Minor

Code	Title	Credits
EC-150	Statistics (QR)	3
or MA-150	Statistics I	
EC-110	Introduction to Microeconomics (HBS)	3
or EC-120	Introduction to Macroeconomics	
BA-200	Principles of Management	3
BA-210	Financial Accounting I	3
BA-250	Analytical Techniques in Business	3
Select any four additional BA courses (students may choose one of the following EC courses):		12

EC-205 Money, Banking, and
Monetary Policy

EC-301 Economic Development

EC-307 International Finance

EC-308 International Trade

Total Credits

27

Communication

Department of Communication

The Department of Communication at Worcester State University promotes the critical understanding of communication in a culturally diverse world. The program provides a praxis-based model of learning well suited for the digital age: theoretical and conceptual knowledge based instruction along with hands-on synthesis and application to yield creative content. Specifically, the program engages students in the theory and practice of mass communication, social and digital media, advertising, public relations, and media production, among others. The department's goal is to educate students to assess the role of communication in society, and to be proficient communicators and engaged citizens. Representing diverse areas of expertise, the faculty emphasizes contemporary issues and media ethics from a local-to-global perspective.

Courses focused on media literacy, criticism, production and special topics, prepare students for professional careers and for further study at the graduate level. Facilities include a television studio, editing suites, multimedia labs, video / photographic equipment and photographic dark rooms. In addition to course work, students in their junior and senior year are encouraged to apply for media internships and independent studies in their field of interest.

- Communication Education Minor (p. 320)
- Communication Major (p. 320)
- Communication Major, Concentration in Advertising and Public Relations (p. 322)
- Communication Major, Concentration in Digital Media Production (p. 323)
- Communication Minor (p. 325)
- Master's of Science in Communication (MSC) Program (p. 325)

Faculty

David Angell, Visiting Assistant Professor (2023), B.A., Rhode Island College; M.F.A., Vermont College of Fine Arts

Carlos Fontes, Professor (1996), B.A., Escola Superior de Meios de Comunicacao Social, Lisbon; M.A., Ph.D., University of Massachusetts

Julie D. Frechette, Professor (1999), B.A., University of New Hampshire; M.A., Ph.D., University of Massachusetts

Suzanne Gainer, Department Chair, Professor (2001), B.A., St. Vincent College; M.F.A., Rhode Island School of Design

Daniel S. Hunt, Professor (2013), B.A., University of Rhode Island; M.S., Boston University College of Communication; Ph.D., University of Connecticut

Emanuel E. Nneji, Professor (2005), B.A., University of Nigeria; M.S., University of Lagos; Ph.D., University of South Carolina

Brittany E. Severance, Assistant Professor (2021), B.A., University of Massachusetts; M.A., M.F.A., Emerson College

Eric Nichols, Assistant Professor (2019), B.A., Worcester State University; M.F.A. Maine College of Art

Courses

CM-100 Intro to Mass Communication

LASC Categories: TLC, HBS

An integrated examination of the history, theory, structure, process, and effects of each of the mass media.

Fall and Spring and every year. 3 Credits

CM-101 Library Skills for Research

The course covers the basics of library research: search strategies and how to use both print and automated research tools.

Other or on demand. 1 Credit

CM-103 Survey of Radio and Television

LASC Categories: HBS, TLC

Perspectives on the development of radio and television technologies, programming, regulation, and economic support, and their impact.

Fall and Spring and every year. 3 Credits

CM-105 Media Writing

Prerequisites: CM-100

An introduction to various types of mass media writing, from print and broadcast to public relations, advertising, and online media.

Every year. 3 Credits

CM-106 Communications and the Internet**LASC Categories:** TLC

Focuses on the social and educational implications of the Internet and the application of its various search tools as a means of communication.

Spring only and other on demand. 3 Credits

CM-107 Journalism and Democracy

This course introduces students to the history of American journalism and the role of journalism in democratic and non-democratic societies.

3 Credits

CM-108 Introduction to Animation

This hands-on introductory-level course covers the fundamentals of aesthetics of computer animation. Through a series of shorts projects, students will learn the principles of expression through movement in time, sequential composition, editing and integration of images sequences and sound.

3 Credits

CM-110 Public Speaking**LASC Categories:** TLC

Essentials of speech production and speech writing for large and small groups. Classroom practice in delivering various types of speeches. [formerly ME 110 Speech]

Fall and Spring and every year. 3 Credits

CM-150 Photography I**LASC Categories:** CA

Covers the basic theory and practice of thirty-five millimeter black and white photography, including camera handling, film processing, light meters, printing and picture content.

Fall and Spring and every year. 3 Credits

CM-151 Introduction to Digital Photography**LASC Categories:** CA

Techniques and aesthetics of digital photography. Introduction to the operation of SLR digital cameras and the computer as digital darkroom.

Every year. 3 Credits

CM-160 Introduction to Digital Imaging**LASC Categories:** CA

This course introduces students to the procedures, techniques and concepts of basic digital imaging. In the course students learn to use the computer as a tool for visual image making.

Fall and Spring and every year. 3 Credits

CM-180 Introduction to Advertising**LASC Categories:** HBS

An overview of the advertising including the historical and current roles of advertising in our economy, basic advertising concepts and methods, and social and cultural effects.

3 Credits

CM-191 Special Topics in Communication

An introductory level course in communication on current or specialized topics.

3 Credits

CM-193 Special Topics in Communication for First Year Students**LASC Categories:** FYS

Introductory level course covering topics of special interest to first-year students. offered only as a First-Year Seminar.

Every year. 3 Credits

CM-199 Interpersonal Communication in Media

Study of the communications process as it relates to the production of material in various media, including video, audio, film.

Every year. 3 Credits

CM-200 Writing for Communication**LASC Categories:** WAC**Prerequisites:** EN-102

Development of writing, research, and critical thinking skills associated with the discipline of communication. Assignments focus on contemporary communication issues.

Every year. 3 Credits

CM-204 Analysis of News

This course introduces students to the conventions, ethical issues and the economics, political and socio-cultural forces that affect mainstream and alternative journalism today.

Every 2-3 years. 3 Credits

CM-205 Reporting for Media

This course refines interviewing skills and enables students to develop evidence from documentary sources to create stories for converging media.

Fall and Spring and every 2-3 years. 3 Credits

CM-206 Digital Storytelling**Prerequisites:** CM-100

Use of personal narrative to construct stories using audio, still and video images, and music tracks in digital format.

Every year. 3 Credits

CM-210 Special Topics in Communication

This is a mid-level communication course focused on current specialized topics not covered by the department's curriculum.
3 Credits

CM-213 Gender and the Media

LASC Categories: HBS, TLC, DAC, WAC, DIV

Prerequisites: CM-100 and EN-102

This course will explore how difference is socially constructed along gender lines and will explore the intersections of gender, identity, power and media representation.

Fall and Spring and every 2-3 years. 3 Credits

CM-231 Photography II

Prerequisites: CM-150 or CM-151

Expands basic skills in camera craft, film and print processing and presentation. Instruction and practice in the zone system, theory and practice of advanced exposure and film development control. Emphasis on photographic composition and efficiency in designing purposeful photographic statements.

Fall and Spring and every year. 3 Credits

CM-240 Principles of Public Relations Practices

LASC Categories: HBS

Prerequisites: CM-100

An overview of public relations principles in business, politics, and society.

3 Credits

CM-241 Understanding Movies

LASC Categories: CA, TLC

An introduction to the aesthetics and critical theories of film as an artistic medium of communication through critical observation of classic and contemporary movies.

Other or on demand. 3 Credits

CM-242 Understanding Video Games

LASC Categories: CA, TLC

An introduction to the interdisciplinary study of video games as texts through an examination of their cultural, educational, and social functions in contemporary settings.

Every year. 3 Credits

CM-244 Graphic Design I

LASC Categories: CA

Through hands on projects, students will learn formal elements of design, principles of typography, idea generation, and issues of responsible design as applied to print media.

Fall and Spring and every year. 3 Credits

CM-259 Television Production

LASC Categories: CA

Basics of studio production including visualization and sequencing of short scripts, sound, graphics, lighting, and technical direction.

Every 2-3 years. 3 Credits

CM-260 Introduction to Video

LASC Categories: CA

A beginning course in video program production, using lightweight and portable equipment.

Fall and Spring and every year. 3 Credits

CM-285 History of Photography

LASC Categories: CA, TLC

The history of photography from 1839 to present, with attention to styles, aesthetics, technical processes, and leading practitioners. [Cross-listed with AR-285.]

Every 2-3 years. 3 Credits

CM-301 Communication Theory

Prerequisites: CM-100

Examines the nature and origins of symbol systems, the make up of audiences, the effects of mass media, and concomitant research.

Other or on demand. 3 Credits

CM-315 Social Media

LASC Categories: CA, TLC

Prerequisites: CM-100

This course explores the historical and societal influences on the development of social media through conceptual and practical applications.

3 Credits

CM-325 Community Media Production

Prerequisites: CM-259

This course focuses on the practice of creating media for the purpose of community engagement. Students will gain experience in television studio production, video editing, and audio recording by exploring topics and issues relevant to the people of Worcester. Program development, interviewing skills, and production techniques will be covered. Students will also work on using social media promotion for content dissemination.

Every year. 3 Credits

CM-340 Public Relations Strategy

Prerequisites: CM-240

Case study approach to public relations practices, problems, opportunities, and application to practical situations.

Every 2-3 years. 3 Credits

CM-344 Graphic Design II**Prerequisites:** CM-244

The course builds upon the foundations of design covered in Graphic Design I, with emphasis on critical thinking, visual problem solving and the use of text and image.

Every year. 3 Credits

CM-350 Intercultural Communication**Prerequisites:** CM-100

Introductory communication theory and practice across cultural groups defined by race, ethnicity, gender, religion, age, nationality, politics and economics.

3 Credits

CM-359 Documentary Production**Prerequisites:** CM-260

This course engages students in a semester-long production of documentary and introduces key concepts of documentary theory.

Every 2-3 years. 3 Credits

CM-360 Television Production II**LASC Categories:** CA**Prerequisites:** CM-259 or CM-260

The student will gain experience in the areas of electronic videotape editing, technology of television engineering, creative video, remote production, and other advanced techniques. Primary emphasis is on the production of programs utilizing advanced techniques.

Every year. 3 Credits

CM-363 Visual Media Literacy**Prerequisites:** CM-100

An introduction to principles of visual media literacy and their application in media production and perception.

3 Credits

CM-366 Scriptwriting**Prerequisites:** CM-100

Creating scripted material for the electronic media. All types, styles, and formats will be covered.

Every 2-3 years. 3 Credits

CM-370 Advertising Production**Prerequisites:** CM-100 and CM-180

Applied skills in advertising including the creation of advertisements in different media, advertising strategies, media schedules and campaign plans.

Other or on demand. 3 Credits

CM-384 Media Criticism**LASC Categories:** HBS, TLC, DAC, WAC, DIV**Prerequisites:** CM-100 and EN-102

Evaluation and analysis of film, television, theatre, and radio performances, development of intelligent, ethical standards of judgment.

Fall and Spring and every year. 3 Credits

CM-390 Independent Media and Society**LASC Categories:** TLC, DAC**Prerequisites:** CM-100

This course introduces students to the theory and practice of wide range of media economically and politically independent of both corporation and the state. The course focuses on the relationship between independent media and corporate media as well as the role of independent media within social movements, cultures of resistance, and processes of social change.

Other or on demand and other or on demand. 3 Credits

CM-396 Video Editing**LASC Categories:** CA**Prerequisites:** CM-259 or CM-260

The principles and procedures of editing video using computer-based, non-linear editing techniques and equipment. Students will produce short edited programs.

Fall and Spring and other or on demand. 3 Credits

CM-400 Advertising and Public Relations Research**LASC Categories:** HBS**Prerequisites:** CM-100, CM-180 and CM-240.

The course concentrates on the uses and applications of research in advertising and public relations situations.

Every 2-3 years. 3 Credits

CM-404 Independent Study: Media**Prerequisites:** CM-100

Permits advanced students to investigate topic of special interest through research or production of a project. Periodic consultations with advisor.

Fall and Spring and every year. 1-6 Credits

CM-405 Mass Communication Research**LASC Categories:** HBS, WAC**Prerequisites:** EN-102.

Survey of methods and applications of research in media fields, including advertising, public relations, journalism, new media and political communication.

Every year. 3 Credits

CM-408 Directed Study: Communication

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

1-3 Credits

CM-410 Seminar: Topics in Communication

This course engages students in advanced examination of emerging communication topics and of topics in a faculty's area of expertise.

Spring only and other or on demand. 3 Credits

CM-416 Media Law and Ethics

LASC Categories: ICW, HBS

Prerequisites: CM-100 or JO-101.

An overview of the US legal and justice systems and an examination of ethical issues in mass media.

[Cross-listed with EN-416.]

Alternating and every 2-3 years. 3 Credits

CM-435 Communication Internship

Prerequisite: Two relevant communication courses and consent of department provides opportunity for advanced students to increase experience through internship with sponsoring community organization, institution, or business under appropriate supervision.

Fall and Spring and every year. 3-12 Credits

CM-450 Senior Communication Capstone

LASC Categories: CAP

Prerequisites: CM-100, CM-110 CM-363, CM-384 and either CM-105 or CM-200.

Course allows students to reflect upon and document culminating experiences while nearing the end of their major coursework.

Every year. 3 Credits

Program Learning Outcomes

- Teach students a broad range of concepts and skill sets which entail gathering, processing, editing, presenting and evaluating information.
- Teach students to effectively gauge the effects of communication and mass media.
- Educate students about mass media and its role in local, national, and global society.
- Vest students with the intellectual tools necessary to be informed and critical consumers of mass media.

- Teach and encourage responsible/ethical media production.
- Prepare students for careers in the industries of communication and mass media.
- Contribute to the body of knowledge about mass media, society, and where the two intersect.
- Disseminate the aforementioned knowledge to the Commonwealth of Massachusetts and beyond.

Communication Education Minor

Requirements for a Minor in Communication Education

Code	Title	Credits
CM-100	Intro to Mass Communication	3
CM-110	Public Speaking	3
CM-350	Intercultural Communication	3
CM-384 or CM-363	Media Criticism Visual Media Literacy	3
Select any 2 electives in Communication		6
Total Credits		18

Communication Major

Requirements for a Major in Communication

39 credits for the Advertising and Public Relations concentration and 39 credits for the concentration in Digital Media Production.

Code	Title	Credits
Core Courses (21 credits)		
CM-100	Intro to Mass Communication	3
CM-105 or CM-200	Media Writing Writing for Communication	3
CM-110	Public Speaking	3
CM-363	Visual Media Literacy	3
CM-384	Media Criticism	3
CM-450	Senior Communication Capstone	3
Select one of the following:		3
CM-213	Gender and the Media	

CM-350	Intercultural Communication	
CM-390	Independent Media and Society	
Elective Courses		(18 credits)
Select 18 credits in Communication		18
Total Credits		39

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/ major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Sample Timetable for Completion of Degree Communication, Generalist

Year One

Semester One		Credits
LASC	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I	3
CM-100	Intro to Mass Communication	3
LASC	LASC Elective (QR) (p. 50)	3
LASC	LASC Elective (GP) (p. 42)	3
Credits		15

Semester Two

EN-102	College Writing II	3
LASC	LASC Elective (CON) (p. 38)	3
CM-110	Public Speaking	3
LASC	LASC Elective (USW) (p. 51)	3
LASC	LASC Elective (TLC) (p. 53)	3
Credits		15

Year Two

Semester Three

CM-105	Media Writing	3
SELECT	CM Major Elective	3
LASC	LASC Elective (NSP) (p. 49)	4
LASC	LASC Elective (TLC) (p. 53)	3
LASC	LASC Elective (GP) (p. 42)	3
Credits		16

Semester Four

CM-213	Gender and the Media	3
--------	----------------------	---

SELECT	CM Major Elective	3
LASC	LASC Elective (NSP) (p. 49)	3
LASC	LASC Elective (HBS) (p. 44)	3
LASC	LASC Elective (CA) (p. 39)	3
Credits		15

Year Three

Semester Five

CM-363	Visual Media Literacy	3
SELECT	CM Major Elective	3
LASC	LASC Elective (HBS) (p. 44)	3
LASC	LASC Elective (CA) (p. 39)	3
SELECT	General Elective	3
Credits		15

Semester Six

CM-384	Media Criticism	3
SELECT	CM Major Elective	3
LASC	LASC Elective (ICW) (p. 46)	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15

Year Four

Semester Seven

CM-435	Communication Internship	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15

Semester Eight

CM-450	Senior Communication Capstone	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15

Total Credits

121

Once LASC requirements are satisfied, students may select general requirements. Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Communication Major, Concentration in Advertising and Public Relations

Requirements for the Concentration in Advertising and Public Relations

Code	Title	Credits
Core Courses		
		(21 credits)
CM-100	Intro to Mass Communication	3
CM-105	Media Writing	3
or CM-200	Writing for Communication	
CM-110	Public Speaking	3
CM-363	Visual Media Literacy	3
CM-384	Media Criticism	3
CM-450	Senior Communication Capstone	3
Select one of the following:		3
CM-213	Gender and the Media	
CM-350	Intercultural Communication	
CM-390	Independent Media and Society	
Required Courses for Concentration		(18 credits)
In addition to the six core courses, students will have to complete the following:		
CM-180	Introduction to Advertising	3
CM-240	Principles of Public Relations Practices	3
CM-340	Public Relations Strategy	3
or CM-370	Advertising Production	
CM-400	Advertising and Public Relations Research	3
or CM-405	Mass Communication Research	
Select 6 credits of Elective Courses in Communication		6
Total Credits		39

Sample Timetable for Completion of Degree Communication/ Concentration in Advertising and Public Relations

Year One

Semester One		Credits
LASC	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I	3
CM-100	Intro to Mass Communication	3
CM-110	Public Speaking	3
LASC	LASC Elective (QR) (p. 50)	3
Credits		15

Semester Two

EN-102	College Writing II	3
LASC	LASC Elective (CON) (p. 38)	3
CM-105	Media Writing	3
or CM-200	or Writing for Communication	
LASC	LASC Elective (TLC) (p. 53)	3
LASC	LASC Elective (USW) (p. 51)	3
Credits		15

Year Two

Semester Three

CM-180	Introduction to Advertising ¹	3
CM-240	Principles of Public Relations Practices ¹	3
LASC	LASC Elective (NSP) (p. 49)	4
LASC	LASC Elective (TLC) (p. 53)	3
LASC	LASC Elective (GP) (p. 42)	3
Credits		16

Semester Four

Select one of the following:		3
CM-213	Gender and the Media	
CM-350	Intercultural Communication	
CM-390	Independent Media and Society	
SELECT	CM Major Elective	3
LASC	LASC Elective (NSP) (p. 49)	3
LASC	LASC Elective (CA) (p. 39)	3
LASC	LASC Elective (HBS) (p. 44)	3
Credits		15

Year Three

Semester Five

CM-363	Visual Media Literacy	3
--------	-----------------------	---

CM-384	Media Criticism	3
LASC	LASC Elective (GP) (p. 42)	3
LASC	LASC Elective (HBS) (p. 44)	3
LASC	LASC Elective (CA) (p. 39)	3
Credits		15
Semester Six		
CM-340	Public Relations Strategy ²	3
CM-370	Advertising Production ²	3
LASC	LASC Elective (ICW) (p. 46)	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Year Four		
Semester Seven		
CM-363	Visual Media Literacy	3
CM-384	Media Criticism	3
CM-400	Advertising and Public Relations Research ³	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Semester Eight		
CM-400 or CM-405	Advertising and Public Relations Research ³ or Mass Communication Research	3
SELECT	CM Journalism Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Total Credits		121

¹ Taught each Fall semester

² Taught each Spring Semester

³ Taught every third semester

Once LASC requirements are satisfied, students may select general requirements.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/

major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Communication Major, Concentration in Digital Media Production

Requirements for the Concentration in Media Production

Code	Title	Credits
Core Courses		(21 credits)
CM-100	Intro to Mass Communication	3
CM-105	Media Writing	3
or CM-200	Writing for Communication	
CM-110	Public Speaking	3
CM-363	Visual Media Literacy	3
CM-384	Media Criticism	3
CM-450	Senior Communication Capstone	3
Take one course from the following:		3
CM-213	Gender and the Media	
CM-350	Intercultural Communication	
CM-390	Independent Media and Society	
Conceptual		(6 credits)
Take two courses from the following:		6
CM-103	Survey of Radio and Television	
CM-106	Communications and the Internet	
CM-150	Photography I	
CM-210	Special Topics in Communication (as approved)	
CM-241	Understanding Movies	
CM-242	Understanding Video Games	
CM-250		
or MU-250	Music of the Cinema: Spectacle, Splendor, And Spielberg	
CM-285	History of Photography	
or AR-285	History of Photography	
Experiential		(9 credits)

Take three courses from the following: 9

CM-108	Introduction to Animation	9
or AR-105	Introduction to Animation	
CM-151	Introduction to Digital Photography	9
CM-160	Introduction to Digital Imaging	
CM-210	Special Topics in Communication	9
CM-244	Graphic Design	
CM-259	Television Production	9
CM-260	Introduction to Video	
CM-315	Social Media	9
CM-366	Scriptwriting	

Specialist (6 credits)

Take two courses from the following: 6

CM-206	Digital Storytelling	6
CM-210	Special Topics in Communication	
CM-231	Photography II	6
CM-344	Graphic Design II	
CM-359	Documentary Production	6
CM-360	Television Production II	
CM-390	Independent Media and Society	6
CM-396	Video Editing	
CM-410	Seminar: Topics in Communication (as approved)	6
CM-435	Communication Internship	

Total Credits 42

Sample Timetable for Completion of Degree Communication/ Concentration Digital Media Production

Year One

Semester One		Credits
LASC	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I	3
CM-100	Intro to Mass Communication	3
CM-110	Public Speaking	3
LASC	LASC Elective (USW) (p. 51)	3
Credits		15

Semester Two

EN-102	College Writing II	3
CM-105	Media Writing	3
CM-241	Understanding Movies	3
LASC	LASC Elective (CON) (p. 38)	3
LASC	LASC Elective (QR) (p. 50)	3
Credits		15

Year Two

Semester Three

CM-150	Photography I	3
or CM-103	or Survey of Radio and Television	
CM-213	Gender and the Media	3
or CM-390	or Independent Media and Society	
LASC	LASC Elective (NSP) (p. 49)	4
LASC	LASC Elective (GP) (p. 42)	3
LASC	LASC Elective (HBS) (p. 44)	3
Credits		16

Semester Four

CM-259	Television Production	3
or CM-260	or Introduction to Video	
CM-315	Social Media	3
LASC	LASC Elective (TLC) (p. 53)	3
LASC	LASC Elective (CA) (p. 39)	3
LASC	LASC Elective (NSP) (p. 49)	3
Credits		15

Year Three

Semester Five

CM-151	Introduction to Digital Photography	3
CM-244	Graphic Design	3
CM-363	Visual Media Literacy	3
SELECT	CM Major Elective	3
LASC	LASC Elective (ICW) (p. 46)	3
Credits		15

Semester Six

CM-206	Digital Storytelling	3
or CM-231	or Photography II	
CM-359	Documentary Production	3
or CM-360	or Television Production II	
CM-384	Media Criticism	3
CM-435	Communication Internship	3-12
SELECT	General Elective	3
Credits		15-24

Year Four**Semester Seven**

CM-450	Senior Communication Capstone	3
CM-396	Video Editing	3
SELECT	CM Elective or Internship	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15

Semester Eight

CM-350	Intercultural Communication	3
CM-404	Independent Study: Media	1-6
SELECT	CM Elective	3
SELECT	CM Elective or Internship	3
SELECT	General Elective	3
Credits		13-18
Total Credits		119-133

Once LASC requirements are satisfied, students may select general requirements. Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

¹ Recommended Electives

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Communication Minor

Requirements for a Minor in Communication

Code	Title	Credits
CM-100	Intro to Mass Communication	3
CM-110	Public Speaking	3
Select 4 electives in Communication including at least one course at the 300-level or higher.		12
Total Credits		18

Master's of Science in Communication (MSC) Program

Worcester State University/Clark University School of Professional Studies MSC Degree Program

Through a cooperative program between Worcester State University and Clark University, qualified Communication majors and minors during their senior year can work towards a Master of Science in Communication (MSC), while concurrently completing their baccalaureate degree.

Criminal Justice

Department of Criminal Justice

This major offers students a greater awareness of social services, judicial practice and court proceedings, law enforcement, corrections, fraud examination, public policy, emergency management, security, loss prevention, compliance, law, intelligence, juvenile justice, forensics, victim services, and other helping fields.

Criminal Justice courses allow students to explore critical thinking in an experiential environment by participating in mock investigations and trials and by participating in internships with corrections facilities, district courts, state or federal government agencies, and a vast array of social services organizations. Students are eligible to apply for internships in a criminal justice related organization during their junior year.

Baccalaureate degree holders will be prepared to seek employment positions in local, state, and federal organizations and private companies, or they may continue their education to complete a master's degree in Criminal Justice or a law degree.

A minor in Criminal Justice or Forensic Science, when paired with a major from a program from the School of Humanities and Social Sciences, will significantly broaden students' prospective career paths, equipping them with in-demand marketable skills.

Faculty

Criminal Justice faculty members are multi-faceted and active in the discipline. As Criminal Justice is an Interdisciplinary program, faculty specialties include Public Policy, Law, Public Administration, Sociology, Criminology, and Criminal Justice. Faculty are highly engaged in research and routinely involve students. Faculty are members of the American Society of Criminology, Academy of Criminal Justice Sciences, and regional associations related to Criminal Justice, Sociology, Juvenile Justice, Corrections and Law.

Requirements

Students must maintain a minimum overall GPA of 2.0 in the major, consistent with Worcester State University policy.

Evening and Summer Criminal Justice Courses

Core courses, though not offered in an online format, are available as evening courses. Elective courses are offered in the evening and online during the regular academic calendar as well as during the summer sessions. Many courses are available in online and blended formats (in-class and online blend).

Alpha Phi Sigma National Criminal Justice Honor Society

Students who challenge themselves to lead by example in all aspects of their academic environment become excellent candidates for induction into the Alpha Phi Sigma National Criminal Justice Honor Society. Membership in the Honor Society highlights outstanding students who exhibit self-motivation and exceed expectations. Prospective students with a GPA of 3.3 or higher can benefit from membership; it is highly recommended for adding to the resume.

Criminal Justice Club

Students are encouraged to join the CJ Club, a student-run club assisted by a Faculty Adviser. The Club serves as a conduit for students to network with peers, meet with guest speakers, attend the annual Career Fair, and take part in field trips and special events designed to broaden career choices and offer opportunities unique to each students' particular path.

- Criminal Justice Major (p. 333)
- Criminal Justice Minor (p. 334)
- Homeland Security Minor (p. 335)

Faculty

Mark H. Beaudry, Associate Professor (2018), A.S., Mount Wachusett Community College; M.S., B.S., Northeastern University; Ph.D., Capella University

Aimée Delaney, Professor (2013), B.A., M.A., C.A.G.S., (Domestic Violence) University of Massachusetts, Lowell; Ph.D., University of New Hampshire

Hyesun Kim, Department Chair, Professor (2010), B.A., Dongguk University, South Korea; M.A., Ewha Women's University, South Korea; M.A., John Jay College of Criminal Justice; Ph.D., Indiana University of Pennsylvania

Penny Martin, Associate Professor (2003), B.S., Weber State College, Utah; M.A., Humboldt State University; Ph.D., University of Miami

Stephen A. Morreale, Professor (2007), B.S., University of Massachusetts, Boston; M.P.A., Golden Gate University; D.P.A., Nova Southeastern University

Francis G. Olive III, Associate Professor (2016), B.S., Our Lady of the Elms College; M.C.S.W., Fordham University; Ph.D., University of New Haven

John R. Tahiliani, Professor (2008), B.A., King's College; M.A., Ph.D., Washington State University

Courses

CJ-101 Introduction to Criminal Justice

LASC Categories: GP, HBS, ICW

This course provides a general introduction to the criminal justice system, including the historical development, fundamental principles, and legal framework of the criminal justice system in the United States and around the world. It examines the various components of the criminal justice system, including law enforcement, courts, and corrections, assessing their effectiveness in promoting public safety and ensuring justice. The course also explores various theoretical perspectives on criminal behavior and ethical considerations for criminal justice professionals.

Fall and Spring and every year. 3 Credits

CJ-102 Introduction to Corrections

Prerequisites: CJ-101

Corrections is described as a study of the historical and contemporary views that examine the punishment of crime, offender management, and rehabilitation. This course focuses on correctional philosophy, theory, and practices. It further explores sentencing, jails, prisons, probation, parole, correctional policies, agencies, prison life, treatment, challenges facing correctional populations, and reentry.

Fall and Spring and every year. 3 Credits

CJ-103 Evidence Collection and Crime Scene Preservation

Prerequisites: CJ-101. Forensic Science minors must take BT-101 as the prerequisite for this course.

This course provides students with a theoretical framework for the practice of evidence collection and crime scene preservation. Various techniques and protocols for investigation will be reviewed and linked to methods of collection of physical evidence, as well as the interpretation, accountability and preservation of data. Techniques of documentation and case preparation will also be explored.

Fall only and every year. 3 Credits

CJ-111 Law Enforcement and Society

Prerequisites: CJ-101

The structure and function of law enforcement agencies in contemporary society will be analyzed in their sociological context. Particular emphasis will be placed on the role of the police within the framework of the Criminal Justice System.

Fall and Spring and every year. 3 Credits

CJ-130 Introduction to Cybersecurity for Criminologists

The unauthorized access or loss of criminal justice data due to a cyberattack has serious operational and privacy implications. This course will focus on the importance of cybersecurity needs to be considered that may compromise a public agency's ability to protect life and maintain order. This could potentially affect the public's confidence in criminal justice agencies, thus eroding trust and credibility.

Alternating and every year. 3 Credits

CJ-193 Special Topics for First-Year Students

LASC Categories: FYS

Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.

Every year. 3 Credits

CJ-203 Theories of Crime

Prerequisites: CJ-101

This course explores the prominent theories of crime causation, including biological, psychological, sociological, and cultural explanations. In this course, students also learn the implications of these theories for policy making within the criminal justice system.

Fall and Spring and every year. 3 Credits

CJ-204 Introduction to Research in Criminal Jus**Prerequisites:** CJ-203

This course provides an overview of research concepts, designs, and applications within the content areas of criminal justice. Reasoning, concept construction, theoretical frameworks, ethical principles, and professional writing conventions are examined.

Fall and Spring and every year. 3 Credits

CJ-205 American Judicial System**Prerequisites:** CJ-101

An examination of the development of law and the American legal system. The problems related to the meaning and uses of law: the organizational hierarchy of the courts: and the role of the courts in the criminal justice systems.

Fall and Spring and every year. 3 Credits

CJ-208 Systems of Addictions Treatment**Prerequisites:** HE-285 or CJ-285

This course provides an overview of counseling modalities and techniques used in addiction treatment and recovery settings, including for those with co-occurring disorders. A family systems approach will be employed to understand how the Criminal Justice System, the Mental Health System, and the larger community relate. Legal and regulatory restrictions, ethical codes, and legal sanctions also are discussed.

Fall and Spring and every year. 3 Credits

CJ-211 Victimology**Prerequisites:** CJ-101

Criminal-victim relationships, with emphasis on victim-precipitated crimes and compensation to the victims.

Every 2-3 years. 3 Credits

CJ-212 Homeland Security

The course is designed to introduce students to the established Department of Homeland Security. The course will examine issues such as interdepartmental workings, legal restrictions placed on the DHS mandates, how the DHS interacts with both domestic and international agencies, and how effective has the DHS been since its inception.

Alternating and every year. 3 Credits

CJ-215 Art Crimes**LASC Categories:** TLC, HBS

This course explores a variety of criminal offenses involving the production, consumption, distribution, and display of art, including graffiti/street art, forgery, theft, vandalism, rights infringement, and indecent and politically subversive art. The course examines these offenses from an interdisciplinary perspective, including law, criminology, aesthetics, economics, and cultural studies. Art crimes are examined from the international level to the local. (This course does not count as a Criminal Justice elective for Criminal Justice majors.)

Every 2-3 years. 3 Credits

CJ-216 Cybercrime**Prerequisites:** CJ-101.

Cybercrime has grown in visibility and importance during the last two decades. There is growing public interest in cybercrime and identity theft and its consequences for businesses and individuals, only scant attention has been given to investigation and understanding of this crime. The focus of this course is to introduce students to the technical, social and legal aspects of cybercrime while exposing students to theories, tools and approaches to preventing and investigation of Cybercrime.

Every 2-3 years. 3 Credits

CJ-217 Criminal Justice and Cultural Studies Abroad

This course is designed to provide students with an opportunity to explore culture, crime, and criminal justice systems overseas by attending international programs held in foreign countries. This course includes a study of criminal justice practices and systems through field studies, lectures, seminars, workshops, and the like. Further, students are exposed to diverse cultural experiences and events throughout the program.

Every 2-3 years. 3-6 Credits

CJ-218 Emergency Management

This course covers topics such as risk identification and assessment of natural hazards such as an environmental event or a human-made hazards such as violence in the workplace. The course also covers the development of crisis and disaster incident management programs. Students are required to take the assigned Federal Emergency Management Agency online course and a certificate is optional.

Alternating and every 2-3 years. 3 Credits

CJ-230 Leading Criminal Justice Organizations**Prerequisites:** CJ-101 and CJ-102 and CJ-111

An examination of organizational and leadership theory and its applications within criminal justice organizations. Consideration of the principles of organization and methods adopted by progressive agencies to effectuate change and ensure effective criminal justice service to the community.

Every 2-3 years. 3 Credits

CJ-250 Quantifying Crime**LASC Categories:** QAC**Prerequisites:** Score of 3 or higher on math

Accuplacer or passing grade in college level math class.

Students are provided with an overview of statistics used in criminal justice and criminology. The course covers topics including constructing testable research questions in the study of crime, organizing data, applying appropriate statistical tests, and interpreting results. This course also teaches students how to evaluate government data, technical reports, and empirical studies which summarize criminal justice data. Specific topics may include measuring crime, calculating crime hot spots, and crime mapping.

Every 2-3 years. 3 Credits

CJ-285 Drugs and Society

This course examines the history of alcohol and other mood changing drugs in the U.S, the myths and stereotypes of alcohol and drug use, sociocultural factors that contribute to the use of drugs, and the patterns and progression of substance use disorders.

Every 2-3 years. 3 Credits

CJ-301 Juvenile Procedure**Prerequisites:** CJ-101, CJ-201/CJ-111, CJ-202/CJ-102, CJ-205.

An examination of the underlying philosophy of juvenile justice and procedures used to process a juvenile alleged to be delinquent through the juvenile justice system. The course will focus on the differences between juvenile procedure and adult criminal procedure by examining recent court decisions and statutory law pertaining to juveniles.

Every 2-3 years. 3 Credits

CJ-302 Criminal Law**Prerequisites:** CJ-101 and CJ 205

The function of criminal law and its relationship to various criminal offenses, including crimes against persons and crimes against property.

Fall and Spring and every year. 3 Credits

CJ-305 Principles of Evidence and Proof**Prerequisites:** CJ-101 and CJ-205.

This course analyzes federal and state rules of evidence in criminal proceedings, focusing on the relationship between evidence and proof. The course also examines issues related to the collection and seizure of admissible physical evidence, the role of privileges, and the interrogation of the accused.

Spring only and every 2-3 years. 3 Credits

CJ-306 Contemporary Issues in Corrections**Prerequisites:** CJ-101, CJ-201/CJ-111, CJ-202/CJ-102, CJ-205.

This course is designed to examine contemporary issues in the field of corrections. The focus of this course will include jails, prisons and community corrections and will examine current issues in: correctional administration, inmate management, mental health, rehabilitation programs, and reentry and reintegration.

Every 2-3 years. 3 Credits

CJ-307 Contemporary Issues in Law Enforcement**Prerequisites:** CJ-101, CJ-201/CJ-111, CJ-202/CJ-102, CJ-205.

An intensive analysis of selected problems in American law enforcement and police-community relations. A major research paper is required.

Every 2-3 years. 3 Credits

CJ-310 Organized and White Collar Crime**Prerequisites:** CJ-101, CJ-201/CJ-111, CJ-202/CJ-102, CJ-205.

The methods through which organized crime influences and, in many instances, controls entire communities. Traditional types of crime heavily influenced by organized crime, such as loan sharking and gambling, will be analyzed in an effort to demonstrate the basis of power and wealth of organized crime in the United States.

Every 2-3 years. 3 Credits

CJ-320 Criminal Procedure**Prerequisites:** CJ 205, or its equivalent or permission of the instructor

A study of the basic constitutional rights associated with the investigation, prosecution, and trial of criminal cases, and how the U.S. Supreme Court and other appellate courts have interpreted those rights.

The course focuses on law enforcement practices including arrests, lineups, interrogations, searches and seizures, and in court processes including pre-trial proceedings, trial, and sentencing.

Every 2-3 years. 3 Credits

CJ-322 Gangs

This course will offer an in-depth study of gangs in the United States. Topics to be examined include various theories of gang formation, group dynamics, and individual factors associated with gang membership. Attention will also be given to the different types of gangs that exist. Given these dynamics, the final portion of the course will focus on prevention and intervention efforts aimed at reducing gang behavior.

Every 2-3 years. 3 Credits

CJ-325 Capital Punishment

This course focuses on capital punishment law, particularly United States Supreme Court decisions addressing constitutional issues relevant to the death penalty. Students also will explore empirical, penological, political, and moral issues related to the death penalty and its administration.

Every 2-3 years. 3 Credits

CJ-327 Race, Ethnicity and Criminal Justice

Prerequisites: CJ-205

An examination of the issues of race and ethnicity which continue to affect all aspects of criminal justice in America. Whether as offenders, victims, or as persons working (or seeking to work) within the system, African Americans, Hispanics, and other minorities are treated differently than non-minorities. This course explores the core concepts of race and ethnicity as they have developed in our culture, and examines the evidence for and against various forms of racism and discrimination in key institutions of the criminal justice system. The nature and status of constitutional, statutory, and other remedies are also explored.

Every 2-3 years. 3 Credits

CJ-329 Crime and the Media

The course will deal with issues related to the mass media and crime in society. The increasing importance of the mass media in shaping peoples perception of attitudes toward the criminal justice system will be focused on. Other topics will include the media as a cause and cure for crime, biases in the media coverage, the effects of the media on criminal proceedings and crime on television and in films.

Every 2-3 years. 3 Credits

CJ-332 Violent Crime

Prerequisites: CJ-101, CJ-203 and CJ-205

This course focuses on the study of violence and crime in America through exploring historical perspectives, examining diverse acts of violence, assessing relevant criminology theory regarding the genesis of violent behavior, considering media coverage, and reviewing trends in national and international data on violence. Specific violent crimes such as homicide, family violence, sexual assault, workplace violence, youth violence, and serial crimes will be surveyed. Acts of official violence, such as capital punishment and police brutality, will also be examined along with their impact on society.

Every 2-3 years. 3 Credits

CJ-333 Terrorism

Prerequisites: CJ-101, CJ-201/CJ-111

This course will explore the development of terrorism as a form of crime. Topics to be studied include major terrorist groups and their strategies, tactics and targets, jurisdictional issues, anti- and counter-terrorist operations, federal law enforcement, and future trends in terrorism.

Fall and Spring and every 2-3 years. 3 Credits

CJ-334 Drugs, Crime and Society

Prerequisites: CJ-101.

This course will present an overview of the problems of drug-related crime in contemporary society. Specific drug substances are discussed, as well as legal, cultural, and social factors in connection with drug law enforcement.

Every 2-3 years. 3 Credits

CJ-335 Comparative Criminal Justice Systems**Prerequisites:** CJ-205

Increasingly, practitioners in the American criminal justice systems are required to interact with their counterparts, as well as citizens from other national jurisdictions. Effective interaction, including cooperation and sharing, requires some understanding of how criminal justice is conceived and practiced in other parts of the world. This course examines and compares key institutions of the criminal justice systems in six model countries, two in Europe, two in Asia, one Islamic nation, and one from Latin America. We look not only at formal organizations in each country, but also at actual practices and how they compare with each other and the United States. To understand how differences and similarities have developed, we also learn something of the history, culture, political system and economic conditions of each model country.

Every 2-3 years. 3 Credits

CJ-337 Criminal Justice Ethics**Prerequisites:** CJ-101

This course investigates the application of moral logic to problems in the field of criminal justice. Issues related to policing, criminal prosecution, and corrections will be studied. Students will be encouraged to induce general moral precepts and rules from the examination of particular situations and problems.

Every 2-3 years. 3 Credits

CJ-338 Issues in Contemporary Security

An overview of security systems applicable to contemporary industrial and commercial demands. Losses through physical, technological, and personnel hazards are viewed as preventable phenomena if vulnerabilities are recognized and ameliorative measures taken. Counter-measures will be weighed within the framework of loss criticality and cost of effectiveness.

Every 2-3 years. 3 Credits

CJ-340 Special Topics in Criminal Justice

An in-depth study of a limited or specialized area within the criminal justice field. Course content will vary according to the area of specialization of the instructor and the interest of the students. May be repeated if course content differs.

Other or on demand. 3 Credits

CJ-351 Applied Research**Prerequisites:** CJ-101 and CJ-204.

Students will work directly with one or more of the department faculty member(s) on new or ongoing research focused on a criminal justice topic and will gain practical experience in the research methodology appropriate to the research project. Topics will vary each semester by research needs of the Criminal Justice faculty.

Alternating and every year. 3-9 Credits

CJ-352 Principles of Investigation**Prerequisites:** CJ-101 and CJ-201/CJ-111.

This course provides students with a theoretical framework for the practice of investigation in both the private and public sectors. Various techniques and protocols for investigation will be explored including infractions and ethics investigations and background investigations. Students will link these methods to the collection of physical evidence, interpretation and preservation of data, rules of evidence, techniques of documentation, along with interview and interrogation approaches.

Every 2-3 years. 3 Credits

CJ-354 Addictions Counseling of Individuals and Families**LASC Categories:** ICW**Prerequisites:** HE-285 or CJ-285

This course provides students with an applied understanding of counseling skills, techniques, and strategies in addiction treatment. The psychology of addictions and various treatment modalities are discussed. Engagement, assessment, treatment planning, brief and ongoing treatment, continuing care, and work with special populations are considered. Dialectical behavior therapy, cognitive-behavioral, mindfulness practice techniques, and motivational interviewing concepts are introduced, and students apply them in role-playing scenarios. Boundaries, ethics, and counselor self-awareness are also covered.

Fall and Spring and every year. 3 Credits

CJ-371 Strategic Planning**Prerequisites:** CJ-101

This course is designed to acquaint students with general theories of planned change at the individual, organizational, and community levels. Special attention will be given to the need for employee involvement and collaboration in working toward organizational goals, with reference to concepts such as reinventing government and total quality management. The emphasis will be on applied theory. Students will be expected to develop their own ideas for change in the fields of policing, courts, or corrections. They would then be required to consider the resistances that would likely arise as their changes are introduced, and how they should best be dealt with, considering planned change theories from the course.

Every 2-3 years. 3 Credits

CJ-398 Criminal Justice Internship**Prerequisites:** CJ-101 and CJ-102 and CJ-111 and CJ-203

Criminal Justice internship involves student field-based work experience within selected agencies of the criminal justice system or allied helping agencies. This course is designed to provide students with an opportunity to translate theoretically oriented classroom principles into practical application.

Fall and Spring and every year. 3-6 Credits

CJ-399 Independent Study in Criminal Justice

Individual research and independent study related to a particular aspect of criminal justice that is of special interest.

Every year. 3-6 Credits

CJ-400 Criminal Justice Capstone**LASC Categories:** CAP

Prerequisites: CJ-101, CJ-102/CJ-202, CJ-111/CJ-201, CJ-203/CJ-121, CJ-205, and CJ-331/204. Provide students the opportunity to engage in a culminating experience in which they use critical thinking skills to analyze, integrate, and synthesize the knowledge gained in their major program of study. Students will apply that knowledge and critical thinking skill to the exploration of issues and concerns/problems of the profession in preparation of future employment and/or graduate education.

Fall and Spring and every year. 3 Credits

CJ-401 Forensic Science Senior Seminar**Prerequisites:** BT-101 and CJ-103

The senior seminar is designed to bring together the diverse areas of knowledge that the student has gained in the area of forensic science. It is a synthesis of classroom knowledge applied to real world forensic science issues. Topics covered emphasize the use of critical thinking skills to analyze, integrate and synthesize research and case studies relevant to the forensic sciences.

Spring only and every year. 3 Credits

CJ-406 The 12 Core Functions of Addictions Counseling**Prerequisites:** HE-285 or CJ-285 Take CJ-208 or HE-208; Take PS-270 or HE-270; Take CJ-354 or HE-354;

This culminating course prepares students to enter the field of substance use disorders and/or addictions counseling through an intensive review of the 12 Core Functions of Addictions Counseling. Students further develop the skill sets from prior coursework to serve as a foundation for gaining practical experience in addictions counseling.

Fall and Spring and every year. 3 Credits

CJ-407 Pre-Practicum Seminar in Addictions Counseling**Prerequisites:** PS-101 Take HE-285 or CJ-285; Take HE-270 or PS-270; Take HE-208 or CJ-208; Take HE-354 or CJ-354;**Prerequisites or Corequisite:** CJ-406 or HE-406

The course is designed for students who wish to complete the course Practicum in Addictions Counseling in pursuit of CADC licensure. Students are prepared for fieldwork through practice of counseling techniques, reviews of case studies, and study of counseling theories. All core functions of addictions counseling are reviewed and reinforced, with particular emphasis on assessment, counseling, and case management. Students practice in role play using a variety of modalities while considering the needs of special populations and the opportunities and constraints of various treatment settings. Ethical and legal considerations for addictions counselors are also explored. Open to Addictions Counseling Certificate

Fall and Spring and every year. 3 Credits

CJ-408 Directed Study: Criminal Justice

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

Other or on demand. 3 Credits

CJ-409 Practicum in Addictions Counseling

Prerequisites: CJ-407 or HE-407

Field experience in which students complete 150 hours of direct care experience in a substance use disorders counseling setting. To qualify for CADC licensure, the practicum must be repeated for a total of 300 hours and 6 credits. Course may be repeated.

Fall and Spring and every year. 3 Credits

Program Learning Outcomes

- Possess the capacity to comprehend and evaluate qualitative and quantitative social science research, including at least a basic familiarity with introductory level statistical concepts.
- Comprehend the Constitutional concepts and values of due process, equal protection, and fundamental fairness in policing, courts and corrections.
- Demonstrate the capacity for ethical and moral reasoning in all aspects of the criminal justice curriculum.
- Comprehend the nature and significance of gender, racial, ethnic-cultural, and class issues in the administration of criminal justice.
- Demonstrate sufficient writing, research, communications, and computer literacy skills to enable graduates to obtain bachelor-level entry in criminal justice and applied professional fields, or alternatively, to pursue graduate studies in such fields and disciplines.
- Be able to employ critical reasoning skills across criminal justice curriculum.
- Demonstrate familiarity with both traditional and contemporary theories of crime causation, and their implications for public policy.
- Be cognizant of the history, development, fundamental concepts, and current operation of American law and our principal criminal justice

institutions, together with their relationships to each other and to the larger social and political context.

Criminal Justice Major

The Bachelor of Science degree in Criminal Justice is a 120 credit-hour program. It is an interdisciplinary major, predicated on a common core of the humanities, social sciences, mathematics, and physical sciences. The goal of the program is to develop in students critical thinking skills and an increased analytical awareness of the role of law enforcement agencies, courts, correctional institutions, human services, and social advocacy venues in the criminal justice system. The curriculum includes coursework to provide students with awareness of recent advances in human dynamics, civil rights legislation, information technology and security, cybercrime, intelligence organizations, and leadership roles.

The course of study consists of an extensive overview of the criminal justice system and an intensive examination of each of the major components of the system. The program is designed to serve students who may elect to enter the criminal justice profession immediately upon graduation, students of the liberal arts with professional interest in criminal justice, and students who desire to pursue graduate or law school. Criminal Justice majors are able to apply for an internship during their junior year.

To request an application form, please call the Admissions office at 508-929-8040.

Requirements for a Major

42 credits in criminal justice, of which 22 must be completed at Worcester State University.

Code	Title	Credits
Major Core		(24 credits)
CJ-101	Introduction to Criminal Justice	3
CJ-102	Introduction to Corrections	3
CJ-111	Law Enforcement and Society	3
CJ-203	Theories of Crime	3
CJ-204	Introduction to Research in Criminal Jus	3
CJ-205	American Judicial System	3

CJ-302	Criminal Law	3
CJ-400	Criminal Justice Capstone	3
Criminal Justice Electives		(18 credits)
Select 18 credits		18
Total Credits		42

Sample Timeline for Completion of Degree: Criminal Justice

Year One

Semester One		Credits
LASC	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I	3
CJ-101	Introduction to Criminal Justice	3
MA-099	Developmental Math: Algebra (or higher based on Accuplacer score)	3
LASC	LASC Elective (CON) (p. 38)	3
Credits		15

Semester Two

EN-102	College Writing II	3
LASC	LASC Elective (TLC) (p. 53)	3
CJ-102	Introduction to Corrections	3
CJ-111	Law Enforcement and Society	3
LASC	LASC Elective (QR) (p. 50)	3
Credits		15

Year Two

Semester Three

CJ-203	Theories of Crime	3
CJ-205	American Judicial System	3
LASC	LASC Elective (GP) (p. 42)	3
LASC	LASC Elective (HBS) (p. 44)	3
LASC	LASC Elective (USW) (p. 51)	3
Credits		15

Semester Four

CJ-302	Criminal Law	3
CJ	Elective Course in Major	3
LASC	LASC Elective (NSP) (p. 49)	4
LASC	LASC Elective (CA) (p. 39)	3
LASC	LASC Elective (ICW) (p. 46)	3
Credits		16

Year Three

Semester Five

SELECT	CJ Elective	3
--------	-------------	---

SELECT	CJ Elective	3
LASC	LASC Elective (NSP) (p. 49)	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15

Semester Six

CJ-204	Introduction to Research in Criminal Jus	3
SELECT	CJ Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15

Year Four

Semester Seven

CJ-400	Criminal Justice Capstone	3
SELECT	CJ Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15

Semester Eight

SELECT	CJ Elective	3
SELECT	CJ Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		12
Total Credits		118

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Criminal Justice Minor

The Criminal Justice minor is a 21 credit-hour program comprised of 12 major core credits and nine elective credits. Similar to the Criminal Justice major, the minor is an interdisciplinary course of study. This minor can complement a major in Communications, Sociology, Psychology, Computer Science, Urban Studies, History, or other related majors. Students of interdisciplinary studies can benefit from this minor

if they have an interest in pursuing a career within the scope of criminal justice organizations, human services, and social advocacy.

The curriculum provides an intermediate level of exposure to the major components of the criminal justice industry, such as law enforcement and corrections, judicial procedure, and other avenues, depending upon the electives chosen.

Requirements for a Minor

7 courses comprising 4 core courses and three electives.

Code	Title	Credits
Core Courses		(12 credits)
CJ-101	Introduction to Criminal Justice	3
CJ-102	Introduction to Corrections	3
CJ-111	Law Enforcement and Society	3
CJ-205	American Judicial System	3
Criminal Justice Electives		(9 credits)
Select three courses		9
Total Credits		21

Students will need to obtain a Declaration of Major/Minor from the Registrar's Office and obtain signature of CJ Department Chair. Students seeking entry into the CJ minor must obtain the signature of the CJ Department Chair.

Homeland Security Minor

Homeland Security Minor Requirements

Code	Title	Credits
Required Courses		(18 credits)
CJ-101	Introduction to Criminal Justice	3
CJ-212	Homeland Security	3
CJ-218	Emergency Management	3
<i>Elective Courses - choose 3 courses (9 credits)</i> ¹		9
CJ-216	Cybercrime	
CJ-307	Contemporary Issues in Law Enforcement	

CJ-322	Gangs	
CJ-333	Terrorism	
CJ-335	Comparative Criminal Justice Systems	
CJ-337	Criminal Justice Ethics	
CJ-338	Issues in Contemporary Security	
CJ-340	Special Topics in Criminal Justice	
CJ-352	Principles of Investigation	
CJ-371	Strategic Planning	
CJ-399	Independent Study in Criminal Justice	
CJ-408	Directed Study: Criminal Justice	
Total Credits		18

¹ One course MUST be at the 300 level or above.

This program would introduce students to the field of homeland security and its many functions. Courses will be specifically focused on terrorism, emergency management, cybercrime, and federal & international law enforcement. The program provides a panoramic view of the diverse issues affecting federal criminal justice agencies and crime. It also addresses public and private security partnerships.

Homeland Security Minor Requirements for Criminal Justice Majors

Code	Title	Credits
<i>Required Courses</i>		
CJ-212	Homeland Security	3
CJ-218	Emergency Management	3
<i>Elective Courses - Choose 4 courses</i>		<i>12</i>
CJ-216	Cybercrime	
CJ-307	Contemporary Issues in Law Enforcement	
CJ-322	Gangs	
CJ-333	Terrorism	
CJ-335	Comparative Criminal Justice Systems	
CJ-337	Criminal Justice Ethics	
CJ-338	Issues in Contemporary Security	
CJ-340	Special Topics in Criminal Justice	

CJ-352	Principles of Investigation
--------	-----------------------------

CJ-371	Strategic Planning
--------	--------------------

CJ-399	Independent Study in Criminal Justice
--------	--

CJ-408	Directed Study: Criminal Justice
--------	-------------------------------------

None of the courses in this minor will double count towards the Criminal Justice Major.

Total Credits

18

Economics

Department of Business Administration and Economics

The economics program is designed to help students understand the world they live in, analyze important social issues, and adapt to a changing economic climate.

- Economics Major (p. 340)
- Economics Minor (p. 343)

Faculty

Bonnie Orcutt, Professor (2003), B.S., Worcester State College; M.A., Ph.D., Clark University

Elizabeth J. Wark, Professor (2007), B.A., Mount Holyoke College; M.B.A., University of Massachusetts; M.A., Ph.D., Clark University

Janice G. Yee, Professor (2007), B.A., University of Massachusetts, Dartmouth; M.A., Ph.D., Clark University

BA courses that will count towards the major or minor in Economics

Students pursuing a major or minor in Economics may elect to use **ONE** of the following BA courses to count towards their electives in the EC major/minor that may also count within the electives of the BA minor. (Note: There are 15 credits of electives in the EC major, 12 credits of electives in the EC minor, and 12 credits of electives in the BA minor.)

Code	Title	Credits
BA-316	Financial Management	3
BA-404	Corporate Finance	3
BA-415	Investment Analysis	3
BA-416	Financial Markets and Institutions	3

EC courses that will count towards the major in Economics and the minor in Business Administration

Students pursuing a major in Economics and a minor in Business Administration may use **ONE** of the following EC courses to count both within the 12 credits of elective courses for the BA minor AND within the 15 credits of electives for the EC major.

Code	Title	Credits
EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

EC courses that will count towards the major in Business Administration and a minor in Economics

Students pursuing a major in Business Administration and a minor in Economics may use **TWO** of the following EC courses to count in both within the 12 credits of elective courses for the BA major AND within the 12 credits of electives for the EC Minor:

Code	Title	Credits
EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

EC courses that will count towards the major in Business Administration

Students pursuing a major in Business Administration may use **TWO** of the following EC courses to count within the 12 credits of electives for the Business Administration major.

Code	Title	Credits
EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

EC courses that will count towards meeting the requirements of the International Business concentration

A maximum of two of the EC courses listed below may be used.

Code	Title	Credits
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

EC courses that will count towards meeting the requirements of the Finance Concentration

Code	Title	Credits
EC-205	Money, Banking, and Monetary Policy	3
EC-307	International Finance	3

BA courses and EC courses that will count towards meeting the requirements of a double major in Business Administration and in Economics

Students pursuing a double major in Business Administration and Economics may use:

TWO of the following EC courses to count within the 12 credits of elective (concentration) courses for the BA major, and

ONE of the following BA courses to count within the 15 credits of elective courses for the EC major.

Code	Title	Credits
EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3

EC-307	International Finance	3
EC-308	International Trade	3
BA-316	Financial Management	3
BA-404	Corporate Finance	3
BA-415	Investment Analysis	3
BA-416	Financial Markets and Institutions	3

EC-102 Consumer Economics

LASC Categories: ICW

An in-depth study of personal and family economics, obtaining income, buying wisely, consumer borrowing, saving, and financial investment; the consumer protection and consumer legislation movements will be specifically emphasized.

3 Credits

EC-104 Personal Financial Planning

LASC Categories: ICW

An investigation of the major vehicles for personal savings: bonds, stocks, mutual funds, real estate, and retirement and estate planning.

3 Credits

EC-110 Introduction to Microeconomics

LASC Categories: HBS

An introduction to the operation of the American market system and to the behavior of its participants whether consumers, producers, the government, or other nations engaged in international trade with the United States.

3 Credits

EC-120 Introduction to Macroeconomics

LASC Categories: HBS

An introduction to economic analysis with particular emphasis upon the national problems of achieving and maintaining full employment, general price stability, and growth of the American economy through time.

3 Credits

EC-150 Statistics

LASC Categories: QR

Prerequisites: EC-110 or EC-120

Basic tools of statistical analysis appropriate to research in the social sciences; topics include measures of central tendency, hypothesis testing, time series, index numbers, regression, and correlation.

3 Credits

EC-193 First Year Seminar Economics**LASC Categories:** FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

3 Credits

EC-200 Intermediate Macroeconomics**Prerequisites:** EC-110 and EC-120

An intermediate analysis of the determination of the level and growth of national income and employment, special attention given to the problems of inflation and recession and to the national fiscal and monetary policies designed to maintain full employment and stable price levels.

3 Credits

EC-201 Intermediate Microeconomics**Prerequisites:** EC-110 and EC-120

An intermediate level treatment of the theory of market pricing in a private enterprise system as it affects the resource and output decision of firms and industries under various market structures and the behavior of consumers.

3 Credits

EC-202 Introduction to Mathematical Economics**Prerequisites:** EC-110, and EC-120 and MA-110 or MA-180 with a C- or above or math placement exam code of 6.

A survey of some basic mathematical techniques appropriate to the analysis of economic models and application of economic theory.

3 Credits

EC-205 Money, Banking, and Monetary Policy**Prerequisites:** EC-110 and EC-120

A study of the roles of money, depository institutions, and central bank monetary policy in maintaining stable growth of the American economy.

3 Credits

EC-206 Urban Economics**Prerequisites:** EC-110 and EC-120

The theory and policy of the growth and development of metropolitan areas; some of the policy-related problems discussed are poverty, residential and commercial land use and traffic congestion.

3 Credits

EC-208 Economics of Health Care**LASC Categories:** ICW, WAC**Prerequisites:** EC-110 and EN-102

Introductory study of the health care industry of the United States; pricing of health care, manpower availability, alternative delivery systems, third party payments, and government role in planning, regulating, and financing health care.

3 Credits

EC-210 Current Economic Issues**Prerequisites:** EC-110 EC-120

This course is designed to connect economic knowledge and theory acquired at the introductory level to current economic issues and policy. National and international topics of importance will be considered. For example, pollution, trends in productivity, profitability and distribution, debt and deficits, patterns of investment, trade, and globalization and the economic issues of race, gender and poverty may be covered.

3 Credits

EC-215 Labor Economics**Prerequisites:** EC-110 EC-120

A study of the process of wage determination in a market economy, consideration given to the evolution of union organization and collective bargaining affecting wages, hours, working conditions, and grievance procedures for labor.

3 Credits

EC-301 Economic Development**Prerequisites:** EC-110 and EC-120

A survey of contemporary economic theories concerning less developed countries; social, cultural, and political forces shaping the development of such countries are also investigated.

3 Credits

EC-304 Economics of the Environment**Prerequisites:** EC-110 and EC-120

Methods of pollution control and the socio-economic problems caused by pollution, current research on ecology and economics, and the impact that limits on pollution may have on income and population growth.

3 Credits

EC-306 Introduction to Econometrics**Prerequisites:** EC-110, EC-120 and MA-150 or EC-150

The application of statistical techniques to the verification of economic models and examination of economic problems.

3 Credits

EC-307 International Finance**Prerequisites:** EC-110 and EC-120

Study of how international trade and investment is financed in a world of floating, fixed and managed exchange rate systems.

3 Credits

EC-308 International Trade**LASC Categories:** GP**Prerequisites:** EC-110 and EC-120

Reasons why nations gain by spatial specialization and exchange with other countries. Analysis of the mechanism by which international equilibrium is restored. Study of trade and foreign exchange policies.

3 Credits

EC-309 Public Spending and Taxation**Prerequisites:** EC-110 and EC-120

An analysis of government spending, revenue sharing, and taxation; includes the impact of government spending upon efficient use of resources and national growth.

3 Credits

EC-400 Independent Study in Economics**Prerequisites:** EC-200 and EC-201.

For the student whose needs cannot be fully met by available offerings; actual arrangements to be made between student and professor; not intended for general enrollment; a limit of three credits can be acquired.

1-3 Credits

EC-402 Internship in Economics**Prerequisites:** EC-200 and EC-201 or permission of instructor

Practical experience in economic analysis with industry and non-profit organizations and government agencies; internships may be of varying length.

1-12 Credits

EC-403 Selected Topics in Economics**Prerequisites:** EC-200 and EC-201 or permission of instructor

Covers selected topics in economics of mutual interest to the student and faculty.

3 Credits

EC-408 Directed Study in Economics

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

1-3 Credits

EC-490 Capstone in Economics**LASC Categories:** CAP**Prerequisites:** EC-110 EC-120 EC-200 EC-201 or permission of instructor

Integrative capstone course in economics involving policy analysis and critical application of economic theories.

3 Credits

Program Learning Outcomes

- Demonstrate the ability to present orally and in writing a coherent, logical economic argument grounded in economic theory
- Read and assess articles of economics topics
- Articulate orally and in writing the core economic principles, concepts, and theories that form the foundation for economic analysis and economic research
- Investigate economic issues by synthesizing, building, and using theories and/or models to predict the behavior of economic agents
- Evaluate economic issues and real world problems through data analysis and the application of appropriate statistical techniques, quantitative, and/or qualitative methods

Economics Major

The B.S. in Economics will provide each student with knowledge of current economic thought and will develop students' understanding of the role played by economic institutions in society. Having completed a thorough program integrating economic theory and practice, students will be prepared to effectively participate in society as informed citizens to promote social well-being. Students will be prepared to succeed in a wide array of positions in business, government, and nonprofit organizations and will be able to successfully pursue graduate work in economics, and related fields, predominately at the Masters level. Qualified majors will have an

opportunity for honors and advanced coursework, intensive faculty interactions, national and regional competitions and activities, and economic research.

Graduates with a B.S. in Economics will be able to do the following:

- demonstrate the ability to present orally and in writing a coherent, logical economic argument grounded in economic theory;
- read and assess articles on economic topics;
- articulate orally and in writing the core economic principles, concepts and theories that form the foundation for economic analysis and economic research;
- investigate economic issues by synthesizing, building, and using theories/models to predict the behavior of economic agents; and
- evaluate economic issues and real world problems through data analysis and the application of appropriate statistical techniques, quantitative and/or qualitative methods.

Omicron Delta Epsilon, the international honor society in economics, is available to outstanding students.

Requirements for a Major in Economics

33 credits with EC designation

Code	Title	Credits
EC-110	Introduction to Microeconomics	3
EC-120	Introduction to Macroeconomics	3
EC-150	Statistics (or another acceptable statistics course)	3
EC-200	Intermediate Macroeconomics	3
EC-201	Intermediate Microeconomics	3
Select one of the following:		3
EC-202	Introduction to Mathematical Economics	
EC-306	Introduction to Econometrics (or a course in which calculus is a primary topic)	

The remaining 15 (or more) credits may be chosen from economics electives in accordance with special interests and career objectives

Total Credits 33

Students are encouraged to take an internship if their program permits.

Students pursuing a major in Economics and a minor in Business Administration may use one of the following EC courses to count both within the 12 credits of elective courses for the BA minor and within the 15 credits of electives for the EC major.

Code	Title	Credits
EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

Once LASC requirements are satisfied, students may select general requirements.

BA courses that will count towards the major or minor in Economics:

Students pursuing a major or minor in Economics may elect to use ONE of the following BA courses to count towards their electives in the EC major/minor that may also count within the electives of the BA minor. (Note: There are 15 credits of electives in the EC major, 12 credits of electives in the EC minor, and 12 credits of electives in the BA minor.)

Code	Title	Credits
BA-316	Financial Management	3
BA-404	Corporate Finance	3
BA-415	Investment Analysis	3
BA-416	Financial Markets and Institutions	3

EC courses that will count towards the major in Business Administration and a minor in Economics:

Students pursuing a major in Business Administration and a minor in Economics may use TWO of the following EC courses to count in both within the 12 credits of elective courses for the BA major AND within the 12 credits of electives for the EC Minor (maximum of 2 EC courses listed below):

Code	Title	Credits
EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

EC courses that will count towards meeting the requirements of the International Business concentration.

A maximum of two of the EC courses listed below may be used.

Code	Title	Credits
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3

EC courses that will count towards meeting the requirements of the Finance Concentration:

Code	Title	Credits
EC-205	Money, Banking, and Monetary Policy	3
EC-307	International Finance	3

BA courses and EC courses that will count towards meeting the requirements of a double major in Business Administration and in Economics:

Students pursuing a double major in Business Administration and Economics may use:

- TWO of the following EC courses to count within the 12 credits of elective (concentration) courses for the BA major, and
- ONE of the following BA courses to count within the 15 credits of elective courses for the EC major.

Code	Title	Credits
EC-205	Money, Banking, and Monetary Policy	3
EC-301	Economic Development	3
EC-307	International Finance	3
EC-308	International Trade	3
BA-316	Financial Management	3
BA-404	Corporate Finance	3
BA-415	Investment Analysis	3
BA-416	Financial Markets and Institutions	3

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Sample Timeline for Completion of Degree: Economics (for All Students Entering in Fall 2012 or Later)

The order of LASC courses indicated is only a sample. Students may select LASC courses that are available in any given term.

Year One

Semester One		Credits
LASC	First-Year Seminar (p. 41)	3
EN-101	College Writing I (WR)	3
EC-120	Introduction to Macroeconomics	3
EC-150	Statistics	3
LASC	LASC Elective (TLC) (p. 53)	3
Credits		15

Semester Two

EN-102	College Writing II (WR)	3
LASC	LASC Elective (CON) (p. 38)	3
EC-110	Introduction to Microeconomics	3
LASC	LASC Elective (QR) (p. 50)	3
LASC	LASC Elective (USW) (p. 51)	3
Credits		15

Year Two

Semester Three

SELECT	Economics Elective (#1)	3
LASC	LASC Elective (CA) (p. 39)	3
LASC	LASC Elective (NSP) (p. 49)	4
SELECT	General Elective	3
LASC	LASC Elective (HBS) (p. 44)	3
Credits		16

Semester Four

EC-202 or EC-306	Introduction to Mathematical Economics or Introduction to Econometrics	3
SELECT	Economics Elective (#2)	3
LASC	LASC Elective (NSP) (p. 49)	3-4
LASC	LASC Elective (GP) (p. 42)	3

LASC	LASC Elective (QR) (p. 50)	3
Credits		15-16
Year Three		
Semester Five		
EC-201	Intermediate Microeconomics	3
SELECT	Economics Elective (#3)	3
SELECT	General Elective	3
SELECT	General Elective	3
LASC	LASC Elective (ICW) (p. 46)	3
Credits		15
Semester Six		
EC-200	Intermediate Macroeconomics	3
SELECT	Economics Elective (#4)	3
LASC	LASC Elective (p. 37) ¹	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Year Four		
Semester Seven		
LASC/EC	Capstone course or Elective #5	3
LASC	LASC Elective (p. 37) ¹	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Semester Eight		
SELECT	EC Capstone course or Elective #5	3
LASC	LASC Elective (p. 37) ¹	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Total Credits		121-122

major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Economics Minor

The Minor in Economics provides students with an excellent background for work in business fields such as banking, insurance, finance and accounting. Combining an Economics Minor with a B.S. degree in Business Administration helps to give students an edge in the marketplace. The Minor in Economics is equally appropriate for work in the private section, in the not-for-profit section and in the public sector at the federal, state, or local level. The minor may also help to prepare students for careers in teaching, journalism, and law, as well as for admission to graduate programs in public policy, law, business, international relations, journalism and related fields.

Requirements for a Minor

Code	Title	Credits
EC-110	Introduction to Microeconomics (HBS)	3
EC-120	Introduction to Macroeconomics (HBS)	3
PLUS Any four additional Economics courses		12
Total Credits		18

¹ Students need 1 DAC, 1 WAC and 1 QLAC

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/

English

Department of English

The English Department offers a major in English and minors in Writing, Literature, Journalism, English (general), and Narratives of Health and Body. All of our programs are designed to be flexible so each student has the opportunity to shape their own course of study, which may include a variety of literature, film, and writing courses. The department offers courses in American, English, and World literatures with a special emphasis on literatures of historically marginalized communities. In addition, the department is particularly strong in creative writing and journalism.

Studying English enables students to examine the world and human experience through its cultural texts. The study of literature and film and other textual forms develops within students a powerful understanding of how narrative and language shape us and the world around us. The English Department strives to develop readers and writers who are empathetic and capable of deep critical analysis with the ability to write creatively and persuasively.

The English major goes well beyond the examination of literary texts and writing practices and encourages students to become more thoughtful and fluent when engaging different ideas and cultures, ultimately leading to greater insight into themselves, those around them, and the communities in which they participate. English majors are able to transfer their skills in creative and critical reading and writing to a variety of professional contexts, while also drawing on their facility with words and story to better understand, engage with, and critique ideas and institutions in their personal, professional, and civic lives.

The English major offers students the opportunity to move outside of the classroom and to apply their developing knowledge of writing, literature, and textual understanding in real-world civic and professional settings through fieldwork, internships, research, or other kinds of applied and sustained engagement with real audiences and communities.

The Writing Center

The Writing Center, an extension of the English Department, offers students the opportunity to discuss their writing with trained, peer writing

consultants. Writing consultants are recruited from across the university community and represent a variety of majors. Writing consultants can support and help guide student-writers at any stage of a project, from its inception to its final draft. The Writing Center is a safe, non-judgmental space with its sole purpose being to help students successfully navigate any writing project, curricular or extracurricular. The Writing Center is located on the third floor of Sullivan and is open Monday thru Friday. Please stop by or call 508-929-8112.

English Honor Society

The English Department has an active chapter of Sigma Tau Delta, an international honor society in English. Juniors and Seniors who demonstrate strong academic achievement may apply for membership.

- English Major (p. 354)
- English Major, Concentration in Journalism (p. 356)
- English Major, Concentration in Writing (p. 358)
- English Minor (p. 359)
- Literature Minor (p. 360)
- Narrative Studies of Health and Body Minor (p. 361)
- Writing Minor (p. 361)

Faculty

Elizabeth Bidinger, Professor (2007), A.B., University of Michigan; M.A., Boston University; Ph.D., University of Connecticut

Jeremy Birkline, Visiting Assistant Professor (2024), A.A., LoneStar Community College; B.A., University of Texas at Austin; M.F.A., Emerson College

Riley B. McGuire, Assistant Professor (2020), B.A., M.A., University of Manitoba; M.A., Ph.D., University of Pennsylvania

Matthew Ortoleva, Department Chair, Professor (2011), B.A., Rhode Island College; M.A., Ph.D., University of Rhode Island

Dennis Quinn, Professor (1996), B.A., Worcester State College; M.A., Assumption College; Ph.D., University of Massachusetts

Jamie Remillard, Associate Professor (2017), B.A., Ph.D., University of Rhode Island; M.F.A., Emerson College

Christina Santana, Associate Professor (2016), B.A., M.A., University of Nevada, Reno; Ph.D., Arizona State University

MaryLynn Saul, Professor (1995), B.S., M.A., Ph.D., Ohio State

Hardeep Singh Sidhu, Associate Professor (2016), B.A., Boston University; M.A., Ph.D., University of Rochester

Heather Treseler, Professor (2011), B.A., Brown University; Ph.D., University of Notre Dame

Donald W. Vescio, Jr, Professor (1998), A.B., State University of New York, Oswego; M.A., University of New Hampshire; Ph.D., University of Rochester

Karen Weierman, Professor (2000), B.A., Georgetown University; Ph.D., University of Minnesota

Cleve Wiese, Associate Professor (2014), B.A., Rhodes College; M.A., New York University; Ph.D., State University of Texas, Austin

Courses

EN-099 Developmental English

Concentration on language basics - spelling, vocabulary, grammar, usage - with practice in writing sentences and paragraphs. Carries developmental credit (not counted toward degree requirements.) Every year. 3 Credits

EN-101 College Writing I

LASC Categories: WR1

Prerequisites: PLCMT-EN1

College Writing I focuses on writing as critical inquiry, reflection, and communication. Students practice the fundamentals of effective writing, emphasizing planning, drafting, revising, and editing. (Required of all students unless exempted by the English Department)

Fall and Spring and every year. 3 Credits

EN-102 College Writing II

LASC Categories: WR2

Prerequisites: EN-101

EN-102 builds upon EN-101 and focuses on research writing, synthesizing sources, critical analysis, argumentation, and information literacies. Students practice the fundamentals of effective writing in collaborative and academic communities, while evaluating and using sources in different rhetorical situations. This course is designed to help students develop transferable skills and strategies that may be applied to a variety of audiences and in a range of situations.

Fall and Spring and every year. 3 Credits

EN-103 First-Year Writing Lab

This one credit course offers supplemental support for students concurrently enrolled in a section of EN101: College Writing I. First-Year Writing Lab reinforces the fundamentals of effective writing practices and processes, specifically the practices of drafting, revising, editing, and proofreading. In First-Year Writing Lab, students will work Lab-specific assignments and activities, as well as on assignments from their specific first-year writing sections, with the goal of learning to transfer and apply a developing set of rhetorical abilities across a variety of writing situations. First-Year Writing Lab is offered pass/fail only.

Fall and Spring and every year. 1 Credit

EN-107 Journalism and Democracy

LASC Categories: WAC

This course introduces students to the history of American journalism and the role of journalism in democratic and non-democratic societies. [Cross-listed with CM-107]

Every year. 3 Credits

EN-115 LGBTQ+ Narratives**LASC Categories:** DIV, ICW, TLC

This course approaches narrative as a key tool for LGBTQ+ individuals to create life-sustaining community, establish identity as artists and activists, and combat social discrimination and stigma. Students will analyze a diverse array of material, including memoir, fiction, poetry, painting, film, and music. Collectively, we will ask what qualifies as a LGBTQ+ narrative: is it determined by the content of a piece, its formal manifestation, the identity of its creator, or something else entirely? The intersections of gender identity and sexual orientation with other components of selfhood—including race, disability, and class—will be essential to our conversations. Alternating and every 2-3 years. 3 Credits

EN-120 Race in Comics**LASC Categories:** TLC, USW, DAC, DIV

Comics offers a unique combination of tools for representing race. Artists have long used either language or visual art to think about identity, but comics merges the two in new ways. In this course, students analyze innovative comics and graphic novels/nonfiction to better understand why this medium is such a productive way to reflect on racial identity. How do comics authors engage with the difficult history of racial caricature and the longstanding lack of diversity in the field? And what can the combination of image and text say about the tension between appearance and identity? Every 2-3 years. 3 Credits

EN-132 World Literature**LASC Categories:** GP, DAC, TLC, DIV

The course examines the major authors in world literature from ancient to modern times; however, in a given semester the course may focus on one particular time period. All areas of the world are covered, including such areas as Africa, Europe, the Americas. An emphasis will be put on cultural, sociological, historical, and philosophical influences on the literature. Such authors may be included as Chinua Achebe, Pablo Neruda, Bei Dao, Salman Rushdie, Nadine Gordimer, Edwidge Danticat, and Bessie Head. Fall and Spring and every year. 3 Credits

EN-140 Introduction to Poetry**LASC Categories:** TLC

Examination and appreciation of the techniques and types of poetry including the sonnet, the pastoral, the mock heroic, and the ode. Fall and Spring and every year. 3 Credits

EN-150 The Short Story**LASC Categories:** TLC

Introduction to the art of the short story through analysis of representative works. Every year. 3 Credits

EN-156 Mythology**LASC Categories:** TLC, DAC

Myths and legends of ancient Greece and Rome which form a part of the classical tradition in English literature. Fall and Spring and every year. 3 Credits

EN-158 Science Fiction**LASC Categories:** TLC

The nature and function of nineteenth and twentieth century science fiction literature: Wells, Verne, Asimov, Bradbury, and others. Every 2-3 years. 3 Credits

EN-160 Literature of the Bible**LASC Categories:** TLC

Biblical writings. Emphasis will be placed on the Old Testament. Every 2-3 years. 3 Credits

EN-164 Fairy and Folk Tales From Around the World**LASC Categories:** TLC, DIV

The course will examine fairy tales and folk tales from across the globe and from different cultural traditions, which may include Indian, Japanese, African, German, Irish, Jewish, African-American, or Hawaiian. The course will compare similar themes, such as identity or distrust of step-parents, in these traditional tales and contrast the differing forms the tales may take in different cultures. Along with traditional folk tales, modern stories reinterpreting a traditional tale from a diverse point of a view (e.g. a lesbian Cinderella) will be analyzed. Fall and Spring and every 2-3 years. 3 Credits

EN-165 The Art of Storytelling**LASC Categories:** TLC, CA

Students are introduced to the basics of narrative theory and storytelling practices across genres and cultures. Students craft their own stories while exploring different modalities, including oral, written, visual, and audio storytelling. Students practice critical analysis of stories, examine how stories circulate among publics and audiences, and how stories impact individuals and communities. Alternating and every 2-3 years. 3 Credits

EN-167 Literature and Human Rights**LASC Categories:** GP, DAC, DIV

The course examines writing about human rights, including memoirs and novels, and examines issues of social justice. Violations of human rights that may be addressed include genocide, political repression, and torture; while social justice issues that may be examined include women's rights, justice and punishment, disability rights and methods of protesting for human rights. The course will examine definitions of human rights as well as reparations and living with the aftermath of human rights violations. Fall and Spring and every 2-3 years. 3 Credits

EN-168 Film and Literature**LASC Categories:** CA, TLC, WAC

An examination of the fundamental, rhetorical techniques of film and literature to determine the similarities of and differences between the two forms of expression.

Every 2-3 years. 3 Credits

EN-169 Ethnic Literature in the U.S.**LASC Categories:** USW, TLC, DAC

Study of ethnic literature in the U.S., focusing on African- American, Asian-American, Latino, and Native-American writers.

Fall and Spring. 3 Credits

EN-170 Search for Identity**LASC Categories:** DAC, TLC, DIV

This course is designed to explore the topic of identity in literature, which may include gender, race, ethnicity, philosophy, body image, physical ability/disability, etc. The course will examine each literary text for the relative importance of the various aspects of identity for each author/character and the intersectionality of identity. Questions to consider will include: which identity is prioritized (by the individual and by society) in any given situation? What or who determines which aspect of identity is prioritized at different moments? How do conflicts in identity for an individual get resolved?

Other or on demand. 3 Credits

EN-172 Women and Literature**LASC Categories:** WAC, TLC, GP

Explores basic issues and problems in literature by and about women.

Every year. 3 Credits

EN-173 Baseball: America's Literary Pastime**LASC Categories:** TLC, DAC, WAC**Prerequisites:** EN-102 or EN-202

This course will survey the literature of baseball, including writers from the golden era of baseball, such as Ernest Lawrence Thayer, Charles E. Van Loan, Albert G. Spalding, Damon Runyon, and Ring Lardner, to more contemporary authors, such as May Swenson, Roger Angell, Robert Creamer, and Annie Dillard. We will consider baseball writing within the context of American social, political, and historical perspectives, examining such themes as the idealism of sport, public mythologies, race relations, and national identity.

Other or on demand and other or on demand. 3 Credits

EN-174 Women Poets**LASC Categories:** TLC, WAC, GP**Prerequisites:** Fulfillment of Writing II

A close reading and analysis of poetry written by women from a historical as well as a contemporary feminist perspective.

Other or on demand. 3 Credits

EN-180 Kerouac, Ginsberg, and the Beats**LASC Categories:** WAC**Prerequisites:** EN-102 or EN-202

This course will examine representative works from Jack Kerouac, Allen Ginsberg, and other writers associated with the Beat Generation, such as William Burroughs, Peter Orlovsky, Gary Snyder, Carolyn Cassady, Joyce Johnson, and Elise Cowen. In addition, this course will explore the literary, political, and social precursors that gave rise to the Beats, as well as the influence that the Beats had on 1960s politics and popular culture. Finally, the writing of the Beats will be considered through the broader contexts of gender, religion, social status, and economics.

Other or on demand. 3 Credits

EN-190 Special Readings in Literature

An introductory literature course responsive to current interests or controversies.

3 Credits

EN-193 First Year Seminar English**LASC Categories:** FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

Every year. 3 Credits

EN-202 Honors Composition**LASC Categories:** WR2

Focuses on writing development for academic success and citizenship, emphasizing rhetorical analysis, information literacy, and academic and public discourse. Honors students only.

Every year. 3 Credits

EN-207 The Writer's Life**LASC Categories:** WAC

Students examine the role of the writer in society and map their own possible career paths as writers.

Every year. 3 Credits

EN-210 U.S. Literature (Beginnings-1865)**LASC Categories:** DIV, TLC, USW

In this course students will read a broad selection of the most exciting and important literature produced in the United States from its beginnings to 1865.

In small, discussion-based class meetings and regular writing assignments, students will analyze the diverse ways that U.S. authors have innovated in response to the culture at large and to the traditions of literature that came before them. In close readings of fiction, life writing, poetry, essays, and more, students will pay particular attention to how differences in power among social groups (such as class, gender, or race) have shaped the nation's literary history.

Alternating and every year. 3 Credits

EN-211 U.S. Literature (1865-Present)**LASC Categories:** DIV, TLC, USW

In this course students will read a broad selection of the most exciting and important literature produced in the United States from 1865 to the present. In small, discussion-based class meetings and regular writing assignments, students will analyze the diverse ways that U.S. authors have innovated in response to the culture at large and to the traditions of literature that came before them. In close readings of fiction, life writing, poetry, essays, and more, students will pay particular attention to how differences in power among social groups (such as class, gender, or race) have shaped the nation's literary history.

Alternating and every year. 3 Credits

EN-214 Introduction to Digital Humanities**LASC Categories:** QAC, WAC**Prerequisites:** EN102 or equivalent

This course is an introduction to the use of digital technologies in the analysis, production, and reception of texts. Most of us already are digital scholars, as we read information electronically, collaborate online, and write texts using computers. This course addresses instances in which we create or use information that is uniquely keyed to digital technologies, such as developing visual representations of narrative, using artificial intelligence to assess writing, statistically analyzing poetry, or crowd-sourcing creative and academic writing. This course will explore the theoretical and practical implications of reading and writing in a digital age.

Other or on demand and every year. 3 Credits

EN-217 Introduction to Narrative Studies of Health and Medicine**LASC Categories:** HBS, ICW

This course offers students an introduction to narrative representations of illness, health, and healing. Students consider works of literature, literary theory, and film in their narrativization of the dynamic between patient and clinician, the role (and limitations) of empathic recognition, the ethical issues in healthcare settings, and rhetorical constructions of normalcy, disability, disease, agency, and well-being. The course introduces students to literary traditions as well as to journalistic and narrative methodologies that inform a humanistic approach to stories about the science of health and medicine.

Alternating and every year. 3 Credits

EN-220 English Literature (beginnings to 1798)**LASC Categories:** ICW, GP, TLC

The diverse course covers major works and authors from the beginnings of literature in the British Isles up until the end of the 18th century. Authors included are major writers Chaucer, Shakespeare, and Milton, as well as other authors such as Amelia Lanyer, Margery Kempe and Olaudah Equiano. Emphasis will be put on the historical and sociological environment as well as the literary and thematical developments that each work demonstrates. The course may focus on such themes or events as women's roles, human rights, the Atlantic slave trade and colonization.

Fall and Spring and every year. 3 Credits

EN-221 English Literature (1798-Present)**LASC Categories:** GP, ICW, TLC

An introduction to major developments in the literatures of England from 1798 to the present alongside the socio-political debates that influenced them. Though intended as an overview of more than two centuries of literature, the course focuses on how differences in power between various social groups within England and across the world intimately informed the period's cultural output. The readings consist of a diverse range of genres - lyrical poetry, realist novels, abolitionist lifewriting, travelogues, stage comedies - that engage with key issues that will shape class discussions and lectures, including colonization, urbanization, rising literacy rates, technological advancements, and more. Alternating and every year. 3 Credits

EN-230 Environmental Literature**LASC Categories:** CA, ICW

This course will focus on how environmental writers challenge and change how we perceive human ecological relationships to the natural world. We will address the following questions: How have writers challenged us to think about our place in a shared world and our responsibilities toward our ecological communities? How have writers attempted to awaken us to our connections to the natural world and the non-human other? How do these connections feed our mind, body, and spirit? We will also consider their warnings of what happens when we ignore our ecological selves, our ecological communities, and our ecological responsibilities. Every 2-3 years. 3 Credits

EN-240 Survey of Postcolonial and Transcultural Literature**LASC Categories:** GP**Prerequisites:** EN-102

Introduction to literatures in English from formerly colonized countries in Africa, Asia, and the Caribbean, and from the postcolonial diaspora. Every year. 3 Credits

EN-252 Technical Writing**LASC Categories:** WAC**Prerequisites:** EN-102

Focuses on how to write and produce basic documents, from research and progress reports to brochures and manuals. Fall and Spring and every year. 3 Credits

EN-253 Business Communications**LASC Categories:** WAC**Prerequisites:** EN-102

A consideration of accepted business communication conventions: correspondence, memoranda, survey reports, proposals, interim reports and project reports. Fall and Spring and every year. 3 Credits

EN-254 Critical Writing

Critical examination of English prose style; class reports; practice in the writing of analytical papers. Spring only and every 2-3 years. 3 Credits

EN-255 Methods of Literary Study**LASC Categories:** TLC, WAC**Prerequisites:** EN-102

Introduction to critical methods of interpreting literature through examination of works by major authors. Fall and Spring and every year. 3 Credits

EN-256 Creative Writing: Fiction**LASC Categories:** CA**Prerequisites:** EN-102

An opportunity to develop the student's writing ability and critical sense; work of students and professional authors will be analyzed. Every year. 3 Credits

EN-257 The Power of Memoir**LASC Categories:** TLC, CA, WAC**Prerequisites:** EN-102

Examines the craft and theory of memoir through wide-ranging readings and intensive practice in writing and workshopping personal narratives. 3 Credits

EN-258 Creative Writing: Nonfiction**LASC Categories:** CA**Prerequisites:** EN-102

A course focused on memoir and narrative journalism; students analyze and create short works of nonfiction. Every 2-3 years. 3 Credits

EN-260 Creative Writing: Poetry I**LASC Categories:** CA, TLC**Prerequisites:** EN-102

Developing the student's skill in the creation of poetry; attention to contemporary trends in American poetry. Every year. 3 Credits

EN-262 Creative Writing: Poetry II**LASC Categories:** CA**Prerequisites:** EN-102

Conversation with practicing poets; preparation of a small booklet of poems.

Every year. 3 Credits

EN-266 Journalism: Practice and Techniques**LASC Categories:** WAC, TLC**Prerequisites:** EN-102

Training in developing, reporting, writing and editing straight news, feature, profile, and interpretive stories.

Every year. 3 Credits

EN-267 Journalism: Advanced Newswriting**LASC Categories:** WAC**Prerequisites:** EN-102

Provides advanced training in the development and writing of straight news stories.

Every 2-3 years. 3 Credits

EN-268 Journalism: Feature Writing**LASC Categories:** WAC, CA**Prerequisites:** EN-102

Provides advanced training in finding, researching, developing, and writing feature stories for newspapers and magazines. [Cross-listed with CM-268]

Every 2-3 years. 3 Credits

EN-270 Journalism: Editing**LASC Categories:** WAC, TLC**Prerequisites:** EN-102

Training in copy selection, copy editing, story placement, headline writing, layout, and use of style books. [Cross-listed with CM-270]

Every 2-3 years. 3 Credits

EN-271 Journalism Workshop**LASC Categories:** WAC**Prerequisites:** EN 102.

Provides laboratory sessions in all aspects of journalism for advanced writers; emphasis on publication.

Every 2-3 years. 3 Credits

EN-272 News Reporting and Writing I**LASC Categories:** ICW, USW, WAC**Prerequisites:** EN-102 and EN-107

Includes fundamentals of news judgement, events coverage, sourcing, interviewing, writing on deadline, fact checking and basic editing.

Every year. 3 Credits

EN-275 Sportswriting**LASC Categories:** WAC**Prerequisites:** EN-102

Introduces students to the journalistic art of sportswriting, reporting, and interviewing for various media.

Every year. 3 Credits

EN-281 Writing for Digital Environments**LASC Categories:** WAC, QAC**Prerequisites:** EN-102 or EN-202

This course will provide theories and strategies for writing in digital environments, with special emphasis on the rhetorical conventions for online communication and the design of digital information. Increasingly, information is presented in digital format, which assumes different user experiences than those normally associated with print media. The goal of this course is to explore the expectations and requirements of digital writing, how writers and readers negotiate information in non-physical spaces, and how specific characteristics of different digital environments shape what we can say, and how we say it.

Other or on demand and other or on demand. 3 Credits

EN-300 History of the English Language**LASC Categories:** TLC**Prerequisites:** EN-102

A study of the origins of the English language from Old English through Middle English to the present.

Other or on demand. 3 Credits

EN-302 Medieval Literature

Ideas of medieval christianity, courtly love, and chivalric honor as they appear in lyric poetry, drama, and Arthurian romance.

Every 2-3 years. 3 Credits

EN-303 Arthurian Literature**LASC Categories:** TLC

This course traces the development of the Arthurian legends from their Celtic origins up through the modern period.

Every 2-3 years. 3 Credits

EN-304 Witchcraft in Medieval and Renaissance Literature**LASC Categories:** TLC**Prerequisites:** EN-102

This course explores how Medieval and Renaissance literature on witchcraft addressed contemporary concerns.

Every 2-3 years. 3 Credits

EN-306 The Renaissance**LASC Categories:** TLC**Prerequisites:** EN-102

The non-dramatic literature of Tudor England; emphasis on More, Wyatt, Sidney, Spenser, the earlier works of Shakespeare, Donne and Bacon.

Every 2-3 years. 3 Credits

EN-311 Young Adult Literature**Prerequisites:** EN-102

Theoretical and critical approaches to classic and contemporary texts written for young adults aged pre-teen to late teen.

Every 2-3 years. 3 Credits

EN-318 Romantic Literature**Prerequisites:** EN-102

Poetry and prose with special emphasis on the poetry of Wordsworth, Coleridge, Shelley, Byron, and Keats.

Every 2-3 years. 3 Credits

EN-320 Victorian Literature**LASC Categories:** TLC, WAC**Prerequisites:** EN-102

Study of selected prose and poetry of the major writers of the Victorian period.

Fall and Spring and every 2-3 years. 3 Credits

EN-321 Gothic Monsters From Frankenstein to Dracula**LASC Categories:** TLC, GP**Prerequisites:** EN-102

Ranging from Frankenstein's monster to Count Dracula, nineteenth-century literature generated some of the most enduringly influential monsters in pop culture. This course approaches the period's Gothic texts as both generative sites of literary innovation and reflections of the anxieties that captivated the culture that produced them: fears about new technologies, changing mores around sex and gender, responses to an increasingly globalized world, and more. Our approach to the Gothic and monstrosity will be informed by considerations of power: we will discuss how issues of race, class, gender, sexuality, disability, nationality, and more inform how society constructs some bodies as "monstrous."

Other or on demand and every 2-3 years. 3 Credits

EN-322 Community Writing**LASC Categories:** ICW, DIV, DAC**Prerequisites:** EN-102 or EN-202

An introduction to writing about, for, and with communities. Students learn to successfully complete individual or group community writing projects, which begin when relationships are built with community organizations to identify a communication need. Then, in collaboration, possible solutions are identified to address the communication need with the goal of developing and delivering a document for use by the partnering community organization that helps to solve the problem. As a result, students develop practical writing experience and an ability to act as a writing consultant.

Spring only and every year. 3 Credits

EN-328 Narratives of U.S. Immigration**LASC Categories:** TLC, USW, DAC, WAC**Prerequisites:** EN-102 or EN-202

In this course students examine narratives of United States immigration in literature, film, and history. The immigrant narrative is both a foundational American story and also a story of the outsider to American culture. Students explore how authors navigate these conflicting poles, and how they complicate myths of the U.S. as a melting pot and land of opportunity. Topics for discussion include: assimilation and pluralism; citizenship, class, ethnicity, gender, language, nationality, race, and religion; diaspora; labor; nativism and xenophobia; and the social, legal, and political history of American immigration.

Every 2-3 years. 3 Credits

EN-334 Modern Poetry**Prerequisites:** EN-102

Close analysis of the development of British and American poetry from the late nineteenth century to World War II.

Every 2-3 years. 3 Credits

EN-335 Writing About Food Systems**Prerequisites:** EN-102 or EN-202.

Food systems are complex and vulnerable, but our lives depend upon their sustainability. In all efforts to support socially just, sustainable food systems, language matters. This course engages students in learning about and writing about sustainable and just food systems. Students will gain an understanding of the interconnected ecological, cultural, political, economic, social, ethical, material, affective, and aesthetic dimensions of food systems; create written deliverables that respond to an authentic community need concerning sustainable and just food systems, address an audience external to the class through their writing, and participate in collaborative, community-based action and service. Alternating and every 2-3 years. 4 Credits

EN-336 Contemporary Poetry**Prerequisites:** EN-102

Concentrates on poets whose major work was written after World War II: Special attention to authors presently writing and publishing. Every 2-3 years. 3 Credits

EN-338 Contemporary Novel**Prerequisites:** EN-102

American and English novels after World War II with emphasis on living novelists. Every 2-3 years. 3 Credits

EN-341 Advanced Practices in Writing**LASC Categories:** WAC

Students gain advanced practices and skill in professional writing genres. Rotating topics and genres. Consent of instructor. Every year. 3 Credits

EN-342 The American Novel I**LASC Categories:** WAC, TLC**Prerequisites:** EN-102

The American novel from its origin to 1900. Every 2-3 years. 3 Credits

EN-344 American Novel II**LASC Categories:** TLC, WAC**Prerequisites:** EN-102

The American novel from the late nineteenth century until the mid-twentieth century. Fall and Spring and every 2-3 years. 3 Credits

EN-345 American Women Writers**LASC Categories:** USW, DAC**Prerequisites:** EN-102

The course examines major works by American women writers in fiction, non-fiction, poetry, and drama within applicable critical contexts. Every 2-3 years. 3 Credits

EN-347 Studies in U.S. Ethnic Literature**LASC Categories:** USW**Prerequisites:** EN-102

Selected topics in U.S. ethnic literature, including thematic and comparative approaches, and in-depth studies of a single ethnic literature. Every 2-3 years. 3 Credits

EN-348 Postcolonial Women's Writing**LASC Categories:** GP**Prerequisites:** EN-102

Writing by women from colonized and formerly colonized countries on local and global issues shaping women's lives and creative expression. Every 2-3 years. 3 Credits

EN-350 Chaucer**Prerequisites:** EN-102

A study of the development of Chaucer's versatile art and writings as expressive of the later Middle Ages. Every 2-3 years. 3 Credits

EN-352 Practicum in Journalism**LASC Categories:** WAC**Prerequisites:** EN-270 and EN-272

Workshop in which students report, write, and edit the online college news magazine. Participate in all aspects of publication. [Cross-listed with CM-352] Alternating and every year. 3 Credits

EN-353 Narrative Journalism**LASC Categories:** CA, WAC**Prerequisites:** EN-272

Students analyze and create in-depth journalistic features and nonfiction stories that blend reporting with techniques of fictional storytelling. [Cross-listed with CM-353] Every 2-3 years. 3 Credits

EN-354 Opinion Writing**LASC Categories:** ICW, WAC**Prerequisites:** EN-272

Students analyze and practice writing op-eds and other opinion pieces. Learn to write commentary that is publication ready. [Cross-listed with CM-354] Every 2-3 years. 3 Credits

EN-355 Practicum in English

Students engage in experiential learning, project management, and the application of skills, practices, and knowledges gained through course work in English while collaborating with WSU faculty, staff, community partners, or other students. Students further develop their critical, problem-solving, and communicative skillset while adapting what they have learned to new environments and challenges. May be repeated multiple times.

Fall and Spring and every year. 1 Credit

EN-358 Disability Stories, Disability Studies

LASC Categories: DIV, HBS, ICW, TLC

Prerequisites: EN-102 or EN-202.

This course introduces students to the field of disability studies by examining depictions of disability in literature. We will discuss foundational texts and consider key terms including ableism, access, medicalization, representation, and prosthesis. We will also discuss the ways that disability intersects with other aspects of identity such as race, class, gender, and sexuality. Our readings will span multiple centuries and will include poems, memoirs, films, and critical essays by leading disability studies scholars. Together, we will question the construction of bodily, mental, and social norms and analyze how narratives both resist and conform to cultural conceptions of disability.

Alternating and every 2-3 years. 3 Credits

EN-360 Shakespeare I

Prerequisites: EN-102

Major plays. Required of all English majors.

Fall and Spring and every year. 3 Credits

EN-362 Shakespeare II

Prerequisites: EN-102

A continuation of EN360; includes the sonnets and less familiar plays.

Every 2-3 years. 3 Credits

EN-364 Elizabethan and Jacobean Drama

LASC Categories: WAC

Prerequisites: EN-102

A critical analysis of plays by the contemporaries of Shakespeare: Kyd, Marlowe, Greene, Jonson, Ford, Webster, and others.

Other or on demand and every 2-3 years. 3 Credits

EN-370 Antislavery Literature

LASC Categories: TLC, USW, DAC, WAC, DIV

Prerequisites: EN-102 or EN-202 or EN-250

This course traces the literary history of the antislavery movement in the Atlantic World: writing in a range of genres, antislavery writers made a significant contribution to the campaigns to end the slave trade and slavery. These texts also shaped the history and memory of legal enslavement and its aftermath. While the Atlantic system of legal slavery ended in the nineteenth century, an even larger system of illegal slavery still exists, and so the course concludes by considering the work of contemporary antislavery writers and what they might learn from their predecessors.

Fall only and every 2-3 years. 3 Credits

EN-380 Milton

Prerequisites: EN-102

A study of Milton's work from early poems to *Paradise Lost*, *Paradise Regained*, and *Samson Agonistes*; includes some prose pamphlets.

Every 2-3 years. 3 Credits

EN-390 Irish Literary Revival

Prerequisites: EN-102

The Irish literary renaissance; the origins of the movement; includes Joyce, Yeats, Synge, O'Casey, Lady Gregory, and others.

Every 2-3 years. 3 Credits

EN-400 Seminar in English

Prerequisites: EN-102

Student presentations on individual figures and particular problems in literature.

Every year. 3 Credits

EN-408 Directed Study: English

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

Fall and Spring. 1-3 Credits

EN-410 Theories and Practices of Writing Consult

Prerequisites: EN-102

Training and practice in one-to-one assistance for students' writing for any course, stage, or specific need.

Fall only and every year. 3-6 Credits

EN-411 Theory and Teaching of Writing**Prerequisites:** EN-102

Every 2-3 years. 3 Credits

EN-416 Media Law and Ethics**Prerequisites:** EN-272 or CM-272

An overview of the U.S. legal and justice systems and an examination of ethical issues in mass media.

[Cross-listed with EN-416]

Every 2-3 years. 3 Credits

EN-425 Independent Study in English**Prerequisites:** EN-102

An opportunity for further study in a special field of interest under faculty supervision. Consent of instructor.

Fall and Spring and every year. 1-6 Credits

EN-426 Senior Seminar**LASC Categories:** CAP**Prerequisites:** EN-255

Course provides an option for seniors to fulfill their university capstone requirement in the discipline.

Consent of instructor.

3 Credits

EN-450 Special Topics in English**Prerequisites:** EN-102

Specific content will vary in response to particular student and faculty interests.

Fall and Spring and every year. 3 Credits

EN-475 Internship in English**Prerequisites:** EN-102.

Provides majors the opportunity to gain practical experience in areas where they may apply acquired critical and writing skills. Consent of instructor

Fall and Spring and every year. 3-6 Credits

JO-101 Introduction to Journalism**LASC Categories:** ICW, USW, WAC**Prerequisites:** EN-102 or EN-202

Includes fundamentals of news judgement, events coverage, sourcing, interviewing, writing on deadline, fact checking and basic editing.

Other or on demand. 3 Credits

JO-201 Multimedia Journalism**LASC Categories:** WAC**Prerequisites:** EN-101

Workshop in which students report, write, and edit the online college news magazine. Participate in all aspects of publication.

Alternating and every year. 3 Credits

Program Learning Outcomes

- Analyze and document the history, conventions, methodologies, and practices of literary, cultural, and rhetorical studies as a form of academic inquiry, a pathway for personal growth and expression, a framework for engaging with critical moral and ethical issues, and a site of analysis of identity construction and power inequities.
- Analyze texts across historical, geographical, and cultural boundaries and interrogate workings of difference, hierarchy, and power, both within and across texts, including the intersections of multiple identity categories including ability, class, ethnicity, gender, nationality, race, religion, and sexuality.
- Interpret a variety of forms, genres, styles, structures, and modes of writing, while articulating and demonstrating the value of close reading in the study of literature, creative writing, rhetoric, media, and other forms of discourse.
- Design, conduct, and deliver research projects effectively and ethically.
- Produce and analyze writing across a wide range of modes, including creative, professional, personal, print, and digital expression.
- Apply the content and methodologies of literature and writing studies outside of the classroom, in civic and professional environments.

English Major

Requirements for a Major

Code	Title	Credits
<i>Foundation</i>		6
EN-210	U.S. Literature (Beginnings-1865)	
EN-211	U.S. Literature (1865-Present)	
EN-220	English Literature (beginnings to 1798)	
EN-221	English Literature (1798-Present)	
EN-240	Survey of Postcolonial and Transcultural Literature	
EN-255	Methods of Literary Study	
EN-300	History of the English Language	

<i>Literature</i>	3
EN-120 Race in Comics	
EN-132 World Literature	
EN-140 Introduction to Poetry	
EN-150 The Short Story	
EN-156 Mythology	
EN-158 Science Fiction	
EN-160 Literature of the Bible	
EN-164 Fantasy, Faerie and Folk Fairy and Folk Tales From Around the World	
EN-167 Literature and Human Rights	
EN-168 Film and Literature	
EN-169 Ethnic Literature in the U.S.	
EN-170 Search for Identity	
EN-172 Women and Literature	
EN-173 Baseball: America's Literary Pastime	
EN-174 Women Poets	
EN-180 Kerouac, Ginsberg, and the Beats	
EN-210 U.S. Literature (Beginnings-1865)	
EN-211 U.S. Literature (1865-Present)	
EN-220 English Literature (beginnings to 1798)	
EN-221 English Literature (1798-Present)	
EN-230 Environmental Literature	
EN-240 Survey of Postcolonial and Transcultural Literature	
<i>Writing</i>	3
EN-207 The Writer's Life	
EN-252 Technical Writing	
EN-253 Business Communications	
EN-256 Creative Writing: Fiction	
EN-257 The Power of Memoir	
EN-258 Creative Writing: Nonfiction	
EN-260 Creative Writing: Poetry I	
EN-262 Creative Writing: Poetry II	
EN-266 Journalism: Practice and Techniques	
EN-267 Journalism: Advanced Newswriting	
EN-268 Journalism: Feature Writing	
EN-270 Journalism: Editing	
EN-272 News Reporting and Writing I	

EN-275 Sportswriting	
EN-281 Writing for Digital Environments	
JO-101 Introduction to Journalism	
JO-201 Multimedia Journalism	
<i>Historically Marginalized Traditions</i>	3
EN-120 Race in Comics	
EN-132 World Literature	
EN-167 Literature and Human Rights	
EN-169 Ethnic Literature in the U.S.	
EN-172 Women and Literature	
EN-174 Women Poets	
EN-240 Survey of Postcolonial and Transcultural Literature	
EN-328 Narratives of U.S. Immigration	
EN-345 American Women Writers	
EN-347 Studies in U.S. Ethnic Literature	
EN-348 Postcolonial Women's Writing	
EN-370 Antislavery Literature	
<i>Applied Studies</i>	3
EN-271 Journalism Workshop	
EN-322 Community Writing	
EN-352 Practicum in Journalism	
EN-410 Theories and Practices of Writing Consul	
EN-426 Senior Seminar	
EN-475 Internship in English	

Electives 18

18 credits, which must include at least 12 credits at the 300/400-level.

Some courses have multiple designations, but may only be used to fulfill one category requirement.

Total Credits 36

Sample Timetable for Completion of Degree: English

Year One

Semester One		Credits
LASC	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I	3
LASC	LASC Elective (TLC) (p. 53)	3
LASC	LASC Elective (QR) (p. 50)	3

LASC	LASC Elective (USW) (p. 51)	3
Credits		15
Semester Two		
EN-102	College Writing II	3
LASC	LASC Elective (GP) (p. 42)	3
LASC	LASC Elective (CON) (p. 38)	3
EN 1XX+	EN Major Elective	3
LASC	LASC Elective (NSP) (p. 49)	3
Credits		15
Year Two		
Semester Three		
EN-220	English Literature (beginnings to 1798)	3
EN-255	Methods of Literary Study	3
LASC	LASC Elective (NSP) (p. 49)	4
LASC	LASC Elective (HBS) (p. 44)	3
LASC	LASC Elective (CA) (p. 39)	3
Credits		16
Semester Four		
EN-221	English Literature (1798- Present)	3
SELECT	General Elective	3
EN-1XX+	EN Major Elective	3
LASC	LASC Elective (ICW) (p. 46)	3
SELECT	General Elective	3
Credits		15
Year Three		
Semester Five		
EN-210 or EN-211	U.S. Literature (Beginnings-1865) or U.S. Literature (1865- Present)	3
EN-3XX+	EN Major Elective	3
SELECT	General Elective	3
LASC	LASC Elective (p. 37)	3
SELECT	General Elective	3
Credits		15
Semester Six		
EN-360	Shakespeare I	3
EN-3XX+	EN Major Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Year Four		
Semester Seven		
EN-3XX+	EN Major Elective	3

EN-3XX+	EN Major Elective	3
EN-1XX+	EN Major Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Semester Eight		
LASC/EN	Capstone	3
EN-1XX+	EN Major Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Total Credits		121

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/ major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

English Major, Concentration in Journalism

Requirements for a Major in English, Concentration in Journalism

In addition to taking the required courses for the English major and two 300- or 400-level literature electives, students choosing the journalism concentration must take five journalism courses comprised of three required courses and two electives. Some courses have multiple designations, but may only be used to fulfill one category requirement.

Code	Title	Credits
Foundations		(6 credits)
Take 2 courses from the following:		6
EN-210	U.S. Literature (Beginnings-1865)	
or EN-211	U.S. Literature (1865-Present)	
EN-211	U.S. Literature (1865- Present)	

EN-220	English Literature (beginnings to 1798)
EN-221	English Literature (1798- Present)
EN-240	Survey of Postcolonial and Transcultural Literature
EN-255	Methods of Literary Study
EN-300	History of the English Language

Literature Elective (3 credits)

Select one literature elective 3

EN-120	Race in Comics
EN-132	World Literature
EN-140	Introduction to Poetry
EN-150	The Short Story
EN-156	Mythology
EN-158	Science Fiction
EN-160	Literature of the Bible
EN-164	Fantasy, Faerie and Folk Fairy and Folk Tales From Around the World
EN-167	Literature and Human Rights
EN-168	Film and Literature
EN-169	Ethnic Literature in the U.S.
EN-170	Search for Identity
EN-172	Women and Literature
EN-173	Baseball: America's Literary Pastime
EN-174	Women Poets
EN-180	Kerouac, Ginsberg, and the Beats
EN-210	U.S. Literature (Beginnings-1865)
EN-211	U.S. Literature (1865- Present)
EN-220	English Literature (beginnings to 1798)
EN-221	English Literature (1798- Present)
EN-230	Environmental Literature
EN-240	Survey of Postcolonial and Transcultural Literature

Writing Elective (3 credits)

Select one writing elective 3

EN-207	The Writer's Life
EN-252	Technical Writing
EN-253	Business Communications

EN-256	Creative Writing: Fiction
EN-257	The Power of Memoir
EN-258	Creative Writing: Nonfiction
EN-260	Creative Writing: Poetry I
EN-262	Creative Writing: Poetry II
EN-266	Journalism: Practice and Techniques
EN-267	Journalism: Advanced Newswriting
EN-281	Writing for Digital Environments

Historically Marginalized Traditions (3 credits)

Select one elective 3

EN-120	Race in Comics
EN-132	World Literature
EN-167	Literature and Human Rights
EN-169	Ethnic Literature in the U.S.
EN-172	Women and Literature
EN-174	Women Poets
EN-240	Survey of Postcolonial and Transcultural Literature
EN-328	Narratives of U.S. Immigration
EN-345	American Women Writers
EN-347	Studies in U.S. Ethnic Literature
EN-348	Postcolonial Women's Writing
EN-370	Antislavery Literature

Applied Studies (3 credits)

Select one applied studies elective 3

EN-271	Journalism Workshop
EN-322	Community Writing
EN-352	Practicum in Journalism
EN-410	Theories and Practices of Writing Consul
EN-426	Senior Seminar
EN-475	Internship in English

Upper Level Literature Electives (6 credits)

Select two literature electives from 300/400 level courses 6

Journalism Requirements (9 credits)

EN-107	Journalism and Democracy	3
EN-272	News Reporting and Writing I	3
EN-416	Media Law and Ethics	3

Journalism Electives	(6 credits)
Select 2 electives from the following:	6
EN-268 Journalism: Feature Writing	
EN-270 Journalism: Editing	
EN-275 Sportswriting	
EN-352 Practicum in Journalism	
EN-353 Narrative Journalism	
EN-354 Opinion Writing	
EN-475 Internship in English	
Total Credits	39

Prerequisites

Code	Title	Credits
The following are prerequisites for every journalism course except EN-270, which has only EN-102 (or equivalent LASC course) as a prerequisite:		
EN-102	College Writing II (or equivalent LASC course)	
EN-107	Journalism and Democracy	
EN-272	News Reporting and Writing I	
Total Credits		0

English Major, Concentration in Writing

Requirements for a Major in English, Concentration in Writing

15 credits in writing courses (exclusive of EN-101 and EN-102) in addition to the English major. The remaining 6 credits must be literature electives at the 300-level or above. Some courses have multiple designations, but may only be used to fulfill one category requirement.

Code	Title	Credits
English Major Foundation Requirements (6 credits)		
Take two foundation courses		6
EN-210	U.S. Literature (Beginnings-1865)	
EN-211	U.S. Literature (1865-Present)	
EN-220	English Literature (beginnings to 1798)	
EN-221	English Literature (1798-Present)	

EN-240	Survey of Postcolonial and Transcultural Literature	
EN-255	Methods of Literary Study	
Literatures		(3 credits)
Select one literature course		3
EN-120	Race in Comics	
EN-132	World Literature	
EN-140	Introduction to Poetry	
EN-150	The Short Story	
EN-156	Mythology	
EN-158	Science Fiction	
EN-160	Literature of the Bible	
EN-164	Fantasy, Faerie and Folk Fairy and Folk Tales From Around the World	
EN-167	Literature and Human Rights	
EN-168	Film and Literature	
EN-169	Ethnic Literature in the U.S.	
EN-170	Search for Identity	
EN-172	Women and Literature	
EN-173	Baseball: America's Literary Pastime	
EN-174	Women Poets	
EN-180	Kerouac, Ginsberg, and the Beats	
EN-210	U.S. Literature (Beginnings-1865)	
EN-211	U.S. Literature (1865-Present)	
EN-220	English Literature (beginnings to 1798)	
EN-221	English Literature (1798-Present)	
EN-230	Environmental Literature	
EN-240	Survey of Postcolonial and Transcultural Literature	

Writing Courses		(15 credits)
Select 15 credit hours from the following:		15
EN-207	The Writer's Life	
EN-252	Technical Writing	
EN-253	Business Communications	
EN-256	Creative Writing: Fiction	
EN-257	The Power of Memoir	
EN-258	Creative Writing: Nonfiction	
EN-260	Creative Writing: Poetry I	
EN-262	Creative Writing: Poetry II	

EN-266	Journalism: Practice and Techniques
EN-267	Journalism: Advanced Newswriting
EN-268	Journalism: Feature Writing
EN-270	Journalism: Editing
EN-272	News Reporting and Writing I
EN-275	Sportswriting
EN-281	Writing for Digital Environments
EN-341	Advanced Practices in Writing
EN-352	Practicum in Journalism
EN-353	Narrative Journalism
EN-354	Opinion Writing
EN-411	Theory and Teaching of Writing
CM-366	Scriptwriting
A 3-6 credit internship in writing, whether in English (EN-410 or EN-475) or other languages (FR-475 or SP-475)	

Historically Marginalized Traditions (3 credits)

Select one elective from this section		3
EN-120	Race in Comics	
EN-132	World Literature	
EN-167	Literature and Human Rights	
EN-169	Ethnic Literature in the U.S.	
EN-172	Women and Literature	
EN-174	Women Poets	
EN-240	Survey of Postcolonial and Transcultural Literature	
EN-328	Narratives of U.S. Immigration	
EN-345	American Women Writers	
EN-347	Studies in U.S. Ethnic Literature	
EN-348	Postcolonial Women's Writing	
EN-370	Antislavery Literature	

Applied Studies (3 credits)

Select one elective from these courses		3
EN-271	Journalism Workshop	
EN-322	Community Writing	
EN-352	Practicum in Journalism	
EN-410	Theories and Practices of Writing Consul	
EN-426	Senior Seminar	

EN-475	Internship in English	
Upper Level Literature Courses (6 credits)		
Take two additional literature courses at the 300/400 level		6
Total Credits		36

English Minor

The English minor allows students to explore their interests in literature, film, and writing through a flexible, largely student-designed minor. The English minor allows students to develop a program of study around their individual interests and/or connections to their major area of study. This minor can be an engaging supplement to any major or can serve as an entirely different area of specialization, exploration, and inquiry.

The English minor is the department's most flexible minor and allows students the opportunity to take courses in literature, film, and writing in a manner that best suits their needs and aspirations.

English Minor (18 Credits)

Code	Title	Credits
Required (6 credits)		

Foundations

Take 1 course from the following:		3
-----------------------------------	--	---

EN-210	Survey of American Literature I
EN-211	Survey of American Literature II
EN-220	Survey of English Literature I
EN-221	Survey of English Literature II
EN-240	Survey of Postcolonial and Transcultural Literature
EN-255	Methods of Literary Study

Historically Marginalized Traditions

Take one course from the following:		3
-------------------------------------	--	---

EN-120	Race in Comics
EN-132	World Literature
EN-167	Literature and Human Rights
EN-169	Ethnic Literature in the U.S.
EN-172	Women and Literature
EN-174	Women Poets
EN-240	Survey of Postcolonial and Transcultural Literature

EN-328	Narratives of U.S. Immigration	
EN-345	American Women Writers	
EN-347	Studies in U.S. Ethnic Literature	
EN-348	Postcolonial Women's Writing	
EN-370	Antislavery Literature	
Electives		(12 credits)
English electives (exclusive of EN 101, EN 102, EN 202)		6
300- or 400-level Literature electives		6
Total Credits		18

EN-347	Studies in U.S. Ethnic Literature	
EN-348	Postcolonial Women's Writing	
EN-370	Antislavery Literature	
<i>Electives</i>		<i>12</i>

Choose four courses from the following. Two must be at the 300-400 level.

EN-120	Race in Comics	
EN-132	World Literature	
EN-140	Introduction to Poetry	
EN-150	The Short Story	
EN-158	Science Fiction	
EN-160	Literature of the Bible	
EN-164	Fantasy, Faerie and Folk Fairy and Folk Tales From Around the World	
EN-167	Literature and Human Rights	
EN-168	Film and Literature	
EN-169	Ethnic Literature in the U.S.	
EN-170	Search for Identity	
EN-172	Women and Literature	
EN-174	Women Poets	
EN-180	Kerouac, Ginsberg, and the Beats	
EN-210	U.S. Literature (Beginnings-1865)	
EN-211	U.S. Literature (1865-Present)	
EN-220	English Literature (beginnings to 1798)	
EN-221	English Literature (1798-Present)	
EN-222	English Literature (1798-Present)	
EN-230	Environmental Literature	
EN-240	Survey of Postcolonial and Transcultural Literature	
EN-302	Medieval Literature	
EN-303	Arthurian Literature	
EN-304	Witchcraft in Medieval and Renaissance Literature	
EN-306	The Renaissance	
EN-311	Young Adult Literature	
EN-318	Romantic Literature	
EN-320	Victorian Literature	
EN-321	Romantic and Victorian Gothic	
EN-328	Narratives of U.S. Immigration	
EN-334	Modern Poetry	

Literature Minor

Requirements for Literature Minor (18 Credits)

Code	Title	Credits
Required Courses		(18 credits)
<i>Foundations</i>		<i>3</i>
Take one course from the following:		
EN-210	U.S. Literature (Beginnings-1865)	
EN-211	U.S. Literature (1865-Present)	
EN-220	English Literature (beginnings to 1798)	
EN-221	English Literature (1798-Present)	
EN-240	Survey of Postcolonial and Transcultural Literature	
EN-255	Methods of Literary Study	
<i>Historically Marginalized Traditions</i>		<i>3</i>
Take one course from the following:		
EN-120	Race in Comics	
EN-132	World Literature	
EN-167	Literature and Human Rights	
EN-169	Ethnic Literature in the U.S.	
EN-172	Women and Literature	
EN-174	Women Poets	
EN-240	Survey of Postcolonial and Transcultural Literature	
EN-328	Narratives of U.S. Immigration	
EN-345	American Women Writers	

EN-336	Contemporary Poetry
EN-338	Contemporary Novel
EN-342	The American Novel I
EN-344	American Novel II
EN-345	American Women Writers
EN-347	Studies in U.S. Ethnic Literature
EN-348	Postcolonial Women's Writing
EN-350	Chaucer
EN-360	Shakespeare I
EN-362	Shakespeare II
EN-364	Elizabethan and Jacobean Drama
EN-370	Antislavery Literature
EN-380	Milton
EN-390	Irish Literary Revival

Total Credits **18**

Narrative Studies of Health and Body Minor

Narratives of Health and Body Minor Requirements

Code	Title	Credits
<i>Core Required Course</i>		3
EN-217	Introduction to Narrative Studies of Health and Medicine	
<i>Elective Courses (5 courses-one must be at the 300 or 400 level)</i>		15
NH-150	The Short Story for Narratives of Health And Medicine	
NH-252	Technical Writing for Narratives of Health and Medicine	
NH-257	The Power of Memoir for Narratives of Health and Medicine	
NH-260	Creative Writing: Poetry I for Narratives of Health and Medicine	
EN-190	Special Readings in Literature (approved NHB topics)	
EN-450	Special Topics in English (approved NHB topics)	

EN-475	Internship in English (approved NHB topics)
--------	---

Total Credits **18**

Writing Minor Requirements for a Minor in Writing

18 credits of writing beyond EN-101, EN-102, or EN-250.

Code	Title	Credits
Requirements		(3 credits)
Take one of the following courses:		3
JO-101	Introduction to Journalism	
EN-257	The Power of Memoir	
EN-258	Creative Writing: Nonfiction	

Electives		(15 credits)
Select 15 credits of writing courses offered by the department, including, but not limited to the following:		15

EN-165	Oral Literature: the Art of Storytelling
EN-207	The Writer's Life
EN-250	
EN-251	
EN-252	Technical Writing
EN-253	Business Communications
EN-254	Critical Writing
EN-256	Creative Writing: Fiction
EN-260	Creative Writing: Poetry I
EN-262	Creative Writing: Poetry II
EN-266	Journalism: Practice and Techniques
EN-267	Journalism: Advanced Newswriting
EN-268	Journalism: Feature Writing
EN-269	
EN-270	Journalism: Editing
EN-271	Journalism Workshop
EN-272	News Reporting and Writing I
EN-275	Sportswriting
EN-281	Writing for Digital Environments
EN-322	Community Writing

EN-341	Advanced Practices in Writing
EN-351	
EN-352	Practicum in Journalism
EN-353	Narrative Journalism
EN-354	Opinion Writing
EN-410	Theories and Practices of Writing Consul
EN-411	Theory and Teaching of Writing
EN-415	
JO-201	Multimedia Journalism

Students may choose to substitute any three credit English course for one of their elective writing courses. Other writing courses offered in other departments may be counted toward the minor with the permission of the Chair of the English Department.

Total Credits **18**

Other writing courses offered in other departments may be counted toward the minor with the permission of the Chair of the English Department. Each student must take at least one course designated a professional writing course.

History

Department of History and Political Science

Our department explores the present and past through two distinct disciplines: History and Political Science. History is the study of the human past as it is constructed and interpreted with human artifacts, written evidence, and oral traditions. It requires empathy for people, respect for intelligent debate, and the skillful use of an evolving set of practices and tools. Political Science addresses questions about the organization and function of governments, public policies and political processes, systems, and political behavior. Political scientists use both humanistic and scientific perspectives and tools and a variety of methodological approaches to examine the processes, systems, and political dynamics of all countries and regions of the world. All History and Political Science courses emphasize critical reading, rigorous research, and strong oral and written communication skills. The History program encompasses a minor and a major, with a special track for future educators at the K-12 level, and minors in Public History and Middle East Studies. The department also offers a major and minor in Political Science, and minors in Pre-Law and Civic Engagement. History majors complete a capstone project through a seminar course, an independent senior thesis, or by being accepted into the fall American Antiquarian Society Seminar. The department supports the Upsilon Rho chapter of Phi Alpha Theta (the National History Honor Society) and is a member of the American Historical Association and the American Political Science Association.

- 4+1 Program in History and Political Science / Master of Public Administration and Policy (MPAP) (p. 377)
- 4+1 Program in History and Political Science / Master of Public Management (MPM) (p. 379)
- 4+1 Program in History and Political Science / MS in Nonprofit Management (p. 376)
- History Major (p. 380)
- History Major Track for History Educators (p. 382)
- History Minor (p. 382)
- Public History Minor (p. 382)

Faculty

Nathan Angelo, Associate Professor (2016), B.A., Hofstra University; M.A., New York University and City University of New York; Ph.D., New School for Social Research

Erika Briesacher, Professor (2012), B.A., Illinois Wesleyan University; M.A., Southern Illinois University, Edwardsville; Ph.D., Kent State University

Anthony Dell'Aera, Associate Professor (2016), B.A., Trinity College; M.A., Ph.D. Brown University

Martin Fromm, Professor (2013), B.A., Brown University; M.A., Stanford University; Ph.D., Columbia University

Aldo V. Garcia-Guevara, Department Chair, Professor (2006), B.A., University of North Carolina, Asheville; M.A., Ph.D., University of Texas, Austin

Michael Gesin, Professor (2007), B.A., Worcester State College; M.A., Ph.D., Brandeis University

Charlotte Haller, Department Chair, Professor (2004), B.A., Brown University; M.A., Ph.D., University of Wisconsin

Tona J. Hangen, Professor (2008), B.S., Massachusetts Institute of Technology; Ph.D., Brandeis University

Joshua D. Koenig, Assistant Professor (2022), B.A., M.A., Southern Illinois University Edwardsville; Ph.D., Western Michigan University

Tanya Mears, Associate Professor (2010), B.S., Tuskegee University; M.A., Ph.D. University of Massachusetts, Amherst

Alison K. Okuda, Associate Professor (2017), B.A., University of California; M.Phil., Ph.D., New York University

Noa Shaindlinger, Assistant Professor (2022), B.A., Tel Aviv University, Israel; M.A., Ph.D., University of Toronto, Canada

Robert W. Smith, Professor (2007), B.A., Syracuse University; M.A., Ph.D., College of William and Mary

Courses

HI-103 Connecting Ancient Worlds: World History to 1500

LASC Categories: GP, TLC

Surveys economic, social, political and intellectual developments of global societies and their inter-relationship from ancient times to 1500. Counts for Global/Thematic in the History major.

Fall and Spring and every year. 3 Credits

HI-104 Age of Empires: World History 1500 to the Present

LASC Categories: GP, TLC

Surveys economic, social, political, and intellectual development of global societies world civilizations and their inter relationship from 1500 to the present. Counts for Global/Thematic in the History major.

Fall and Spring and every year. 3 Credits

HI-105 Modern World History

LASC Categories: GP, TLC

Surveys economic, social, political, and intellectual development of global societies and their inter-relationship from 1914 to the present. Counts for Global/Thematic in the History major.

Fall and Spring and every year. 3 Credits

HI-111 US History to 1877

LASC Categories: CON, USW

From colonization through the Civil War era. A study of politics, society, economy, diplomacy, and culture in that period. Counts for Europe/United States in the History major.

Fall and Spring and every year. 3 Credits

HI-112 US History 1865 to the Present

LASC Categories: CON, USW

From the Civil War era to the present. Topics include politics, society, economy, diplomacy, and culture in modern America. Counts for Europe/United States in the History major.

Fall and Spring and every year. 3 Credits

HI-140 We the People: Writing the Constitution (writing II)

LASC Categories: CON, WR2

Prerequisites: EN-101

While building skills in research, writing, and information literacy, this course also provides historical perspectives on current issues, focusing upon the state and federal constitutions as living documents. Students will develop tools to understand the ways that laws reflect, limit, and shape society. Counts for a 100-level Europe/US course within History major.

Spring only and every 2-3 years. 3 Credits

HI-150 Special Topics

Special topics at the introductory level; especially appropriate for first- and second-year students. Geographic region or historical approach varies by course and instructor.

Other or on demand and other or on demand. 3 Credits

HI-155 World History Through Film

LASC Categories: GP, DIV

This course introduces students to several important themes in world history through the medium of film. It will focus on issues of race, class, and gender in different countries during the 20th century up to the present. In addition, it will examine related issues such as colonialism, migration, diaspora, urbanization, family, food culture, music and dance, religion, resistance, genocide, and others. Students will learn how to use film as a historical source, as a product of the place and period in which it was created. It counts for the 100-level Global/Thematic category in the History major.

Alternating and every 2-3 years. 3 Credits

HI-156 Modern Global Environmental History

LASC Categories: GP

This course examines twentieth century world history through an environmental lens. The course will explore the significance of natural resource distribution in uneven globalization, the human and environmental costs of resource extraction in different national and colonial contexts, the role of natural disasters in shaping and accelerating social and political change, environmental costs and experiments that came with mobilization for war, the cross-generational legacies of twentieth century environmental disasters, and the meanings and possibilities of sustainable development. Counts for Global/Thematic in the History major.

Every year. 3 Credits

HI-172 Plots, Scandals, and Villains**LASC Categories:** GP, TLC

Historical scandals, plots, and the labels of "villain" or "hero" are rich opportunities to analyze history in context. What counts as a scandal varies widely by time and place. How a plot or crime is reported or understood in primary source material can frame a narrative of "good" versus "evil," and how those meanings change over time. Students will use the lens of these types of global events to highlight historical circumstance, chronology, and context while identifying and utilizing historical sources and methods. This course counts for the "Thematic/Global" category in the History major.

Other or on demand and every 2-3 years. 3 Credits

HI-178 A History of Ghana**LASC Categories:** GP, DIV, TLC

The diverse country of Ghana in West Africa has many histories, each attuned to different perspectives. While all of Ghanaian history cannot be covered in one course, students will be introduced to many important issues from ancient and ancestral Ghana to the present. Through the voices of both Ghanaians and scholars of Ghana, students will take a long view of history to understand the important status of Ghana in the world today. Counts for Africa/Latin America in the History major.

Fall only and every year. 3 Credits

HI-181 History Explorations Cohort I

This is a one-credit course that is designed to support integrative learning and development of metacognitive skills for students considering teaching history and social studies at the K12 level in Massachusetts. It is the first of a three course sequence that is required for students in the Educators' Track in the History Major, but is open to all History majors interested in exploring social studies education as a career and deepening their history studies.

Other or on demand and every year. 1 Credit

HI-193 First Year Seminar History**LASC Categories:** FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

Fall only and every year. 3 Credits

HI-200 The Historian's Craft**Prerequisites:** one 100-level history course.

A methods course providing hands-on exploration of history as both a professional field and a scholarly discipline.

Fall and Spring and every year. 4 Credits

HI-205 Native America**LASC Categories:** TLC, USW, DIV, DAC

This survey covers the broad sweep of Native American history and focuses on the encounter between American and European civilizations and how Native culture has adapted through the centuries. Counts for Europe/US in the History Major.

Every 2-3 years. 3 Credits

HI-207 American West: Myth and Reality

The historic development of the West, its impact on the American character, and a study of how myths became accepted "fact." Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-208 American Immigrant History

Survey of immigration. Topics such as old-world background, impact on the United States, nativism, cultural pluralism, religion, mobility, family and politics. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-211 History of US Foreign Policy I**LASC Categories:** USW

Colonial origins to the era of the Spanish American War. The sources and developments of United States foreign policy in that period. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-213 Colonial Latin America

The People of Latin America from Pre-Columbian societies to the wars for independence, focusing on race, sex and power. Counts for Africa/Latin America in the History major.

Every 2-3 years. 3 Credits

HI-214 Modern Latin America**LASC Categories:** TLC, GP, DAC

The people of Latin America from independence to the present, focusing on race, sex and power. Counts for Africa/Latin America in the History major.

Every 2-3 years. 3 Credits

HI-216 Labor, Capital, and Power in United States History**LASC Categories:** HBS, USW

The history of the United States economic development. Topics to be addressed include: slavery; consumerism and market economies; industrialization and de-industrialization; gendered and racialized divisions of labor; the global movement of capital, goods, and workers; union organizing; and the role of government and the law in shaping the economy. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-217 US Social History**LASC Categories:** TLC, USW, WAC, DIV, DAC

Considers topics and approaches in the field of social history in the United States. Counts for Europe/US in History major. [Applicable to Women's, Gender, and Sexuality Studies Minor.]

Every 2-3 years. 3 Credits

HI-218 US Constitutional History I**LASC Categories:** CON, HBS, USW

The development of constitutional history to 1865. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-219 US Constitutional History II**LASC Categories:** CON, USW, HBS

The development of the United States constitution since 1865. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-220 American Military History

An overview of American military history from colonial times to the present. Students will develop a conceptual and methodological framework for studying the American military system and how it has changed over time and how it has shaped, and been shaped by, both U.S. and global history. Counts for Europe/United States in the History Major.

Spring only and every 2-3 years. 3 Credits

HI-221 African-American History I

The people of African descent from the emergence of the slave trade to the Civil War, focusing on race, gender, and power. Counts for Europe/United States in the History major.

Every year. 3 Credits

HI-222 African-American History II

The people of African descent from the end of the Civil War through the twentieth century, focusing on race, class, gender, and power. Counts for Europe/United States in the History major.

Every year. 3 Credits

HI-223 History of France I

Domestic and foreign problems of nineteenth and twentieth century France. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-224 English History I**LASC Categories:** TLC, WAC

English history from earliest settlement to the reign of Elizabeth I. Origins of the Common Law, Parliament, and English liberty. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-225 English History II**LASC Categories:** TLC, WAC

English history through the English Revolution, the Industrial Revolution, the British Empire, the World Wars, and decline. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-226 Latin American History Through Film

This course will explore how filmmakers have portrayed Latin American History in their movies. Counts for Africa/Latin America in the History major.

Every 2-3 years. 3 Credits

HI-227 American Popular Art and Architectural History**LASC Categories:** CA, ICW, TLC

An introduction to and survey of popular architectural and artistic expression in American life from the point of initial European contact with Native American groups through the present. Focus on a variety of material and classifications of art and architecture, including high-style, vernacular, folk, popular, commercial, ethnic, and regionally-oriented materials. Counts for Europe/United States in the History major.

Fall and Spring and every 2-3 years. 3 Credits

HI-228 Currency, Commodities, and Crashes: Global Economic History, 1500-2000**LASC Categories:** GP, HBS

This course explores economic ideas, events, and institutions in world history, from approximately the rise of modern banking through the Industrial Revolution and into the integration of the early 2000s. This course situates concepts such as labor, long-run/short-run, panics and depressions, capital, trade, political economy, colonialism, currency, and markets in global social and cultural contexts, considering not only economic reasons for the behavior of historical actors but also the importance of economic history (broadly understood) as part of an interdisciplinary approach to research. Counts for Global/Thematic/Methodological in the History major.

Other or on demand and every 2-3 years. 3 Credits

HI-229 The Holocaust

In this course, we will examine the origins and prosecution of the Holocaust, the systematic destruction of Jews and Jewish life by the Nazi regime prior to and during World War II. From beginning to end this is a course about an extraordinarily bold and far-reaching mass murder, one that occurred in "civilized" Germany. The course focuses on the state and ideology that lay behind the genocide, its victims, and the voices of resistance against it. Counts for Europe/US in the History major. Alternating and every 2-3 years. 3 Credits

HI-232 European Intellectual Hist II**Prerequisites:** HI-103 or HI-104

The main theoretical works, philosophic, psychological and scientific, of the nineteenth and twentieth centuries. Counts for Europe/U.S. in the History major.

Every 2-3 years. 3 Credits

HI-234 Russian History I

A study of major political, economic, social, intellectual and diplomatic currents in Russia, from the Kievan era to Stalin. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-235 Russian History II

A study of major political, economic, social, intellectual, and diplomatic currents in Russia, from the Kievan era to Stalin. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-236 Nature and Culture in Premodern East Asia**LASC Categories:** GP, TLC

This course will examine premodern East Asian history through the lens of interactions between humans and nature, exploring how people in the regions of present-day China, Japan, (North and South) Korea, and Vietnam engaged with the land, water, plants, and animals to forge new cultural patterns, social relations, and political institutions. Counts for Middle East/Asia in the History major. Every 2-3 years. 3 Credits

HI-237 Modern Far East History II**LASC Categories:** GP

The transformation and re-invention of East Asian societies since World War II. Counts for Middle East/Asia in the History major.

Every year. 3 Credits

HI-243 Introduction to Public History

Introduction to the field, theory, and practice of Public History and associated institutions such as museums, archives, and historical sites. Counts for Global/Thematic/Methodological in the History major.

Every 2-3 years. 3 Credits

HI-245 History of Modern Germany I

The origins and growth of Brandenburg-Prussia; their impact on the rest of Germany from the foundation of the Holy Roman Empire to the emergence of the Second Reich in 1871. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-246 History of Modern Germany II

German economic and political crises from 1870 to the present. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-247 Central America and the Caribbean

This survey examines the political, cultural and social history of Central America and the Caribbean from pre-Columbian times to the present with an emphasis on the 20th century. Counts for Africa/Latin America in the History major.

Every 2-3 years. 3 Credits

HI-248 Seminar on Globalization & Human Rights**LASC Categories:** USW, GP, DAC

This class is taught with SO 228 LatinX Experiences. WSU and A.I.D. program participants in their sophomore year will explore globalization and human rights and issues of personal growth and academic development. Counts for Global/Thematic/Methodological in the History major.

Every 2-3 years. 3 Credits

HI-250 Special Topics in History

Special topics at the introductory or intermediate level; especially appropriate for first and second-year students.

Every year. 3 Credits

HI-251 Roots of China's Rise: Reform, Revolution and Reinvention**LASC Categories:** TLC, GP

Examines the modern historical roots of China's rise as an international power, from the decline of its last imperial dynasty through the tumults of 20th century social movements to its recent emergence as a global economic power. Counts for Middle East/Asia in the History major.

Every 2-3 years. 3 Credits

HI-252 Civil War and Reconstruction**LASC Categories:** DIV, TLC

The causes, consequences, and meaning of the Civil War and Reconstruction, as viewed from multiple perspectives. Social, political, military and cultural history will all be explored to develop a rich and multilayered understanding of questions of violence and division, emancipation, voting rights, military service, terrorism, gendered violence, and the draft, among others. Counts for Europe/US in the History major.

Spring only and every 2-3 years. 3 Credits

HI-255 Faculty-Led Study Abroad: China Cultural Immersion**LASC Categories:** TLC, GP

Experientially based immersion in the culture and society of China, consisting of language study, visits to historical and cultural sites, cultural immersion activities in local life, and the opportunity to engage with Chinese students. Counts for Middle East/Asia in the History major.

Every 2-3 years. 3 Credits

HI-257 Political Terrorism in Historical Perspective

A comparative approach to the terrorist movements of the nineteenth and twentieth centuries, concentrating on the European groups. Counts for Global/Thematic/Methodological in the History major.

Every 2-3 years. 3 Credits

HI-258 Russia Since the Stalin Era

An analysis of the major political, economic and diplomatic developments in the (former) Soviet Union since the death of Stalin; the formation of the Commonwealth of Independent States. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-261 Middle East History I**LASC Categories:** TLC, GP

The rise and expansion of Islam; the Caliphate; Muslim religion, civilization and its impact on the West, decline of medieval Islam. Counts for Middle East/Asia in History major.

Every 2-3 years. 3 Credits

HI-262 Middle East History II: the Ottoman Empire, 1289-1920**LASC Categories:** GP, TLC, WAC

The Ottoman Empire: expansion, institutions, impact on Europe, decline of the Empire. Counts for Middle East/Asia in History major.

Every 2-3 years. 3 Credits

HI-263 The Modern Middle East, 1900-present**LASC Categories:** GP, DIV

This course is an invitation to reconsider our preconceived notions about the modern Middle East, by way of introduction to the rich history of the region since 1900. Students will learn about the legacies of the Pan-Arabism in the era of decolonization, the politics of oil in the Gulf, and the rise of authoritarian states (Syria, Iraq). We will focus on histories of violence and the struggles of stateless peoples (Palestinians, Kurds, Armenians) and consider the dynamics of popular uprisings, revolutions and rebellions, both failed and successful ones. Counts for Middle East/Asia in the History major.

Every 2-3 years. 3 Credits

HI-265 Land and Power in North America**LASC Categories:** HBS

This course will survey the history of American land use from pre-contact Native North America to the present. The course will examine how peoples of North America came to acquire, control, utilize, and transform the landscape. In turn, the class explores how land shaped American history. Topics of study include early American agriculture, the plantation system, land policy, settlement and agricultural expansion, scientific and technological change, industrial transformation, land use in wartime, land policy, and water rights. It will introduce students to the diverse people, places, and cultural traditions that collectively constitute the American landscape. Europe/US in History major.

Fall only and every 2-3 years. 3 Credits

HI-267 US-Latin American Relations**LASC Categories:** USW, WAC, DAC

This course will analyze the political, economic, social, and cultural impact of the interactions between and among the governments and people of the US and Latin America. Counts for Africa/Latin America in the History major.

Every year. 3 Credits

HI-268 American Revolutionary Period**LASC Categories:** TLC, USW, CON

The causes, consequences, and meaning of the American Revolution, as viewed from multiple perspectives. Social, legal, constitutional, political, military, and cultural history will all be explored to develop a rich and multi-layered understanding of questions of representation, taxation, slavery and freedom, Indigenous experiences, military strategy, popular mobilization, and political ideology, among others. Counts for Europe/US in the History major. Every 2-3 years. 3 Credits

HI-269 History of the Ancient Mediterranean World

The rise, development, and fall of the civilizations of the Ancient Mediterranean from the beginning of civilization in the Fertile Crescent to the fall of Rome in the west, and the rise of successor states. Topics include the birth of agriculture, cities, writing, and trade, religions, and the development of empires and cultures, including but not limited to the Sumerians, Babylonians Egyptians, Persians, Greeks, and Romans, and their interactions with the wider world. Counts for Global/Thematic/Methodological in the History major.

Alternating and every 2-3 years. 3 Credits

HI-270 History of Modern Italy

Study of modern Italy from 1789 to the present. Counts for Europe/U.S. in the History major. Every 2-3 years. 3 Credits

HI-274 The History of Gender and Sexuality in America**LASC Categories:** TLC, USW, DIV, DAC

The history of sexuality and gender in America. Includes investigations of lesbian and gay histories; transgender histories; attempts to regulate and define sexuality; practices of birth control; the intersections of race, class, and gender; the social construction of gender; and the challenges of doing hidden histories. Counts for Europe/US in the History major. [Applicable to the Women's, Gender, and Sexuality Studies Minor.]

Every 2-3 years. 3 Credits

HI-276 Jewish History I

This course constitutes a systematic introduction to the Biblical history of the Jewish people down to the 12th century. Counts for Global/Thematic/Methodological in the History major.

Every 2-3 years. 3 Credits

HI-277 Jewish History II

History of the Jewish people from Medieval period to early Modernity. Counts for Global/Thematic/Methodological in the History major.

Every 2-3 years. 3 Credits

HI-278 African History Before 1800**LASC Categories:** GP, TLC, DAC, DIV

An introduction to the history of societies and cultures of Africa up to 1800. We will consider such topics as Nubian queens in Egypt, the diffusion of Bantu languages, transcontinental trade networks, the spread of Islam and Christianity, the rise of West African empires, and the transatlantic slave trade. Counts for Africa/Latin America in the History major. Alternating and every 2-3 years. 3 Credits

HI-279 African History Since 1800**LASC Categories:** GP, TLC, DAC, DIV

An introduction to the history of groups and countries within Africa from 1800 to the early 21st century. Like the rest of the world, Africa was also changing rapidly during these centuries. Topics include the extraction of wealth, European colonial rule, pan-Africanism, independence and development during the Cold War, and Africa today. Counts for Africa/Latin America in the History major.

Alternating and every 2-3 years. 3 Credits

HI-280 Introduction to African Diaspora History**LASC Categories:** TLC, GP, DAC

Students will learn about the development of the African diaspora and how it has shaped the world since antiquity. We will consider the movements, experiences, and exploits of ordinary people and celebrated figures of African descent through such topics as imperial expansion; slavery, resistance, and freedom; nationalism and the civil rights movement; and current global issues. Counts for Global/Thematic/Methodological in the History major. Alternating and every 2-3 years. 3 Credits

HI-282 History Educators Cohort II**Prerequisites:** HI-181.

This is a one-credit course that is designed to support integrative learning and development of metacognitive skills for students considering teaching history and social studies at the K12 level in Massachusetts. Students will work with a cohort of future History educators to develop their own pedagogical or educational practice in history, and to support each other. It is the second of a three course sequence that is required for students in the Educators' Track in the History Major, but is open to all History majors interested in exploring social studies as a career and deepening their history studies.

Other or on demand and every year. 1 Credit

HI-283 Food in American History**LASC Categories:** ICW

American History, 1607 to the present, as understood through the changing and diverse meanings of food. Food reflects broader economic, culture, and political trends and structures in American history as well as providing a multi-sensory window into the past. As part of this class, students will engage in a civic engagement and/or public history project related to the history of food. Counts for Global/Thematic/Methodological in the History major. Spring only and every 2-3 years. 3 Credits

HI-284 Gender & Sexuality in the Middle East And North Africa**LASC Categories:** GP

Middle Eastern women and queer folks are often imagined as oppressed, voiceless, and subdued by religion, traditional patriarchal society & the authoritarian state. This course will challenge these notions, focusing instead on the lived experience of men, women, gender non-binary and transpeople in the Middle East and North Africa, examining the historical construction of complex and intersecting identities and people's understanding of gender and sexual difference. Counts for Middle East/Asia in the History Major.

Alternating and every 2-3 years. 3 Credits

HI-285 History of Baseball**LASC Categories:** USW, TLC, DAC

History of baseball from the first bat-and-ball games to the present. Counts for Global/Thematic/Methodological in the History major. Every 2-3 years. 3 Credits

HI-286 American Legal History

An overview of American legal history from the colonial era to the present. Counts for Europe/US in the History major.

Every 2-3 years. 3 Credits

HI-290 Health and Healing in America**LASC Categories:** ICW, TLC, WAC

Explores topics in the history of medicine, health, disease, and healing in US history. Counts for Europe/United States in the History major. Every 2-3 years. 3 Credits

HI-300 The Early National Period of the US: 1783-1829**LASC Categories:** USW, TLC**Prerequisites:** HI-111

The Confederation, Constitution, the emergence of political parties, and the rise of American nationality. Counts for Europe/United States in the History major. Every 2-3 years. 3 Credits

HI-301 Research and Writing of History**Prerequisites:** HI-200 Historian's Craft

The history of history. A study of historiography, theory of history, and practice of historical research and writing. Continues from Historian's Craft, and lays the foundation for capstone-level work.

Other or on demand and every year. 4 Credits

HI-303 Colonial North America to 1763**Prerequisites:** HI-111 and HI-112

This course will cover colonial North America, focusing on the colonies that became the United States, from the first arrivals to 1763. Topics include the peopling of the Americas from Asia and Europe, the rationale for European colonization, the foundation of the English empire, settler/native relations, the African slave trade, colonial policy, interactions with the French, Dutch, and Spanish colonies, expansion in the eighteenth century, colonial culture, the rivalry between Great Britain and France, and the expulsion of France from North America. Counts for United States/Europe in the history major.

Fall and Spring and every 2-3 years. 3 Credits

HI-308 Europe in the Age of Revolution and Nationalism: 1789-1870**Prerequisites:** HI-103 or HI-104

The French Revolution, Napoleon, Congress of Vienna; nationalism, liberalism, socialism; Second French Empire; German and Italian unifications. Counts for Europe/United States in the History major. Every 2-3 years. 3 Credits

HI-310 Massachusetts History**Prerequisites:** HI-111 or HI-112

A survey of Massachusetts history from its colonial origins to the present era, including the social, economic, political, constitutional development of state history and culture. Counts for Europe/United States in the History major.

Every year. 3 Credits

HI-311 Ancient Rome**Prerequisites:** Writing II.

This course will cover Roman history from the Indo-European migration into Italy to the fall of the Roman Empire in the west. Topics include the peopling of the Italian peninsula, the founding of Rome, the establishment of the republic, the emergence of Rome as a great power, the fall of the republic and establishment of the empire, the expansion of the Roman world, Roman culture and society, the rise of Christianity, the barbarian invasions, the fall of Rome in the west, and the persistence of Rome in the east. Counts for Global/Thematic/Methodological in the History major.

Alternating and every 2-3 years. 3 Credits

HI-312 20th Century Europe I**Prerequisites:** HI-103 or HI-104

The politics and economics of World War I; the pattern of restlessness between the wars in the rise of dictatorship in Germany, Italy, and Spain; the regimentation of economic control. Counts for Europe/United States in History major.

Every 2-3 years. 3 Credits

HI-318 Ethnic Identities in China**LASC Categories:** TLC, GP, DAC, WAC**Prerequisites:** Writing II.

This course examines the modern history of ethnic identity formation in China and its frontiers and borderlands. It explores how China's own history of territorial expansion and political subjugation driven by ethnic minority rule shaped Chinese concepts of ethnic unity and diversity. The intersecting trajectories of European imperialism and Chinese ethnic nationalism will also be discussed, with the goal of situating the construction of ethnic categorization in China to global processes of colonialism and nationalism. Counts for Middle East/Asia in the History major.

Alternating and every 2-3 years. 3 Credits

HI-319 Material Culture

Focuses on the way scholars use and analyze objects in historical, social and cultural content. Counts for Global/Thematic/Methodological in the History major.

Every 2-3 years. 3 Credits

HI-320 Citizen Nation**LASC Categories:** CON, USW, WAC, DIV, DAC**Prerequisites:** Writing II.

Explores the history and meaning of citizenship in the United States, including discrimination, rights struggles and changing citizenship criteria. Counts for Europe/US in History major. [Cross-listed with PO-320.]

Fall only and every 2-3 years. 3 Credits

HI-321 Museums and Society

Course on the history of museums and their development as a major space for public history and memory. Counts for Global/Thematic/Methodological for the History major.

Every 2-3 years. 3 Credits

HI-322 Nationalism**LASC Categories:** GP, HBS, DAC

Examines the theories of nationalism, the development of the modern nation-state, and its effect on global politics. [Cross-listed with PO-322.] Counts for Global/Thematic/Methodological in the History major.

Every 2-3 years. 3 Credits

HI-323 Empire**Prerequisites:** HI-103 and HI-104

Theories and models of colonization, the reaction of colonized peoples, and the way historians analyze imperialism from 1400 to 1920's. [Cross-listed with PO-323.] Counts for Global/Thematic/Methodological in the History major.

Every 2-3 years. 3 Credits

HI-324 Museum Education and Interpretation**Prerequisites:** Writing II.

Public history and museum education focuses on the use of institutional collections, technology, and programming to support a community-engaged mission. This hands-on course focuses on how practitioners develop visitor-centered educational programs within their institutions, the theories and models they draw on to serve the public, and act as a bridge between academic and publicly-oriented research. Counts for Global/Thematic/Methodological within the History major.

Other or on demand and every 2-3 years. 3 Credits

HI-326 Global Histories of Violence**LASC Categories:** GP**Prerequisites:** Writing II.

This seminar will explore the disparate histories of violence and its different forms: colonial violence and anticolonial resistance, state violence and the carceral state, counterinsurgency and torture, genocide and ethnic cleansing from the early modern era to the present. The study of violence will be rooted in historical context but will also consciously take on a comparative approach. Counts for Global/Thematic/Methodological in the History major.

Alternating and every 2-3 years. 3 Credits

HI-327 Out of Place: Displacement, Refugeehood, Migration in or of the Middle East**LASC Categories:** GP, DIV**Prerequisites:** Writing II

This course focuses on migrants and refugees in and of the Middle East. It explores the histories of human mobility within and from the region since 1500. We will pay close attention to the reasons people have migrated, and how some ended up refugees and asylum seekers because of war and persecution; circulation of work migrants and political activists; and the racialization and discrimination in destination countries. Through this course we will identify and empathize with the diverse experiences of migrants, refugees, asylum seekers and work migrants. Counts for Middle East/Asia.

Fall and Spring and every 2-3 years. 3 Credits

HI-332 American Environmental History**LASC Categories:** ICW, NSP**Prerequisites:** Writing II.

This course explores the impact of environmental conditions on American historical and cultural development and examines changing attitudes toward environmental issues. Environmental history is an interdisciplinary field that focuses on the physical, material, cultural, intellectual, governmental, and economic processes, which helped transform and shape our environment and society in different places and times. This course explores American history through an environmental lens. It examines America's interaction with nature the environment, and environmental science since the arrival of Europeans in the fifteenth century. Counts for Europe/United States in the History major.

Fall and Spring and every 2-3 years. 3 Credits

HI-333 Women in Latin America**Prerequisites:** HI-213 HI-214 HI-226 or HI-247

Examines the roles of women in diverse societies including Mexico, Brazil and Caribbean nations. Emphasis on the modern period. Counts for Africa/Latin America in the History major.

Every 2-3 years. 3 Credits

HI-334 Environmental Crisis and Management in China**LASC Categories:** HBS, NSP

This course will examine the history of the relationship between Chinese society and culture, economic development, state power, scientific theories, and the environment. Recent media reports have highlighted a worsening environmental crisis in China while at the same time reporting on China as a new leader in the development of alternative energy sources. Government, domestic and international non-governmental organizations, urban and rural activists, scientific studies and discourses, and evolving political ideologies will be addressed. Counts for Middle East/Asia in the History major. Every 2-3 years. 3 Credits

HI-335 Imperial Crossroads of Modern East Asia**LASC Categories:** TLC, GP

Examines East Asian history at the crossroads of Chinese, Japanese, Russian and Korean colonial and nationalist movements in a region called Manchuria, presently China's northeast border with Russia, Korea, and Mongolia. Counts for Middle East/Asia within the History major. Every 2-3 years. 3 Credits

HI-336 Race, Sex, and Power in the American South**LASC Categories:** DIV**Prerequisites:** Writing II.

This course covers the history of the American South from its colonial beginnings through the Civil Rights era. We will dissect the tangled history of race and sex in the region from multiple perspectives. Throughout, we will highlight the ways that viewing history from the margins creates an expansive perspective for revealing the structures of power and the functioning of the law in the South. We will question stereotypes of regional distinctiveness and backwardness and critically assess the relationship of the South to the nation. Counts for Europe/United States in the History major. Alternating and every 2-3 years. 3 Credits

HI-337 Travels in Asia**LASC Categories:** TLC, GP

Travels in Asia examines modern East Asian history through the lens of Chinese, Japanese, European, and American travel narratives from the seventeenth through the twentieth centuries. Counts for Middle East/Asia in the History major. Every 2-3 years. 3 Credits

HI-342 History of Early Modern Europe**Prerequisites:** Writing II.

This course analyzes political, economic, social, intellectual, and cultural developments in Europe in global context from approximately 1450 to the beginning of the revolutionary period (approximately 1780). This course includes major events and phenomena such as the impact of the Reformation, the Thirty Years' War, the Enlightenment, colonization, and the beginning of the Industrial Revolution. This course counts for Europe/United States in the History major.

Other or on demand and every 2-3 years. 3 Credits

HI-351 Age of Jackson**LASC Categories:** USW, TLC**Prerequisites:** HI-111 or HI-112

Political, social, economic, and intellectual developments in the second quarter of the nineteenth century. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-353 The Age of Reform: US History, 1877-1920**Prerequisites:** one History course.

An analysis of the transformation of America, including reform response to the Gilded Age's industrialization, urbanization and immigration patterns. Counts for Europe/United States in the History major.

Every 2-3 years. 3 Credits

HI-356 The History of the Cold War**LASC Categories:** USW**Prerequisites:** HI-104 or HI-105 or HI-112

The origins of the Cold War, American, Soviet and Chinese foreign policies, arms control negotiations and future prospects. Counts for Global/Thematic/Methodological in the History major.

Every 2-3 years. 3 Credits

HI-373 African Immigration in the 20th Century**LASC Categories:** GP, TLC, DAC**Prerequisites:** Writing II

Why do we commonly hear about a "brain drain" in African countries or human rights violations of refugees entering Europe? This course examines how these current global issues developed through the history of immigration from the African continent to North America and Europe during the 20th century. Counts for Global/Thematic/Methodological in the History major.

Other or on demand and every 2-3 years. 3 Credits

HI-375 Popular Music and Performance in Modern Africa**LASC Categories:** CA, TLC, DAC**Prerequisites:** Writing II

This course looks at changes in popular music in Africa since the late 19th century. Instead of studying the practice of traditional or art music in Africa, students will gain a stronger understanding of the significance of global connections between Africa and other parts of the world by examining the performance of popular music in a variety of spaces, including streets, nightclubs, and ceremonies. Counts for Africa/Latin America in the History major.

Other or on demand and every 2-3 years. 3 Credits

HI-377 American Fascism**LASC Categories:** USW**Prerequisites:** 9 credits in history beyond the 100-level or permission of the instructor.

The history of American Nazi movements, including neo-Nazi, anti-government, and paramilitary movements, have a history spanning decades and connecting to early nativist, racist, and hypernationalist movements from the founding forward. This course systematically analyzes the ecosystem of American Nazism largely in the 20th and 21st centuries, taking into account the structures that impact the formation of these movements as well as the individuals who lead and embrace their ideologies. The study of American Nazism is interdisciplinary, requiring extensive study of information literacy, historical contexts, sociopolitical events, and legal approaches to dismantling the influence of American Nazism. Europe/US in History major.

Other or on demand and every 2-3 years. 3 Credits

HI-381 The First World War

The origins, course, and consequences of the First World War. Counts for Global/Thematic/Methodological in the History major.

Every 2-3 years. 3 Credits

HI-383 History Educators Cohort III**Prerequisites:** HI-282.

This is a one-credit course designed to support integrative learning and development of metacognitive skills for students considering teaching history and social studies at the K12 level in Massachusetts. Students will work with a cohort of future History educators to practice professional development, to analyze historiography for teaching, to understand and apply state standards for educators to the study of history, to evaluate their own pedagogical or educational practice, and to support each other. This is the third and final course of a three course sequence that is required for students in the Educators' Track in the History Major. Other or on demand and every year. 1 Credit

HI-385 Doing Historic Preservation**Prerequisites:** Writing II.

This course serves as an introduction to the theory and practice of historic preservation. The course is designed to examine the history of the preservation movement in United States, and explore the ways in which laws, public policies, and cultural attitudes shape how we preserve or do not preserve the built environment in America. Students will engage directly with the community and take part in projects that focus on experiential learning and direct applications of historic preservation. Counts for Global/Thematic/Methodological within the History major.

Fall only and every 2-3 years. 3 Credits

HI-390 World History for Educators**LASC Categories:** TLC, GP**Prerequisites:** HI-200

This course examines history through global perspectives for future educators. It deals with pedagogical approaches to and frameworks for teaching on major themes running through global history from premodern to contemporary periods. The course investigates broad themes in global history ranging across technological and scientific discoveries, shifting forces of political power and imperial formation, and the evolution of ideas about culture and society. Counts for Global/Thematic/Methodological in the History major.

Fall and Spring and every year. 4 Credits

HI-391 U.S. History for Educators**LASC Categories:** USW**Prerequisites:** HI-200 Historian's Craft

This course examines United States history while providing in-depth training and practice in approaching this content area as future educators. It deals with major themes running through US history from its early origins to contemporary periods. The course investigates broad themes in US history ranging across the processes of colonization and imperialism, economic development, slavery, political development, cultural change, and social movements. Counts for Europe/United States in the History major. Alternating and every year. 4 Credits

HI-400 Independent Study in History

Special topics for advanced research and study under the guidance of a faculty member. Consent of instructor.

Fall and Spring and every year. 1-6 Credits

HI-408 Directed Study: History

Directed study offers students who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

HI-440 Internship in History

Internships in museums, archives, government agencies, etc. at beginning professional level in cooperating institutions, under joint supervision of agency and faculty.

Fall and Spring and every year. 6-12 Credits

HI-445 Public History Practicum**Prerequisites:** HI 243 (Introduction to Public History) and 9 credits in the Public History minor

The Public History Practicum is designed to allow students to apply the concepts they have learned in courses progressing to a Public History minor. In this course, students will create, produce, or mount an exhibit, event, or project showcasing their understanding of Public History concepts, methods, and approaches. This project can then be incorporated into a portfolio of students' work in the Public History minor.

Other or on demand and other or on demand. 3 Credits

HI-450 Special Topics in History

Advanced special topics in history; course may be taught as an upper level seminar.

Other or on demand. 3 Credits

HI-460 Senior Research Seminar in History**LASC Categories:** WAC, CAP**Prerequisites:** any two 100-level History courses and HI-200

Capstone research, writing and portfolio seminar for seniors in the history major; students produce a substantive original research paper.

Fall and Spring and every year. 4 Credits

HI-465 American Antiquarian Society Seminar**LASC Categories:** CAP

Prerequisites: HI-200 or Permission of Instructor
The American Antiquarian Society sponsors a prestigious annual seminar each fall for a select group of undergraduates from Worcester colleges and universities; participants produce a substantial original research paper. The topic and theme varies year to year, guided by a visiting scholar at the AAS. Suitable for upper-level undergraduates who can work independently and have strong analytical and writing skills. Usually 2 slots are reserved for WSU students through a competitive application process. Fall only and every year. 4 Credits

HI-470 Senior Thesis in History**LASC Categories:** CAP, WAC**Prerequisites:** any two 100-level History courses and HI-200.

History major capstone option for students who intend to write a senior thesis in history.

Fall and Spring and every year. 4 Credits

Program Learning Outcomes

- Students will recall and explain historical events and facts of significance to their coursework, being able to set them in chronological order.
- Students will have a working sense of how history unfolded.
- Students will set historical facts/events in broader context. They will have the "flavor of an era" and be able to connect facts together.
- Students will experience history as a flow, not as separate discrete "bits" of information.
- Students will identify primary and secondary sources, and understand the scholarly uses of each.

- Students can analyze a given source using appropriate questions, methods and techniques.
- Students will gain information literacy with respect to both printed and online sources of historical information.
- Students will frame questions for historical research and conduct a program of research inquiry, demonstrating strong and independent research skills.
- Students will create original works of historical scholarship.
- Students will reflect on their own learning process and become self-reliant and independent learners.

4+1 Program in History and Political Science / MS in Nonprofit Management

Students enrolled in History or Political Science (majors and minors) may apply for the joint 4+1 program with the Master of Science in Non-Profit Management (NPM). The following are the eligibility requirements:

1. Applicants must have completed 90 undergraduate credits.
2. Applicants must have a minimum 3.25 GPA in their majors
3. Applicants must have an overall minimum 3.0 GPA
4. Applicants must have completed an undergraduate internship, independent study or capstone project related to a nonprofit organization
5. Two letters of recommendation

In order to complete the joint degree, students take 9-11 graduate credits, which count both in their undergraduate program and in the master's in nonprofit management. The graduate credits are taken in place of elective undergraduate credits. Students get advising from both the graduate coordinator and their undergraduate advisor. Admission is on a rolling basis and applicants may start their program of study in any semester.

Code	Title	Credits
MS in Nonprofit Management (36 credits)		
<i>CORE COURSES</i>		
NM-901	The Nonprofit World: NGOs, the State & Civil Society	3
NM-934	Ethics and Management of Human Resources	3
NM-942	Organizational Theory	3
NM-945	Financial Management for Non-Profit Organizations	3
NM-949	Strategic Leadership and Planning	3
NM-951	Grant Writing	4
NM-980	Thesis I	1
NM-981	Thesis II	4
NM-990	Action Research	3
NM-993	Marketing and Resource Development	3
Two (2) ELECTIVES required		6
Total Credits		36

Code	Title	Credits
Master of Public Administration and Policy (36 credits)		
<i>CORE COURSES</i>		
PA-901	Policy Analysis	3
PA-903	Economics for Policy Analysis	3
PA-934	Ethics & Management of Human Resources	3
PA-942	Organizational Theory	3
PA-945	Public Budgeting & Financial Management	3
PA-949	Strategic Leadership & Planning for Public Organizations	3
PA-951	Negotiation & Conflict Resolution for Public Organizations	3
PA-980	Capstone Fieldwork I for Public Administration & Policy	2
PA-981	Capstone Fieldwork II for Public Administration and Policy	4

PA-990	Analysis and Interpretation of Quantitative Data for Public Policy	3
Two (2) ELECTIVES required		6
Total Credits		36

Master of Public Administration and Policy (MPAP)
 – A student may take any *three* of the following core courses and any courses offered as graduate electives: PA-901, PA-903, PA-934, PA-942, PA-945, PA-949, PA-951,

Code	Title	Credits
Master of Public Management (36 credits)		
<i>CORE COURSES</i>		
PM-901	Project Management for Public Organizations	3
PM-903	Economics for Policy Analysis	3
PM-934	Ethics & Management of Human Resources	3
PM-942	Organizational Theory	3
PM-945	Financial Management for Public Organizations	3
PM-949	Strategic Leadership & Planning for Public Organizations	3
PM-951	Negotiation & Conflict Resolution for Public Organizations	3
PM-980	Management Project Fieldwork I for Public Management	2
PM-981	Management Project Fieldwork II for Public Management	4
PM-990	Action Research	3
Two (2) ELECTIVES required		6
Total Credits		36

Master of Public Management (MPM) – A student may take any *three* of the following core courses and any courses offered as graduate electives: PM-901, PM-903, PM-934, PM-942, PM-945, PM-949, PM-951

4+1 Program in History and Political Science / Master of Public Administration and Policy (MPAP)

Students enrolled in History or Political Science (majors and minors) may apply for the joint 4+1 program with the Master of Public Management (MPM). The following are the eligibility requirements:

1. Applicants must have completed 90 undergraduate credits.
2. Applicants must have a minimum 3.25 GPA in their majors
3. Applicants must have an overall minimum 3.0 GPA
4. Two letters of recommendation

Students are encouraged to take introductory courses in political science, statistics and economics before graduating from their undergraduate programs since these courses are prerequisites for full matriculation into the MPAP. A course in financial accounting is also highly recommended. Students achieve matriculation only after they obtain their undergraduate degree. The prerequisite requirements must be completed by then.

In order to complete the joint degree, students take 9-11 graduate credits, which count both in their undergraduate program and in the MPAP. The graduate credits are taken in place of elective undergraduate credits. Students get advising from both the graduate coordinator and their undergraduate advisor. Admission is on a rolling basis and applicants may start their program of study in any semester.

4+1 Students

Graduate core courses will count as core classes in the graduate program and electives in the student’s undergraduate program. Graduate electives will count as electives in both the graduate and undergraduate programs

MS in Nonprofit Management – A student may take any *three* of the following core courses and any courses offered as graduate electives: NM-901, NM-903, NM-934, NM-942, NM-945, NM-949, NM-951, NM-993

Code	Title	Credits
MS in Nonprofit Management		
(36 credits)		
<i>CORE COURSES</i>		
NM-901	The Nonprofit World: NGOs, the State & Civil Society	3
NM-934	Ethics and Management of Human Resources	3
NM-942	Organizational Theory	3
NM-945	Financial Management for Non-Profit Organizations	3
NM-949	Strategic Leadership and Planning	3
NM-951	Grant Writing	4
NM-980	Thesis I	1
NM-981	Thesis II	4
NM-990	Action Research	3
NM-993	Marketing and Resource Development	3
Two (2) ELECTIVES required		6
Total Credits		36

Code	Title	Credits
Master of Public Administration and Policy		
(36 credits)		
<i>CORE COURSES</i>		
PA-901	Policy Analysis	3
PA-903	Economics for Policy Analysis	3
PA-934	Ethics & Management of Human Resources	3
PA-942	Organizational Theory	3
PA-945	Public Budgeting & Financial Management	3
PA-949	Strategic Leadership & Planning for Public Organizations	3
PA-951	Negotiation & Conflict Resolution for Public Organizations	3
PA-980	Capstone Fieldwork I for Public Administration & Policy	2
PA-981	Capstone Fieldwork II for Public Administration and Policy	4

PA-990	Analysis and Interpretation of Quantitative Data for Public Policy	3
Two (2) ELECTIVES required		6
Total Credits		36

Code	Title	Credits
Master of Public Management		
(36 credits)		
<i>CORE COURSES</i>		
PM-901	Project Management for Public Organizations	3
PM-903	Economics for Policy Analysis	3
PM-934	Ethics & Management of Human Resources	3
PM-942	Organizational Theory	3
PM-945	Financial Management for Public Organizations	3
PM-949	Strategic Leadership & Planning for Public Organizations	3
PM-951	Negotiation & Conflict Resolution for Public Organizations	3
PM-980	Management Project Fieldwork I for Public Management	2
PM-981	Management Project Fieldwork II for Public Management	4
PM-990	Action Research	3
Two (2) ELECTIVES required		6
Total Credits		36

4+1 Students

Graduate core courses will count as core classes in the graduate program and electives in the student's undergraduate program. Graduate electives will count as electives in both the graduate and undergraduate programs

MS in Nonprofit Management – A student may take any *three* of the following core courses and any courses offered as graduate electives: NM-901, NM-903, NM-934, NM-942, NM-945, NM-949, NM-951, NM-993

Master of Public Administration and Policy (MPAP)

– A student may take any *three* of the following core courses and any courses offered as graduate electives: PA-901, PA-903, PA-934, PA-942, PA-945, PA-949, PA-951

Master of Public Management (MPM) – A student may take any *three* of the following core courses and any courses offered as graduate electives: PM-901, PM-903, PM-934, PM-942, PM-945, PM-949, PM-951

4+1 Program in History and Political Science / Master of Public Management (MPM)

Students enrolled in History or Political Science (majors and minors) may apply for the joint 4+1 program with the Master of Public Management (MPM). The following are the eligibility requirements:

1. Applicants must have completed 90 undergraduate credits.
2. Applicants must have a minimum 3.25 GPA in their majors
3. Applicants must have an overall minimum 3.0 GPA
4. Two letters of recommendation

Students are encouraged to take introductory courses in political science, management and economics before graduating from their undergraduate programs since these courses are prerequisites for full matriculation into the MPM. A course in financial accounting is also highly recommended. Students achieve matriculation only after they obtain their undergraduate degree. The prerequisite requirements must be completed by then.

In order to complete the joint degree, students take 9-11 graduate credits, which count both in their undergraduate program and in the MPM. The graduate credits are taken in place of elective undergraduate credits. Students get advising from both the graduate coordinator and their undergraduate advisor. Admission is on a rolling basis and applicants may start their program of study in any semester.

Code	Title	Credits
MS in Nonprofit Management		(36 credits)
<i>CORE COURSES</i>		
NM-901	The Nonprofit World: NGOs, the State & Civil Society	3
NM-934	Ethics and Management of Human Resources	3
NM-942	Organizational Theory	3
NM-945	Financial Management for Non-Profit Organizations	3
NM-949	Strategic Leadership and Planning	3
NM-951	Grant Writing	4
NM-980	Thesis I	1
NM-981	Thesis II	4
NM-990	Action Research	3
NM-993	Marketing and Resource Development	3
Two (2) ELECTIVES required		6
Total Credits		36

Code	Title	Credits
Master of Public Administration and Policy		(36 credits)
<i>CORE COURSES</i>		
PA-901	Policy Analysis	3
PA-903	Economics for Policy Analysis	3
PA-934	Ethics & Management of Human Resources	3
PA-942	Organizational Theory	3
PA-945	Public Budgeting & Financial Management	3
PA-949	Strategic Leadership & Planning for Public Organizations	3
PA-951	Negotiation & Conflict Resolution for Public Organizations	3
PA-980	Capstone Fieldwork I for Public Administration & Policy	2
PA-981	Capstone Fieldwork II for Public Administration and Policy	4

PA-990	Analysis and Interpretation of Quantitative Data for Public Policy	3
Two (2) ELECTIVES required		6
Total Credits		36

Code	Title	Credits
Master of Public Management (36 credits)		
<i>CORE COURSES</i>		
PM-901	Project Management for Public Organizations	3
PM-903	Economics for Policy Analysis	3
PM-934	Ethics & Management of Human Resources	3
PM-942	Organizational Theory	3
PM-945	Financial Management for Public Organizations	3
PM-949	Strategic Leadership & Planning for Public Organizations	3
PM-951	Negotiation & Conflict Resolution for Public Organizations	3
PM-980	Management Project Fieldwork I for Public Management	2
PM-981	Management Project Fieldwork II for Public Management	4
PM-990	Action Research	3
Two (2) ELECTIVES required		6
Total Credits		36

4+1 Students

Graduate core courses will count as core classes in the graduate program and electives in the student's undergraduate program. Graduate electives will count as electives in both the graduate and undergraduate programs

MS in Nonprofit Management – A student may take any *three* of the following core courses and any courses offered as graduate electives: NM-901, NM-903, NM-934, NM-942, NM-945, NM-949, NM-951, NM-993

Master of Public Administration and Policy (MPAP) – A student may take any *three* of the following core courses and any courses offered as graduate electives: PA-901, PA-903, PA-934, PA-942, PA-945, PA-949, PA-951

Master of Public Management (MPM) – A student may take any *three* of the following core courses and any courses offered as graduate electives: PM-901, PM-903, PM-934, PM-942, PM-945, PM-949, PM-951

History Major

Requirements for a Major in History

Code	Title	Credits
Two 100-Level History Courses ¹		6
HI-200	The Historian's Craft (taken in the second year)	4
HI-301	Research and Writing of History (taken in the third year)	4
Eight 200-Level or Higher History Courses ²		24
One Europe/US Course		
One Middle East/Asia Course		
One Africa/Latin America Course		
One Global/Thematic/Methodological Course		
Four Elective History Courses		
Capstone Course		4
HI-460	Senior Research Seminar in History	
HI-465	American Antiquarian Society Seminar	
HI-470	Senior Thesis in History	
Total Credits		42

¹ Excluding HI-193 and fulfilling two (out of four) of the following categories: (1) Europe/US, (2) Middle East/Asia, (3) Africa/Latin America, and (4) Global/Thematic.

² Two or more courses must be at the 300 and/or 400-Level.

Sample Timetable for Completion of Degree: History

Year One		
Semester One		Credits
LASC	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I	3
LASC	LASC Elective (CA) (p. 39)	3
SELECT	100-level History Course 1 of 2	3
MA	Math Foundation Course (QR)	3
Credits		15
Semester Two		
LASC	LASC Elective (QR) (p. 50)	3
EN-102	College Writing II	3
SELECT	Elective or Minor Course	3
SELECT	100-level History Course 2 of 2	3
LASC	LASC elective (USW)	3
Credits		15
Year Two		
Semester Three		
HI-2XX	Europe/U.S. History Elective	3
HI-2XX	Global/Thematic/Methodological Elective	3
LASC	LASC Elective (CON) (p. 38)	3
SELECT	Elective or Minor Course	3
HI-200	The Historian's Craft	4
Credits		16
Semester Four		
HI-2XX+	Africa/Latin America History Electives	3
HI-3XX+	History Elective (300/400 level)	3
LASC	LASC Elective (NSP) (p. 49)	3
SELECT	General Elective or Minor course	3
SELECT	General Elective or Minor Course	3
Credits		15
Year Three		
Semester Five		
HI-2XX+	Middle East/Asia History Elective	3
HI-2XX+	History Elective	3
	Research and Writing of History	4
SELECT	General Elective or Minor course	3

LASC	LASC Elective (ICW) (p. 46)	3
Credits		16
Semester Six		
LASC	LASC Elective (NSP) (p. 49)	4
HI-2XX+	Elective in Major	3
LASC	LASC Elective (HBS) (p. 44)	3
LASC	LASC Elective (GP) (p. 42)	3
SELECT	General Elective or Minor course	3
Credits		16
Year Four		
Semester Seven		
SELECT	General Elective or Minor course	3
SELECT	General Elective or Minor course	3
SELECT	General Elective or Minor course	3
HI-3XX	History Elective (300/400 Level)	3
LASC	LASC Elective (DIV)	3
Credits		15
Semester Eight		
HI-460 or HI-470	Senior Research Seminar in History or Senior Thesis in History	4
LASC	LASC Elective (TLC) (p. 53)	3
SELECT	General Elective or Minor course	3
SELECT	General Elective or Minor course	3
Credits		13
Total Credits		121

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

History Major Track for History Educators

Code	Title	Credits
Two 100-Level History Courses ¹		6
HI-181	First Year Cohort Class for History Educators	1
HI-200	The Historian's Craft	4
HI-216	Economic History of the United States	3
Or an appropriate Economics course substitute		
HI-282	Second Year Cohort Class for History Educators	1
HI-310	Massachusetts History	3
HI-383	Third Year Cohort Class for History Educators	1
HI-390	World History for Educators	4
HI-391	U.S. History for Educators	4
Four 200-Level or Higher History Courses ²		12
One Middle East/Asia Course		
One Africa/Latin America Course		
One Global/Thematic/Methodological Course		
One Elective History Course		
Capstone Course		4
HI-460	Senior Research Seminar in History	
HI-465	American Antiquarian Society Seminar	
HI-470	Senior Thesis in History	
Total Credits		43

¹ Excluding HI-193 and fulfilling two (out of four) of the following categories: (1) Europe/US, (2) Middle East/Asia, (3) Africa/Latin America, and (4) Global/Thematic.

² One or more course must be at the 300 or 400 level.

Exception for Double Majors in Early Childhood or Elementary Education: Only 36 History credits are required. A student may opt to omit the free elective and the capstone. If the capstone course is omitted, the capstone requirement in History must be fulfilled by submission of a non-credit History Learning Portfolio before or during the student teaching semester. See department for Portfolio forms and submission guidelines.

History Minor

The History minor is a flexible program that allows students to choose courses in their areas of interest as they build the skills and habits of mind that are the hallmark of good history. The one required course, HI 200, The Historian's Craft, requires a 100-level history course as a prerequisite (and that 100-level history course counts toward the minor). There are no ancillary courses required to complete the minor. It is highly recommended that students take HI 200 as early as possible within the minor.

Requirements for a Minor in History

Code	Title	Credits
Requirements		(7 credits)
One 100-level, 3-credit History course		3
HI-200	The Historian's Craft	4
History electives		(12 credits)
9 credits in History at any level		9
3 credits in History at the 300 or 400 level.		3
Total Credits		19

Public History Minor

The professional field of Public History (also known as Applied History) is rapidly expanding. This 24-credit minor provides specialized preparation for diverse careers in the field, including archiving, museum work, federal and state Public History programs such as the National Park Service, private institutions, and interpretive historical sites. Undergraduate coursework in the Public History minor emphasizes both practice and theory, including methods for disseminating information to diverse publics, and the preservation of heritage in the form of texts, objects, buildings, and landscapes. The Public History minor is housed in the History and Political Science department, but it is an interdisciplinary minor with an integrated community experiential practicum or internship experience.

Students majoring in History will also be able to minor in Public History.

Code	Title	Credits
Program Requirements		(24 credits)

Required Courses

HI-243	Introduction to Public History	3
--------	--------------------------------	---

HI-445 or HI-440	Public History Practicum Internship in History	3
---------------------	---	---

Practices

Take 2 courses from the following courses		6
---	--	---

AR-118	Global Art History
--------	--------------------

AR-225	Art Since Mid-20th Century
--------	----------------------------

EN-214	Introduction to Digital Humanities
--------	------------------------------------

HI-319	Material Culture
--------	------------------

HI-321	Museums and Society
--------	---------------------

UR-421	Selected Topics in Urban Studies ¹
--------	---

Take 2 courses from the following courses		6
---	--	---

CM-260	Introduction to Video
--------	-----------------------

CM-359	Documentary Production
--------	------------------------

CS-135	Programming for Non-CS Majors
--------	-------------------------------

CS-140	Introduction to Programming
--------	-----------------------------

CS-265	Database Applications
--------	-----------------------

EN-252	Technical Writing
--------	-------------------

EN-281	Writing for Digital Environments
--------	----------------------------------

UR-240	Introduction to Qualitative Research Methods for the Social Sciences
--------	--

Additionally, take two courses from either category or special topics by permission.		6
--	--	---

1. UR 421 Special Topics must be Historic Preservation to fulfill this minor.

Total Credits		24
----------------------	--	-----------

Music

Aligning itself with the evolving trends of the 21st century arts world, Worcester State University offers its visual and performing arts students a Major in Interdisciplinary Visual and Performing Arts, one of the few interdisciplinary arts majors in the country. With this major, students go beyond the standard coursework in art, music, and theatre to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts and an understanding of how to use one art form to inform the other, while also gaining an in-depth knowledge of the art forms that most excite them.

The major is designed to provide students with a strong foundation in art, music, and theatre, and both a theoretical and practical understanding about how they interact in an interdisciplinary environment. Core courses promote critical thinking, and prepare students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts. Students craft the major to fit their areas of interest – art, music, theatre, etc. - through electives chosen in consultation with advisors.

Students apply their coursework to the production, performance, and critical study of creative work through a multitude of exhibit and performance opportunities.

Minor in Music
 Minor in Composition and Music Technology

(See Visual and Performing Arts Department (p. 385) for a complete listing of requirements and courses.)

Music Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

Students develop musicianship through instrumental and vocal lessons, study performance as members of ensembles, and complete courses in composition, history, and theory of music.

Students must audition for individual instrumental or vocal lessons.

Requirements for a Minor in Music

Code	Title	Credits
Music Theory		(3 credits)
MU-101 or MU-205	Fundamentals of Music and Aural Skills Music Theory I	3
Music History		(3 credits)
MU-280	History of Music	3
Music Performance		(3 credits)
Three semesters of applied music lessons at 1 credit, chosen from:		3
MU-102 or MU-104 or MU-106	Applied Music Class Piano Class Guitar	
MU-202	Applied Music	
MU-302	Applied Music	
MU-402	Applied Music	
Ensemble		(3 credits)
Three semesters of study in any ensemble at 1 credit per semester, chosen from:		3
MU-220	Chorus	
MU-222	African Drumming	
MU-228	Piano Ensemble	
MU-300	Chorale	
MU-321	Small Ensemble	
MU-326	Chamber Orchestra	
Other ensemble approved by the Department		
Electives		(6 credits)
Six elective credits in any other class with an MU prefix, except MU 115 and MU 100		6
Total Credits		18

Composition and Music Technology Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a music composition and technology minor, students apply a strong foundation in musical literacy and personal musicianship to composition and emerging digital technologies. Traditional courses in music theory, performance, and composition prepare students for digital application of music.

Students perform original compositions as well as compose original music for student video and film projects and theatrical productions. Based on personal interest, students choose from a variety of fields to complete the elective component of this minor. These include creative writing, film and video games, web design, and practical business management in addition to visual art, music, theater, and interdisciplinary arts courses.

Requirements for a Minor in Composition and Music Technology

22 credits as follows:

Code	Title	Credits
MU-102 & MU-104	Applied Music and Class Piano	2
MU-185	Composition I	3
MU-205	Music Theory I	3
MU-275	Computers and Music	3
MU-285	Composition II	1
MU-305	Music Theory II	3
MU-375	Sound Synthesis	3
MU-385	Composition III	1
SELECT	MU Elective	3
Total Credits		22

Visual and Performing Arts Department of Visual and Performing Arts

Aligning itself with the evolving trends of the 21st century arts world, Worcester State University offers several programs for visual and performing arts students, including two majors, double majors for education students, and four minors.

The Major in Interdisciplinary Visual and Performing Arts is one of the few interdisciplinary arts majors in the country. With this major, students go beyond the standard coursework in art, music, and theatre to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts and an understanding of how to use one art form to inform the other, while also gaining an in-depth knowledge of the art forms that most excite them.

The interdisciplinary major is designed to provide students with a strong foundation in art, music, and theatre, and both a theoretical and practical understanding about how they interact in an interdisciplinary environment. Core courses promote critical thinking, and prepare students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts. Students craft the major to fit their areas of interest – art, music, theatre, etc. - through electives chosen in consultation with advisors. Students apply their coursework to the production, performance, and critical study of creative work through a multitude of exhibit and performance opportunities.

Students interested in theatre can pursue studies through the new Major in Theatre or the Major in Interdisciplinary Visual and Performing Arts. The Major in Theatre provides marketable, hands-on production experience with an extensive variety of coursework to prepare students for a career in live theatre production, its associated industries, or advanced graduate education.

Students interested in art can pursue studies through the new Major in Art or the Major in Interdisciplinary Visual and Performing Arts. The Major in Art emphasizes the integration of broad-based studio art training and arts research with the development

of creativity, communication, and critical thinking to prepare students for graduate studies or careers in a wide range of arts-related fields.

- Art Major (p. 461)
- Art Minor (p. 462)
- Composition and Music Technology Minor (p. 385)
- Music Minor (p. 384)
- Theatre Major (p. 463)
- Theatre Minor (p. 464)
- Visual and Performing Arts and Education, Double Major (p. 459)
- Visual and Performing Arts Major (p. 458)

Faculty

Michael C. Hachey, Professor (1993), B.F.A., M.F.A., Massachusetts College of Art

Stacey Parker, Professor (2007), B.F.A., Alfred University; M.F.A., Rochester Institute of Technology

Amaryllis Siniosoglou, Professor (2005), P.E.P., Royal College of Art, London; M.F.A., University of Massachusetts, Amherst; Diplome Supérieur d' Art Plastique, School of Art, Athens

Kyle D. Martin, Professor (1998), B.M. Hardin-Simmons University; M.M., D.M.A., Eastman School of Music

Carlos Odria, Assistant Professor (2020), B.A., M.Mus., Ph.D., Florida State University

Steven Gagliastro, Visiting Instructor (2023), B.M.E., UMass Amherst

Jane Howland, Visiting Assistant Professor (2023), B.A., University of Pennsylvania; M.F.A., Brandeis University

Samuel O'Connell, Department Chair, Professor (2010), B.A., M.A., Washington University; Ph.D., Northwestern University

Adam Zahler, Professor (2007), B.A., University of Vermont; M.F.A., University of Virginia

Kayleigha Zawacki, Visiting Assistant Professor (2023), B.F.A., M.F.A., Boston University

Art Courses

AR-100 Cross Media Studio

LASC Categories: CA, TLC

An introduction to selected two- and three-dimensional media through the exploration of a semester-long theme such as the human figure, or forms in nature.

Fall and Spring and every year. 3 Credits

AR-105 Introduction to Animation

This hands-on introductory course covers the fundamentals and aesthetics of computer animation using the Adobe AfterEffects motion graphics program.

Fall and Spring and every year. 3 Credits

AR-118 Global Art History

LASC Categories: GP, DAC, CA

Surveys the outstanding visual art from all cultures beginning in the prehistoric era to the late 19th century.

Fall only and every year. 3 Credits

AR-119 First Year Art Practicum

This course offers students an opportunity to work closely with faculty to work in the art gallery, develop technical skills, studio projects, and do research to support their creative development. This course is required for the Art Major. It will be geared to the individual needs of each student.

Other or on demand and every year. 1 Credit

AR-123 Design Fundamentals

LASC Categories: CA, QAC

Design Fundamentals is a course combining 2 and 3 Dimensional Design. In this course we explore composition, space, and color along with planes, volumes, and environments. A variety of materials are used to create on surfaces and in actual space. Many projects are grounded in aspects of mathematical and geometrical systems, e.g., grids, tiling, Fibonacci series, fractals, regular solids.

Fall and Spring and every year. 3 Credits

AR-130 Painting I

LASC Categories: CA

An introduction to the fundamentals of historical painting styles, techniques, and materials used, with emphasis on visual perception and expression

Fall and Spring and every year. 3 Credits

AR-140 Drawing Fundamentals**LASC Categories:** CA, GP, DAC

The development of visual perception, technical skills, and individual expression in drawing media. Students will explore concepts in drawing to develop their artwork through observation, experimentation, awareness of historical and contemporary contexts, and critical assessment. Projects utilize a variety of drawing materials to demonstrate technical facility and to enhance self-expression.
Fall and Spring and every year. 3 Credits

AR-150 Life Studio I**LASC Categories:** CA

Focus on the human figure through different modes of drawing and painting. Attention to structure and anatomy and their expressive aspects.
Fall and Spring and every year. 3 Credits

AR-165 Creating Cultural Forms**LASC Categories:** CA, GP, WAC, DAC**Prerequisites:** EN-102

A studio course. Concepts of art forms created by a variety of world cultures and art movements of the past and present.
Fall and Spring and every year. 3 Credits

AR-191 Special Topics in Art

Introductory course to cover various topics.
3 Credits

AR-193 First Year Seminar in Art**LASC Categories:** FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.
Every year. 3 Credits

AR-210 Drawing and Painting Studio**LASC Categories:** CA

This course is a comprehensive introduction to the art of drawing and painting. Students will be strongly encouraged to explore the skills and concepts of these art forms in order to develop their ideas through observation, experimentation, historical context, and analysis. Projects are designed to expand awareness and to expose students to contemporary concerns.
Fall and Spring and every year. 3 Credits

AR-215 Art Theory and Practice**LASC Categories:** CA, GP

This course chooses a topic or a theme to explore in the classroom and studio for a semester. Students will read about this topic or theme and they will produce work in the studio inspired by their reading. Topics may include (but are not limited to): the figure in art, landscape art, abstract art, science and art, social sciences and art, religion and art, east meets west, arte povera, Dada art etc.
Fall only and every year. 3 Credits

AR-219 Second Year Art Practicum**Prerequisites:** VP-200

This course offers students an opportunity to work closely with faculty to work in the art gallery, develop technical skills, studio projects, and do research to support their creative development. This course is required for the Art Major. It will be geared to the individual needs of each student.
Other or on demand and every year. 1 Credit

AR-221 The Work of Art**LASC Categories:** CA

This is the first in a set of three core courses for the Art major. This course focuses on practical and professional art skills including but not limited to the creation of professional documents like resumes, artist statements and proposals, professional internet presence such as websites and social media accounts, art critique work and gallery related content such as exhibition submissions and gallery representation.
Other or on demand and every year. 3 Credits

AR-225 Art Since Mid-20th Century**LASC Categories:** CA, GP, WAC, DAC

Explores how artists have challenged the traditional definitions of the art object and the expanded materials, media and concepts employed by artists since 1950 to the present era.
Fall only and every year. 3 Credits

AR-230 Printmaking**LASC Categories:** CA

Introduction to the techniques and aesthetics of etching and relief. Prints by major artists are examined.
Fall and Spring and every year. 3 Credits

AR-235 3D Sculpture Studio**LASC Categories:** CA, GP, WAC**Prerequisites:** EN-102

This is an introductory course focusing on form creation grounded in sculptural forms and techniques. Students will create sculpture by exploring traditional techniques such as molding, carving, casting and assemblage using historical and contemporary materials from clay and stone to cardboard and found objects. Historical context, skill development, critical analysis and proper tool usage and safety are emphasized.

Fall and Spring and every year. 3 Credits

AR-240 Watercolor**LASC Categories:** CA, TLC

A studio course exploring various techniques and expressive forms used by watercolorists of the past and present.

Fall and Spring and every year. 3 Credits

AR-260 Visual Arts in the Schools**LASC Categories:** CA

An exploration of art materials and concepts, and their appropriate use with children. Includes studio projects, art history, and educational theory.

3 Credits

AR-270 Driftwood to Dumpsters**LASC Categories:** CA, TLC, WAC**Prerequisites:** EN-102

Students will learn about the history and practice of making art from non-traditional materials. This is a lecture and hands-on art course.

Every 2-3 years. 3 Credits

AR-285 History of Photography**LASC Categories:** CA, TLC

The history of photography from 1839 to present, with attention to styles, aesthetics, technical processes, and leading practitioners. [Cross-listed with CM-285]

Every 2-3 years. 3 Credits

AR-308 Thesis Seminar**LASC Categories:** CA**Prerequisites:** AR-221.

This course focuses on the research that prepares students for their Capstone. They will evaluate the work of other artists working in their media, make critical judgments about the work they experience in contemporary exhibitions, and present their ideas orally in class presentations. Students will also develop their studio art portfolio and capstone proposal.

Spring only and every year. 3 Credits

AR-312 Methods and Materials in Studio Art**LASC Categories:** CA**Prerequisites:** EN 102 or any 100-level AR course.

Materials and Methods in Studio Art offers in-depth artistic exploration through combining studio methods, mixing materials and techniques and developing an artistic style. This course encourages students to experiment with art making in both two and three-dimensions allowing them to cultivate their aesthetic concepts through innovative projects.

Fall and Spring and every year. 3 Credits

AR-313 Illustration**LASC Categories:** CA, GP**Prerequisites:** EN 102 or any 100-level AR course.

This course is designed to introduce students to the processes involved in illustration. This may include, but is not limited to editorial illustration, children's books, book/album covers, concert posters, comics/manga, character design, botanical illustration, medical illustration and basic lettering. This course will cover basic illustration techniques in drawing and painting.

Fall and Spring and every year. 3 Credits

AR-319 Third Year Art Practicum**Prerequisites:** AR-219

This course consolidates student studio skills, research expertise, and best practices for creative work. Students will initiate the development of a body of work that will lead to Capstone.

Other or on demand and every year. 1 Credit

AR-330 Intermediate Printmaking**Prerequisites:** AR-230

Continuation of relief printmaking in an individual direction using tone/color and multiple blocks.

Every year. 3 Credits

AR-350 Special Topics in Art

Prerequisites: one studio course or consent of instructor.

A course covering topics which vary in response to specific student and faculty interest.

Fall and Spring and every year. 3 Credits

AR-400 Ind Study: Art

An opportunity for further study in a special field of interest under faculty supervision.

Fall and Spring and other or on demand. 3 Credits

AR-402 Internship in Art

An individual experience through internship with a sponsoring community organization, professional institution or individual, i.e., museums, galleries, artists.

Fall only and other or on demand. 3-6 Credits

AR-408 Directed Study: Art

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

Fall and Spring. 1-3 Credits

AR-455 Thesis Capstone

LASC Categories: CAP

Pre-requisite: Completion of all other major requirements. Students design, and create their work for public presentation. This is the final course in the Art Major and is a requirement for all the majors.

Other or on demand and every year. 3 Credits

Music Courses

MU-101 Fundamentals of Music and Aural Skills

LASC Categories: CA

An introduction to reading and writing conventional music notation, the fundamentals of music theory, and basic aural skills. Emphasis will be placed on intervals, scales, chords, rhythmic values, sight-singing, melodic dictation, and aural recognition of intervals and chords.

Every year. 3 Credits

MU-102 Applied Music

LASC Categories: ICW

Prerequisites: Audition required

Audition required. Private instruction in an instrument or voice. Thirteen weekly one-hour lessons. May be repeated. Studio fee required. Instruments offered: brass, guitar, piano, percussion, strings, and winds.

Fall and Spring and every year. 1 Credit

MU-104 Class Piano

LASC Categories: CA

Prerequisites: MU-100 or MU-101

Basic piano technique and pedagogy in a group setting of 12 or fewer

Fall and Spring and every year. 1 Credit

MU-106 Class Guitar

An introduction to playing the guitar, including technique, reading tabs and notation, and harmonization of melodies with chords. Solo literature appropriate to the level will be studied. Students are required to provide an instrument.

Fall and Spring and every year. 1 Credit

MU-115 Music Appreciation

LASC Categories: CA

General survey of masterpieces of major composers of various periods in history of music.

Fall and Spring and every year. 3 Credits

MU-120 Ear Training

Prerequisites: MU-100 or MU-101

An introductory course in the fundamentals of ear-training and sight-singing. Emphasis will be placed on the development of basic melodic, harmonic, and rhythmic aural skills through listening, dictation, and application of solfege.

Every year. 3 Credits

MU-125 Jazz Appreciation

LASC Categories: CA, TLC

Surveys the history of jazz beginning with the earliest roots in the American South to today.

Every year. 3 Credits

MU-140 World Music

LASC Categories: CA

An introduction to music of various cultures and continents including music of Africa, Asia, Latin America, the Middle East, and India.

Spring only and every 2-3 years. 3 Credits

MU-175 Music in America

Survey of music history and literature in America including gospel spirituals, jazz, popular and classical music.

Other or on demand. 3 Credits

MU-185 Composition I

LASC Categories: CA

Prerequisites: MU 101 Fundamentals of Music Aural Skills OR MU 100 Music Fundamentals

An introduction to compositional methods and techniques. Students develop personal expression by creating musical works while exploring use of melody, harmony, timbre, rhythm, texture, and tonality within conventional musical forms.

Spring only and every year. 3 Credits

MU-193 Special Topics in Music:First Year Students

LASC Categories: FYS

Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.

Every year. 3 Credits

MU-200 Issues in Music

This course deals with topics of special interest, in both seminars and studio environments at an introductory level.

3 Credits

MU-202 Applied Music

Prerequisites: Audition Required

Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week.

Student fee required. May be repeated. Offered every semester.

Fall and Spring and other or on demand. 1 Credit

MU-205 Music Theory I

LASC Categories: CA

Prerequisites: MU-100 or 101.

Analysis and application of harmonization techniques using diatonic chords. Further emphasis is placed on voice-leading, figured bass, melodic construction, and embellishing tones.

Spring only and other or on demand. 3 Credits

MU-215 Chorus and Music Theory

LASC Categories: CA

Prerequisites: Audition Required

Mixed choral repertoire and performance, covering vocal problems and techniques. Introduction to music theory, rhythms, intervals, basic chordal structures, harmonization. Participation in college chorus required.

Fall and Spring and every year. 3 Credits

MU-220 Chorus

LASC Categories: CA

Prerequisites: MU-215

Mixed Chorus repertoire. May be repeated.

Fall and Spring and every year. 0.5-1 Credits

MU-222 African Drumming

LASC Categories: GP, CA, DAC

An exploration of African music and drumming techniques from the culture of Ghana. Students will develop performance skills and present a public performance during the course of the semester.

Every year. 0.5-3 Credits

MU-223 African Drumming II

LASC Categories: CA, GP

Prerequisites: MU 222-African Drumming I, or MU 193-FYS African Drumming from Ghana

This Level 2 ensemble builds on Level 1 in the following ways: (a) learn new drumming styles; (b) improvise with greater freedom; and (c) learn to play lead drum rhythms, with the possibility of performing them in the final performance.

Spring only and every 2-3 years. 3 Credits

MU-228 Piano Ensemble

LASC Categories: CA

Prerequisites: MU-102 or MU-190

A small ensemble for keyboard players who will learn, explore, and perform four-hand piano repertoire.

Every year. 1 Credit

MU-231 Women in Music

LASC Categories: CA, TLC

A survey of the role of women in music, particularly the great composers from Medieval to Contemporary times.

3 Credits

MU-237 Music in the Elementary School**LASC Categories:** CA

Discover the benefits of using music to enrich general education from preschool through high school. Develop your own musicianship through learning to use your singing voice, learning to play the recorder, learning to read notation and gaining an overview of western music history.

Other or on demand. 3 Credits

MU-250 Music of the Cinema: Spectacle, Splendor, And Spielberg**LASC Categories:** CA, TLC

An introduction to the role, impact, and importance of music in motion pictures from silent movies through contemporary film.

Spring only. 3 Credits

MU-275 Computers and Music

An introduction to computer music technologies with emphasis on use of electronics and computers in music composition and performance. Further emphasis will be placed on basic acoustics, perception of sound, application of computer music in experimental genres, digital recording, mixing, fundamentals of sound synthesis and digital signal processing.

Other or on demand and other or on demand. 3 Credits

MU-280 History of Music**LASC Categories:** CA

A general survey of western art music covering the historical periods of the Medieval, Renaissance, Baroque, Classical, Romantic, and 20th Century.

Fall and Spring and every year. 3 Credits

MU-285 Composition II**Prerequisites:** MU-185 or MU-204, and MU-205.

A continuation of Composition I. Students will explore methods of tonal composition. Emphasis will be placed on melodic writing, harmonization practices, chord substitutions, use of figurations, texture, and timbre in tonal music. Experimentation with rhythmic and metric practices including asymmetry, shifting accents, changing time signatures, and ostinato.

Fall and Spring and every year. 1 Credit

MU-300 Chorale**LASC Categories:** CA**Prerequisites:** Audition Required

Study and performance of a cappella choral literature from the Middle Ages to contemporary times. May be repeated. Audition required for enrollment.

Every year. 0.5-1 Credits

MU-302 Applied Music**Prerequisites:** Audition Required

Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week. Student fee required. May be repeated. Offered every semester.

Fall only and every year. 1 Credit

MU-305 Music Theory II**LASC Categories:** CA**Prerequisites:** MU-205

Harmonization of melodies using primary and secondary chords, harmonic analysis of tonal music from the Common Practice Period, including diatonic and chromatic chords, secondary dominants, modulation, and aural skills. An introduction to formal schemes in music including phrase structure, binary and ternary and form, sonata form, and species counterpoint.

Fall only and every year. 3 Credits

MU-310 The American Musical in Performance

Study, rehearsal and performance of a great American musical. Music, acting and dance will all be skills which are developed.

Every 2-3 years. 3 Credits

MU-321 Small Ensemble**LASC Categories:** ICW, CA

The performance of musical works by a small ensemble. By permission of instructor or audition.

Fall and Spring and every year. 0.5-1 Credits

MU-326 Chamber Orchestra**LASC Categories:** CA

In this class the students will rehearse and perform music from the orchestral repertoire in a variety of styles and genres and from varied periods. All woodwind, string, brass, keyboard and percussion instruments are eligible to participate. 1 credit section for those repeating the class in another semester and those in proposed revised music minor; .5 credit section for VPA music concentrators
Pre-requisite: Audition for Instructor
Fall and Spring and every year. 0.5-3 Credits

MU-330 Jazz Ensemble**LASC Categories:** ICW, USW, DAC

An ensemble where students learn to perform traditional jazz repertoire, as well as original compositions. Through rehearsing, performing, directed listening and ear training, students will learn: (a) conceptual approaches to improvising and composing; (b) harmonic, melodic and rhythmic theory specific to the jazz idiom; and (c) methods for connecting audiation to instrumental playing. Special emphasis will be on jazz standards, especially those with a blues form. 3 credits 1 credit if repeating .5 for Visual and Performing Arts majors with music concentration or focus and those who minor in composition and music technology
Fall and Spring and every year. 0.5-3 Credits

MU-375 Sound Synthesis**Prerequisites:** MU-275

A continuation of MU 275 Computers and Music. Focus on application of sound in composition acoustics and additive synthesis, modulation and waveshaping, signal flow, processing, digital filtering, reverberation, and sample processing.
Other or on demand and other or on demand. 3 Credits

MU-385 Composition III**Prerequisites:** MU 285/Composition II MU 305/Music Theory I (currently MU 210)

An exploration of compositional practices presented during Composition II. Students will compose absolute music in the style of the Common Practice Period as well as work with superimposed chords, shifting tonality, pandiatonicism, large-scale forms, polyrhythms, and polymeter. This course introduces to composing tonal music for non-musical genres including media, video games, incidental music for theater and film.
Other or on demand and every year. 1 Credit

MU-400 Independent Study in Music**Prerequisites:** Consent of Instructor

An opportunity for further study in a special field of interest under faculty supervision.
Fall and Spring and every year. 1-6 Credits

MU-402 Applied Music**Prerequisites:** Audition Required

Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week. Student fee required. May be repeated. Offered every semester.
Fall and Spring. 1 Credit

MU-408 Directed Study: Music

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.
3 Credits

MU-410 Special Topics in Music

This course will allow members of the music faculty to develop courses of special interest. This would include seminars on specific composers or compositions, in both classroom and applied studio environments.
0.5-3 Credits

MU-485 Composition IV**Prerequisites:** MU-385

Compositional techniques of the 20th-century including modality, parallelism, atonality, serialism, electronic music, aleatory, music concrete, and sound synthesis.
Other or on demand and other or on demand. 1 Credit

Theatre Courses

TH-126 Script Analysis**LASC Categories:** CA, TLC, DAC

Script analysis for theatre artists. How to take a script from initial reading to production.
Other or on demand. 3 Credits

TH-145 Acting I**LASC Categories:** CA

Introductory acting theory and practice. Students present brief monologues and scenes in class.

Fall and Spring and every year. 3 Credits

TH-155 First-Year Theatre Practicum

Practical work in Theatre production for first-year students.

Fall and Spring and every year. 1 Credit

TH-175 Introduction to Stagecraft**LASC Categories:** CA, QR

An introductory class to major types of Stagecraft for live theatre. Students will learn in formal classes and in 30 hours of scheduled laboratories about set construction, costume construction and lighting technology. Students will learn the vocabulary of technical theatre and will learn geometric and mathematical methods required for each of the three main areas covered.

Fall and Spring and every year. 3 Credits

TH-191 Introduction to the Theatre**LASC Categories:** CA

An overview of live performance, with the emphasis on audience appreciation. Performance arts and crafts are examined.

Fall and Spring and every year. 3 Credits

TH-193 Special Topics in Theater:First-Year Students**LASC Categories:** FYS

Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.

Every year. 3 Credits

TH-235 History of Theatre**LASC Categories:** GP, TLC, DAC

Survey of world theatre including from its ritual origins through the classical era, medieval era, the renaissance, the restoration, the modernist revolution to the present day. This global approach includes historical examples from Europe, Africa, Asia, North America, and South America.

Fall and Spring and every year. 3 Credits

TH-246 Voice and Movement**Prerequisites:** TH-145.

Training to strengthen the natural voice, develop diction, learn period movement and develop spatial awareness on and off stage.

Every year. 3 Credits

TH-255 Second-Year Theatre Practicum

Practical work in Theatre production for second-year students.

Every year. 1 Credit

TH-263 Concepts of Theatre Design**LASC Categories:** CA

This is a fundamental design course for live theatre, but will also apply to other design fields. Drawing, both freehand and digital, will be studied. Students will learn the elements and principles of design, and how to apply them to Scenic, Costume and Lighting Design, as well as other modes of 2-dimensional and 3-dimensional art. Additive and subtractive color theory will be covered. Students will learn the specialized language of design and will study how to approach the three areas of design aforementioned. Other or on demand and every year. 3 Credits

TH-270 History of American Entertainment I**LASC Categories:** CA, USW

An historical survey of American popular entertainments from the Colonial period through the end of the nineteenth century.

Every year. 3 Credits

TH-271 History of American Entertainment II**LASC Categories:** CA, USW

An historical survey of American popular entertainments from the rise of film and radio through the great American musicals.

Every year. 3 Credits

TH-272 History of Costume**LASC Categories:** CA

The history of clothing from ancient times to the present. Lecture/discussion and a research project on a chosen era or culture.

Every 2-3 years. 3 Credits

TH-274 Stage Management**LASC Categories:** CA, QAC

An introduction to the craft of stage management focussing on the techniques, responsibilities and duties necessary to manage both rehearsals and performances.

Every year. 3 Credits

TH-290 Theatre for Young Audiences**LASC Categories:** ICW, CA, DAC

Organization of children's theatre, script selection, visual design, rehearsal and performance.

Investigation of creative drama as a teaching tool in elementary education.

Spring only and other or on demand. 3 Credits

TH-292 Applied Theatre and Community Engagement**LASC Categories:** CA, ICW

Principles and techniques of leading improvised dramatic activities with children and adults. Involves sensory awareness, imagination, movement and story dramatizations.

Every year. 3 Credits

TH-321 Rehearsal and Performance**LASC Categories:** CA

Public performance of full-length stage productions under faculty direction. Students assume performance and/or production "roles" as described in departmental manual.

Spring only and every year. 3 Credits

TH-345 Acting II**Prerequisites:** TH-145.

Further development of acting skills with emphasis on stage-acting technique.

Every year. 3 Credits

TH-348 Stage Combat**LASC Categories:** CA, ICW**Prerequisites:** TH-191 or TH-145.

Training in armed and unarmed combat for the stage. emphasis will be placed on safety in the choreography of stage fighting.

Every year. 3 Credits

TH-355 Third-Year Theatre Practicum

Practical work in Theatre production.

Fall and Spring and every year. 1 Credit

TH-360 Scenic Design for Theatre**LASC Categories:** CA

Scenic Design for Theatre will include research, drafting, drawing and rendering, model building and presentation of scenic designs for assigned plays.

Every year. 3 Credits

TH-370 Costume Design for Theatre**LASC Categories:** CA

Conceptualization, collaboration, research, figure drawing and rendering, swatching, and presentation of costume designs for assigned plays.

Every year. 3 Credits

TH-380 Directing**Prerequisites:** TH-145.

Script selection, casting, scene analysis, blocking, rehearsal techniques and other concerns of the theatrical director. Students direct a short scene and short plays.

Every 2-3 years. 3 Credits

TH-390 Lighting Design for Theatre**LASC Categories:** CA

Study and exercises in conceptualization, collaboration, design presentation, qualities and functions of light, drafting the light plot, and control of theatrical lighting.

Every year. 3 Credits

TH-399 Special Topics in Theatre

Will include study of topics on an as needed basis, (i.e. in conjunction with a production, or a course for advanced students who wish to pursue further study).

Other or on demand and other or on demand. 3 Credits

TH-405 Independent Study in Theatre

Offers motivated students the opportunity to study a theatre topic not covered in the established curriculum.

Other or on demand and other or on demand. 1-6 Credits

TH-408 Directed Study: Theatre

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

TH-435 Internship in Theatre

Provides an opportunity for students in good standing to gain practical experience with professional theatre or related organizations.

Other or on demand and other or on demand. 1-12 Credits

TH-455 Theatre Capstone**LASC Categories:** CAP, WAC**Prerequisites:** TH-155 and TH-255 and TH-355

Theatre students will create a senior thesis project/capstone in acting, directing, design, playwriting, craft or dramaturgy, chosen in consultation with a faculty advisor and demonstrating the skills learned in their studies. The capstone may be part of a mainstage production or a student generated project. Each capstone project will be accompanied by a written analysis showing their research or full-documentation of their process.

Fall and Spring and every year. 3 Credits

Visual and Performing Arts Courses

VP-155 First Year Practicum

Students will put into practice interdisciplinary concepts, ideas, and techniques at an experiential level.

Spring only and every year. 1 Credit

VP-193 Special Topics in Visual and Performing Arts: First-Year Students

LASC Categories: FYS

Introductory level courses covering topics of special interest to first-year students. Offered only as First-Year Seminar.

Every year. 3 Credits

VP-200 Critical Thinking in the Arts

LASC Categories: CA, TLC, DAC, QAC

The experience of art, music, and theatre to develop individual critical thinking in the similarities and differences among the arts.

Every year. 3 Credits

VP-210 Contemporary Dance Styles I

LASC Categories: CA

The study and movement of dance vocabularies in one or more contemporary and modern styles.

Every year. 3 Credits

VP-255 Second Year Practicum

Prerequisites: VP-155

Students will put into practice interdisciplinary concepts, ideas, and techniques at an exploratory level.

Spring only and every year. 1 Credit

VP-355 Third Year Practicum

Prerequisites: VP-155 and VP-255

Students will put into practice interdisciplinary concepts, ideas, and techniques at an experimental level.

Spring only and every year. 1 Credit

VP-364 Interdisciplinary Arts Theory

Prerequisites: VP-200

An exploration of interdisciplinary art theory drawing on theories and critical writings from Art, Music, and Theatre from a variety of historical periods.

Fall and Spring and every year. 3 Credits

VP-365 Interdisciplinary Arts Practice

Prerequisites: VP-200

Examines examples of contemporary modes of interdisciplinary works of music, theatre, and visual art with the goal of developing an individual, creative aesthetic.

Spring only and every year. 3 Credits

VP-405 Independent Study in the Arts

Prerequisites: Permission of Instructor

An opportunity for advanced students to examine topics not ordinarily covered in other arts courses.

Every year. 1-6 Credits

VP-408 Directed Study: Visual & Performing Arts

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

VP-410 Special Topics in the Arts

Study of topics not otherwise covered in the curriculum. [Prerequisite: [2 VP courses]

Fall and Spring and every year. 3 Credits

VP-435 Internship in the Arts

Advanced students gain practical experience in a working arts environment.

Fall and Spring and every year. 3-12 Credits

VP-455 Arts Capstone/Senior Thesis

LASC Categories: WAC, CAP

Prerequisites: VP-200, and EN-102

Students design and create a work or works of art, music, or theatre for public presentation.

Every year. 3 Credits

Program Learning Outcomes

Art

- Acquire the principles of art and design.
- Demonstrate knowledge of traditional and contemporary art practices.
- Cultivate aesthetic and conceptual judgments.
- Develop skills in critical thinking and analysis.
- Demonstrate effective written, oral, and visual communication skills.
- Produce artwork in a variety of media and techniques.

Theatre

- Acquire the critical language for the analysis and interpretation of theatre
- Demonstrate aesthetic literacy over historical periods and cultures that pertain to the production and interpretation of theatre
- Apply theoretical knowledge and concepts to the creation and critical analysis of theatre
- Utilize critical thinking skills in the production of theatre

Visual and Performing Arts

- Acquire the critical language for the analysis and interpretation of art forms
- Demonstrate aesthetic literacy over historical periods and cultures that pertain to the production and interpretation of art
- Apply theoretical knowledge and concepts to the creation and critical analysis of art forms
- Utilize critical thinking skills in the production of creative work

Philosophy

Department of Philosophy

The study of Philosophy helps students to develop insights into the nature of individuals, societies, and values, and it helps them to think critically about themselves and the world around them. By studying philosophical works from the past and present, East, West, North, and South, students engage theories about such central concepts as personhood, justice, gender, knowledge, language, and science.

- Ethics Minor (p. 403)
- Philosophy Minor (p. 402)

Frank Boardman, Department Chair, Associate Professor (2017), B.A., Hunter College; Ph.D., The City University of New York Graduate Center

Carter Hardy, Assistant Professor (2022), B.A., University of Central Florida; M.Phil., Ph.D., University of South Florida

Laura W. Kane, Associate Professor (2020), B.A., Hunter College, City University of New York; M.Phil., Ph.D., The Graduate Center, City University of New York

Sharisse Kanet, Visiting Assistant Professor (2022), B.A., Wesleyan University; M.A., Ph.D., CUNY Graduate Center

Henry C. Theriault, Associate Vice President for Academic Affairs, Professor (1998), B.A., Princeton University; Ph.D., University of Massachusetts

Courses

PH-100 Introduction to Philosophy

LASC Categories: HBS, TLC

The fundamentals of philosophy: its vocabulary, problems, and methods.

Every year. 3 Credits

PH-101 Ancient Greek Philosophy

LASC Categories: ICW, TLC

Introduction to fundamental topics in Western philosophy through the works of ancient philosophers, including Plato and Aristotle. While predominantly Greek thinkers are studied, the course may include Roman or other ancient thinkers as well.

Every 2-3 years. 3 Credits

PH-102 History of Modern Western Philosophy 1600-1800

LASC Categories: HBS, TLC

Engages central topics of Western philosophy through study of important modern philosophers, typically from Descartes through Kant.

Every 2-3 years. 3 Credits

PH-110 Critical Thinking

LASC Categories: TLC, ICW

Critical thinking through informal logical identification, analysis and evaluation of arguments, including identification of fallacious arguments, through engagement with rhetoric and public discourse

Fall and Spring and every year. 3 Credits

PH-115 Logic I

LASC Categories: QR

A study of introductory symbolic (formal) logic, covering sentential logic and the foundations of predicate logic.

Every year. 3 Credits

PH-130 Ethics: Human Conduct & Values

LASC Categories: HBS, TLC

The nature of morality and value and their place in the world of human action.

Every year. 3 Credits

PH-131 Medical Ethics

LASC Categories: HBS, TLC

An introductory-level examination of various ethical issues such as abortion, euthanasia, cloning and other genetics issues, access to health care, race and health care, and women's health.

Every 2-3 years. 3 Credits

PH-132 Business Ethics

LASC Categories: HBS, TLC

An introduction to ethical theory and issues such as truth in advertising, product liability, affirmative action, employer and employee rights and duties, whistle blowing, and corporate responsibility.

Every 2-3 years. 3 Credits

PH-133 Social and Political Ethics

LASC Categories: HBS, TLC, DAC

Investigates major social and political theories and their applications to selected problems of justice.

Every 2-3 years. 3 Credits

PH-134 Computing Ethics**LASC Categories:** HBS, ICW

An introduction to significant issues in the ethics of computing, including the application of ethical theories to the development of technology, cyberculture, and artificial intelligence, as well as some distinct ethical theories that emerge from thinking about computing and information technology.

Fall and Spring and every year. 3 Credits

PH-151 Race, Gender, and the Law**LASC Categories:** TLC, USW, CON, DIV

This course provides a philosophical approach to issues of race and gender as expressed in legislation, judicial interpretation, enforcement, and public policy. Every 2-3 years. 3 Credits

PH-152 Philosophy of Love and Sex**LASC Categories:** HBS, ICW, DAC

Investigates the concepts of love and sex and structural and discursive factors contributing to our daily experiences of these phenomena.

Every year. 3 Credits

PH-163 Philosophy on Television**LASC Categories:** USW, TLC

An introduction to philosophy through philosophical writings on popular television shows.

Every 2-3 years. 3 Credits

PH-170 Introduction to Asian Philosophy**LASC Categories:** GP, TLC, DAC

Introduces and surveys the major philosophical traditions in East-Asia, South-Asia, and South-East Asia. This course will study the different worldviews, conceptions of human nature and the good life from these philosophical perspectives, and where possible, make comparisons with Western philosophies.

Every 2-3 years. 3 Credits

PH-171 Buddhist Philosophy**LASC Categories:** GP, ICW, DAC

Introduces and surveys the history and development of the major Buddhist traditions, and their interpretation of core Buddhist philosophies, as they move outwards from India.

Every 2-3 years. 3 Credits

PH-172 Chinese Philosophy**LASC Categories:** GP, TLC, DAC

Surveys the philosophies of ancient China, including Taoism, Buddhism, Legalism and the development of the Confucian tradition in China.

Every 2-3 years. 3 Credits

PH-177 Introduction to Latin American Philosophy**LASC Categories:** GP, TLC, DAC

An introduction to many of the principal texts, thinkers, and debates within Latin American philosophy.

Every 2-3 years. 3 Credits

PH-178 Africana Philosophy**LASC Categories:** TLC, USW, DAC

Explores the philosophy of the African diaspora in African, African American and Caribbean writings. The course addresses both historical and contemporary material across intersections of race, gender, and class using philosophy, history, and literature.

Every 2-3 years. 3 Credits

PH-180 Sports and Philosophy**LASC Categories:** ICW

Examines key ethical and other issues in sports, including competition, fair play, sportsmanship, drug use, race and gender, and violence.

Every 2-3 years. 3 Credits

PH-190 Special Topics in Philosophy

An introductory philosophy course on current or specialized topics. LASC Categories: Varies by topic. See current course listing for specific LASC area approved.

Every 2-3 years. 3 Credits

PH-193 First Year Seminar Philosophy**LASC Categories:** FYS

An introductory course covering a topic of special interest to first-year students. Offered only as a First-Year Seminar.

Every 2-3 years. 3 Credits

PH-200 Knowledge and Reality**LASC Categories:** NSP, TLC

A critical evaluation of answers to the most general questions of human existence: What is there? How do we know it? How did it come to be?

Every 2-3 years. 3 Credits

PH-201 19th Century European Philosophy**LASC Categories:** HBS, TLC

Engages the radical new philosophical ideas developed on the European Continent in the 19th Century, beginning with Hegel.

Every 2-3 years. 3 Credits

PH-205 Environmental Ethics**LASC Categories:** GP, ICW, TLC

This course will examine the contemporary ethical issues in our interactions with the environment and students will develop the skills necessary to engage in the contemporary debates surrounding these issues. Students will read, discuss, and critique traditional and contemporary theories in environmental ethics, as well as how these influence current debates. Students will focus on analyzing and critiquing contemporary cases, and develop philosophical arguments to better approach the relevant ethical issues. Possible topics include animal rights, duties to nature, food ethics, climate change, and environmental justice.

Fall and Spring and every 2-3 years. 3 Credits

PH-206 Animal Ethics**LASC Categories:** ICW, HBS, TLC

This course is intended as an exploration of some of the many issues surrounding non-human animals and how they are treated by our species. The goal of this class is to critically examine our assumptions and views toward nonhuman animals, with the hope of not only forming coherent opinions, but also being able to provide strong arguments for them. Some topics we will address are: historical perspectives on the human-animal relationship, legal and philosophical personhood, human exceptionalism, and various ethical approaches.

Fall and Spring and every 2-3 years. 3 Credits

PH-215 Logic II**LASC Categories:** QR**Prerequisites:** PH-115

Intermediate symbolic (formal) logic including multi-placed predicates and identity.

Every 2-3 years. 3 Credits

PH-220 Philosophy of Mind**LASC Categories:** NSP, TLC**Prerequisites:** EN-102

Drawing on canonical philosophical texts as well as research from relevant disciplines, this course is an investigation of the relationship between mental phenomena and physical states and processes, along with implications for such issues as personal identity and free will.

Every 2-3 years. 3 Credits

PH-221 Existentialism and Phenomenology**LASC Categories:** GP, TLC

Examines the Existentialist movement of the first half of the 20th Century.

Every 2-3 years. 3 Credits

PH-223 American Philosophy**LASC Categories:** TLC, DAC**Prerequisites:** EN-102

Surveys key movements in the history of philosophy in the United States that have come to be identified with the tradition of American philosophy, including Transcendentalism, Pragmatism, indigenous philosophy, African American philosophy, and their representative thinkers.

Every 2-3 years. 3 Credits

PH-225 Philosophy of Language**LASC Categories:** TLC, ICW

A survey of theories of reference, truth, word and sentence meaning, ordinary language philosophy, embodied communication, and/or dialogic ethics.

Every 2-3 years. 3 Credits

PH-228 Bioethics**LASC Categories:** ICW, HBS, TLC

This course is an advanced-level examination of various ethical issues at the intersection of biology and medicine, and students will develop the skills necessary to engage in the contemporary debates surrounding these issues. Students will read, discuss, and critique traditional and contemporary theories in bioethics, as well as how these influence current debates. Students will focus on analyzing and critiquing contemporary cases, and develop philosophical arguments to better approach the relevant ethical issues. Possible topics include genetic screening and modification, pandemics and epidemics, scarce medical resources, animal experimentation, and medical research.

Fall and Spring and every 2-3 years. 3 Credits

PH-231 Philosophy of Law**LASC Categories:** CON, HBS, USW, DIV, DAC**Prerequisites:** EN-102

Survey of the legal theories and issues and the philosophical bases of key legal and related political concepts, including Natural Law Theory, Legal Positivism, Legal Realism, and critical perspectives.

Every year. 3 Credits

PH-237 Philosophy of Space and Time**LASC Categories:** NSP, TLC

An investigation into philosophical problems regarding space and time, with a focus on those that emerge from the history of science and contemporary physics.

Spring only and every 2-3 years. 3 Credits

PH-240 Political Theory**LASC Categories:** USW, TLC, DIV

Investigates concepts including political power, equality, revolution, liberties, slavery, socialism and patriarchal power, race and gender.

Every year. 3 Credits

PH-241 Genocide and Human Rights**LASC Categories:** USW, GP, DIV

This course treats the ethical, political, and other dimensions of systematic mass violence through case studies and general theoretical analyses.

Every 2-3 years. 3 Credits

PH-242 Race, Nation, Class, Gender and Sexuality**LASC Categories:** USW, HBS, DIV

Examines these five important social categories that define the political, legal, economic, and cultural contexts in which we live.

Other or on demand. 3 Credits

PH-250 Global Feminisms**LASC Categories:** TLC, GP

Investigates the theoretical underpinnings of women's movements for equal rights around the globe.

Every 2-3 years. 3 Credits

PH-251 Mass Violence Against Women**LASC Categories:** USW, GP, DIV

A philosophy-based, interdisciplinary course examining historical and contemporary mass violence against women.

Every 2-3 years. 3 Credits

PH-254 Feminist Theory**LASC Categories:** HBS, USW, DAC, DIV

Feminist Theory: Examines the development of feminist ideas and movements from the 18th century to the present, in the US and, particularly in recent decades, globally. A close analysis of Second Wave, Postmodern, and Black Feminist ideas are studied as a basis for writings and social action that attends to issues of race, class, gender, and sexuality, using intersectional methodologies and critiques to address issues of reproduction and health, labor and economic power, violence, and state power.

Other or on demand and every year. 3 Credits

PH-260 Philosophy of Science**LASC Categories:** HBS, TLC

Critically investigates such questions as: What distinguishes sciences from pseudo-sciences? When is a theory confirmed? What is a law of nature?

Every year. 3 Credits

PH-262 Philosophy of Art**LASC Categories:** CA, TLC

Prerequisites: One semester of philosophy required.

An investigation of the nature of aesthetic experience, art and art history, creativity, criticism and artistic reception.

Alternating and every 2-3 years. 3 Credits

PH-263 Film and Philosophy**LASC Categories:** GP, TLC

An intermediate study of films presenting philosophical ideas about film.

Every 2-3 years. 3 Credits

PH-264 Philosophy of Education**LASC Categories:** TLC, ICW

Examines philosophical approaches to education through readings of various authors such as Plato, Rousseau, Wollstonecraft, Dewey, and Freire.

Additionally surveys recent empirical and/or cross-disciplinary work that engages with philosophical approaches to education, including psychology, cognitive science, education, feminist theory, critical race theory, and/or decolonial theory.

Every 2-3 years. 3 Credits

PH-290 Advanced Special Topics in Philosophy

A treatment of current or special topics for students beyond the introductory level. LASC Categories:

Varies by topic. See current course listing for specific LASC area approved.

Every 2-3 years. 3 Credits

PH-301 Individual Figure in the History of Western Philosophy**Prerequisites:** EN-102

Studies a specific Western philosopher. The philosopher for a given semester will be indicated in the course registration listings.

Every 2-3 years. 3 Credits

PH-315 Moral Psychology**LASC Categories:** HBS, TLC**Prerequisites:** Writing II

This course will examine theories and current research on moral judgments, decision-making, and behavior. Students will learn to assess and critique the intersecting research in moral philosophy and the empirical sciences, and reflect on how these relate to their own moral interactions, as well as those of people from very different cultures. Possible topics include: moral motivation; moral development; moral emotions, such as empathy, sympathy, disgust, and guilt; free will; akrasia (weakness of will); cultural relativism; and virtue.

Fall and Spring and every 2-3 years. 3 Credits

PH-316 Moral Skepticism**Prerequisites:** EN-102 or EN-202.

A survey of topics in what is often called "metaethics": The nature of moral truth, the meaning of moral terms, and the subjects of moral discourse and practice.

Fall and Spring and every 2-3 years. 3 Credits

PH-320 Topics in Metaphysics and Epistemology**Prerequisites:** EN-102

Selected topics in theories of mind, language, and knowledge.

3 Credits

PH-327 Feminist Medical Ethics**LASC Categories:** DIV, ICW

This course will examine various feminist critiques of mainstream bioethics and explore the growth of feminist bioethics as its own distinct sub-field. We will work through feminist conceptions of autonomy and epistemic injustice, and discuss how those conceptions affect decision making with respect to medical interventions. We will focus upon ethical questions and cases that highlight feminist concerns about reproductive choice, reproductive technology, dependency and disability, race, gender, and power imbalances. We will also explore how feminist conceptions of autonomy and care reframe ethical concerns regarding medical decision making for children and minors. Prerequisite: Sophomore standing.

Other or on demand. 3 Credits

PH-328 Comparative Ethics**LASC Categories:** GP, HBS, TLC**Prerequisites:** EN-102 or EN-202.

All societies have some discussion about the moral issues that they must face. Some of these are very similar across cultures, while others vary greatly due to social, economic, geographic, and historical circumstances. This course will examine, compare, and contrast ethical approaches from different geographical locations, cultures, and times. Students will learn to understand, analyze, and critique ethical theories and applications across a range of traditions that are both familiar and foreign to them. These could include ethical theories from Western, African, Eastern, and Middle Eastern traditions.

Fall and Spring and every 2-3 years. 3 Credits

PH-335 Animal Law & Policy**LASC Categories:** ICW, CON, TLC**Prerequisites:** EN-102 or EN-202.

This course will provide an interdisciplinary and in-depth survey of the growing and dynamic field of animal law. We will address the historical status of animals in the law, how our society views animals, how ethics relates to animal treatment, how animals are currently utilized in society, the current application of animal protection laws (including their limitations and efforts to strengthen them), as well emerging efforts to re-classify some animals within our legal system. We will consider how legal systems, specific cases, legislation, and cultural values have affected and continue to affect the evolution of this arena.

Fall and Spring and every 2-3 years. 3 Credits

PH-360 Philosophy of History

LASC Categories: USW, GP

Prerequisites: 3 credits from department PH
 Explores the different philosophical approaches to the study and writing of history and the nature of historical change and development.
 Every 2-3 years. 3 Credits

PH-390 Independent Study in Philosophy

Tutorials in areas of philosophy not covered in normal course offerings.
 Fall and Spring and every year. 1-6 Credits

PH-391 Internship in Philosophy

Provides an opportunity for mid-level or advanced students to increase their philosophical knowledge.
 3 Credits

PH-408 Directed Study: Philosophy

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction of and with agreement from a faculty member.
 3 Credits

- Interpret philosophical texts in order to recognize, explicate, and critique a range of plausible meanings of each text.
- Comprehend, represent, appraise, and sometimes resolve conceptual tensions among distinct metaphysical, etc., theories.
- Philosophy beyond the discipline, students will:
 - Develop critical questions about mainstream points of view and assumptions about the world, human beings, etc.
 - Appreciate and appraise the role and impact of philosophical analysis and inquiry in other disciplines, such as the physical sciences, medicine, religion, etc.
 - Examine and appraise claims about causal relations that are held to produce scientific knowledge or historical, social, cultural, and political developments.
 - Identify, comprehend, appraise, and/or apply multiple theories of ethical or social responsibility.

Program Learning Outcomes

- Regarding argumentation and evidence, students will:
 - Recognize, analyze, and assess arguments presented in readings, discussions, and other sources, such as newspaper editorials.
 - Construct arguments in which premises logically connect to conclusions.
 - Appreciate, evaluate, and employ scientific and social scientific evidentiary standards.
 - Identify or formulate alternative viewpoints, concepts, lines of argument, or interpretations of presented viewpoints, concepts, lines of argument, or interpretations, when those alternatives are not given.
- Regarding historical and theoretical frameworks, students will:
 - Develop knowledge of one major period in the history of philosophy.
 - Develop understanding, ability to discuss, and ability to evaluate major theories and concepts in metaphysics, epistemology, ethics, political philosophy, and/or aesthetics.

Philosophy Minor

Requirements for a Minor in Philosophy

18 credit, including:

- (a) At least one course from group 1: Values and Society
- (b) At least one course from group 2: Culture and Traditions
- (c) At least one course from group 3: Knowledge, Reason, and Reality
- (d) At least one course at the 200 level and at least one course at the 300 level

Code	Title	Credits
<i>Group 1: Values and Society</i>		3
PH-130	Ethics: Human Conduct & Values	
PH-131	Medical Ethics	
PH-133	Social and Political Ethics	
PH-134	Computing Ethics	
PH-151	Race, Gender, and the Law	
PH-231	Philosophy of Law	
PH-240	Political Theory	

PH-241	Genocide and Human Rights	
PH-251	Mass Violence Against Women	
<i>Group 2: Culture and Traditions</i>		3
PH-101	Ancient Greek Philosophy	
PH-102	History of Modern Western Philosophy 1600-1800	
PH-152	Philosophy of Love and Sex	
PH-170	Introduction to Asian Philosophy	
PH-171	Buddhist Philosophy	
PH-172	Chinese Philosophy	
PH-177	Introduction to Latin American Philosophy	
PH-178	Africana Philosophy	
PH-180	Sports and Philosophy	
PH-201	19th Century European Philosophy	
PH-242	Race, Nation, Class, Gender and Sexuality	
PH-250	Global Feminisms	
PH-254	Feminist Theory	
PH-262	Philosophy of Art	
PH-263	Film and Philosophy	
PH-360	Philosophy of History	
<i>Group 3: Knowledge, Reason, and Reality</i>		3
PH-110	Critical Thinking	
PH-115	Logic I	
PH-215	Logic II	
PH-220	Philosophy of Mind	
PH-221	Existentialism and Phenomenology	
PH-225	Philosophy of Language	
PH-237	Philosophy of Space and Time	
PH-260	Philosophy of Science	
PH-264	Philosophy of Education	
PH-320	Topics in Metaphysics and Epistemology	
<i>Philosophy Elective Courses</i>		9
Total Credits		18

Minors should contact the Chair of the Philosophy Department to arrange for departmental advising, and they should select their philosophy courses in consultation with their departmental advisor.

Advising can include support for a student's graduate, law, or other professional school application process.

Ethics Minor

Requirements for a Minor in Ethics

Code	Title	Credits
<i>Required Ethics Course</i>		
PH-130	Ethics: Human Conduct & Values	3
or PH-133	Social and Political Ethics	
<i>Applied Ethics-Take one course from the following:</i>		3
PH-131	Medical Ethics	
PH-132	Business Ethics	
PH-134	Computing Ethics	
PH-151	Race, Gender, and the Law	
PH-240	Political Theory	
PH-241	Genocide and Human Rights	
PH-327	Feminist Medical Ethics	
<i>Elective Courses-Take 2 courses from the following:</i>		6
PO-262	Principles of US Public Policy	
PO-311	Environmental Politics and Policy	
PO-312	Health Politics and Policy	
HC-228	Health Ethics	
CJ-327	Race, Ethnicity and Criminal Justice	
CJ-337	Criminal Justice Ethics	
EN-167	Literature and Human Rights	
EN-168	Film and Literature	
EN-416	Media Law and Ethics	
UR-290	Gender and the City	
UR-305	Group Conflict in the Urban Community	
UR-331	Crime and the City	
UR-380	Public Policy and Cultural Diversity	
Take two additional courses from the above applied ethics or elective courses.		6
One must be at the 200 level, and one must be at the 300 level.		
Total Credits		18

The following courses could also be treated as Ethics Courses depending on the specific course content, the instructor's permission, and the permission of

the student's philosophy advisor. Students should confirm with the professor in advance of taking the course.

Code	Title	Credits
PH-190	Special Topics in Philosophy	3
PH-290	Advanced Special Topics in Philosophy	3
PH-301	Individual Figure in the History of Western Philosophy	3
PH-390	Independent Study in Philosophy	1-6

Minors should contact the Chair of the Philosophy Department to arrange for departmental advising, and they should select their philosophy courses in consultation with their departmental advisor. Advising can include support for a student's graduate, law, or other professional school application process.

Political Science

Department of History and Political Science

Our department explores the present and past through two distinct disciplines: History and Political Science. The Political Science program at Worcester State University offers a major and minor in Political Science and minors in Pre-Law and Civic Engagement. Political Science gives students the opportunity to pursue a broad range of questions about the organization and function of government. Students in Political Science programs acquire the analytical skills to ask and answer questions about how and why governments operate in the way that they do. Students can choose to focus on any of the traditional subfields of political science, which include American politics, comparative government, international relations, and political theory. Graduates are prepared to work in a broad array of professional settings, including in traditional career paths such as government service, law, business, journalism, and education; working with community and nonprofit organizations; and involvement in political movements and elected office. Many graduates continue their education to pursue advanced degrees in graduate school or law school.

- Civic Engagement Minor (p. 412)
- Political Science Major (p. 413)
- Political Science Minor (p. 413)
- Pre-Law Minor (p. 414)

Faculty

Nathan Angelo, Associate Professor (2016), B.A., Hofstra University; M.A., New York University and City University of New York; Ph.D., New School for Social Research

Erika Briesacher, Professor (2012), B.A., Illinois Wesleyan University; M.A., Southern Illinois University, Edwardsville; Ph.D., Kent State University

Anthony Dell'Aera, Associate Professor (2016), B.A., Trinity College; M.A., Ph.D. Brown University

Charlotte Haller, Department Chair, Professor (2004), B.A., Brown University; M.A., Ph.D., University of Wisconsin

Tona J. Hangen, Professor (2008), B.S., Massachusetts Institute of Technology; Ph.D., Brandeis University

Robert W. Smith, Professor (2007), B.A., Syracuse University; M.A., Ph.D., College of William and Mary

Courses

PO-110 American Government

LASC Categories: HBS, USW, CON

This course introduces students to the American political system and thus it will be an exploration of American republican democracy. We will attempt to understand the way that the political system operates by examining Congress, the presidency, the judiciary, federalism, political parties, interest groups, elections, civil liberties and civil rights, and policy issues relevant to Americans. We will explore the way that institutional arrangements facilitate debate, which ultimately leads to policy changes. Our objective in this class will be to understand the workings of American democracy.

Fall and Spring and every year. 3 Credits

PO-120 Global Politics

LASC Categories: GP, HBS, DAC, DIV

An introduction to Comparative Politics and International Relations. In this course, students will learn how different countries around the world govern themselves and how they interact with each other. Topics may include democratic and non-democratic regimes, theories of war and peace, global political cultures, and intergovernmental organizations such as the United Nations. [Applicable to the Global Studies Concentration.]

Fall and Spring and every year. 3 Credits

PO-130 Introduction to Political Theory

LASC Categories: TLC

This course introduces students to the field of political theory by focusing on some of the major works and concepts such as democracy, freedom, liberty, and justice.

Alternating and every year. 3 Credits

PO-150 Foundations of Legal Studies**LASC Categories:** HBS, CON

This course introduces the fundamentals of the American legal system. Primary topics will include the sources of law; constitutional interpretation; the roles of the executive, legislative, and judicial branches of government; federal and state judicial systems; civil and criminal law; legal ethics; and questions of power, authority, justice, inequality, individualism, and the community. Students will also learn the fundamentals of legal research, such as locating the texts of statutes, regulations, and court decisions on specific subjects; reading and analyzing statutes and case law; and developing techniques for legal writing and oral presentations.

Fall and Spring and every 2-3 years. 3 Credits

PO-160 Introduction to Civic Engagement**LASC Categories:** ICW, USW

What are the responsibilities of citizenship? How do we define community? What are the ways we can participate in civic life? This course in civic learning and civic engagement will help prepare individuals for effective democratic participation, which in turn promotes growth of healthy communities, global economic vitality, social and political well-being and democratic human interactions. Through a variety of readings and experiential activities, students will be introduced to the four core pillars in the Civic Engagement field: Civic and Democratic Knowledge, Civic and Democratic Skills, Civic and Democratic Values, and Civic and Democratic Action.

Alternating and every year. 3 Credits

PO-191 Special Topics: Political Science

Other or on demand. 3 Credits

PO-193 First Year Seminar Political Science**LASC Categories:** FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

Fall only and every year. 3 Credits

PO-201 International Relations Theory**LASC Categories:** USW, GP, WAC

Theory and practice of international security (realism and internationalism) and international political economy (liberalism and protectionism) in their historical context. [Applicable to the Global Studies Concentration.]

Alternating and every 2-3 years. 3 Credits

PO-202 Globalization**LASC Categories:** USW, GP, WAC

The promise and problems of globalization (spread of free market capitalism and political democracy). [Applicable to the Global Studies Concentration.]

Every 2-3 years. 3 Credits

PO-203 Gender, War and Peace**LASC Categories:** GP, HBS, DAC, DIV

A practical and thematic examination of the relevance of the concepts of gender to war and peace. Students will become familiar with multiple, feminist approaches to topics such as: militarization, gender and armed actors, wartime violence, the impact of war on gender relations, peace activism, peace processes, and peacekeeping. Classes will also cover the emergence of new norms adopted by the UN system to address these issues, as well as the emergence of feminist foreign policies. We will examine cases drawn from across the globe.

Alternating and every year. 3 Credits

PO-204 Women in Politics**LASC Categories:** DIV, HBS

This course examines how women have gained access to formal politics in the US and internationally. Using intersectional feminist theories and theories of political participation, mobilization, and representation, we will examine why women and which women are excluded from formal politics, how women have exercised political power formally and informally, which women benefit most from expanded participation, and whether women's political representation is linked to better outcomes for ordinary women across different groups.

Every 2-3 years. 3 Credits

PO-205 Poverty and Development**LASC Categories:** GP, HBS, DIV

Why are some countries rich, and some poor? What causes these global inequalities, and do we have effective policy solutions? Does aid work? In this course, we will examine the political economy of development across the globe. We will examine how concepts like "poverty" are defined and measured, competing explanations for development, and the efficacy of international responses to poverty alleviation. Importantly, we will center the experiences and perspectives from the Global South.

Every 2-3 years. 3 Credits

PO-209 Ancient and Classical Political Theory

This class introduces students to the ideas and concepts found in the works of ancient and classical political theorists. We will read major works by theorists like Plato, Aristotle, Machiavelli, Locke, Mill, Hobbes, the Federalists, and Rousseau. Emphasis will be placed on how theorists justify the existence of government and how its conception has evolved over time. We then trace fundamental principles, such as democracy, liberty, and justice and show how these ideas are encapsulated in the US Constitution. Every 2-3 years. 3 Credits

PO-213 The Modern Presidency

LASC Categories: HBS, USW

This course will examine the evolution of the presidency. Special attention is given to those presidents who have expanded the office.

Every 2-3 years. 3 Credits

PO-215 State and Local Government

LASC Categories: HBS, USW

Examines sub-national governments and politics in the United States; the structure and problems of these governments.

Every 2-3 years. 3 Credits

PO-216 Political Parties and Interest Groups

LASC Categories: HBS

Examines the organization, functions, and methods of political parties; the role of interest groups in the American political process.

Every 2-3 years. 3 Credits

PO-217 The U.S. Congress

LASC Categories: HBS, CON

The nature and function of the United States Congress, including the complexities of the lawmaking process, Congressional elections, the relationship between individual members of Congress and their constituencies, major issues of public policy, and institutional relations between Congress, the Presidency, and the Judiciary.

Alternating and every 2-3 years. 3 Credits

PO-220 European Politics

LASC Categories: HBS, GP

This course provides a comparative study of European government and politics, with a focus on major countries such as Great Britain, France, Italy, Spain, Germany, and Russia. Special emphasis will be placed on learning about the structure of political power within the state and on important institutions that form the link between state and society, such as political parties and interest groups. Diverse nationalistic responses to the European Union will also be considered. [Applicable to the Global Studies Concentration.]

Every 2-3 years. 3 Credits

PO-221 Asian Politics

LASC Categories: HBS, GP

This course provides students with an analysis of selected political systems of the countries of Asia. Students will have the opportunity to learn about major theories in comparative politics, which will be applied to the understanding of countries in the Asian region. Topics will include communist and post-communist transitions, democratization, social movements, and economic reform. [Applicable to the Global Studies Concentration.]

Every 2-3 years. 3 Credits

PO-222 Latin American Politics

LASC Categories: GP, HBS

This course provides a comparative study of the government and politics of contemporary Latin America. It will explore the political systems of various countries, as well as how political dynamics, such as democratization, authoritarianism, and crisis situations, have affected political, economic, and social policies throughout the region. [Applicable to the Global Studies Concentration.]

Every 2-3 years. 3 Credits

PO-223 Political Communication**LASC Categories:** TLC

This course will analyze the relationship between citizens' opinions and the mass media through a focus on political campaign and governmental communication strategy. Specific attention will be given to the history of the relationship between politicians and the media. We will also study political campaign advertisements. We will analyze how political candidates and governments communicate with voters, how they shape their images and manage crises, and ultimately attempt to determine how effective politicians are in influencing public opinion.

Alternating and every 2-3 years. 3 Credits

PO-224 Middle Eastern Politics**LASC Categories:** HBS, GP

This course provides students with an analysis of selected political systems of the countries of the Middle East. Students will have the opportunity to learn about major theories in comparative politics, which will be applied to the understanding of countries in the Middle Eastern region. International rivalries in the area are also discussed. [Cross-listed with HI-330]

Alternating and every 2-3 years. 3 Credits

PO-230 Campaigns and Elections**LASC Categories:** HBS

This course examines political campaigns and elections in the United States, with a focus on the candidate nomination and electoral process, campaign structures and strategies, voting, political participation, public opinion, the media, political behavior, and the role of political parties.

Alternating and every 2-3 years. 3 Credits

PO-234 Modern and Contemporary Political Theory

This course will focus on how recent political philosophers have responded to questions such as what constitutes liberty, freedom, and justice. In turn, students will be prompted to consider questions such as when is it necessary for government to constrain freedom, and how can conflicts between the rights of the individual and the rights of the community be adjudicated. This class will allow for engagement with these concepts through the works of modern political theorists such as Marx, Nietzsche, Freud, and Arendt, and contemporary political theorists such as Rawls, Nozick, Dworkin, Berlin and Strauss.

Alternating and every 2-3 years. 3 Credits

PO-240 The United Nations and Global Governance**LASC Categories:** HBS, GP

This course explores a selection of the various organizations that are relevant in contemporary global politics. Special attention will be paid to the United Nations, as well as to organized political movements that challenge, and/or offer alternative visions for, global governance. Concepts, practices, and processes that will be covered in this course include: sovereignty, democracy, human rights, global capitalism, and political resistance/pre-figurative politics.

Alternating and every 2-3 years. 3 Credits

PO-243 City Politics**LASC Categories:** HBS, DAC, DIV

This course examines the political development and the political processes of America's cities. The actors in this story include machine bosses, reformers, immigrants, bureaucrats, politicians, average citizens, the rich, the poor, and the marginalized. Particular attention will be given to the political institutions of city government, structures and strategies of city elections, local party organizations, governing strategies of mayors, evolving urban populations and interests, and enduring problems such as racism, prejudice, discrimination, poverty, crime, education, economic decay and exploitation.

Alternating and every 2-3 years. 3 Credits

PO-250 Doing Political Science: an Introduction To Research Methodology**LASC Categories:** HBS, QAC, QR**Prerequisites:** One 100-level course in Political Science.

This course introduces students to the research process in Political Science. There will be an emphasis on both quantitative and qualitative methods of generating and analyzing social science statistics and other data in order to answer research questions about the political world around us. In this course students will learn what makes Political Science a "science." No previous experience in math, statistics, or programming is required.

Alternating and every 2-3 years. 4 Credits

PO-262 Principles of US Public Policy**LASC Categories:** HBS

This course introduces students to how American public policy is formulated and how public policies can be evaluated. These theoretical and structural frameworks are then applied to a series of case studies of public policies to examine the role of politics in how the policy process works and to develop a fuller understanding of the political and ideological debates over contemporary public policy issues such as welfare, social security, health care, education, labor, criminal justice, and the environment.

Alternating and every 2-3 years. 3 Credits

PO-264 American Political Thought**LASC Categories:** TLC, USW, DAC, DIV

This course examines the evolution of American political thought as a means to better understand the role of political ideology in contemporary politics. Through a close reading of mainly primary source documents in political theory spanning the colonial period through the present era, students will critically engage topics such as American iterations of Republicanism and Democracy, American character, slavery, race, women's rights, ethnicity, class, and immigration. These topics will reveal challenges to core American values which would shape American political development. We will also examine how different varieties of liberals and conservatives confront these political questions.

Every 2-3 years. 3 Credits

PO-265 Racial and Ethnic Politics**LASC Categories:** HBS, USW, DAC

This class will analyze the relationship between the United States government and racial and ethnic groups and explore the way that race is utilized in American politics. We will focus on issues affecting racial and ethnic communities in the United States, the politics behind racial and ethnic classification, and the use of racial and ethnic appeals in American political campaigns. The readings for this course will cover topics such as affirmative action, criminal justice reform, and civil rights. It will offer students an opportunity to analyze political speeches and advertisements that utilize race and ethnicity.

Every 2-3 years. 3 Credits

PO-299 Special Topics in Political Science

Special Topics in Political Science at the introductory and intermediate level, offering an overview of a particular subject that is not regularly offered in the course catalog; appropriate for students at any level. Other or on demand and other or on demand. 3 Credits

PO-301 International Law**LASC Categories:** HBS, GP, DAC**Prerequisites:** PO-110 or PO-120

An examination of international law through the lens of international relations. This course will focus on international humanitarian law (the law of war), international human rights law, and territorial law (border disputes). We will examine contemporary and historical cases, such as genocide in Myanmar, the wars in Iraq and Afghanistan, the expansion of human rights to women and Indigenous peoples, and China's claims to the South China Sea. Students will also learn about the courts and legal instruments involved in enforcing each area of international law.

Alternating and every 2-3 years. 3 Credits

PO-311 Environmental Politics and Policy**LASC Categories:** HBS, NSP

Investigation of the factors that determine the formation of public policy on the environment with consideration of the roles played by federal, state, and local regulatory agencies in the United States. Case studies will include global climate change, air and water pollution, energy, land use, brownfields, waste management, endangered species, and population growth.

Alternating and every 2-3 years. 3 Credits

PO-312 Health Politics and Policy**LASC Categories:** HBS, ICW

Examination of the process and factors that influence formulation, implementation and modification of health policy in the United States. Topics will include health ethics, insurance, finance, prescription drug regulation, Medicare/Medicaid, epidemics, private markets, public interest, distributive justice, and the role of government.

Fall and Spring and every year. 3 Credits

PO-313 The Politics of American Education**LASC Categories:** DAC**Prerequisites:** EN102 or EN202, PO110

This course explores the political issues relevant to the American educational system. The focus of the course will be the contemporary political debates and public policy attached to both the American public school system and the system of higher education. We will analyze federal and state educational policy, trace the development of federal involvement in the education system, and explore the current political issues related to the American education system. Special attention will be given to issues of race, sex/gender, and class.

Other or on demand and every 2-3 years. 3 Credits

PO-318 Constitutional Law of Government Powers And Constraints**LASC Categories:** CON**Prerequisites:** PO-110

A critical analysis of key US Supreme Court decisions addressing the horizontal allocation of power among federal government branches and institutions, and the vertical allocation of power between federal and state governments. Attention will also be given to unresolved constitutional issues between the legislative and executive branches, the Massachusetts state constitution, and to the theoretical foundations of the United States Constitution (such as Locke, Montesquieu, and the Federalist Papers).

Alternating and every 2-3 years. 3 Credits

PO-319 Constitutional Law of Civil Rights and Liberties**LASC Categories:** CON**Prerequisites:** PO-110

This course will provide students with an analysis of law pertaining to civil liberties and civil rights in the United States, with attention also given to Massachusetts. Following the historical development of constitutional law in the United States, we will begin with pre-Civil War law to see how fundamental civil liberties and civil rights have been applied to the states.

Alternating and every 2-3 years. 3 Credits

PO-320 Citizen Nation**LASC Categories:** CON, USW, DAC, WAC, DIV**Prerequisites:** EN-102 or EN-202.

Explores the history and meaning of citizenship in the United States, including discrimination, rights struggles and changing citizenship criteria. [Cross-listed with HI-320.]

Other or on demand. 3 Credits

PO-322 Nationalism

Examines the theories of nationalism, the development of the modern Nation-state, and its effect on global politics. [Cross-listed with HI-322. Applicable to the Global Studies Concentration.]

Other or on demand. 3 Credits

PO-323 Empire**Prerequisites:** HI-103 and HI-104

Theories and models of colonization, the reaction of colonized peoples, and the way historians analyze imperialism from 1400 to 1920's. [Cross-listed with HI-323. Applicable to the Global Studies Concentration.]

Every 2-3 years. 3 Credits

PO-327 Global South Leadership in the United Nations**LASC Categories:** GP, DIV**Prerequisites:** EN-102.

Global South individuals and countries have been instrumental in creating and sustaining the United Nations. In this course, we examine how the Global South has used the UN to foster action on issues such as human rights, decolonization, gender equality, and environmental sustainability. In this course, students will get to experience these issues through a field trip to UN headquarters and a Model United Nations simulation.

Every 2-3 years. 3 Credits

PO-334 Environmental Crisis and Management in China**LASC Categories:** HBS, NSP**Prerequisites:** EN-102 or EN-202

This course will examine the history of the relationship between Chinese society and culture, economic development, state power, scientific theories, and the environment. Recent media reports have highlighted a worsening environmental crisis in China while at the same time reporting on China as a new leader in the development of alternative energy sources. This course will trace the political, economic, social, and scientific history behind this environmental crisis, and will evaluate the role of local, regional, and national levels of the government, domestic and international non-governmental organizations, urban and rural activists, scientific studies and discourses, and evolving political ideologies. [Cross-listed with HI-334.]

Every 2-3 years. 3 Credits

PO-361 The Rise of the Right: Conservative Politics From Goldwater to Today**LASC Categories:** TLC**Prerequisites:** EN-102 or EN-202 Take PO-110;

This course will critically trace the development of conservative politics in the United States from the 1960s to today. Students will analyze various influential conservative activists and thinkers like Barry Goldwater and Charles Murray to consider their influence on the political campaigns and strategies of figures like Ronald Reagan, Richard Nixon, and Donald Trump. We will read the texts of key conservative thinkers on welfare, race, and foreign relations to analyze their lasting impact on American politics.

Other or on demand and every 2-3 years. 3 Credits

PO-370 Crisis Politics**Prerequisites:** PO-110 or PO-101 (archived)

Analyze the theories regarding the roots of violence, revolution, and terrorism. Special attention will be devoted to violence in America.

Every 2-3 years. 3 Credits

PO-380 American Foreign Policy Since the Cold War**LASC Categories:** CON, USW, HBS**Prerequisites:** PO-110 or PO-101 (archived) or HI-112 or HI-212

Instruments of American foreign policy; major foreign policy developments since 1947.

Every 2-3 years. 3 Credits

PO-399 Special Topics in Political Science**Prerequisites:** PO-110, PO-120, or PO-130.

Special Topics in Political Science at the advanced level, offering a discipline-specific examination of a particular subject that is not regularly offered in the course catalog; appropriate for more advanced students who have previously taken courses in Political Science.

Other or on demand and other or on demand. 3 Credits

PO-401 Senior Research Seminar in Political Science**LASC Categories:** CAP, WAC**Prerequisites:** PO-110 and EN-102 or EN-202

A capstone research seminar for Political Science majors in which students integrate their training as political scientists in terms of research, analysis, and evaluation of recent and seminal scholarship in one or more of the major subfields, culminating in a large scale original research paper that uses appropriate methods to answer emerging questions in the discipline.

Alternating and every year. 4 Credits

PO-408 Directed Study: Political Science

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

Fall and Spring and every year. 3 Credits

PO-440 Internship in Political Science

Internships in government agencies, political parties, election campaigns, non-governmental organizations, the news media, and other institutions in the public and private sectors. Students will perform a variety of tasks in a professional setting, combining the academic study of politics with practical work experience.

Fall and Spring and every year. 1-6 Credits

PO-441 Internship in Pre-Law

Internships with Courts, Law Firms, the District Attorney's office, the Public Defender's office, Legal Aid societies, and other institutions involved in the practice of law. Students will perform a variety of tasks in a professional legal setting, combining the academic study of Pre-Law with practical work experience.

Fall and Spring and every year. 1-6 Credits

PO-450 Special Topics: Political Science

Selected areas of interest to students and instructors. Topic, prerequisites and instructor are announced in advance.

Other or on demand. 3 Credits

PO-470 Senior Thesis-Capstone Project

LASC Categories: CAP, WAC

An intensive independent research project that serves as a capstone experience for students majoring in Political Science. Students may opt either to (1) write a traditional formal thesis, or (2) complete an alternative large scale experiential project in applied political research, political action, or creative political arts. The Senior Thesis/Capstone Project may be used to substitute for the Senior Research Seminar requirement in the Political Science major. Fall and Spring and every year. 4 Credits

One course from each of the three civic engagement categories - courses must derive from three different disciplines.		
<i>Depth</i>		6
Two courses from a single civic engagement category.		
<i>Experiential</i>		3
One practicum/internship focused on civic engagement at the 300 or 400 level in any department, as approved by the student's civic engagement advisor. Options include, but are not limited to:		
UR-440	Practicum in Urban Studies	
CM-352		
PO-440	Internship in Political Science	
<i>Total Credits</i>		21

Program Learning Outcomes

- Students will identify and explain the structure and function of government, both as an abstract concept and in specific historical and national contexts.
- Students will differentiate among and apply key concepts in the field of political science, such as power, sovereignty and legitimacy.
- Students will compare political systems, constitutions, national interests, and ideas of international responsibilities as elements of global politics.
- Students will apply political theory in their examination of political systems.
- Students will select and apply appropriate methodologies (such as from economics, anthropology, psychology, organizational behavior, and history) to evaluate different political systems and theories.
- Students will determine the relevance of political participation to political outcomes; they will connect their political science learning to their own political identity.

Civic Engagement Minor

Code	Title	Credits
<i>Foundation</i>		3
PO-160	Introduction to Civic Engagement	
<i>Breadth</i>		9

Code	Title	Credits
<i>Category 1: Politics & Policy</i>		
CM-384	Media Criticism	3
EV-130	Environmental Problems and Solutions	3
EV-235	Contemporary Climate Change	3
GE-250	Urban Geography	3
GE-258	Global Environmental Change	3
GE-285	Sustainable Communities	3
PO-215	State and Local Government	3
PO-217	The U.S. Congress	3
PO-243	City Politics	3
PO-262	Principles of US Public Policy	3
PO-265	Racial and Ethnic Politics	3
PO-311	Environmental Politics and Policy	3
PO-319	Constitutional Law of Civil Rights and Liberties	3
PO-325	The Kennedy Legacy in American Public Life	3
UR-310	Power, Politics and Decision-Making in Urban Communities	3
UR-311	Urban Politics and Policies	3
UR-320	Power and Urban Insecurity	3
UR-360	Environmental Systems and Public Policy	3
UR-380	Public Policy and Cultural Diversity	3

Category 2: Communications & Advocacy Skills

CM-106	Communications and the Internet	3
CM-107	Journalism and Democracy	3
CM-110	Public Speaking	3
CM-204	Analysis of News	3
CM-206	Digital Storytelling	3
CM-213	Gender and the Media	3
CM-260	Introduction to Video	3
CM-268		3
CM-272		3
CM-305		3
CM-315	Social Media	3
CM-325	Community Media Production	3
CM-340	Public Relations Strategy	3
CM-345		3
CM-350	Intercultural Communication	3
CM-359	Documentary Production	3
CM-363	Visual Media Literacy	3
CM-390	Independent Media and Society	3
EN-107	Journalism and Democracy	3
EN-268	Journalism: Feature Writing	3
EN-272	News Reporting and Writing I	3
EN-322	Community Writing	3
PO-216	Political Parties and Interest Groups	3
PO-223	Political Communication	3
PO-230	Campaigns and Elections	3
TH-292	Applied Theatre and Community Engagement	3

Category 3: Social Justice & Social Change

CM-416	Media Law and Ethics	3
HI-217	US Social History	3
HI-243	Introduction to Public History	3
HI-320	Citizen Nation	3
PH-130	Ethics: Human Conduct & Values	3
PH-131	Medical Ethics	3
PH-133	Social and Political Ethics	3
PH-151	Race, Gender, and the Law	3
PH-241	Genocide and Human Rights	3
SO-200	Contemporary Social Problems	3
SO-230	Political Sociology	3
SO-285	Race, Class and Gender	3

SO-300	Social Change	3
SO-305	Applied Sociology	3
SO-315	Social Movements	3
UR-213	Human Identity and Urban Environment	3
UR-305	Group Conflict in the Urban Community	3
UR-321	Advanced Social Work	3

Political Science Major

Requirements for the Major in Political Science

Code	Title	Credits
<i>Introductory Courses</i>		
PO-110	American Government	3
PO-120	Global Politics	3
1 Additional 100-level PO Course		3
<i>Methods</i>		
PO-250	Doing Political Science: an Introduction To Research Methodology	4
or another appropriate research methods course of at least 3 credits approved for this requirement by the Political Science advisor		
<i>Electives</i>		
5 Elective Courses at the 200 Level or Above		15
2 Elective Courses at the 300 Level or Above		6
<i>Experiential</i>		
PO-440	Internship in Political Science	1-6
or PO-441	Internship in Pre-Law	
or another appropriate practicum approved for this requirement by the Political Science advisor		
<i>Capstone</i>		
PO-401	Senior Research Seminar in Political Science	4
or PO-470	Senior Thesis in Political Science	
Total Credits		39-44

Political Science Minor

Requirements for a Minor in Political Science

Code	Title	Credits
PO-110	American Government	3
PO-120	Global Politics	3
3 elective courses in Political Science at any level		9

1 elective course in Political Science at or above the 300 level	3
--	---

Total Credits	18
----------------------	-----------

Pre-Law Minor

Requirements for the Pre-Law Minor:

Code	Title	Credits
<i>Required Courses</i>		9

PO-150	Foundations of Legal Studies
--------	------------------------------

PH-110 or PH-115	Critical Thinking Logic I
---------------------	------------------------------

PH-231 or PH-151	Philosophy of Law Race, Gender, and the Law
---------------------	--

A course in this category not taken as a Required Course can be taken to satisfy the Elective/Experiential Learning requirement.

<i>Constitutional and International Law</i>	6
---	---

Take 2 courses from the following:

PO-318 or HI-218	Constitutional Law of Government Powers And Constraints US Constitutional History I
---------------------	--

PO-319 or HI-219	Constitutional Law of Civil Rights and Liberties US Constitutional History II
---------------------	--

PO-301	International Law
--------	-------------------

A course in this category not taken as a Constitutional or International Law Course can be taken to satisfy the Elective/Experiential Learning requirement.

<i>Electives/Experiential Learning</i>	6
--	---

Take 2 courses from the following (if not already satisfied by courses in the above categories):

PH-130	Ethics: Human Conduct & Values
--------	--------------------------------

PH-133	Social and Political Ethics
--------	-----------------------------

PH-240	Political Theory
--------	------------------

PH-241	Genocide and Human Rights
--------	---------------------------

PO-217	The U.S. Congress
--------	-------------------

PO-441	Internship in Pre-Law
--------	-----------------------

HI-241	English Constitutional History
--------	--------------------------------

HI-320	Citizen Nation
--------	----------------

HI-420	Seminar in Constitutional History
--------	-----------------------------------

CJ-205	American Judicial System
--------	--------------------------

BA-320	Business Law I
--------	----------------

Law & Marginalized Groups

At least one of the courses taken to satisfy the requirements of the Pre-Law Minor must address issues of law and marginalized groups. Students can satisfy this requirement by taking PH-151 Race, Gender, and the Law, or PO-319 Constitutional Law of Civil Rights and Liberties, or an appropriate course approved by the Pre-Law Advisor.

A student may substitute an appropriate course approved by the Pre-Law Advisor for any of the above requirements.

Total Credits	21
----------------------	-----------

In addition to the Pre-Law Minor, WSU has multiple 3+3 Law Degree Agreements, with the UMass School of Law and the Western New England University School of Law. More information about these programs can be found at <https://www.worcester.edu/Articulation-Agreements/>.

Psychology

Department of Psychology

Psychology courses acquaint students with basic principles of learning, motivation, development, and interpersonal relationships, providing a foundation for effective living and a background for a variety of career opportunities. The major provides students with a wide range of marketable and graduate study skills that include interpersonal awareness, problem-solving, research, and computer literacy.

Baccalaureate degree holders are prepared for entry level positions in a broad range of areas including health and social services, mental health, organizational leadership and management, community relations, education, human resources, program development, public affairs, social science research, and programs for women. Psychology is recognized in Massachusetts as a certificate academic major for Early Childhood and Elementary Education students. Those with bachelor's degrees in psychology work in the same fields as do psychologists with graduate degrees. Some of the department's alumni:

- Counsel or teach people in group homes, nursing homes, and clinics
- Are case managers in insurance companies
- Plan and execute research
- Help young people in juvenile courts, schools and recreational programs
- Are behavior specialists
- Counsel drug addicts and victims of abuse

The department provides solid preparation for graduate work in psychology by helping students develop specializations and providing opportunities for the development of excellent research skills. The department offers an HONORS program and an internship program and operates a state-of-the-art computer laboratory. Psi Chi, the national honor society in psychology, is available to outstanding students who major in the discipline.

The **minor** programs offer an opportunity for students wishing to develop a core understanding of psychology. A general minor in Psychology, as well as a specialized minor in Human Development, are available.

Admission Requirements

Admission is open to any student who is interested in psychology and who can maintain a 2.0 grade point average in the required and elective psychology courses.

Standards for Minimum Academic Performance in the Psychology Major

The Psychology major requires a minimum grade of C- in all courses applied to the major. Courses may be repeated. The C- minimum grade does not apply to psychology courses beyond those applied to the major (four specified, four from specified areas and four elective courses). Students must maintain a minimum overall GPA of 2.0 in the major, consistent with Worcester State University policy.

Concentrations

Students may choose to simply major in psychology **without** a particular specialization (by completing the Requirements for a Major in Psychology) or may choose to major in psychology **with** a specialization by completing the requirements for a concentration in Mental Health Services, or an Interdisciplinary Concentration in Women's Studies.

Evening Psychology

The required core courses for the Psychology Major may be completed with evening or summer courses. Many core courses are offered in the evening during each academic year as well as some elective courses. Internships and independent study courses, however, are only offered in Fall and spring day courses.

HONORS Program

The HONORS program is designed to increase opportunities for students of outstanding ability to engage in independent work and prepare for more challenging futures. It is especially recommended for students planning to pursue graduate education.

The HONORS project must be completed and presented to the faculty sponsor. Students are required to make an oral presentation on the project in a session open to all faculty and students in the department.

Admission to the HONORS program is by application. The admission requirements, closing date for application and instructions for completing the application process may be obtained from the Department Office.

- Human Development Minor (p. 421)
- Minor in Mental Health Services (p. 421)
- Psychobiology Minor (p. 422)
- Psychology Major (p. 423)
- Psychology Major, Concentration in Mental Health Services (p. 425)
- Psychology Major, Interdisciplinary Concentration in Women's Studies (p. 425)
- Psychology Minor (p. 426)

Faculty

Alexandra M. Burgess, Associate Professor (2017), B.A., Smith College; M.A., Ph.D., University of Hawai'i at Manoa

Amy Cota-McKinley, Department Chair, Professor (2002), B.A., University of Wisconsin; M.S., Jacksonville State University; Ph.D., Colorado State University

Lori J. Dawson, Professor (1995), B.A., Suffolk University; M.A., Ph.D., State University of New York, Albany

Sarah Eagan, Assistant Professor (2022), B.A., Sonoma State University; M.A., Ball State University; Ph.D., University of Nebraska

Charles R. Fox, Professor (2013), O.D., New England College of Optometry; B.A., M.A., St. John's University; Ph.D., Brandeis University

Kathryn Frazier, Associate Professor (2016), B.A., Scripps College; M.A., Ph.D., Clark University

Benjamin Jee, Associate Professor (2015), B.S., University of Toronto; Ph.D., University of Illinois, Chicago

Brittany Jeye, Assistant Professor (2019), B.S., M.A., Ph.D., Boston College

Bonnie G Kanner, Professor (1997), B.A., M.S., C.A.S., State University of New York, Albany; Ph.D., Clark University

Jacqueline N. Raftery-Helmer, Associate Professor (2017), B.S., Union College; M.A., Ph.D., Clark University

Nicole Rosa, Associate Professor (2014), B.A., Stonehill College; M.S.W., Boston College; M.A., Ph.D., Brandeis University

Brandi Silver, Professor (2003), B.S., M.S., Ph.D., Colorado State University

Emily Soltano, Professor (1999), B.A., Ph.D. State University of New York, Albany

Champika K. Soysa, Professor (2003), B.A., Mount Holyoke College; M.A., Ph.D., Clark University

Colleen Sullivan, Professor (2012), B.S., Frostburg State University; M.A., Ph.D., University of Maryland, Baltimore

Seth Surgan, Professor (2006), B.A., University of North Carolina, Chapel Hill; M.A., Ph.D., Clark University

Marc J. Wagoner, Associate Professor (2004), B.A., Morehouse College; Ph.D., University of Minnesota

Courses

PB-200 Introduction to Psychobiology

LASC Categories: HBS, NSP, LAB

Prerequisites: PS-101 and BI-116 or BI-140.

Introductory course in Psychobiology that covers topics including neurobiology, evolution, sensory/motor systems, learning and memory, and social behavior.

Fall only and every year. 4 Credits

PB-400 Capstone in Psychobiology

LASC Categories: CAP

Seminar covering selected topics in Psychobiology including primary source material readings, laboratory activities, discussion, oral presentation and written papers.

Spring only and every year. 2 Credits

PS-101 General Psychology

LASC Categories: HBS

Introduction to history of psychology, scientific method, brain/nervous system, development, learning, motivation, sensation/perception, personality, psychopathology, psychotherapy, cognitive processes, social behavior.

Fall and Spring and every year. 3 Credits

PS-193 Special Topics in Psychology for First Year Students**LASC Categories:** FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

Fall only and every year. 3 Credits

PS-201 Career Exploration in Psych**LASC Categories:** HBS, ICW**Prerequisites:** PS-101.

This course guides students in exploring the broad range of career opportunities in the field of psychology. The class is for any student who is considering the field of psychology and intended for those beginning their undergraduate careers. This class provides students with the information about the intersection between areas in psychology, related careers and graduate school options. It debunks the myth that you must go to graduate school if you major in psychology.

Alternating and every year. 3 Credits

PS-210 Developmental Psychology**LASC Categories:** HBS, ICW**Prerequisites:** PS-101 with a C- or above.

Physical, social, emotional, intellectual, and moral development from conception to adolescence is examined within a framework of various theories.

Fall and Spring and every year. 3 Credits

PS-222 Introduction to Health Psychology**Prerequisites:** PS-101 with a C- or above.

Introduction to the areas and methods of Health Psychology. Topics include: epidemiology, behavior change, compliance, alternative medicine, healing, chronic illness.

Other or on demand and every year. 3 Credits

PS-230 Brain and Behavior**LASC Categories:** NSP**Prerequisites:** PS-101 (Majors must pass with a C- or better). Credit will not be granted for both PS 230 and PS 380

An introduction to the biological basis of behavior.

Fall and Spring and every year. 3 Credits

PS-240 Introduction to Abnormal Psychology**LASC Categories:** HBS**Prerequisites:** PS-101. Psychology majors must pass with a C- or above. Credit will not be provided for both PS-240 and PS-335.

Etiology, dynamics and treatment of psychopathology and their relation to normal personality are considered from traditional and contemporary perspectives.

Fall and Spring and every year. 3 Credits

PS-250 Social Psychology**Prerequisites:** PS-101 with a C- or above.

The psychological dynamics of social interaction including verbal and non-verbal communication, group dynamics and attitude formation and change. Other or on demand and every year. 3 Credits

PS-252 Applied Social Psychology**Prerequisites:** PS-101 with a C- or above.

Survey of applied social psychology including psychology in educational, organizational, and legal settings; diversity, environmental, health, media, and consumer issues.

Other or on demand and every year. 3 Credits

PS-254 Persuasion**Prerequisites:** PS-101 with a C-

Explores the areas of persuasion, social influence, and compliance gaining in various situations by utilizing psychological theories/approaches to explain behavior.

Other or on demand and every year. 3 Credits

PS-255 Psychological Foundations of Diversity**Prerequisites:** PS-101 with a C- or above.

Explores the gender, racial/ethnic, multiple-group membership, cultural, social class, religious, disability and sexual orientation facets of diversity.

Other or on demand and every year. 3 Credits

PS-260 Psychology of Human Sexuality**Prerequisites:** PS-101 with a C- or above.

Sexuality as a foundation of personality. The wide range of human sexuality is explored; sexual development, roles, attitudes and behaviors.

Other or on demand and every 2-3 years. 3 Credits

PS-263 Psychology of Women**Prerequisites:** PS-101 with a C- or above.

Women's psychological development throughout the lifespan will be examined, including female development, achievement, stereotyping, stress, violence and psychological disorders.

Other or on demand and every 2-3 years. 3 Credits

PS-270 Psychopharmacology**LASC Categories:** NSP**Prerequisites:** PS-101 with a C- or above.

This course will explore the effects of psychotropic drugs on the brain and subsequent effects on behavior.

Other or on demand and every year. 3 Credits

PS-275 Psychological Statistics**LASC Categories:** QR, QAC, NLL**Prerequisites:** PS 101 with a C- or above, and a passing grade in a college level math, or an Math Placement Test of 3 or higher

Data tabulation; graphing; measurement of central tendency, variability and correlation; hypothesis testing applied to psychological and sociological data. Hand and computer analysis.

Fall and Spring and every year. 4 Credits

PS-276 Research Methods**LASC Categories:** WAC**Prerequisites:** PS-101 with a grade of C- or above, EN-102 PS-275 with a grade of C_ or above, and 3 credits in another 200 level Psychology course C- or above..

Exploration of psychological research methodologies including: scientific method, design, conduction, analysis, and reporting of research, ethical principles and APA format.

Fall and Spring and every year. 3 Credits

PS-280 Sensation and Perception**LASC Categories:** NSP**Prerequisites:** PS-101. (Majors must pass with a C- or better)

Selected sensory and perceptual processes are studied in the context of current theory and research.

Fall and Spring and every year. 3 Credits

PS-295 Special Topics in Psychology**Prerequisites:** PS-101 with a C- or above.

Selected areas of mutual interest to instructor and students. Topics and prerequisites are announced in advance.

Other or on demand and other or on demand. 3 Credits

PS-297 Research in Psychology**Prerequisites:** PS-101, and PS-275 or PS-276.

Lab and/or field based research on a specific research topic under the supervision of a faculty member. May include assisting faculty with ongoing research. Written report required.

Fall and Spring and every year. 1-3 Credits

PS-307 Applied Research Methods**LASC Categories:** WAC**Prerequisites:** PS-101, PS-205 or PS-276, PS-275 EN-102 with a C- or above.

Extension of research design and methods introduced in PS-276: Research Methods, including applied research design, statistical analysis, and scientific writing.

Fall and Spring and every year. 3 Credits

PS-310 Development of Exceptional Children/Youth**LASC Categories:** HBS**Prerequisites:** PS-101 and PS-210. (Majors must pass with a C- or better)

Characteristics and needs of children with exceptionalities including intellectual disabilities, learning disabilities, physical and sensory disabilities, social-emotional difficulties, and giftedness.

Fall only and every year. 3 Credits

PS-312 Psychology of Adolescence**Prerequisites:** PS-101 and PS-210 with a C- or above.

The mental, emotional, social and physical changes of contemporary adolescence are examined with emphasis on family, peer and school influence.

Fall and Spring and every year. 3 Credits

PS-315 Physical and Sexual Abuse**Prerequisites:** PS-101-General Psychology with a C- or above. Either PS240 or PS335 with a C- or above or by permission of instructor for the Women's, Gender, and Sexuality Studies Minor.

Etiology, characteristics, consequence, treatment and prevention of various forms of physical, sexual and emotional abuse in children, adolescents and adults.

Other or on demand and every 2-3 years. 3 Credits

PS-318 Behavior Management Techniques**LASC Categories:** HBS**Prerequisites:** PS-101 and either PS240 or PS335 with a grade of C- or above. Must be completed prior to taking this course.

Considers the basic concepts of behavior management, including behavior modification for exceptional and normal populations.

Other or on demand and every year. 3 Credits

PS-320 Development of Thinking and Knowing**Prerequisites:** PS-101 and PS-210 with a C- or above.

This course will examine the development of human thinking and knowing from Piagetian, information processing and sociocultural perspectives, with an emphasis on infancy and childhood.

Spring only and every year. 3 Credits

PS-322 Psychology of Aging

Prerequisites: PS-101, and PS-210 or IS 160 with a C- or above.

Adulthood and the aging process are studied with special emphasis on current developmental theories. Every year. 3 Credits

PS-325 Psychology of Learning

Prerequisites: PS-101 with a grade of C- or above.

Learning as a fundamental concept in understanding behavior; examines principles and theories of learning, emphasizing experimental findings. Fall and Spring and every year. 3 Credits

PS-326 Psychological Distress and Well-Being

LASC Categories: ICW, HBS

Prerequisites: PS101, and either PS240 or PS335 with a grade of C- or above. Must be completed prior to taking this course.

A broad range of topics will be examined in relation to the knowledge base of psychological distress and well-being. This course will address cultural, systemic, and individual factors in risk and resilience in the manifestation and maintenance of psychological distress and well-being. Spring only and every year. 3 Credits

PS-330 Theories of Personality

LASC Categories: HBS

Prerequisites: PS 101 and either PS 240 or PS 335 or PS 210. Psychology Majors require a C- or higher in each pre-requisite course. Must be completed prior to taking this course

A survey of major theories of personality. Why people think, feel, and behave as they do is explored through the different theories.

Fall only and every year. 3 Credits

PS-340 Psychological Testing and Measurement

LASC Categories: ICW, QR

Prerequisites: PS101 either PS 240 or PS335; and PS275. Psychology majors need a grade of C- or above.

How do psychologists evaluate individual characteristics like extroversion, depression, and inattention? How do mental health providers and researchers administer psychological assessments and interpret their results? This class will explore the theory and practice of psychological testing, including sections on ethics and controversies around standardized testing, measurement theory, and clinical assessment.

Spring only and every year. 3 Credits

PS-345 Cognitive Psychology

LASC Categories: WAC

Prerequisites: PS-101 PS-275 PS-276 with a grade of C- or above and EN-102

This course introduces students to areas of cognitive psychology including memory, language processing and decision making.

Fall and Spring and every year. 3 Credits

PS-355 Social and Personality Development

LASC Categories: HBS

Prerequisites: PS-210. (Majors must pass with a C- or better)

This course will examine social and personality development from various developmental psychology perspectives. Attention is given to the development of self, attachment, emotions, and others in the social context such as family and peers.

Fall only and every year. 3 Credits

PS-365 Cultural Psychology

LASC Categories: TLC, HBS, WAC

Prerequisites: PS-101, EN-102, PS-210 with a C- or above.

This course addresses the role culture plays in human psychological processes and approaches to researching cultural aspects of human action.

Other or on demand and every 2-3 years. 3 Credits

PS-385 Motivation

LASC Categories: HBS

Prerequisites: PS 101 either PS240 or PS335; with a grade of C- or above. Must be completed prior to taking this course.

A study of conditions that arouse, direct and sustain behavior. Topics include: goals, competence, control, arousal, self-esteem, achievement and stress.

Other or on demand and every year. 3 Credits

PS-391 Clinical Psychology

LASC Categories: HBS

Prerequisites: PS 101 and either PS240 or PS335; with a grade of C- or above. Must be completed prior to taking this course.

Topics include current controversies in clinical psychology, the ethics of mental health treatment, clinical research methods, cultural competency in practice, clinical diagnosis, and treatment approaches with an emphasis on humanistic, cognitive, and behavioral styles.

Fall only and every year. 3 Credits

PS-400 Internship in Psychology

Provides opportunity to advanced students to increase experience through internship with sponsoring community organization, institution, or business under appropriate supervision.

Fall and Spring and every year. 1-3 Credits

PS-405 Independent Study: Topics in Psychology

Prerequisites: PS 101 and either PS-275, or PS-276, with a grade of C- or above.

Student will pursue an area of special interest in psychology under close supervision of a faculty member.

Fall and Spring and every year. 1-3 Credits

PS-407 Advanced Research in Psychology

Prerequisites: PS-101 PS-275 and PS-307. Take PS-205 or PS-276.

Advanced lab and/or field based research on a specific research topic under the supervision of a faculty member. Written report required.

Fall and Spring and every year. 1-3 Credits

PS-408 Directed Study: Psychology

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

PS-409 Honors Thesis Research

Prerequisites: PS-275 and PS-276 and PS-307 with a C- or above.

As part of the Psychology Department Honors program, students design and carry out advanced, independent lab and/or field based research on a specific research topic under the supervision of a faculty member. Written report required.

Fall and Spring and every year. 3 Credits

PS-450 Capstone: Contemporary Issues in Psychology

LASC Categories: CAP

Prerequisites: PS-101 PS-275 PS-276 PS-307 with a C- or above. Take six additional courses in the major with a C- or above.

A Capstone course dealing with recent and emerging topics, issues, and methods in psychological science. Content and format varies with instructor.

Fall and Spring and every year. 3 Credits

PS-492 Capstone Seminar in Mental Health Services: Transition to Practice

LASC Categories: CAP

Prerequisites: All core courses in the Psychology major: PS-101, PS-275, PS-276, PS-307, PS-240 (or PS-335), and any two courses from among PS-315, PS-318, PS-326, PS-330, PS-340, PS-385, and PS-391 (or PS-435), and three other psychology courses. Majors must earn a C- or above in all pre-requisite courses.

A capstone course addressing the transition from coursework to practice in mental health services.

Spring only and every year. 3 Credits

PS-495 Special Topics: Psychology

Prerequisites: PS-101 with a C- or above.

Selected areas of mutual interest to instructor and students. Topics and prerequisites are announced in advance.

Other or on demand. 3 Credits

Program Learning Outcomes

Goal 1 (Knowledge base in Psychology)

- 1.1. Use and evaluate theories to explain and predict behavior, including advantages and limitations in the selected framework
- 1.2. Explain complex psychological processes by integrating concepts developed from different content domains

Goal 2 (Scientific inquiry and critical thinking)

- 2.1. Use scientific reasoning to interpret psychological phenomena
- 2.2. Interpret, design, and/or conduct basic and/or applied psychological research
- 2.3. Understand and utilize appropriate quantitative and/or qualitative techniques to analyze and interpret research findings

Goal 3 (Ethical and social responsibility)

- 3.1. Describe, explain, and practice ethical standards and integrity within the context of psychology as a discipline and profession
- 3.2. Identify how issues of power, privilege, and discrimination shape psychological theories, psychological processes, behavior, and social interaction

Goal 4 (Communication)

- 4.1. Demonstrate effective writing through clear and concise written communication for various audiences
- 4.2. Demonstrate effective oral communication for various audiences

Goal 5 (Professional development)

- 5.1. Collaborate successfully on projects
- 5.2. Demonstrate self-regulation through self-reflection, the incorporation of feedback from educators and peers to improve performance, and social interaction
- 5.3. Apply psychological content and skills to career goals

Human Development Minor

Requirements for Psychology Majors and Minors

Code	Title	Credits
PS-210	Developmental Psychology	3
PS-312	Psychology of Adolescence	3
PS-322	Psychology of Aging	3
<i>Take 3 courses from the following:</i>		9
PS-310	Development of Exceptional Children/Youth	
PS-320	Development of Thinking and Knowing	
PS-355	Social and Personality Development	
PS-400	Internship in Psychology (approved by Developmental faculty)	

- PS-101 is required for all the courses in the Human Development minor, however it will count toward the Psychology major or Psychology minor, and not toward the Human Development Minor.

** No courses in the Human Development minor can also count in any way toward the Psychology major or Psychology minor.

Total Credits **18**

Requirements for Non-Psychology Majors or Minors

Code	Title	Credits
PS-101	General Psychology	3
PS-210	Developmental Psychology	3
PS-312	Psychology of Adolescence	3
PS-322	Psychology of Aging	3
<i>Take 2 courses from the following:</i>		6
PS-310	Development of Exceptional Children/Youth	
PS-320	Development of Thinking and Knowing	
PS-355	Social and Personality Development	
PS-400	Internship in Psychology (approved by Developmental faculty)	

Total Credits **18**

Minor in Mental Health Services

Mental Health Minor

The Minor in Mental Health Services offers an opportunity for students to focus in the areas of: (1) risk and resiliency factors impacting individual mental health, and (2) mental health services including clinical assessment and treatment practices.

The first Minor in Mental Health Services track is for students who are majoring in psychology and want to specialize in the area of mental health services. This track fulfills the common prerequisites of graduate programs in clinical psychology, counseling psychology, and social work, thereby making the minor ideal for those students who are considering mental health service provision as a career choice. **Psychology majors cannot count the Mental Health Service minor towards their MajorPlus requirement.**

Mental Health Minor Program Requirements for Psychology Majors

Code	Title	Credits
PS-240	Introduction to Abnormal Psychology	3

Elective Courses **15**

PS-315	Physical and Sexual Abuse
PS-318	Behavior Management Techniques
PS-330	Theories of Personality
PS-326	Psychological Distress and Well-Being
PS-340	Psychological Testing and Measurement
PS-385	Motivation
PS-391	Clinical Psychology
PS-400	Internship in Psychology (only pre-approved clinical internships)
Total Credits	18

* PS-101 is required for all the courses in the Mental Health Services minor. It will count toward the Psychology major OR Psychology minor, but not towards the Mental Health Services Minor.

** No courses in the Mental Health Services minor can also count in any way toward the Psychology major or Psychology minor.

Psychology majors cannot count the Mental Health Service minor towards their MajorPlus requirement.

The second minor track is for non-psychology majors. This track is a complement to other fields of study where knowledge of individual and social factors impacting well-being, abnormal psychology, and mental health services systems would be beneficial.

Mental Health Minor Program Requirements for non-Psychology Majors

Code	Title	Credits
PS-101	General Psychology	3
PS-240 or PS-335	Introduction to Abnormal Psychology	3
<i>Electives</i>		<i>12</i>
PS-315	Physical and Sexual Abuse	
PS-318	Behavior Management Techniques	
PS-326	Psychological Distress and Well-Being	
PS-330	Theories of Personality	

PS-340	Psychological Testing and Measurement
PS-385	Motivation
PS-391	Clinical Psychology
PS-400	Internship in Psychology (only pre-approved clinical internships)
Total Credits	18

Psychobiology Minor

Psychobiology, the study of human and animal biology and behavior, is an interdisciplinary minor offered at Worcester State consisting of 6-7 classes (18-24 credits), with significant course contributions from the Biology and Psychology Departments. The Psychobiology minor allows students to explore the links between mind, body, and behavior, learning from accomplished faculty with expertise in the areas of neuroscience, animal behavior, human perception, cognition, and learning along with other specialties within psychology and biology.

Introductory courses include both Biology and Psychology, grounding students in the basics of both disciplines. Advanced courses provide an in-depth understanding of the nervous system, evolutionary biology, cellular physiology, and sensation and perception. Students will have the opportunity for hands-on learning to put course concepts into action.

All students are eligible to pursue the Psychobiology minor by following either the General Track or one of two specialized tracks: Biology Major Track or Psychology Major Track. These tracks are specialized to assure that students who major in Biology and Psychology receive an appropriate breadth of experiences within the field of Psychobiology to complement their chosen major.

Requirements for a Psychobiology Minor

General Track

(Available to all majors except Biology and Psychology)

Code	Title	Credits
Core		(11 credits)
PS-101	General Psychology	3
BI-116	Animal Biology	4

PB-200	Introduction to Psychobiology	4
--------	-------------------------------	---

Electives		(10-11 credits)
------------------	--	------------------------

Students must select ONE course from Group A, ONE course from Group B, and ONE course from Group C:

Group A (200-level)

PS-280	Sensation and Perception	
BI-200	Human Biology	

Group B (300-level Psychology)

PS-325	Psychology of Learning	
PS-230	Brain and Behavior	

Group C (300-level Biology w/lab)

BI-315	Comparative Neurobiology	
BI-360	Animal Behavior	

Capstone		(2 credits)
-----------------	--	--------------------

PB-400	Capstone in Psychobiology	2
--------	---------------------------	---

Total Credits		23-24
----------------------	--	--------------

Biology Major Track (Only available to Biology majors)

Code	Title	Credits
Core/Foundation		(16 credits)

PS-101	General Psychology	3
--------	--------------------	---

PB-200	Introduction to Psychobiology	4
--------	-------------------------------	---

PS-280	Sensation and Perception	3
--------	--------------------------	---

PS-325	Psychology of Learning	3
--------	------------------------	---

PS-230	Brain and Behavior	3
--------	--------------------	---

Capstone		(2 credits)
-----------------	--	--------------------

PB-400	Capstone in Psychobiology	2
--------	---------------------------	---

Total Credits		18
----------------------	--	-----------

Psychology Major Track (Only available to Psychology majors)

Code	Title	Credits
Core/Foundation		(20 credits)

BI-116	Animal Biology	4
--------	----------------	---

PB-200	Introduction to Psychobiology	4
--------	-------------------------------	---

BI-200	Human Biology	4
--------	---------------	---

BI-315	Comparative Neurobiology	4
--------	--------------------------	---

BI-360	Animal Behavior	4
--------	-----------------	---

Capstone		(2 credits)
-----------------	--	--------------------

PB-400	Capstone in Psychobiology	2
--------	---------------------------	---

Total Credits		22
----------------------	--	-----------

Note: Completing this minor also satisfies the LASC requirements of HBSP, NSP w/ Lab (2x), and the capstone requirement.

Psychology Major

Students may choose to simply major in psychology without a particular specialization (by completing the Requirements for a Major in Psychology) or may choose to major in psychology with a specialization by completing the requirements for a concentration in Mental Health Services (p. 425) or an Interdisciplinary Concentration in Women's Studies. They may also choose to minor in Psychology or Human Development.

Requirements for a Major in Psychology

The Psychology major requires successful completion of 14 courses in Psychology. Six of these courses are specific core requirements; four are from specified areas and the remaining four are electives. At least three courses (nine credits) must be at a 300 and/or 400 level, and all three courses must be taken at Worcester State University. The minimum of 37 credits must include the following four core courses:

Code	Title	Credits
Required Courses		(13 credits)

PS-101	General Psychology	3
--------	--------------------	---

PS-275	Psychological Statistics	4
--------	--------------------------	---

PS-276	Research Methods	3
--------	------------------	---

PS-307	Applied Research Methods	3
--------	--------------------------	---

Diversity requirement. Select one of the following courses.		(0 credits)
--	--	--------------------

PS-255	Psychological Foundations of Diversity	
--------	--	--

PS-260	Psychology of Human Sexuality	
--------	-------------------------------	--

PS-263	Psychology of Women	
--------	---------------------	--

Capstone. Select one of the following courses.		(12 credits)
---	--	---------------------

PS-450	Capstone: Contemporary Issues in Psychology	
--------	---	--

PS-492	Capstone Seminar in Mental Health Services: Transition to Practice	
Select one course each from four of the five different areas		12
<i>Developmental</i>		
PS-210	Developmental Psychology	
PS-312	Psychology of Adolescence	
PS-322	Psychology of Aging	
<i>Social Psychology</i>		
PS-250	Social Psychology	
PS-252	Applied Social Psychology	
<i>Personality and Abnormal Psychology</i>		
PS-240	Introduction to Abnormal Psychology (or PS 335)	
PS-330	Theories of Personality	
PS-340	Psychological Testing and Measurement	
<i>Learning and Cognition</i>		
PS-325	Psychology of Learning	
PS-345	Cognitive Psychology	
<i>Biopsychosocial Processes</i>		
PS-222	Introduction to Health Psychology	
PS-230	Brain and Behavior	
PS-280	Sensation and Perception	
Psychology electives		(12 credits)
Electives - Choose four elective courses from any of the courses in psychology that are not required and are not counted under the four areas.		12
Total Credits		43

Students must obtain a C- or higher in all psychology courses that serve as prerequisites for other psychology courses.

Sample Timetable for Completion of Degree: Psychology

Year One

Semester One		Credits
LASC	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I	3
PS-101	General Psychology	3
LASC	LASC Elective (USW) (p. 51)	3
LASC	LASC Elective (CON) (p. 38)	3
Credits		15

Semester Two

EN-102	College Writing II	3
PS-2XX	PS Major Area	3
PS-2XX	PS Major Area (Not PS-276)	3
LASC	LASC Elective (QR) (p. 50)	3
LASC	LASC Elective (TLC) (p. 53)	3
Credits		15

Year Two

Semester Three

PS-275	Psychological Statistics	4
PS-2XX	PS Major Area	3
PS Diversity Requirement		3
LASC	LASC Elective (GP) (p. 42)	3
LASC	LASC Elective (USW) (p. 51)	3
Credits		16

Semester Four

PS-276	Research Methods	3
PS-2XX	PS Major Area	3
PS-2XX	PS Major Elective	3
LASC	LASC Elective (NSP) (p. 49)	3
LASC	LASC Elective (TLC) (p. 53)	3
Credits		15

Year Three

Semester Five

PS-307	Applied Research Methods	3
PS-3XX	PS Major Area	3
PS-3XX	PS Major Elective	3
LASC	LASC Elective (HBS) (p. 44)	3
LASC	LASC Elective (ICW) (p. 46)	3
Credits		15

Semester Six

PS-1XX+	PS Major Elective	3
PS-1XX+	PS Major Elective	3
LASC	LASC Elective (NSP) (p. 49)	4
SELECT	General Elective	3
LASC	LASC Elective (CA) (p. 39)	3
Credits		16

Year Four

Semester Seven

PS-4XX	Capstone	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15

Semester Eight

SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Total Credits		122

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Psychology Major, Concentration in Mental Health Services

This concentration prepares students for graduate school and/or employment in agencies serving the mental health needs of special populations, including people with mental disabilities, addiction, and cognitive, emotional, and behavioral problems.

Requirements for a Major in Psychology, Concentration in Mental Health Services

40 credits.

In addition to the four core and four area courses in psychology, the following courses are required:

Code	Title	Credits
Required Courses		
		(25 credits)
PS-101	General Psychology	3
PS-275	Psychological Statistics	4
PS-276	Research Methods	3
PS-307	Applied Research Methods	3
Select at least four of the following, including one from each of the four different areas:		12
<i>Developmental</i>		
PS-210	Developmental Psychology	
PS-312	Psychology of Adolescence	

PS-322	Psychology of Aging	
<i>Social Psychology</i>		
PS-250	Social Psychology	
PS-252	Applied Social Psychology	
<i>Personality and Abnormal Psychology</i>		
PS-240	Introduction to Abnormal Psychology	
PS-330	Theories of Personality	
PS-340	Psychological Testing and Measurement	
<i>Learning and Cognition</i>		
PS-325	Psychology of Learning	
PS-345	Cognitive Psychology	
<i>Biopsychosocial Processes</i>		
PS-280	Sensation and Perception	
PS-222	Introduction to Health Psychology	
Concentration in Mental Health Services		(18 credits)
PS-330	Theories of Personality	3
PS-335	Abnormal Psychology	3
PS-340	Psychological Testing and Measurement	3
Select one of the following:		3
PS-400	Internship in Psychology	
PS-318	Behavior Management Techniques	
PS-315	Physical and Sexual Abuse	
PS-391	Clinical Psychology	3
PS-492	Capstone Seminar in Mental Health Services: Transition to Practice	3
Total Credits		43

Psychology Major, Interdisciplinary Concentration in Women's Studies

Requirements for a Major in Psychology, Interdisciplinary Concentration in Women's Studies

15 credits

Psychology majors may elect an interdisciplinary concentration in Women's Studies beyond the requirements of the Psychology major. Five courses may be selected from any course with a "WO" prefix, from at least two disciplines.

Code	Title	Credits
Required Courses		
		(25 credits)
PS-101	General Psychology	3
PS-275	Psychological Statistics	4
PS-276	Research Methods	3
PS-307	Applied Research Methods	3
Select at least four of the following, including one from each of the four different areas:		12
<i>Developmental</i>		
PS-210	Developmental Psychology	
PS-312	Psychology of Adolescence	
PS-322	Psychology of Aging	
<i>Social Psychology</i>		
PS-250	Social Psychology	
PS-252	Applied Social Psychology	
<i>Personality and Abnormal Psychology</i>		
PS-240	Introduction to Abnormal Psychology	
PS-330	Theories of Personality	
PS-340	Psychological Testing and Measurement	
<i>Learning and Cognition</i>		
PS-325	Psychology of Learning	
PS-345	Cognitive Psychology	
<i>Biopsychosocial Processes</i>		
PS-280	Sensation and Perception	
PS-222	Introduction to Health Psychology	
Psychology electives		(12 credits)
Electives - At least three courses (nine credits) must be at a 300 and/or 400 level, and all three courses must be taken at Worcester State University.		12
Women's Studies Requirements		(15 credits)
Select 5 courses with a "WO" prefix from at least two disciplines		15
Total Credits		52

Psychology Minor

Students may choose to minor in psychology without a particular specialization (by completing the Requirements for a Minor in Psychology).

Requirements for a Minor in Psychology

The Psychology minor requires successful completion of six courses in Psychology. The minimum 18 credits must include:

Code	Title	Credits
PS-101	General Psychology	3
15 credits in Psychology electives, including one 300-400 level course		15
Total Credits		18

Sociology

Department of Sociology

The Sociology department strives to help its students develop insights about the workings of the social world and the influence of social structure. Its goal involves not just understanding the world, but working to change it. The departmental curriculum aims to help students uncover root causes of social problems and refine their personal understanding of social responsibility and economic justice.

The Sociology department embraces the goals of personal, community, and global citizenship. Ultimately, the department strives to provide guidance and teaching designed to help students live better lives in an atmosphere of mutual respect.

As a department engaged in public sociology, faculty strive to teach in ways that stress critical thinking joined with action, to advise and mentor students to prepare for lifelong learning and meaningful careers, to encourage students and faculty to collaborate with peers and partners in the community and contribute to the field, and to engage in service to prepare Sociology majors to act in complex settings at home and at work, in their communities and the world. The department encourages majors and minors to participate in study away/study abroad activities.

Admission Requirements

Admission to the Sociology major is based on maintaining acceptable grades in the general foundation requirements and interest in the field of Sociology. Interested persons may contact the Chair of the Sociology department for further information. Upon admission, each major is assigned an advisor and receives an orientation in Sociology.

- 4+1 Bachelor of Science in Sociology/Masters in Non-Profit Management (p. 431)
- Social Inequalities Minor (p. 432)
- Sociology Major (p. 432)
- Sociology Major - Social Inequalities Concentration (p. 433)
- Sociology Minor (p. 434)

Alex Briesacher, Department Chair, Professor (2015), B.S., Illinois State University; M.A., Southern Illinois University Edwardsville; Ph.D., Kent State University

Siri J. Colom, Assistant Professor (2019), B.A., Tufts University; M.A., University of Massachusetts; Ph.D., University of California Berkeley

Michelle Corbin-Izaurre, Professor (2011), B.S., Western Michigan University; M.S., Eastern Michigan University; Ph.D., University of Maryland

Trinidad Morales, Visiting Assistant Professor (2023), B.A., M.A., The University of Texas at El Paso; Ph.D., Texas A&M University

Francisco Vivoni, Professor (2013), B.A., Universidad Puerto Rico, Rio Piedras; Ph.D., University of Illinois, Urbana

Courses

SO-100 Introduction to Sociology: Exploring Our Social World

LASC Categories: HBS, ICW, TLC

The nature of group behavior and social interaction viewed through analysis of structure, norms, and values.

Fall and Spring and every year. 3 Credits

SO-110 Cultural Anthropology

Cross-cultural analysis of the human capacity for adaptation and technological and ideological development. Significant field studies will be examined.

3 Credits

SO-190 Sport and Society

LASC Categories: HBS, USW, DAC, DIV

Analysis of sport as a social system. The implication of sport within interrelational contexts of other social systems.

Every year. 3 Credits

SO-193 First Year Seminar Sociology

LASC Categories: FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

3 Credits

SO-199 Special Topics in Sociology

Foundations in a selected sub-field of sociology ; announcement made at pre-registration time.

3 Credits

SO-200 Contemporary Social Problems**LASC Categories:** HBS, DIV, USW

This course studies how social problems come to be: students learn about what constitutes a social problem and who defines a social problem? Why do some social problems receive so much attention, while others are ignored? We will examine these questions drawing on case studies of contemporary issues, like inequality, racism, immigration, mass incarceration, health care, climate change, drugs, and more.

Every year. 3 Credits

SO-201 Prejudice, Privilege, and Power**LASC Categories:** DIV, TLC, HBS, ICW

This course is an introduction to the social psychological foundations of identity and its relation to prejudice, privilege, and power in micro-interactions and social structures. Students will engage with social psychological understandings of categorizations and their implications at the individual and structural levels.

Other or on demand and other or on demand. 3 Credits

SO-207 First Generation to College: Campus Diversity and College Inequality**LASC Categories:** HBS, ICW, DAC

First generation to college is a term for the increasing numbers of students who are first in their families to attend college. As college has been increasingly framed as the primary mechanism for social and economic mobility, college attendance has reached historic highs for nearly every demographic including for historically marginalized communities. This has created increasingly diverse campuses and it has increasingly bound colleges to broader patterns of inequality. This course examines the racial and economic politics facing first generation to college students as well as the structural inequalities shaping college and its promises of social and economic mobility.

Other or on demand and other or on demand. 3 Credits

SO-215 Medical Sociology**LASC Categories:** HBS, ICW**Prerequisites:** SO-100

The structure of health care delivery systems and levels of health care personnel, patients, and families of patients.

3 Credits

SO-220 Sociology of the Family**LASC Categories:** HBS

A comparative approach to the study of the structure of family systems with emphasis on changing patterns of family life.

Every year. 3 Credits

SO-228 Latinx Experiences in the U.s. and the World**LASC Categories:** TLC, USW, DAC, DIV

This course surveys current theoretical approaches used to explain Latina/o experiences and provides an empirical overview of how social institutions affect the daily lives of Latinas and Latinos in the U.S. and the world.

Other or on demand. 3 Credits

SO-230 Political Sociology**LASC Categories:** HBS, GP**Prerequisites:** SO-100

Foundations of social movements in political phenomena, social conditions, and emerging political institutions; the structural basis of social change and politics.

Other or on demand and every year. 3 Credits

SO-235 Music and Social Change**LASC Categories:** CA, HBS, TLC, ICW

Using case studies, social theory and historical materials, this course explores the role of music in social change.

Other or on demand. 3 Credits

SO-240 Sociology of Education**Prerequisites:** SO-100

Study of modern educational systems, emphasizing the social, political and economic factors that influence its organization and its functions.

3 Credits

SO-250 Sociology of Religion**LASC Categories:** HBS, ICW, DAC**Prerequisites:** SO-100

A cross-cultural comparative study of the nature of religious institutions as systems of socially determined and socially relevant beliefs and practices.

3 Credits

SO-255 Sociology of Disability**LASC Categories:** HBS, ICW, DAC

Using theory and practical application, this course explores the impact of impairment and disability within a societal context.

3 Credits

SO-270 Social Theory I**LASC Categories:** TLC, GP**Prerequisites:** SO-100

Fundamental concepts and intellectual traditions, especially the contributions of Comte, Spencer, Marx, Toennies, Durkheim, and Simmel.

3 Credits

SO-275 Social and Behavioral Statistics**LASC Categories:** QAC**Prerequisites:** SO-100 and any 200 Sociology course. SO 280 recommended

Data tabulation; graphing; measurement of central tendency, variability, and correlation; hypothesis testing applied to psychological and sociological data. Hand and computer analysis.

3 Credits

SO-280 Research Methods of Sociology**Prerequisites:** SO-100

An analysis of the research function in sociology; the conduct of research appropriate to undergraduate students; the formal presentation of research papers.

3 Credits

SO-285 Race, Class and Gender**LASC Categories:** HBS, DAC

An introduction to dominant-minority group relations through the investigation of the patterns and dynamics of differentiation, inequality and discrimination.

3 Credits

SO-295 Sociology of Death & Dying**LASC Categories:** DAC, HBS, ICW**Prerequisites:** SO-100

The course explores the sociological concepts and perspectives as they relate to death and dying and how American society deals with illness, dying, death and bereavement.

3 Credits

SO-299 Special Topics in Sociology Concepts, Realities and Representations

Intermediate level topics.

Other or on demand. 3 Credits

SO-300 Social Change**Prerequisites:** 2 Sociology courses at 200 level, EN-102.

A study of the conditions, patterns, and consequences of social transformation with emphasis on institutional and individual patterns of adjustment and adaptation.

3 Credits

SO-303 Environmental Sociology**LASC Categories:** DIV, GP, HBS

This course explores the relationship between environment and society through a focus on political ecology, sociological dimensions of environmental crisis and dynamics of social change. Prerequisite: 30 completed credits.

Other or on demand and every year. 3 Credits

SO-305 Applied Sociology**LASC Categories:** HBS, ICW**Prerequisites:** SO-100 SO-280

This course approaches Applied Sociology through a project based learning experience incorporating elements of a Community Based Research Process and/or Public Sociology. While applied topics of the course will change from semester to semester, this course will explore the theories and methods of applied sociology, potentially including ethnographic, institutional, and participatory research techniques in community settings.

3 Credits

SO-307 Puerto Rican Diaspora**LASC Categories:** DIV, GP, USW

This course surveys a wide range of Puerto Rican experiences and provides an overview of how social structures shape the daily lives of Puerto Ricans in the United States. Through a focus on diasporas, the course centers on migration as a key experience within Puerto Rican imaginaries. The course explores the sociological themes of identity, race, ethnicity, language, gender, sexuality, social class, and stratification through the lens of Puerto Rican struggle and resistance. Puerto Rican diasporic communities are examined at the intersections of colonialism, modernity, and neoliberal globalization.

Prerequisite: 30 completed credits.

Other or on demand. 3 Credits

SO-312 Youth, Race, and Public Space**LASC Categories:** DIV, HBS, ICW

The course studies young people as agents of social change through key debates and local/global case studies across the academic subfields of youth studies, critical race theory, and public space scholarship. Students in this course engage with youth experiences of increased surveillance and regulation in public space as well as creative forms of subversion and resistance. Through the discussion and analysis of cutting-edge scholarship, students in this course craft critical ethnographies at the multiple intersections of youth, race, and public space. Prerequisite: 30 completed credits.

Other or on demand. 3 Credits

SO-315 Social Movements

Prerequisites: two Sociology courses at the 200 level
Processes by which new norms and forms of social organization emerge from group behavior, aggregate behavior, and social movements.
3 Credits

SO-318 Worcester and Its Discontents**LASC Categories:** DIV, HBS, ICW

This course studies the city of Worcester from a sociological perspective focused on settler colonialism, industrial capitalism and neoliberal gentrification. Students learn about the systematic erasure of indigenous knowledge as crucial to the formation of the capitalist city. Students make key connections between settler colonialism and the contemporary displacement of working-class communities of color in Worcester. The course chronicles lived experiences of economic restructuring within Worcester that signal a meaningful shift from industrial powerhouse to postindustrial theme park. Prerequisite: 30 completed credits.

Other or on demand. 3 Credits

SO-320 Sociology of Race and Ethnicity**LASC Categories:** GP, USW, DAC, WAC, DIV

This course focuses on historical and contemporary discussions of Race and Ethnicity within Sociology. The course will familiarize students with central threads in the study of race and ethnicity and work to identify gaps, particularly as they are relevant for the academic and social sphere of today. Prerequisite: 30 completed credits.

Every year. 3 Credits

SO-332 Contemporary Immigrant Experiences**LASC Categories:** GP, USW**Prerequisites:** EN-102.

In this course students will examine immigrants' lived experiences in the U.S., and learn about the legal systems immigrants must navigate and their experiences with incorporation into different areas of society. Students will be exposed to current debates in the field and engage with theories of immigration, immigration policies, and other laws that shape immigrants' lives. This course will facilitate an understanding of how communities respond to practices that curtail immigrants' basic rights as they navigate intersecting structures of power in American society. Students will be encouraged to look at local examples to make connections between policies, theories, and debates.

3 Credits

SO-340 Social Psychology**LASC Categories:** HBS, ICW, TLC**Prerequisites:** 6 credits in Sociology.

This course explores the interplay between the individual and society by examining how social factors shape our thoughts, feelings, and behaviors. We will investigate the concept of the self as a product of society, as well as the self as a force in society.

Other or on demand and every 2-3 years. 3 Credits

SO-350 Wealth, Poverty, and Power**LASC Categories:** HBS, WAC, DAC, DIV, GP, TLC, USW

Sociological examination of economic stratification; focuses on the translation of class into power via politics, education and collective struggle. Prerequisite: 30 completed credits.

Other or on demand. 3 Credits

SO-355 Gender and Sexuality**LASC Categories:** HBS, ICW, DAC

This course introduces the sociologist study of gender and sexuality. This course examines how social institutions and cultural norms construct particular gender roles and sexual identities within society.

3 Credits

SO-360 Urban Sociology**LASC Categories:** DIV, HBS, ICW, GP

A cross-cultural study of urban social systems and the phenomena and problems connected with the planning process. Prerequisite: 30 completed credits. Other or on demand. 3 Credits

SO-375 Contemporary Social Theory**Prerequisites:** SO-270

Analytical devices, conceptual schemes, and models used by contemporary theorists with emphasis on structural sociology.

3 Credits

SO-400 Independent Study

For advanced sociology majors only; topic to be approved by an independent study advisor. (Requires eight prior courses in sociology.)

1-6 Credits

SO-408 Directed Study

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

1-3 Credits

SO-410 Field Work

Data collection based on participant observation within a social service organization; assignment approval by field-work advisor. (Requires eight prior courses in Sociology.)

1-6 Credits

SO-420 Seminar in Sociology

Prerequisites: 9 credits from department Sociology. Advanced study topics in selected areas of Sociology.

1-3 Credits

SO-425 Global Capitalism**LASC Categories:** HBS, GP, WAC**Prerequisites:** EN-102

This class will look at the development of capitalism from an historical, sociological, and critical perspective and consider the ways capitalism has made and unmade the world. Themes may include: imperialism and the underdevelopment of the Global South, decolonization struggles, global urbanization, global financial institutions, global labor struggles, war and capitalism, global environmental crises and the struggle over resources, and market hegemony. Every year. 3 Credits

SO-499 Sociology Capstone**LASC Categories:** CAP, WAC**Prerequisites:** SO-270 SO-275 SO-280 EN-102

This course is an overview of the discipline of sociology, emphasizing the mastery of the discipline at an undergraduate level.

4 Credits

Program Learning Outcomes

- Demonstrate and apply critical thinking skills in evaluating social theory
- Learn sociological methods
- Learn and understand social structure and social institutions
- Explore the reciprocal relationship between self and society
- Explore public sociology, including engagement with the world, activism, and social change
- Develop a deeper understanding of cultural variation (diversity)

4+1 Bachelor of Science in Sociology/Masters in Non-Profit Management

Through a combined five year Bachelor of Science in Sociology/Master in Non-Profit Management program of studies, it is possible for motivated full-time students who are Sociology majors to complete a five-year program leading to degrees including both a bachelor's degree in Sociology and a master's in Non-Profit Management.

Students who have completed 90 undergraduate credits may apply for admission into the special five-year B.S./M.S. program if they have an overall GPA of not less than 3.0 and a major GPA of not less than 3.25. Students are also required to complete an undergraduate internship, independent study, or capstone project that incorporates work with a community-based organization as part of their undergraduate work. Students must meet all other requirements for admission to the Master in Non-Profit Management. The GRE requirement is waived for students with an overall GPA of 3.25 or higher.

Please also consult the graduate catalog for more information.

In order to complete the joint degree, students take 9-11 graduate credits, which count both in their undergraduate program and in the master’s in nonprofit management. The graduate credits are taken in place of elective undergraduate credits. **Graduate credits cannot replace required core or elective courses in the Sociology major.** Students are advised by both the graduate coordinator and their undergraduate advisor. Admission is on a rolling basis, and applicants may start their program of study in any semester. These graduate credits are included in the undergraduate tuition of full-time state supported students. Students must also take at least one summer class between the Spring of their BS graduation and the fall semester in which they embark on full-time graduate studies. Taking the graduate credits as an undergraduate and the summer class allows students to complete course requirements for the bachelor’s and master’s degree in five years (60 months). For more details, students should consult with the graduate coordinator of the program.

Social Inequalities Minor Minor in Social Inequalities (for non-majors)

The Minor in Social Inequalities (18 credits) offers an opportunity for students to focus in the areas of: (1) Social, Cultural, and Economic factors that contribute to social inequality, and (2) Sociological research employing feminist and anti-racist methodologies.

The minor track is for non-Sociology majors. This track is a complement to other fields where knowledge of social inequalities would be beneficial.

Code	Title	Credits
Required Courses (6 credits)		
SO-100	Introduction to Sociology: Exploring Our Social World	3
SO-201	Prejudice, Privilege, and Power	3
or SO-285	Race, Class and Gender	
Elective Courses (12 credits)		
Take 4 courses from the following:		12
SO-201	Prejudice, Privilege, and Power	
SO-255	Sociology of Disability	

SO-285	Race, Class and Gender
SO-307	Puerto Rican Diaspora
SO-320	Sociology of Race and Ethnicity
SO-350	Wealth, Poverty, and Power
SO-355	Gender and Sexuality
SO-360	Urban Sociology
SO-400	Independent Study (Only pre-approved sections)
SO-420	Seminar in Sociology (Only pre-approved sections)
SO-425	Global Capitalism

Total Credits 18

Sociology Major Requirements for a Major in Sociology

30 credits including:

Code	Title	Credits
SO-100	Introduction to Sociology	3
SO-270	Social Theory I	3
SO-275	Social and Behavioral Statistics	3
SO-280	Research Methods of Sociology	3
A maximum of one course at the 100 level		3
A minimum of three courses at the 300 and/or 400 level		9-15

All courses taken beyond the minimum requirements will be credited as electives.

Sample Timetable for Completion of Degree

Year One		Credits
Semester One		
EN-101	College Writing I	3
LASC	First-Year Seminar (FYS) (p. 41)	3
SO-100	Introduction to Sociology	3
LASC	LASC Elective (QR) (p. 50)	3
LASC	LASC Elective (CON) (p. 38)	3
Credits		15
Semester Two		
EN-102	College Writing II	3

SO	Any 100 or 200 level course in major	3
LASC	LASC Elective (NSP) (p. 49)	4
LASC	LASC Elective (TLC) (p. 53)	3
LASC	LASC Elective (HBS) (p. 44)	3
Credits		16
Year Two		
Semester Three		
SO-270	Social Theory I	3
SO-280	Research Methods of Sociology	3
LASC	LASC Elective (GP) (p. 42)	3
LASC	LASC Elective (NSP) (p. 49)	3
LASC	LASC Elective (CA) (p. 39)	3
Credits		15
Semester Four		
SO-275	Social and Behavioral Statistics	3
SO-2XX	SO Major Elective	3
LASC	LASC Elective (GP) (p. 42)	3
LASC	LASC Elective (CA) (p. 39)	3
LASC	LASC Elective (USW) (p. 51)	3
Credits		15
Year Three		
Semester Five		
SO-3XX+	SO Major Elective	3
SO-1XX+	SO Major Elective	3
LASC	LASC Elective (HBS) (p. 44)	3
LASC	LASC Elective (ICW) (p. 46)	3
SELECT	General Elective	3
Credits		15
Semester Six		
SO-3XX+	SO Major Elective	3
SO-1XX+	SO Major Elective	3
LASC	LASC Elective (TLC) (p. 53)	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Year Four		
Semester Seven		
SO-499	Sociology Capstone (or LASC Capstone)	4
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		16

Semester Eight

SO-3XX+	SO Major Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Total Credits		122

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Sociology Major - Social Inequalities Concentration

The Concentration in Social Inequalities offers an opportunity for students to focus in the areas of: (1) Social, Cultural, and Economic factors that contribute to social inequality, and (2) Sociological research employing feminist and anti-racist methodologies.

Code	Title	Credits
<i>Required Courses</i>		
SO-201	Prejudice, Privilege, and Power	3
or SO-285	Race, Class and Gender	
<i>Elective Courses</i>		12
Minimum 6 credits at 300 level or higher, and 6 additional credits at any level		
SO-199	Special Topics in Sociology	
SO-201	Prejudice, Privilege, and Power (If not used for Required Course)	
SO-228	Latinx Experiences in the U.s. and the World	
SO-255	Sociology of Disability	
SO-285	Race, Class and Gender (If not used for Required Course)	
SO-299	Special Topics in Sociology Concepts, Realities and Representations (Only pre-approved sections)	

SO-307	Puerto Rican Diaspora
SO-320	Sociology of Race and Ethnicity
SO-332	Contemporary Immigrant Experiences
SO-350	Wealth, Poverty, and Power
SO-355	Gender and Sexuality
SO-360	Urban Sociology
SO-303	Environmental Sociology
SO-400	Independent Study (Only pre-approved sections)
SO-410	Field Work (Only pre-approved sections)
SO-420	Seminar in Sociology (Only pre-approved sections)
SO-425	Global Capitalism
<hr/>	
Total Credits	15

Sociology Minor

Requirements for a Minor

18 credits including:

Code	Title	Credits
SO-100	Introduction to Sociology	3
or SO-200	Contemporary Social Problems	
Select at least 15 credits of electives		15

All prerequisites for 300 and 400 level courses must be met if the student wishes to elect courses at these levels.

Urban Studies

Department of Urban Studies

The goal of the Department of Urban Studies is to foster an understanding of the complex challenges that face an increasingly urban and metropolitan world. The field of Urban Studies uses an interdisciplinary approach to understand metropolitan life. It immerses students in an academically rigorous and personally challenging course of study that helps them discover who they are, and how they can become change agents in this global society. The Urban Studies Department cultivates the development of critical thinking skills necessary to excel in today's competitive world. Urban Studies graduates enjoy outstanding careers in a wide variety of occupations, such as, public administration, policy development, non-profit management, urban planning, business, law, human services, health care management, housing management, gerontology and social work.

- 4+1 Program in Urban Studies / Master of Public Administration and Policy (MPAP) (p. 442)
- 4+1 Program in Urban Studies / Master of Public Management (MPM) (p. 443)
- 4+1 Program in Urban Studies / Master of Science in Nonprofit Management (NPM) (p. 441)
- Public Policy and Urban Planning Minor (p. 444)
- Social Work and Social Policy Minor (p. 444)
- Urban Studies Major (p. 445)
- Urban Studies Major, Concentration in Public Policy and Urban Planning (p. 446)
- Urban Studies Major, Concentration in Social Work and Social Policy (p. 446)
- Urban Studies Minor (p. 447)

Faculty

Thomas E. Conroy, Professor (2010), B.A. Salem State University; M.A., Ph.D. University of Massachusetts, Amherst

Shiko Gathuo, Professor (2005), B.Ed. Kenyatta University; M.B.A. University of Nairobi; Grad Certificate, M.S., Ph.D. University of Massachusetts, Boston

Danielle Morales, Assistant Professor (2022), B.S. Renmin University of China; M.S., Ph.D. Texas A&M University

Timothy E. Murphy, Department Chair, Associate Professor (2013), B.A. Indiana University; M.A., Ph.D. University of California, Davis

Adam Saltsman, Associate Professor (2016), B.A. Colby College; M.A., Ph.D. Boston College

Courses

UR-101 Introduction to Urban Studies

LASC Categories: USW, HBS

This course offers a broad contextual overview of urban life that examines the relationship between humans and their environment.

Fall and Spring and every year. 3 Credits

UR-103 Introduction to Women's Studies

LASC Categories: DAC, ICW, HBS

This course uses a variety of academic disciplines to study the situation of women around the world.

Every year. 3 Credits

UR-142 Practicum in Urban Studies-Introductory

Students engage in field-based experiential learning through collaboration with WSU faculty and community partners. By stepping out of the classroom, students gain concrete skills that empower them to be agents of change while building a social and professional network of peers and community members. Practicum courses at this level are introductory experiences to field-based learning. There is no cost associated with this course.

Other or on demand and every year. 1-3 Credits

UR-150 Introduction to City Research

LASC Categories: USW, HBS

This course introduces students to various forms of quantitative and qualitative research processes that are employed in exploring city systems, histories, and groups. It also brings students into the field to practice and develop their burgeoning skills in an Urban Studies lab, the city. As part of their coursework, students will contribute to active research projects in Citylab.

Fall and Spring and every year. 3 Credits

UR-191 Special Topics

Introductory course to cover various topics
Other or on demand and other or on demand. 3 Credits

UR-193 First Year Seminar Urban Studies**LASC Categories:** FYS

Every year. 3 Credits

UR-201 Introduction to Urban Policy**LASC Categories:** HBS, DIV

Analysis of activities, programs, and policies designed to sustain and enhance the livability of an urban environment.

Fall and Spring and every 2-3 years. 3 Credits

UR-212 American Metropolitan Evolution**LASC Categories:** USW, WAC**Prerequisites:** UR-101 and EN-102

Development of metropolitan America from a multi-disciplinary approach with emphasis upon dynamics of urban growth, internal development of cities, immigrations, socio-economic stratification, metropolitanization, and problems deriving from growth.

Fall and Spring and every 2-3 years. 3 Credits

UR-213 Human Identity and Urban Environment**Prerequisites:** UR-101

This course addresses a number of learning outcomes, including: studying historical experiences, cultural patterns, and social advantages and disadvantages of different groups within society; exploring social problems such as racism, sexism, homophobia, and other forms of prejudice, discrimination, and exploitation as both mainstream and non-mainstream groups experience them; examining the diversity of different groups and their changing dynamics; helping students become knowledgeable about diversity issues and develop the ability to distinguish facts from interpretations and opinions; become familiar with materials written by and about diverse groups.

Spring only and every year. 3 Credits

UR-214 Urban Demography**LASC Categories:** DIV, HBS, QR

Urban Demography is a course designed to introduce students to the study of population dynamics in urban settings. The course will cover a range of topics, such as the growth and characteristics of urban populations, relationships between urbanization and the three demographic processes (fertility, mortality, and migration), social disparities, residential segregation, housing, and population policy. Through lectures, discussions, in-class activities, and assignments, students will gain a deep understanding of the factors that shape urban population dynamics, and the implications of these dynamics for urban planning and policy. By the end of the semester, students will be familiar with various theories.

Alternating and every 2-3 years. 3 Credits

UR-217 Child Advocacy**LASC Categories:** ICW

This course will introduce students to the basic structure of Child Advocacy. Over the semester, students will establish an understanding of existent legal protocol which represents children who constitute what is recognized as "at risk" populations and how it works in action.

Alternating and every 2-3 years. 3 Credits

UR-220 Immigrant City**LASC Categories:** ICW, DIV

This course will explore the important role that immigrants have played in the development of our society, with a particular focus on our cities. We will discuss why and how people move, the forces that shape their opportunities and the constraints on their lives, and how a world increasingly defined by migration is changing everything.

Alternating and every 2-3 years. 3 Credits

UR-221 Introduction to Social Work

Prerequisites: College Writing II or permission of department chair.

Prerequisites or Corequisite: UR-101 previously or concurrently.

This course introduces students to the changing concepts, terms, and theories, about the field and practice of Social Work, how social workers interact with individuals and society, and the different roles social workers play in our diverse, ever-changing society. It is structured to provide students with the historical and current understanding of the role of social work practitioners, and it requires that students examine their own concepts, beliefs, and ideas of what "social work" and "social worker" means. These experiences will enhance student's skills in cognitive thinking, reading, writing, and speaking.

Fall only and every year. 3 Credits

UR-230 Technology, Public Policy and Urban Society

LASC Categories: HBS, WAC, ICW

Prerequisites: EN-102

Examination of high-technology and its impact on urban society in areas such as privacy, ethics, intellectual property rights, sense of community, and access to information and services.

Spring only and every year. 3 Credits

UR-232 Quantitative Data Analysis of Urban Problems

LASC Categories: QR

An introduction to methods of developing and examining quantitative information, widely used by planning practitioners and often structuring how issues are framed for public/private discussions and policy decisions. Learn to apply tools of historical and predictive quantitative analysis to all aspects of land use planning and policy, both theoretical, what we expect to happen based on certain assumptions, and empirical, verifying those theoretical relationships by analyzing relevant evidence using mathematical techniques. We will examine and correlate the relationship between data, assumptions, and the leading issues planners and their cities face in today's world.

Alternating and every year. 3 Credits

UR-235 Urban Topics Seminar

An examination of urban topical issues that challenge the intellectual and creative interests of mid-curriculum students in urban studies.

Other or on demand and every year. 3 Credits

UR-240 Introduction to Qualitative Research Methods for the Social Sciences

LASC Categories: HBS, WAC

Prerequisites: EN-102

This introduction course provides an overview of the research process, and introduces students to commonly used qualitative methods in the social sciences.

Every year. 3 Credits

UR-242 Practicum in Urban Studies-Intermediate

Students engage in field-based experiential learning through collaboration with WSU faculty and community partners. By stepping out of the classroom, students gain concrete skills that empower them to be agents of change while building a social and professional network of peers and community members. Practicum courses at this level reflect intermediate-level engagement with field-based learning. There is no cost associated with this course.

Other or on demand and every year. 1-3 Credits

UR-250 Introduction to Urban Planning

LASC Categories: ICW

An exploration of planning theory, dynamics, and practice, and how they form the modern urban planning agenda.

Fall only and every year. 3 Credits

UR-270 Leadership in Nonprofit and Public Organizations

LASC Categories: HBS

The course explores the not-for-profit sector and the macro-environment within which it operates. The not-for-profit sector is used to describe nonprofit organizations and public organizations. The course explores traditional and popular approaches to leadership and the application of these theories in the not-for-profit world. Additionally, the course will review various important areas within the not-for-profit world (the micro-environment) including strategic planning, fundraising, marketing, governance and financial management.

Other or on demand and other or on demand. 3 Credits

UR-275 Urban Art

LASC Categories: CA

Urban Art teaches students how to appreciate, develop, and manage public arts programs from the perspective of an urban Arts & Culture Office.

Alternating and every 2-3 years. 3 Credits

UR-280 The Queer City**LASC Categories:** GP, DIV, TLC

This course is an introduction to the study of same-sex sexualities, their meanings and social organizations, across cultures and through time. The materials for the course are drawn from an array of disciplines, from biology to history, but center upon cultural and urban anthropology. Students will learn to think critically about the role of culture and society in the construction of genders and sexualities worldwide, with an emphasis on urban contexts. Fall only and every 2-3 years. 3 Credits

UR-285 Urban Anthropology**LASC Categories:** GP, TLC

Students in this course will become familiar with urban anthropology through an exploration of ethnography - the study of peoples, cultures, and power dynamics from the perspective of an insider. By investigating ethnographic fieldwork and ethnographic writing from our globalizing world, students will be introduced to a number of different accounts about peoples and cultures - some struggling and some thriving - in cities spanning the globe. Through this diverse sample of lived, urban environments, students will become critical thinkers about the role of culture and society in the construction of the city. Fall only and every 2-3 years. 3 Credits

UR-290 Gender and the City**LASC Categories:** WAC, GP, HBS**Prerequisites:** EN-102

Exploration of the ways in which gender, both male and female, structures responses of individuals to urban life and spaces. Every 2-3 years. 3 Credits

UR-301 Cities and Suburbs**Prerequisites:** UR-101

Multi-disciplinary study of city and suburban growth patterns and problems both of the past, and that hamper metropolitan cooperation and affect the quality of life for city and suburban residents and businesses. Every 2-3 years. 3 Credits

UR-305 Group Conflict in the Urban Community**Prerequisites:** UR-101

Study of conflict and its resolution in contemporary urban settings. Personal, small group, and societal strategies for conflict resolution will be explored. Fall and Spring and every 2-3 years. 3 Credits

UR-306 Interviewing and Counseling Techniques

Investigation of skills and process of interviewing and counseling with emphasis upon theory and practice, participant exercises, and development of helping skills and effective counseling relationships. Every 2-3 years. 3 Credits

UR-310 Power, Politics and Decision-Making in Urban Communities**Prerequisites:** UR-101

Exploration from multi-disciplinary approach of social power and its relation to decision-making in urban communities. Emphasis on theories of power, understanding research methodologies, and policy implications. Every 2-3 years. 3 Credits

UR-311 Urban Politics and Policies**LASC Categories:** HBS**Prerequisites:** UR-101

Political behavior and perceptions in cities and towns from a multi-disciplinary perspective with emphasis on how policy is initiated, developed, and implemented in various governmental forms. Spring only and every 2-3 years. 3 Credits

UR-312 Worcester: A City & Its People**LASC Categories:** USW, DIV

Prerequisites: any 100 level course in Urban Studies. This Urban History class explores the histories of Worcester's different peoples and their stories, many that are left out of what might be called official Worcester history. Students will read and research various primary and secondary sources, explore different approaches to studying and creating history, conduct fieldwork, and create papers or projects about the city's lesser-known and lesser-told histories, groups, individuals, and events. Fall only and every 2-3 years. 3 Credits

UR-315 Oral History for Urban Areas**LASC Categories:** TLC**Prerequisites:** College Writing II or permission of department chair. Any 100-level Urban Studies course or permission of instructor

In its simplest terms, Oral History is the collection and study of historical information using audio or video recordings of interviews with people having personal knowledge of past events. Often powerful and rich personal narratives, oral histories provide insight into a past event or series of events, often communicating unofficial or previous unknown/ misunderstood stories especially in Urban areas. This class explores the theoretical underpinnings of memory and remembering, and best practices for oral history. Students will also engage in oral history work including interviewing, recording, transcribing, analysis, and preparing oral histories for research and dissemination.

Spring only and every 2-3 years. 3 Credits

UR-319 Transportation Planning**LASC Categories:** GP, ICW

Prerequisites: 75 credits. It is recommended that students take UR 250 (Urban Planning) or a GIS or Cultural Geography class in the Department of Earth, Environment, and Physics before taking this course. This course examines the policy, politics, planning, and design of transportation systems in urban areas, with a special focus on Massachusetts. It covers the roles of the federal, state, and local governments and MPOs. It will also overview planning for different modes (e.g. public transit, auto, active travel), tools for transportation planning and policy analysis, transportation impacts such as air pollution, social costs, and climate change, land use and transportation interactions, and citizen participation and citizen needs in the transportation planning process.

Spring only and every 2-3 years. 3 Credits

UR-320 Power and Urban Insecurity**LASC Categories:** ICW

This class looks at how public policy relates to the social construction of race, class, and gender categories and how urban residents navigate such policies as part of their everyday struggle for survival and stability. We consider how popular discourse features dominant narratives of security, insecurity, and human worth when it comes to questions of how the social safety net is allocated. How do these narratives contribute to the way urban residents experience and interpret government on an everyday level? How do these narratives affect the way urban residents interact with the state and public institutions?

Every 2-3 years. 3 Credits

UR-321 Advanced Social Work**Prerequisites:** UR-101 and UR-221.

This course is designed to build upon basic social work skills, and enhance students' understanding about the changing concepts, terms, and theories, about what the field and practice of Social Work is. It is an more in depth examination of the approaches used by social work professionals in assessing and meeting the needs of increasingly diverse, complex and complicated populations.

Spring only and every year. 3 Credits

UR-331 Crime and the City**LASC Categories:** HBS, GP**Prerequisites:** UR-101

Investigation of crime in contemporary urban society and the social, legal, economic, and cultural strategies for dealing with crime and deviance. Other or on demand. 3 Credits

UR-332 Global Cities**LASC Categories:** GP

For the first time in history, urban dwellers outnumber those in rural areas in the world population. Why are people increasingly flocking to cities? And what are some of the impacts of this shift on populations in different parts of the globe? As cities grow to accommodate their swelling numbers, dynamics of both inclusion and exclusion are bound up in processes of change and development. This course addresses these issues by exploring a variety of topics associated with urban exclusion, such as displacement, development, climate change, changing family dynamics, the informal sector, housing, inequality, and forms of resistance to exclusion.

Alternating and every 2-3 years. 3 Credits

UR-340 Urban Housing Dilemma**Prerequisites:** UR-101

Analysis of the factors that shape the nature, location, and supply of urban housing with special focus on federal policies and the housing needs of elders.

Every 2-3 years. 3 Credits

UR-347 Refugees in American Society**LASC Categories:** USW

This course assesses the place of refugees in United States cities, historically and currently. We look at the experience of refugees in the US, relevant policies pertaining to this population, and the various popular debates circulating about refugee settlement and asylum in the US. The course also explores the nature of exile, displacement, and struggle in relation to urban inclusion and exclusion.

Alternating and every 2-3 years. 3 Credits

UR-350 Urban Youth in American Society**Prerequisites:** UR-101

Role and problems of youth in urban societies viewed from a variety of social science perspectives with additional employment of contemporary music and literature.

Other or on demand. 3 Credits

UR-360 Environmental Systems and Public Policy**Prerequisites:** UR-101

Examination of urban ecosystems, focusing on land uses designed to effectively utilize water, open space, and other natural resources.

Other or on demand. 3 Credits

UR-361 Public Policy and Environmental Issues**Prerequisites:** UR-101

Investigation of the factors that determine the formation of public policy on the environment with consideration of the roles played by state and federal regulatory agencies.

Other or on demand. 3 Credits

UR-380 Public Policy and Cultural Diversity**LASC Categories:** HBS, USW**Prerequisites:** UR-101

This course examines contemporary policy issues to support inclusion in diverse societies. Topics addressed include race, socioeconomic status, gender, sexuality, ethnicity, disability, religion, immigration, segregation, and affirmative action.

Fall and Spring and other or on demand. 3 Credits

UR-390 Research Methods in Urban Studies**Prerequisites:** UR-101

This course will provide an overview of the research process, and review commonly used qualitative and qualitative methods in the social sciences.

The course will cover the what, how, and when of qualitative interviews, key informant interviews, focus group discussions, story narratives, ethnographic research, observations, participatory action research, document review and survey research. It will also cover the ethical dimension of research. No prior research knowledge or experience will be assumed.

Other or on demand and every year. 3 Credits

UR-401 Research Seminar in Urban Studies**Capstone****LASC Categories:** CAP

Prerequisites: UR-101, UR-212, UR-213, and UR-390 and have completed 75 credits.

Research skills for urban-based projects including techniques in gathering, analyzing, and reporting data and various forms of field research.

Fall only and every year. 3 Credits

UR-408 Directed Study: Urban Studies

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

1-3 Credits

UR-410 Independent Study**Prerequisites:** UR-101

Individual or small group directed research into selected problems and issues in urban affairs.

Fall and Spring and other or on demand. 3 Credits

UR-421 Selected Topics in Urban Studies

Prerequisites: UR-101 Or permission of instructor
In-depth examination of topical issues challenging the intellectual and creative interests of advanced students in urban studies.

Fall and Spring and other or on demand. 3 Credits

UR-430 Seminar in Current Urban Problems**Prerequisites:** UR-101

Individual and group investigation and research of selected and current urban problems.

Fall and Spring and other or on demand. 3 Credits

UR-440 Practicum in Urban Studies

Directed experiential study for advanced students.

Other or on demand and every year. 1-3 Credits

UR-442 Immigration Law Practicum

Students will collaborate with WSU's partner the Student Clinic for Immigrant Justice to provide legal services to Worcester area immigrants, especially asylum seekers, in need of legal aid. This practicum will be run through the Urban Studies Department and in partnership with the Student Clinic for Immigrant Justice, which also runs a 40-hour training every fall, and which provides ongoing supervision for students who complete the training and who are paired with immigration law attorneys. Prerequisite: Students who enroll in this class must first complete an immigration law training offered every fall semester through a partnership with the Student Clinic for Immigrant Justice and then request permission from the instructor to enroll. Fall and Spring and every year. 1-3 Credits

UR-450 Internship: Urban Studies

Supervised and intensive semester-long experience in community agencies, including weekly group seminar. (Requires completion of 21 credits in Urban Studies and consent of instructor.) Fall and Spring and every year. 3-12 Credits

Program Learning Outcomes

- Students will conduct advanced interdisciplinary research incorporating a variety of source materials, research concepts, methodological approaches, and technological resources.
- Students will critically assess research studies and produce publishable papers, studies, reports, presentations, and projects.
- Students will learn how to be part of a supportive intellectual community driven in collaboration, professionalism, ethical research standards, and best practices in writing, research, and peer mentoring.
- Students will compare and contrast experiences of urbanization from different cultural, demographic, and geographic perspectives – locally, regionally, nationally, and globally – and will analyze them from different theoretical viewpoints.
- Students will develop interdisciplinary, critical reading and creative thinking skills, and advanced written and interpersonal communication skills.
- Students will demonstrate proficiency in creative problem-solving through coursework, experiential learning, and the development of a spirit of inquiry.
- Students will complete service- and experiential learning opportunities through coursework with department faculty, expert practitioners, and community partners.
- Students will engage in career-oriented experiences that prepare them for leadership roles in their fields through service learning coursework, internships, practica, and independent studies.
- Students will develop empathy for the greater understanding of the range of human experience and social responsibility with emphasis on intergenerational and intercultural dynamics.

4+1 Program in Urban Studies / Master of Science in Nonprofit Management (NPM)

Through a combined five year Bachelor of Science in Urban Studies/Masters in Nonprofit Management program of studies, it is possible for motivated full-time students who are urban studies majors to complete a five-year program leading to degrees including both a Bachelor's degree in Urban Studies and a Master's in Nonprofit Management. Urban Studies minors may qualify for the program as well.

Students who have completed 90 undergraduate credits may apply for admission into the special five-year BS/MS program if they have an overall GPA of not less than 3.0 and a major GPA of not less than 3.25. Students are also required to complete an undergraduate internship, independent study, or capstone project that incorporates work with a community-based organization as part of their undergraduate work. Students must meet all other requirements for admission to the Master in Nonprofit Management. The GRE requirement is waived for students with an overall GPA of 3.25 or higher.

Please also consult the graduate catalog for more information.

In order to complete the joint degree, in the final year of their bachelor's work, students take three graduate level courses (9-11 credits) which are counted toward both the undergraduate and graduate degree requirements. These graduate credits are included in the undergraduate tuition of full-time, state-supported students. Students must also take at least one summer class between the spring of their BS graduation and the fall in which they embark on full-time graduate studies. Taking the graduate credits as an undergraduate and the summer class allows students to complete course requirements for the bachelor's and master's degree in five years (60 months). For more details, students should consult with the graduate coordinator of the program.

Students enrolled in Urban Studies (majors and minors) may apply for the joint 4+1 program with the Master of Science in Nonprofit Management (NPM). The following are the eligibility requirements:

1. Applicants must have completed 90 undergraduate credits.
2. Applicants must have a minimum 3.25 GPA in their majors.
3. Applicants must have an overall minimum 3.0 GPA.
4. Applicants must have completed an undergraduate internship, independent study or capstone project related to a nonprofit organization.
5. Two letters of recommendation

In order to complete the joint degree, students take 9-11 graduate credits, which count both in their undergraduate program and in the master's in nonprofit management. The graduate credits are taken in place of elective undergraduate credits. Students get advising from both the graduate coordinator and their undergraduate advisor. Admission is on a rolling basis and applicants may start their program of study in any semester.

Code	Title	Credits
NM-901	The Nonprofit World: NGOs, the State & Civil Society	3
NM-934	Ethics and Management of Human Resources	3
NM-942	Organizational Theory	3
NM-945	Financial Management for Non-Profit Organizations	3

NM-949	Strategic Leadership and Planning	3
NM-951	Grant Writing	4
NM-980	Thesis I	1
NM-981	Thesis II	4
NM-990	Action Research	3
NM-993	Marketing and Resource Development	3
Two (2) ELECTIVES required		6
Total Credits		36

4+1 Students

Graduate core courses will count as core classes in the graduate program and electives in the student's undergraduate program. Graduate electives will count as electives in both the graduate and undergraduate programs.

MS in Nonprofit Management - A student may take any *three* of the following core courses and any courses offered as graduate electives: NM-901, NM-903, NM-934, NM-942, NM-945, NM-949, NM-951, NM-993

4+1 Program in Urban Studies / Master of Public Administration and Policy (MPAP)

Students enrolled in Urban Studies (majors and minors) may apply for the joint 4+1 program with the Master of Public Administration and Policy. The following are the eligibility requirements:

1. Applicants must have completed 90 undergraduate credits.
2. Applicants must have a minimum 3.25 GPA in their majors
3. Applicants must have an overall minimum 3.0 GPA
4. Two letters of recommendation

Students are encouraged to take introductory courses in political science, statistics and economics before graduating from their undergraduate programs since these courses are prerequisites for full matriculation into the MPAP. A course in financial accounting is also highly recommended.

Students achieve matriculation only after they obtain their undergraduate degree. The prerequisite requirements must be completed by then.

In order to complete the joint degree, students take 9-11 graduate credits, which count both in their undergraduate program and in the MPAP. The graduate credits are taken in place of elective undergraduate credits. Students get advising from both the graduate coordinator and their undergraduate advisor. Admission is on a rolling basis and applicants may start their program of study in any semester.

Code	Title	Credits
Master of Public Administration and Policy (36 credits)		
<i>CORE COURSES</i>		
PA-901	Policy Analysis	3
PA-903	Economics for Policy Analysis	3
PA-934	Ethics & Management of Human Resources	3
PA-942	Organizational Theory	3
PA-945	Public Budgeting & Financial Management	3
PA-949	Strategic Leadership & Planning for Public Organizations	3
PA-951	Negotiation & Conflict Resolution for Public Organizations	3
PA-980	Capstone Fieldwork I for Public Administration & Policy	2
PA-981	Capstone Fieldwork II for Public Administration and Policy	4
PA-990	Analysis and Interpretation of Quantitative Data for Public Policy	3
Two (2) ELECTIVES required		6
Total Credits		36

4+1 Students

Graduate core courses will count as core classes in the graduate program and electives in the student’s undergraduate program. Graduate electives will count as electives in both the graduate and undergraduate programs

Master of Public Administration and Policy (MPAP)

– A student may take any *three* of the following core courses and any courses offered as graduate electives: PA-901, PA-903, PS-934, PA-942, PA-945, PA-949, PA-951

4+1 Program in Urban Studies / Master of Public Management (MPM)

Students enrolled in Urban Studies (majors and minors) may apply for the joint 4+1 program with the Master of Public Management (MPM). The following are the eligibility requirements:

1. Applicants must have completed 90 undergraduate credits.
2. Applicants must have a minimum 3.25 GPA in their majors.
3. Applicants must have an overall minimum 3.0 GPA.
4. Two letters of recommendation

Students are encouraged to take introductory courses in political science, management, and economics before graduating from their undergraduate programs since these courses are prerequisites for full matriculation into the MPM. A course in financial accounting is also highly recommended. Students achieve matriculation only after they obtain their undergraduate degree. The prerequisite requirements must be completed by then.

In order to complete the joint degree, students take 9-11 graduate credits, which count both in their undergraduate program and in the MPM. The graduate credits are taken in place of elective undergraduate credits. Students get advising from both the graduate coordinator and their undergraduate advisor. Admission is on a rolling basis and applicants may start their program of study in any semester.

Code	Title	Credits
Master of Public Management (36 credits)		
<i>CORE COURSES</i>		
PM-901	Project Management for Public Organizations	3

PM-903	Economics for Policy Analysis	3
PM-934	Ethics & Management of Human Resources	3
PM-942	Organizational Theory	3
PM-945	Financial Management for Public Organizations	3
PM-949	Strategic Leadership & Planning for Public Organizations	3
PM-951	Negotiation & Conflict Resolution for Public Organizations	3
PM-980	Management Project Fieldwork I for Public Management	2
PM-981	Management Project Fieldwork II for Public Management	4
PM-990	Action Research	3
Two (2) ELECTIVES required		6
Total Credits		36

4+1 Students

Graduate core courses will count as core classes in the graduate program and electives in the student's undergraduate program. Graduate electives will count as electives in both the graduate and undergraduate programs

Master of Public Management (MPM) – A student may take any *three* of the following core courses and any courses offered as graduate electives: PM-901, PM-903, PM-934, PM-942, PM-945, PM-949, PM-951

Public Policy and Urban Planning Minor

Minor in Public Policy and Urban Planning Requirements (18 credits)

Code	Title	Credits
Required Courses		
UR-101	Introduction to Urban Studies	3
UR-201	Introduction to Urban Policy	3
UR-250	Introduction to Urban Planning	3
Take 3 electives from the following. One must be at the 300-400 level.		9

UR-214	Urban Demography	
UR-270	Leadership in Nonprofit and Public Organizations	
UR-310	Power, Politics and Decision-Making in Urban Communities	
UR-311	Urban Politics and Policies	
UR-319	Transportation Planning	
UR-340	Urban Housing Dilemma	
UR-360	Environmental Systems and Public Policy	
UR-380	Public Policy and Cultural Diversity	
UR-430	Seminar in Current Urban Problems	

Total Credits **18**

Social Work and Social Policy Minor

Requirements for a Minor

Code	Title	Credits
<i>Required Courses</i>		
UR-101	Introduction to Urban Studies	3
UR-221	Introduction to Social Work	3
UR-213	Human Identity and Urban Environment	3
or UR-320	Power and Urban Insecurity	
or UR-380	Public Policy and Cultural Diversity	
<i>Elective Courses - take 2 courses (must include 300-level course)</i>		6
UR-220	Immigrant City	
UR-305	Group Conflict in the Urban Community	
UR-306	Interviewing and Counseling Techniques	
UR-311	Urban Politics and Policies	
UR-321	Advanced Social Work	
UR-340	Urban Housing Dilemma	
UR-347	Refugees in American Society	
UR-350	Urban Youth in American Society	
UR-390	Research Methods in Urban Studies	
<i>Experiential Learning (take 1 course)</i>		1-12
UR-142	Practicum in Urban Studies-Introductory (1-3 cr.)	

UR-242	Practicum in Urban Studies-Intermediate (1-3 cr.)	
UR-315	Oral History for Urban Areas (3 cr.)	
UR-450	Internship: Urban Studies (3-12 cr.)	
Total Credits		16-27

Urban Studies Major Requirements for the Major

36 credits.

All Urban Studies majors are required to take the following courses:

Code	Title	Credits
UR-101	Introduction to Urban Studies	3
UR-212	American Metropolitan Evolution	3
UR-213	Human Identity and Urban Environment	3
UR-320	Power and Urban Insecurity	3
UR-390	Research Methods in Urban Studies	3
UR-401	Research Seminar in Urban Studies Capstone	3
SELECT	UR Electives	18
Total Credits		36

Students are encouraged to take community-based experiential courses, including practicum and internship. These course credits may not exceed a total of 12, three of which may count towards the major. Students may take the internship after completing 18 credits in the major. The practicum can be taken at any time, upon permission of department.

Sample Timetable for Completion of Degree: Urban Studies

Year One

Semester One		Credits
EN-101	College Writing I	3
LASC	First-Year Seminar (p. 41)	3
UR-101	Introduction to Urban Studies	3
LASC	LASC Elective (QR) (p. 50)	3

LASC	LASC Elective (CON) (p. 38)	3
Credits		15
Semester Two		
EN-102	College Writing II	3
UR	Any 100 or 200 level course in major	3
LASC	LASC Elective (NSP) (p. 49)	4
LASC	LASC Elective (TLC) (p. 53)	3
LASC	LASC Elective (ICW) (p. 46)	3
Credits		16

Year Two

Semester Three

UR	Major elective approved by advisor	3
LASC	LASC Elective (NSP) (p. 49)	3
LASC	LASC Elective (USW) (p. 51)	3
LASC	LASC Elective (CA) (p. 39)	3
LASC	LASC Elective (GP) (p. 42)	3
Credits		15

Semester Four

UR-213	Human Identity and Urban Environment	3
UR-212	American Metropolitan Evolution	3
LASC	LASC Elective (HBS) (p. 44)	3
LASC	LASC Elective (GP) (p. 42)	3
SELECT	General Elective	3
Credits		15

Year Three

Semester Five

UR-320	Power and Urban Insecurity	3
UR	Any 200 or 300 Level Course	3
LASC	LASC Elective (HBS) (p. 44)	3
LASC	LASC Elective (TLC) (p. 53)	3
SELECT	General Elective	3
Credits		15

Semester Six

UR-390	Research Methods in Urban Studies	3
LASC	LASC Elective (CA) (p. 39)	3
UR	Major elective approved by advisor	3
UR	Major elective approved by advisor	3
SELECT	General Elective	3
Credits		15

Year Four		
Semester Seven		
UR-401	Research Seminar in Urban Studies Capstone	3
UR	Course recommended by Advisor	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Semester Eight		
UR-450	Internship: Urban Studies	3-12
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15-20
Total Credits		121-126

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/ major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Urban Studies Major, Concentration in Public Policy and Urban Planning

Requirements for a Major in Urban Studies, Concentration in Public Policy and Urban Planning:

Code	Title	Credits
Urban Studies Major Requirements (18 credits)		
UR-101	Introduction to Urban Studies	3
UR-212	American Metropolitan Evolution	3
UR-213	Human Identity and Urban Environment	3
UR-320	Power and Urban Insecurity	3
UR-390	Research Methods in Urban Studies	3

UR-401	Research Seminar in Urban Studies Capstone	3
Urban Studies Electives (6 credits)		
Select elective courses for 6 credits.		6
Required Courses for Concentration (12 credits)		
UR-201	Introduction to Urban Policy	3
UR-250	Introduction to Urban Planning	3
Experiential Learning Course (Internship or Practicum)		3
Select one of the following:		3
UR-270	Leadership in Nonprofit and Public Organizations	
UR-310	Power, Politics and Decision-Making in Urban Communities	
UR-311	Urban Politics and Policies	
UR-319	Transportation Planning	
UR-340	Urban Housing Dilemma	
UR-360	Environmental Systems and Public Policy	
UR-361	Public Policy and Environmental Issues	
UR-380	Public Policy and Cultural Diversity	
UR-430	Seminar in Current Urban Problems	

Urban Studies Major, Concentration in Social Work and Social Policy

Requirements for a Major in Urban Studies, Concentration in Social Work and Social Policy

In addition to the 6 Core Courses (18 credits) and 2 Elective Courses (6 credits) required for the major, students must take the following:

Code	Title	Credits
<i>Students must take experiential learning coursework (3 credits) from the following courses:</i>		
UR-142	Practicum in Urban Studies-Introductory	1-3
UR-242	Practicum in Urban Studies-Intermediate	1-3
UR-315	Oral History for Urban Areas	3
UR-450	Internship: Urban Studies	3-12

<i>Required Course (3 credits)</i>		3
UR-221	Introduction to Social Work	3
<i>Students must take 2 of the following courses (6 credits):</i>		6
UR-220	Immigrant City	3
UR-305	Group Conflict in the Urban Community	3
UR-306	Interviewing and Counseling Techniques	3
UR-311	Urban Politics and Policies	3
UR-321	Advanced Social Work	3
UR-340	Urban Housing Dilemma	3
UR-347	Refugees in American Society	3
UR-350	Urban Youth in American Society	3
UR-380	Public Policy and Cultural Diversity	3

Urban Studies Minor

Requirements for a Minor

18 credits including the following:

Code	Title	Credits
UR-101	Introduction to Urban Studies	3
UR-212	American Metropolitan Evolution	3
UR-213	Human Identity and Urban Environment	3
Three additional UR 300-level courses		9
Total Credits		18

Visual and Performing Arts

Department of Visual and Performing Arts

Aligning itself with the evolving trends of the 21st century arts world, Worcester State University offers several programs for visual and performing arts students, including two majors, double majors for education students, and four minors.

The Major in Interdisciplinary Visual and Performing Arts is one of the few interdisciplinary arts majors in the country. With this major, students go beyond the standard coursework in art, music, and theatre to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts and an understanding of how to use one art form to inform the other, while also gaining an in-depth knowledge of the art forms that most excite them.

The interdisciplinary major is designed to provide students with a strong foundation in art, music, and theatre, and both a theoretical and practical understanding about how they interact in an interdisciplinary environment. Core courses promote critical thinking, and prepare students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts. Students craft the major to fit their areas of interest – art, music, theatre, etc. - through electives chosen in consultation with advisors. Students apply their coursework to the production, performance, and critical study of creative work through a multitude of exhibit and performance opportunities.

Students interested in theatre can pursue studies through the new Major in Theatre or the Major in Interdisciplinary Visual and Performing Arts. The Major in Theatre provides marketable, hands-on production experience with an extensive variety of coursework to prepare students for a career in live theatre production, its associated industries, or advanced graduate education.

Students interested in art can pursue studies through the new Major in Art or the Major in Interdisciplinary Visual and Performing Arts. The Major in Art emphasizes the integration of broad-based studio art training and arts research with the development

of creativity, communication, and critical thinking to prepare students for graduate studies or careers in a wide range of arts-related fields.

- Art Major (p. 461)
- Art Minor (p. 462)
- Composition and Music Technology Minor (p. 385)
- Music Minor (p. 384)
- Theatre Major (p. 463)
- Theatre Minor (p. 464)
- Visual and Performing Arts and Education, Double Major (p. 459)
- Visual and Performing Arts Major (p. 458)

Faculty

Michael C. Hachey, Professor (1993), B.F.A., M.F.A., Massachusetts College of Art

Stacey Parker, Professor (2007), B.F.A., Alfred University; M.F.A., Rochester Institute of Technology

Amaryllis Siniosoglou, Professor (2005), P.E.P., Royal College of Art, London; M.F.A., University of Massachusetts, Amherst; Diplome Superieur d' Art Plastique, School of Art, Athens

Kyle D. Martin, Professor (1998), B.M. Hardin-Simmons University; M.M., D.M.A., Eastman School of Music

Carlos Odria, Assistant Professor (2020), B.A., M.Mus., Ph.D., Florida State University

Steven Gagliastro, Visiting Instructor (2023), B.M.E., UMass Amherst

Jane Howland, Visiting Assistant Professor (2023), B.A., University of Pennsylvania; M.F.A., Brandeis University

Samuel O'Connell, Department Chair, Professor (2010), B.A., M.A., Washington University; Ph.D., Northwestern University

Adam Zahler, Professor (2007), B.A., University of Vermont; M.F.A., University of Virginia

Kayleigha Zawacki, Visiting Assistant Professor (2023), B.F.A., M.F.A., Boston University

Art Courses

AR-100 Cross Media Studio

LASC Categories: CA, TLC

An introduction to selected two- and three-dimensional media through the exploration of a semester-long theme such as the human figure, or forms in nature.

Fall and Spring and every year. 3 Credits

AR-105 Introduction to Animation

This hands-on introductory course covers the fundamentals and aesthetics of computer animation using the Adobe AfterEffects motion graphics program.

Fall and Spring and every year. 3 Credits

AR-118 Global Art History

LASC Categories: GP, DAC, CA

Surveys the outstanding visual art from all cultures beginning in the prehistoric era to the late 19th century.

Fall only and every year. 3 Credits

AR-119 First Year Art Practicum

This course offers students an opportunity to work closely with faculty to work in the art gallery, develop technical skills, studio projects, and do research to support their creative development. This course is required for the Art Major. It will be geared to the individual needs of each student.

Other or on demand and every year. 1 Credit

AR-123 Design Fundamentals

LASC Categories: CA, QAC

Design Fundamentals is a course combining 2 and 3 Dimensional Design. In this course we explore composition, space, and color along with planes, volumes, and environments. A variety of materials are used to create on surfaces and in actual space. Many projects are grounded in aspects of mathematical and geometrical systems, e.g., grids, tiling, Fibonacci series, fractals, regular solids.

Fall and Spring and every year. 3 Credits

AR-130 Painting I

LASC Categories: CA

An introduction to the fundamentals of historical painting styles, techniques, and materials used, with emphasis on visual perception and expression

Fall and Spring and every year. 3 Credits

AR-140 Drawing Fundamentals

LASC Categories: CA, GP, DAC

The development of visual perception, technical skills, and individual expression in drawing media. Students will explore concepts in drawing to develop their artwork through observation, experimentation, awareness of historical and contemporary contexts, and critical assessment. Projects utilize a variety of drawing materials to demonstrate technical facility and to enhance self-expression.

Fall and Spring and every year. 3 Credits

AR-150 Life Studio I

LASC Categories: CA

Focus on the human figure through different modes of drawing and painting. Attention to structure and anatomy and their expressive aspects.

Fall and Spring and every year. 3 Credits

AR-165 Creating Cultural Forms

LASC Categories: CA, GP, WAC, DAC

Prerequisites: EN-102

A studio course. Concepts of art forms created by a variety of world cultures and art movements of the past and present.

Fall and Spring and every year. 3 Credits

AR-191 Special Topics in Art

Introductory course to cover various topics.
3 Credits

AR-193 First Year Seminar in Art

LASC Categories: FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

Every year. 3 Credits

AR-210 Drawing and Painting Studio

LASC Categories: CA

This course is a comprehensive introduction to the art of drawing and painting. Students will be strongly encouraged to explore the skills and concepts of these art forms in order to develop their ideas through observation, experimentation, historical context, and analysis. Projects are designed to expand awareness and to expose students to contemporary concerns.

Fall and Spring and every year. 3 Credits

AR-215 Art Theory and Practice**LASC Categories:** CA, GP

This course chooses a topic or a theme to explore in the classroom and studio for a semester. Students will read about this topic or theme and they will produce work in the studio inspired by their reading. Topics may include (but are not limited to): the figure in art, landscape art, abstract art, science and art, social sciences and art, religion and art, east meets west, arte povera, Dada art etc.

Fall only and every year. 3 Credits

AR-219 Second Year Art Practicum**Prerequisites:** VP-200

This course offers students an opportunity to work closely with faculty to work in the art gallery, develop technical skills, studio projects, and do research to support their creative development. This course is required for the Art Major. It will be geared to the individual needs of each student.

Other or on demand and every year. 1 Credit

AR-221 The Work of Art**LASC Categories:** CA

This is the first in a set of three core courses for the Art major. This course focuses on practical and professional art skills including but not limited to the creation of professional documents like resumes, artist statements and proposals, professional internet presence such as websites and social media accounts, art critique work and gallery related content such as exhibition submissions and gallery representation.

Other or on demand and every year. 3 Credits

AR-225 Art Since Mid-20th Century**LASC Categories:** CA, GP, WAC, DAC

Explores how artists have challenged the traditional definitions of the art object and the expanded materials, media and concepts employed by artists since 1950 to the present era.

Fall only and every year. 3 Credits

AR-230 Printmaking**LASC Categories:** CA

Introduction to the techniques and aesthetics of etching and relief. Prints by major artists are examined.

Fall and Spring and every year. 3 Credits

AR-235 3D Sculpture Studio**LASC Categories:** CA, GP, WAC**Prerequisites:** EN-102

This is an introductory course focusing on form creation grounded in sculptural forms and techniques. Students will create sculpture by exploring traditional techniques such as molding, carving, casting and assemblage using historical and contemporary materials from clay and stone to cardboard and found objects. Historical context, skill development, critical analysis and proper tool usage and safety are emphasized.

Fall and Spring and every year. 3 Credits

AR-240 Watercolor**LASC Categories:** CA, TLC

A studio course exploring various techniques and expressive forms used by watercolorists of the past and present.

Fall and Spring and every year. 3 Credits

AR-260 Visual Arts in the Schools**LASC Categories:** CA

An exploration of art materials and concepts, and their appropriate use with children. Includes studio projects, art history, and educational theory.

3 Credits

AR-270 Driftwood to Dumpsters**LASC Categories:** CA, TLC, WAC**Prerequisites:** EN-102

Students will learn about the history and practice of making art from non-traditional materials. This is a lecture and hands-on art course.

Every 2-3 years. 3 Credits

AR-285 History of Photography**LASC Categories:** CA, TLC

The history of photography from 1839 to present, with attention to styles, aesthetics, technical processes, and leading practitioners. [Cross-listed with CM-285]

Every 2-3 years. 3 Credits

AR-308 Thesis Seminar**LASC Categories:** CA**Prerequisites:** AR-221.

This course focuses on the research that prepares students for their Capstone. They will evaluate the work of other artists working in their media, make critical judgments about the work they experience in contemporary exhibitions, and present their ideas orally in class presentations. Students will also develop their studio art portfolio and capstone proposal.

Spring only and every year. 3 Credits

AR-312 Methods and Materials in Studio Art**LASC Categories:** CA**Prerequisites:** EN 102 or any 100-level AR course.

Materials and Methods in Studio Art offers in-depth artistic exploration through combining studio methods, mixing materials and techniques and developing an artistic style. This course encourages students to experiment with art making in both two and three-dimensions allowing them to cultivate their aesthetic concepts through innovative projects.

Fall and Spring and every year. 3 Credits

AR-313 Illustration**LASC Categories:** CA, GP**Prerequisites:** EN 102 or any 100-level AR course.

This course is designed to introduce students to the processes involved in illustration. This may include, but is not limited to editorial illustration, children's books, book/album covers, concert posters, comics/manga, character design, botanical illustration, medical illustration and basic lettering. This course will cover basic illustration techniques in drawing and painting.

Fall and Spring and every year. 3 Credits

AR-319 Third Year Art Practicum**Prerequisites:** AR-219

This course consolidates student studio skills, research expertise, and best practices for creative work. Students will initiate the development of a body of work that will lead to Capstone.

Other or on demand and every year. 1 Credit

AR-330 Intermediate Printmaking**Prerequisites:** AR-230

Continuation of relief printmaking in an individual direction using tone/color and multiple blocks.

Every year. 3 Credits

AR-350 Special Topics in Art**Prerequisites:** one studio course or consent of instructor.

A course covering topics which vary in response to specific student and faculty interest.

Fall and Spring and every year. 3 Credits

AR-400 Ind Study: Art

An opportunity for further study in a special field of interest under faculty supervision.

Fall and Spring and other or on demand. 3 Credits

AR-402 Internship in Art

An individual experience through internship with a sponsoring community organization, professional institution or individual, i.e., museums, galleries, artists.

Fall only and other or on demand. 3-6 Credits

AR-408 Directed Study: Art

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

Fall and Spring. 1-3 Credits

AR-455 Thesis Capstone**LASC Categories:** CAP

Pre-requisite: Completion of all other major requirements. Students design, and create their work for public presentation. This is the final course in the Art Major and is a requirement for all the majors.

Other or on demand and every year. 3 Credits

Music Courses

MU-101 Fundamentals of Music and Aural Skills**LASC Categories:** CA

An introduction to reading and writing conventional music notation, the fundamentals of music theory, and basic aural skills. Emphasis will be placed on intervals, scales, chords, rhythmic values, sight-singing, melodic dictation, and aural recognition of intervals and chords.

Every year. 3 Credits

MU-102 Applied Music**LASC Categories:** ICW**Prerequisites:** Audition required

Audition required. Private instruction in an instrument or voice. Thirteen weekly one-hour lessons. May be repeated. Studio fee required. Instruments offered: brass, guitar, piano, percussion, strings, and winds. Fall and Spring and every year. 1 Credit

MU-104 Class Piano**LASC Categories:** CA**Prerequisites:** MU-100 or MU-101

Basic piano technique and pedagogy in a group setting of 12 or fewer
Fall and Spring and every year. 1 Credit

MU-106 Class Guitar

An introduction to playing the guitar, including technique, reading tabs and notation, and harmonization of melodies with chords. Solo literature appropriate to the level will be studied. Students are required to provide an instrument.
Fall and Spring and every year. 1 Credit

MU-115 Music Appreciation**LASC Categories:** CA

General survey of masterpieces of major composers of various periods in history of music.
Fall and Spring and every year. 3 Credits

MU-120 Ear Training**Prerequisites:** MU-100 or MU-101

An introductory course in the fundamentals of ear-training and sight-singing. Emphasis will be placed on the development of basic melodic, harmonic, and rhythmic aural skills through listening, dictation, and application of solfège.
Every year. 3 Credits

MU-125 Jazz Appreciation**LASC Categories:** CA, TLC

Surveys the history of jazz beginning with the earliest roots in the American South to today.
Every year. 3 Credits

MU-140 World Music**LASC Categories:** CA

An introduction to music of various cultures and continents including music of Africa, Asia, Latin America, the Middle East, and India.
Spring only and every 2-3 years. 3 Credits

MU-175 Music in America

Survey of music history and literature in America including gospel spirituals, jazz, popular and classical music.
Other or on demand. 3 Credits

MU-185 Composition I**LASC Categories:** CA

Prerequisites: MU 101 Fundamentals of Music Aural Skills OR MU 100 Music Fundamentals
An introduction to compositional methods and techniques. Students develop personal expression by creating musical works while exploring use of melody, harmony, timbre, rhythm, texture, and tonality within conventional musical forms.
Spring only and every year. 3 Credits

MU-193 Special Topics in Music:First Year Students**LASC Categories:** FYS

Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.
Every year. 3 Credits

MU-200 Issues in Music

This course deals with topics of special interest, in both seminars and studio environments at an introductory level.
3 Credits

MU-202 Applied Music**Prerequisites:** Audition Required

Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week. Student fee required. May be repeated. Offered every semester.
Fall and Spring and other or on demand. 1 Credit

MU-205 Music Theory I**LASC Categories:** CA**Prerequisites:** MU-100 or 101.

Analysis and application of harmonization techniques using diatonic chords. Further emphasis is placed on voice-leading, figured bass, melodic construction, and embellishing tones.
Spring only and other or on demand. 3 Credits

MU-215 Chorus and Music Theory**LASC Categories:** CA**Prerequisites:** Audition Required

Mixed choral repertoire and performance, covering vocal problems and techniques. Introduction to music theory, rhythms, intervals, basic chordal structures, harmonization. Participation in college chorus required.

Fall and Spring and every year. 3 Credits

MU-220 Chorus**LASC Categories:** CA**Prerequisites:** MU-215

Mixed Chorus repertoire. May be repeated.

Fall and Spring and every year. 0.5-1 Credits

MU-222 African Drumming**LASC Categories:** GP, CA, DAC

An exploration of African music and drumming techniques from the culture of Ghana. Students will develop performance skills and present a public performance during the course of the semester.

Every year. 0.5-3 Credits

MU-223 African Drumming II**LASC Categories:** CA, GP**Prerequisites:** MU 222-African Drumming I, or MU

193-FYS African Drumming from Ghana

This Level 2 ensemble builds on Level 1 in the following ways: (a) learn new drumming styles; (b) improvise with greater freedom; and (c) learn to play lead drum rhythms, with the possibility of performing them in the final performance.

Spring only and every 2-3 years. 3 Credits

MU-228 Piano Ensemble**LASC Categories:** CA**Prerequisites:** MU-102 or MU-190

A small ensemble for keyboard players who will learn, explore, and perform four-hand piano repertoire.

Every year. 1 Credit

MU-231 Women in Music**LASC Categories:** CA, TLC

A survey of the role of women in music, particularly the great composers from Medieval to Contemporary times.

3 Credits

MU-237 Music in the Elementary School**LASC Categories:** CA

Discover the benefits of using music to enrich general education from preschool through high school. Develop your own musicianship through learning to use your singing voice, learning to play the recorder, learning to read notation and gaining an overview of western music history.

Other or on demand. 3 Credits

MU-250 Music of the Cinema: Spectacle, Splendor, And Spielberg**LASC Categories:** CA, TLC

An introduction to the role, impact, and importance of music in motion pictures from silent movies through contemporary film.

Spring only. 3 Credits

MU-275 Computers and Music

An introduction to computer music technologies with emphasis on use of electronics and computers in music composition and performance. Further emphasis will be placed on basic acoustics, perception of sound, application of computer music in experimental genres, digital recording, mixing, fundamentals of sound synthesis and digital signal processing.

Other or on demand and other or on demand. 3 Credits

MU-280 History of Music**LASC Categories:** CA

A general survey of western art music covering the historical periods of the Medieval, Renaissance, Baroque, Classical, Romantic, and 20th Century.

Fall and Spring and every year. 3 Credits

MU-285 Composition II**Prerequisites:** MU-185 or MU-204, and MU-205.

A continuation of Composition I. Students will explore methods of tonal composition. Emphasis will be placed on melodic writing, harmonization practices, chord substitutions, use of figurations, texture, and timbre in tonal music. Experimentation with rhythmic and metric practices including asymmetry, shifting accents, changing time signatures, and ostinato.

Fall and Spring and every year. 1 Credit

MU-300 Chorale**LASC Categories:** CA**Prerequisites:** Audition Required

Study and performance of a cappella choral literature from the Middle Ages to contemporary times. May be repeated. Audition required for enrollment.

Every year. 0.5-1 Credits

MU-302 Applied Music**Prerequisites:** Audition Required

Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week.

Student fee required. May be repeated. Offered every semester.

Fall only and every year. 1 Credit

MU-305 Music Theory II**LASC Categories:** CA**Prerequisites:** MU-205

Harmonization of melodies using primary and secondary chords, harmonic analysis of tonal music from the Common Practice Period, including diatonic and chromatic chords, secondary dominants, modulation, and aural skills. An introduction to formal schemes in music including phrase structure, binary and ternary and form, sonata form, and species counterpoint.

Fall only and every year. 3 Credits

MU-310 The American Musical in Performance

Study, rehearsal and performance of a great American musical. Music, acting and dance will all be skills which are developed.

Every 2-3 years. 3 Credits

MU-321 Small Ensemble**LASC Categories:** ICW, CA

The performance of musical works by a small ensemble. By permission of instructor or audition.

Fall and Spring and every year. 0.5-1 Credits

MU-326 Chamber Orchestra**LASC Categories:** CA

In this class the students will rehearse and perform music from the orchestral repertoire in a variety of styles and genres and from varied periods. All woodwind, string, brass, keyboard and percussion instruments are eligible to participate. 1 credit section for those repeating the class in another semester and those in proposed revised music minor; .5 credit section for VPA music concentrators
Pre-requisite: Audition for Instructor
Fall and Spring and every year. 0.5-3 Credits

MU-330 Jazz Ensemble**LASC Categories:** ICW, USW, DAC

An ensemble where students learn to perform traditional jazz repertoire, as well as original compositions. Through rehearsing, performing, directed listening and ear training, students will learn: (a) conceptual approaches to improvising and composing; (b) harmonic, melodic and rhythmic theory specific to the jazz idiom; and (c) methods for connecting audiation to instrumental playing. Special emphasis will be on jazz standards, especially those with a blues form. 3 credits 1 credit if repeating .5 for Visual and Performing Arts majors with music concentration or focus and those who minor in composition and music technology
Fall and Spring and every year. 0.5-3 Credits

MU-375 Sound Synthesis**Prerequisites:** MU-275

A continuation of MU 275 Computers and Music. Focus on application of sound in composition acoustics and additive synthesis, modulation and waveshaping, signal flow, processing, digital filtering, reverberation, and sample processing.
Other or on demand and other or on demand. 3 Credits

MU-385 Composition III**Prerequisites:** MU 285/Composition II MU 305/Music Theory I (currently MU 210)

An exploration of compositional practices presented during Composition II. Students will compose absolute music in the style of the Common Practice Period as well as work with superimposed chords, shifting tonality, pandiatonicism, large-scale forms, polyrhythms, and polymeter. This course introduces to composing tonal music for non-musical genres including media, video games, incidental music for theater and film.

Other or on demand and every year. 1 Credit

MU-400 Independent Study in Music**Prerequisites:** Consent of Instructor

An opportunity for further study in a special field of interest under faculty supervision.

Fall and Spring and every year. 1-6 Credits

MU-402 Applied Music**Prerequisites:** Audition Required

Instruments offered: Piano, voice, oboe, clarinet, flute, saxophone, trumpet, trombone, French horn, violin, viola, cello, bass, percussion, guitar. Instructors for other instruments may be arranged by special request to the Music Department. Private instruction in an instrument or voice, one hour per week.

Student fee required. May be repeated. Offered every semester.

Fall and Spring. 1 Credit

MU-408 Directed Study: Music

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

MU-410 Special Topics in Music

This course will allow members of the music faculty to develop courses of special interest. This would include seminars on specific composers or compositions, in both classroom and applied studio environments.

0.5-3 Credits

MU-485 Composition IV**Prerequisites:** MU-385

Compositional techniques of the 20th-century including modality, parallelism, atonality, serialism, electronic music, aleatory, music concrete, and sound synthesis.

Other or on demand and other or on demand. 1 Credit

Theatre Courses

TH-126 Script Analysis**LASC Categories:** CA, TLC, DAC

Script analysis for theatre artists. How to take a script from initial reading to production.

Other or on demand. 3 Credits

TH-145 Acting I**LASC Categories:** CA

Introductory acting theory and practice. Students present brief monologues and scenes in class.

Fall and Spring and every year. 3 Credits

TH-155 First-Year Theatre Practicum

Practical work in Theatre production for first-year students.

Fall and Spring and every year. 1 Credit

TH-175 Introduction to Stagecraft**LASC Categories:** CA, QR

An introductory class to major types of Stagecraft for live theatre. Students will learn in formal classes and in 30 hours of scheduled laboratories about set construction, costume construction and lighting technology. Students will learn the vocabulary of technical theatre and will learn geometric and mathematical methods required for each of the three main areas covered.

Fall and Spring and every year. 3 Credits

TH-191 Introduction to the Theatre**LASC Categories:** CA

An overview of live performance, with the emphasis on audience appreciation. Performance arts and crafts are examined.

Fall and Spring and every year. 3 Credits

TH-193 Special Topics in Theater:First-Year Students**LASC Categories:** FYS

Introductory level course covering topics of special interest to first-year students. Offered only as a First-Year Seminar.

Every year. 3 Credits

TH-235 History of Theatre**LASC Categories:** GP, TLC, DAC

Survey of world theatre including from its ritual origins through the classical era, medieval era, the renaissance, the restoration, the modernist revolution to the present day. This global approach includes historical examples from Europe, Africa, Asia, North America, and South America.

Fall and Spring and every year. 3 Credits

TH-246 Voice and Movement**Prerequisites:** TH-145.

Training to strengthen the natural voice, develop diction, learn period movement and develop spatial awareness on and off stage.

Every year. 3 Credits

TH-255 Second-Year Theatre Practicum

Practical work in Theatre production for second-year students.

Every year. 1 Credit

TH-263 Concepts of Theatre Design

LASC Categories: CA

This is a fundamental design course for live theatre, but will also apply to other design fields. Drawing, both freehand and digital, will be studied. Students will learn the elements and principles of design, and how to apply them to Scenic, Costume and Lighting Design, as well as other modes of 2-dimensional and 3-dimensional art. Additive and subtractive color theory will be covered. Students will learn the specialized language of design and will study how to approach the three areas of design aforementioned. Other or on demand and every year. 3 Credits

TH-270 History of American Entertainment I

LASC Categories: CA, USW

An historical survey of American popular entertainments from the Colonial period through the end of the nineteenth century.

Every year. 3 Credits

TH-271 History of American Entertainment II

LASC Categories: CA, USW

An historical survey of American popular entertainments from the rise of film and radio through the great American musicals.

Every year. 3 Credits

TH-272 History of Costume

LASC Categories: CA

The history of clothing from ancient times to the present. Lecture/discussion and a research project on a chosen era or culture.

Every 2-3 years. 3 Credits

TH-274 Stage Management

LASC Categories: CA, QAC

An introduction to the craft of stage management focussing on the techniques, responsibilities and duties necessary to manage both rehearsals and performances.

Every year. 3 Credits

TH-290 Theatre for Young Audiences

LASC Categories: ICW, CA, DAC

Organization of children's theatre, script selection, visual design, rehearsal and performance. Investigation of creative drama as a teaching tool in elementary education.

Spring only and other or on demand. 3 Credits

TH-292 Applied Theatre and Community Engagement

LASC Categories: CA, ICW

Principles and techniques of leading improvised dramatic activities with children and adults. Involves sensory awareness, imagination, movement and story dramatizations.

Every year. 3 Credits

TH-321 Rehearsal and Performance

LASC Categories: CA

Public performance of full-length stage productions under faculty direction. Students assume performance and/or production "roles" as described in departmental manual.

Spring only and every year. 3 Credits

TH-345 Acting II

Prerequisites: TH-145.

Further development of acting skills with emphasis on stage-acting technique.

Every year. 3 Credits

TH-348 Stage Combat

LASC Categories: CA, ICW

Prerequisites: TH-191 or TH-145.

Training in armed and unarmed combat for the stage. emphasis will be placed on safety in the choreography of stage fighting.

Every year. 3 Credits

TH-355 Third-Year Theatre Practicum

Practical work in Theatre production.

Fall and Spring and every year. 1 Credit

TH-360 Scenic Design for Theatre

LASC Categories: CA

Scenic Design for Theatre will include research, drafting, drawing and rendering, model building and presentation of scenic designs for assigned plays.

Every year. 3 Credits

TH-370 Costume Design for Theatre

LASC Categories: CA

Conceptualization, collaboration, research, figure drawing and rendering, swatching, and presentation of costume designs for assigned plays.

Every year. 3 Credits

TH-380 Directing

Prerequisites: TH-145.

Script selection, casting, scene analysis, blocking, rehearsal techniques and other concerns of the theatrical director. Students direct a short scene and short plays.

Every 2-3 years. 3 Credits

TH-390 Lighting Design for Theatre**LASC Categories:** CA

Study and exercises in conceptualization, collaboration, design presentation, qualities and functions of light, drafting the light plot, and control of theatrical lighting.

Every year. 3 Credits

TH-399 Special Topics in Theatre

Will include study of topics on an as needed basis, (i.e. in conjunction with a production, or a course for advanced students who wish to pursue further study).

Other or on demand and other or on demand. 3 Credits

TH-405 Independent Study in Theatre

Offers motivated students the opportunity to study a theatre topic not covered in the established curriculum.

Other or on demand and other or on demand. 1-6 Credits

TH-408 Directed Study: Theatre

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

TH-435 Internship in Theatre

Provides an opportunity for students in good standing to gain practical experience with professional theatre or related organizations.

Other or on demand and other or on demand. 1-12 Credits

TH-455 Theatre Capstone**LASC Categories:** CAP, WAC**Prerequisites:** TH-155 and TH-255 and TH-355

Theatre students will create a senior thesis project/capstone in acting, directing, design, playwriting, craft or dramaturgy, chosen in consultation with a faculty advisor and demonstrating the skills learned in their studies. The capstone may be part of a mainstage production or a student generated project. Each capstone project will be accompanied by a written analysis showing their research or full-documentation of their process.

Fall and Spring and every year. 3 Credits

Visual and Performing Arts Courses**VP-155 First Year Practicum**

Students will put into practice interdisciplinary concepts, ideas, and techniques at an experiential level.

Spring only and every year. 1 Credit

VP-193 Special Topics in Visual and Performing Arts: First-Year Students**LASC Categories:** FYS

Introductory level courses covering topics of special interest to first-year students. Offered only as First-Year Seminar.

Every year. 3 Credits

VP-200 Critical Thinking in the Arts**LASC Categories:** CA, TLC, DAC, QAC

The experience of art, music, and theatre to develop individual critical thinking in the similarities and differences among the arts.

Every year. 3 Credits

VP-210 Contemporary Dance Styles I**LASC Categories:** CA

The study and movement of dance vocabularies in one or more contemporary and modern styles.

Every year. 3 Credits

VP-255 Second Year Practicum**Prerequisites:** VP-155

Students will put into practice interdisciplinary concepts, ideas, and techniques at an exploratory level.

Spring only and every year. 1 Credit

VP-355 Third Year Practicum**Prerequisites:** VP-155 and VP-255

Students will put into practice interdisciplinary concepts, ideas, and techniques at an experimental level.

Spring only and every year. 1 Credit

VP-364 Interdisciplinary Arts Theory**Prerequisites:** VP-200

An exploration of interdisciplinary art theory drawing on theories and critical writings from Art, Music, and Theatre from a variety of historical periods.

Fall and Spring and every year. 3 Credits

VP-365 Interdisciplinary Arts Practice**Prerequisites:** VP-200

Examines examples of contemporary modes of interdisciplinary works of music, theatre, and visual art with the goal of developing an individual, creative aesthetic.

Spring only and every year. 3 Credits

VP-405 Independent Study in the Arts**Prerequisites:** Permission of Instructor

An opportunity for advanced students to examine topics not ordinarily covered in other arts courses.

Every year. 1-6 Credits

VP-408 Directed Study: Visual & Performing Arts

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

VP-410 Special Topics in the Arts

Study of topics not otherwise covered in the curriculum. [Prerequisite: [2 VP courses]

Fall and Spring and every year. 3 Credits

VP-435 Internship in the Arts

Advanced students gain practical experience in a working arts environment.

Fall and Spring and every year. 3-12 Credits

VP-455 Arts Capstone/Senior Thesis**LASC Categories:** WAC, CAP**Prerequisites:** VP-200, and EN-102

Students design and create a work or works of art, music, or theatre for public presentation.

Every year. 3 Credits

Program Learning Outcomes

Art

- Acquire the principles of art and design.
- Demonstrate knowledge of traditional and contemporary art practices.
- Cultivate aesthetic and conceptual judgments.
- Develop skills in critical thinking and analysis.
- Demonstrate effective written, oral, and visual communication skills.
- Produce artwork in a variety of media and techniques.

Theatre

- Acquire the critical language for the analysis and interpretation of theatre
- Demonstrate aesthetic literacy over historical periods and cultures that pertain to the production and interpretation of theatre
- Apply theoretical knowledge and concepts to the creation and critical analysis of theatre
- Utilize critical thinking skills in the production of theatre

Visual and Performing Arts

- Acquire the critical language for the analysis and interpretation of art forms
- Demonstrate aesthetic literacy over historical periods and cultures that pertain to the production and interpretation of art
- Apply theoretical knowledge and concepts to the creation and critical analysis of art forms
- Utilize critical thinking skills in the production of creative work

Visual and Performing Arts Major

Aligning itself with the evolving trends of the 21st century arts world, Worcester State University offers several programs for its visual and performing arts students, including two majors, double students a Major in Interdisciplinary Visual and Performing Arts, one of the few interdisciplinary arts majors for education students, and four minors. in the country.

The Major in Interdisciplinary Visual and Performing Arts is one of the few interdisciplinary arts majors in the country. With this major, students go beyond the standard coursework in art, music, and theatre to understand the larger world of visual and performing arts. WSU's VPA major allows students to gain an interdisciplinary view of the arts and an understanding of how to use one art form to inform the other, while also gaining an in-depth knowledge of the art forms that most excite them.

The interdisciplinary major is designed to provide students with a strong foundation in art, music, and theatre, and both a theoretical and practical understanding about how they interact in an interdisciplinary interdisciplinary environment. Core courses promote critical thinking, and prepare

students intellectually and creatively to complete their capstone/senior thesis projects and launch careers in the arts. Students craft the major to fit their areas of interest – art, music, theatre, etc. - through electives chosen in consultation with advisors. - through electives chosen in consultation with advisors. Students apply their coursework to the production, performance, and critical study of creative work through through a multitude of exhibit and performance opportunities.

Requirements for a VPA Major

Minimum requirement for the major is completion of 45 credits, including a five course (15 credit) Foundation curriculum, a seven course (15 credit) Interdisciplinary Core, and 15 credits of electives chosen in consultation with an advisor.

Code	Title	Credits
Interdisciplinary Foundation and Core Courses		(45 credits)
<i>Foundation Courses</i>		15
Select 2 courses from 2 foundations and 1 course from the third		
<i>Foundation in Art</i>		
AR-118	Global Art History	
AR-123	Design Fundamentals	
<i>Foundation in Music</i>		
MU-101	Fundamentals of Music and Aural Skills	
MU-280	History of Music	
<i>Foundation in Theatre</i>		
TH-126	Script Analysis	
TH-145	Acting I	
<i>Core Courses</i>		
VP-155	First Year Practicum	1
VP-200	Critical Thinking in the Arts	3
VP-255	Second Year Practicum	1
VP-355	Third Year Practicum	1
VP-364	Interdisciplinary Arts Theory	3
VP-365	Interdisciplinary Arts Practice	3
VP-400		3
<i>Disciplinary Electives</i>		15
Five courses to be taken across the department in AR, MU, TH, or VP. To be selected with advising based on student interest and student need.		
Total Credits		45

Visual and Performing Arts and Education, Double Major

Students who double major in Early Childhood or Elementary Education will take a three-part system of courses that include: foundation courses across the department’s three disciplines of art, music, and theatre; courses in the interdisciplinary core of the department; and courses on pedagogy and elective courses in a student’s chosen emphasis in the arts.

Requirements for an Emphasis in Art for Students who double major in Visual and Performing Arts and Early Childhood or Elementary Education

Code	Title	Credits
Foundation Courses		(12 credits)
Choose 4 courses, 2 from 1 discipline and 1 from each remaining discipline for a total of 12 credits:		
AR-118	Global Art History	
AR-123	Design Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-280	History of Music	
TH-126	Script Analysis	
TH-145	Acting I	
Core Courses		(12 credits)
VP-155	First Year Practicum	1
VP-200	Critical Thinking in the Arts	3
VP-255	Second Year Practicum	1
VP-355	Third Year Practicum	1
VP-364	Interdisciplinary Arts Theory	3
or VP-365	Interdisciplinary Arts Practice	
VP-455	Arts Capstone/Senior Thesis	3
Emphasis in Art for Students who double major in Early Childhood or Elementary Education		(12 credits)
<i>Art Pedagogy</i>		
AR-260	Visual Arts in the Schools	3
<i>Electives in Art</i>		
Art electives		9
Total Credits		36

Requirements for an Emphasis in Music for Students who double major in Visual and Performing Arts and Early Childhood or Elementary Education

Code	Title	Credits
Foundation Courses		(12 credits)
Choose 4 courses, 2 from 1 discipline, 1 from each remaining discipline for a total of 12 credits:		12
AR-118	Global Art History	
AR-123	Design Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-280	History of Music	
TH-126	Script Analysis	
TH-145	Acting I	
Core Courses		(12 credits)
VP-155	First Year Practicum	1
VP-200	Critical Thinking in the Arts	3
VP-255	Second Year Practicum	1
VP-355	Third Year Practicum	1
VP-364	Interdisciplinary Arts Theory	3
or VP-365	Interdisciplinary Arts Practice	
VP-455	Arts Capstone/Senior Thesis	3
Emphasis in Music for Students who double major in Early Childhood or Elementary Education		(12 credits)
<i>Music Pedagogy</i>		
MU-237	Music in the Elementary School	3
<i>Electives in Music</i>		
Music Electives		9
Total Credits		36

Requirements for an Emphasis in Theatre for Students who double major in Visual and Performing Arts and Early Childhood or Elementary Education

Code	Title	Credits
Foundation Courses		(12 credits)
Choose 4 courses, 2 from 1 discipline, 1 from each remaining discipline for a total of 12 credits:		12

AR-118	Global Art History	
AR-123	Design Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-280	History of Music	
TH-126	Script Analysis	
TH-145	Acting I	
Core Courses		(12 credits)
VP-155	First Year Practicum	1
VP-200	Critical Thinking in the Arts	3
VP-255	Second Year Practicum	1
VP-355	Third Year Practicum	1
VP-364	Interdisciplinary Arts Theory	3
or VP-365	Interdisciplinary Arts Practice	
VP-455	Arts Capstone/Senior Thesis	3
Emphasis in Theatre for Students who double major in Early Childhood or Elementary Education		(12 credits)
<i>Theatre Pedagogy</i>		
TH-290	Theatre for Young Audiences	3
or TH-292	Applied Theatre and Community Engagement	
<i>Electives in Theatre</i>		
Theatre Electives		9
Total Credits		36

Requirements for an Emphasis in Visual and Performing Arts for Students who double major in Early Childhood or Elementary Education

Code	Title	Credits
Foundation Courses		(12 credits)
Choose 4 courses, 2 from 1 discipline, 1 from each remaining discipline for a total of 12 credits:		12
AR-118	Global Art History	
AR-123	Design Fundamentals	
MU-101	Fundamentals of Music and Aural Skills	
MU-280	History of Music	
TH-126	Script Analysis	
TH-145	Acting I	
Core Courses		(12 credits)
VP-155	First Year Practicum	1
VP-200	Critical Thinking in the Arts	3

VP-255	Second Year Practicum	1
VP-355	Third Year Practicum	1
VP-364 or VP-365	Interdisciplinary Arts Theory Interdisciplinary Arts Practice	3
VP-455	Arts Capstone/Senior Thesis	3
Emphasis in Visual and Performing Arts for Students who double major in Early Childhood or Elementary Education		(12 credits)
<i>Pedagogy</i>		
Choose 2 courses from separate disciplines.		6
AR-260	Visual Arts in the Schools	
MU-237	Music in the Elementary School	
TH-290	Theatre for Young Audiences	
TH-292	Applied Theatre and Community Engagement	
<i>Electives in Art, Music, Theatre, and Visual and Performing Arts</i>		
Art, Music, Theatre, and VPA Electives		6
Total Credits		36

Art Major

The Art Major offers a 45-credit program of study that emphasizes the integration of broad-based studio art training and arts research with the development of creativity, communication, and critical thinking to prepare students for graduate studies or careers in a wide range of arts-related fields, including arts and cultural entrepreneurship, museum studies, arts administration, arts and community development, etc. Students in the art program have the freedom to explore a specified area of interest, including drawing, painting, illustration, sculpture, printmaking, or history and gallery/museum studies.

As part of the new major’s coursework, 30 credits come from a range of introductory and intermediate studio courses, yearly Art Practicum where students are given the opportunity to apply their knowledge and begin to develop their own unique artistic voice, and a menu of student- selected elective courses. This progressive learning program prepares the students for the Thesis Seminar and Capstone where they will develop an independent project that combines creative work in the studio with research informed by their chosen topic or concept.

In addition to four dedicated studios with tools and equipment for printmaking, painting and drawing, design and sculptural work serving as

laboratories, art faculty and staff operate the Mary Cosgrove Dolphin Gallery. The Gallery gives students the opportunity to immerse themselves in current art, artists and art trends, show their own work, and provides a practical setting to learn the inner workings of a professional gallery through internships, course work and exhibition work.

Graduates with a B.A. in Art will be able to do the following:

- Students will acquire the principles of art and design.
- Students will demonstrate knowledge of traditional and contemporary art practices.
- Students will cultivate aesthetic and conceptual judgments.
- Students will develop skills in critical thinking and analysis.
- Students will demonstrate effective written, oral, and visual communication skills.
- Students will produce artwork in a variety of media and techniques.

Worcester State University also offers a Minor in Art (p. 462).

Code	Title	Credits
<i>Required Courses</i>		
AR-118	Global Art History	3
AR-123	Design Fundamentals	3
AR-140	Drawing Fundamentals	3
AR-210	Drawing and Painting Studio	3
AR-215	Art Theory and Practice	3
AR-221	The Work of Art	3
AR-225	Art Since Mid-20th Century	3
AR-235	3D Sculpture Studio	3
AR-308	Thesis Seminar	3
AR-455	Thesis Capstone	3
Electives to be selected with advising		15
<i>Suggested Electives</i>		
AR-130	Painting I	
AR-150	Life Studio I	
AR-165	Creating Cultural Forms	
AR-191	Special Topics in Art	
AR-230	Printmaking	
AR-240	Watercolor	
AR-270	Driftwood to Dumpsters	
AR-285	History of Photography	

AR-330	Intermediate Printmaking
AR-350	Special Topics in Art
AR-400	Ind Study: Art
AR-402	Internship in Art
AR-408	Directed Study: Art
<i>Other Electives</i>	
AR-100	Cross Media Studio
AR-260	Visual Arts in the Schools
Total Credits	45

Art Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

The Art Minor provides students with opportunities for studio practice and for the study of the history of art. A balance of introductory, advanced and elective courses combine to build a solid foundation in art. Opportunities to exhibit work in our campus gallery are part of the Art Minor experience.

Requirements for a Minor in Art

18 credits in art courses at the 100, 200 and 300-level.

Code	Title	Credits
<i>Required Courses</i>		
AR-123	Design Fundamentals	3
SELECT	AR-130 Painting 1 OR AR-140 Drawing Fundamentals OR AR-210 Drawing and Painting Studio	3
AR-235	3D Sculpture Studio	3
<i>Elective Courses</i>		
	Art History Elective	3
	AR Elective 300+	3
	AR Elective	3
Total Credits		18

Music Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

Students develop musicianship through instrumental and vocal lessons, study performance as members of ensembles, and complete courses in composition, history, and theory of music.

Students must audition for individual instrumental or vocal lessons.

Requirements for a Minor in Music

Code	Title	Credits
Music Theory		(3 credits)
MU-101	Fundamentals of Music and Aural Skills	3
or MU-205	Music Theory I	
Music History		(3 credits)
MU-280	History of Music	3
Music Performance		(3 credits)
Three semesters of applied music lessons at 1 credit, chosen from:		3
MU-102	Applied Music	
or MU-104	Class Piano	
or MU-106	Class Guitar	
MU-202	Applied Music	
MU-302	Applied Music	
MU-402	Applied Music	
Ensemble		(3 credits)
Three semesters of study in any ensemble at 1 credit per semester, chosen from:		3
MU-220	Chorus	
MU-222	African Drumming	
MU-228	Piano Ensemble	
MU-300	Chorale	
MU-321	Small Ensemble	
MU-326	Chamber Orchestra	

Other ensemble approved by the Department	
Electives	(6 credits)
Six elective credits in any other class with an MU prefix, except MU 115 and MU 100	6
Total Credits	18

MU-305	Music Theory II	3
MU-375	Sound Synthesis	3
MU-385	Composition III	1
SELECT	MU Elective	3
Total Credits		22

Composition and Music Technology Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a music composition and technology minor, students apply a strong foundation in musical literacy and personal musicianship to composition and emerging digital technologies. Traditional courses in music theory, performance, and composition prepare students for digital application of music.

Students perform original compositions as well as compose original music for student video and film projects and theatrical productions. Based on personal interest, students choose from a variety of fields to complete the elective component of this minor. These include creative writing, film and video games, web design, and practical business management in addition to visual art, music, theater, and interdisciplinary arts courses.

Requirements for a Minor in Composition and Music Technology

22 credits as follows:

Code	Title	Credits
MU-102 & MU-104	Applied Music and Class Piano	2
MU-185	Composition I	3
MU-205	Music Theory I	3
MU-275	Computers and Music	3
MU-285	Composition II	1

Theatre Major

The Theatre Major offers a 39-credit program that combines marketable, hands-on production experience with an extensive variety of coursework to prepare students for a career in live theatre production, its associated industries, or advanced graduate education. Students in the theatre program acquire essential skills and knowledge in performance, design, technology, and dramaturgy involved in the production and study of theatrical arts. An emphasis is placed on the practical techniques and the critical analysis necessary for successful productions.

As part of the new major's coursework, 24 credits come from required courses in Acting, Design, Technology, and Dramaturgy. The remaining credits are in the form of wide-ranging electives from across theatre's areas of study. Those studies complement required work on productions and a senior thesis project. For their capstone project, students can focus their studies on design and technology (scenic/costume/lighting/sound), dramaturgy, acting, or directing.

Fuller Theater and the scenic and costume shops serve as laboratories where students hone their skills on departmental and student productions.

The production season is chosen to provide students with exposure to a range of styles and genres, and opportunities for a diversity of students. Within this portfolio of productions, the program ensures that the work is relevant to our communities, speaks to our audiences, and is produced in styles that fire the audience's imagination.

Graduates with a B.A. in Theatre will be able to do the following:

- Acquire the critical language for the analysis and interpretation of theatre
- Demonstrate aesthetic literacy over historical periods and cultures that pertain to the production and interpretation of theatre

- Apply theoretical knowledge and concepts to the creation and critical analysis of theatre
- Utilize critical thinking skills in the production of theatre

Worcester State University also offers a Minor in Theatre (p. 464).

Requirements for a Theatre Major

Required Core Courses

Code	Title	Credits
TH-126	Script Analysis	3
TH-145	Acting I	3
TH-155	First-Year Theatre Practicum	1
TH-175	Introduction to Stagecraft	3
TH-235	History of Theatre	3
TH-255	Second-Year Theatre Practicum	1
TH-263	Concepts of Theatre Design	3
TH-274	Stage Management	3
TH-355	Third-Year Theatre Practicum	1
TH-455	Theatre Capstone	3
Total Credits		24

Elective Courses - 15 credits total; 9 credits must be at the 300-level or above.

Code	Title	Credits
TH-191	Introduction to the Theatre	3
TH-246	Voice and Movement	3
TH-270	History of American Entertainment I	3
TH-271	History of American Entertainment II	3
TH-272	History of Costume	3
TH-290	Theatre for Young Audiences	3
TH-292	Applied Theatre and Community Engagement	3
TH-321	Rehearsal and Performance	3
TH-345	Acting II	3
TH-348	Stage Combat	3
TH-360	Scenic Design for Theatre	3
TH-370	Costume Design for Theatre	3
TH-380	Directing	3
TH-390	Lighting Design for Theatre	3
TH-399	Special Topics in Theatre	3

TH-405	Independent Study in Theatre	1-6
TH-408	Directed Study: Theatre	3
TH-435	Internship in Theatre	1-12

Theatre Minor

Recognizing the interdisciplinary nature of the arts and how the arts often integrate into and enhance students' study in other disciplines such as criminal justice, communication, business and psychology, the Visual and Performing Arts Department offers minors in its three disciplines of Art, Music, and Theatre. A minor in the arts allows students to further explore and develop their affinity for the arts and their artistic talents.

As a theatre minor, students complete courses covering an overview of theatre, acting and technical skills. Two additional courses are required in a student's chosen area of interest. Students also participate in at least one stage production offering an opportunity to apply the learned skills in a fully realized stage production.

Requirements for a Minor in Theatre

18 credits comprised of the following courses:

Code	Title	Credits
TH-145	Acting I	3
TH-175	Introduction to Stagecraft	3
TH-191	Introduction to the Theatre	3
TH-321	Rehearsal and Performance	3
Select 2 additional 3 credit theatre courses		6
Total Credits		18

World Languages

Department of World Languages

The Department of World Languages offers courses in Spanish (major, minor), and Arabic, as well as a program in Latin American and Latinx Studies (minor) taught in English.

Students with interest in international business, international relations, careers in the health professions, nursing, education, global studies, ethnic studies, or criminal justice, among others, are strongly encouraged to advance their language skills by completing a minor or double major, in order to become much needed bilingual professionals.

LASC requirements can also be fulfilled with language courses in the following categories: "Thought, Language, and Culture" (TLC), "Global Perspectives" (GP), "Creative Arts" (CA), "US & Role in the World" (USW), Individual/Community Well Being (ICW), "Diversity Across the Curriculum" (DAC), and "Writing Across the Curriculum" (WAC).

Students who have earned a Seal of Biliteracy will be granted 12 WSU credits in that language, equivalent to SP-101 / FR-101 / WL-101, SP-102 / FR-102 / WL-102, SP-210 / FR-210 / WL-210, and SP-211 / FR-211 / WL-211. Students with a Seal of Biliteracy are encouraged to continue their language studies by enrolling in a 300-level language course.

Spanish Proficiency Test

The Spanish proficiency test allows students to earn WSU credit for Spanish language classes FOR FREE. It also determines at what level students should begin taking Spanish classes at WSU.

Students need to select the level that best corresponds with their knowledge and pass the test at that level. If they pass the test, then they earn credit for that level and all previous levels. There are 4 tests available, one for each course of the language sequence: 101, 102, 210 & 211.

Please refer to the FAQ below for more information. If you have any other questions not answered here or need to make an appointment to take the test, please email spanishtest@worchester.edu.

FLATS Test

Students must register to take the FLATS test for \$50 (online tests) or for \$75 (paper only tests) through the following website: <https://humflats22.byu.edu/signupall.php>

The Director of Spanish placement in the Department of World Languages will serve as a proctor for the test. Information regarding the FLATS test will be posted on the website for the Department of World Languages.

Scores from the FLATS tests will be sent through USPS to the school and communicated to the Registrar so that appropriate credit can be applied to students' degree audits. Students will receive 6 credits if they pass the beginning section, and 12 credits if they pass both the beginning and intermediate sections. For more information about the test, please visit <https://info.flats.byu.edu/faqs/>

The languages coded as WL should be identified when credit is applied to the student's degree audit.

Students will receive 6 credits (101 and 102) for passing the beginning section and 12 credits (101, 102, 210, & 211) for passing both the beginning and intermediate sections. For students who pass the FLATS test, the credits to be applied are as follows:

- For French: FR 101, 102, 210 & 211
- For Arabic: AR 101, 102, 210 & 211
- For other languages: WL 101, 102, 210 & 211
- Arabic (p. 474)
- French (p. 474)
- Latin American and Latinx Studies (p. 475)
- Spanish (p. 476)

Arabic Faculty

Mohamed Brahimi, Instructor (2009) B.A., M.A., Suffolk University.

French Faculty

Judith Jeon-Chapman, Professor (1993) B.A., College of St. Benedict; M.A., Ph.D., University of Washington

Spanish Faculty

Antonio Guijarro-Donadiós, Department Chair, Professor (2014), B.A., Universidad Complutense de Madrid, Spain; M.A., Salford University, England; M.A., Ph.D., University of Connecticut

Elizabeth Osborne, Associate Professor (2016), B.A., The George Washington University; M.A., Universidad de Chile; Ph.D., Stony Brook University

Ana Pérez-Manrique, Professor (2006), B.A., Universidad de Malaga, Spain; M.A., University of South Carolina; Ph.D., Florida State University

Naida Saavedra, Associate Professor (2016), B.A., Universidad de Zulia, Venezuela; M.A., Ph.D., Florida State University

World Language Courses

AB-101 Beginning Arabic I

LASC Categories: TLC

Introduction to the Arabic language and cultures of the Arabic-speaking world.

3 Credits

AB-102 Beginning Arabic II

LASC Categories: TLC

Prerequisites: AB-101

A continuation of AB 101, designed for students to acquire additional vocabulary, grammar, and reading ability.

3 Credits

AB-210 Intermediate Arabic I

LASC Categories: TLC

Prerequisites: AB-102

Instruction in advanced rules of Arabic grammar and verb system, and in advanced writing and reading.

3 Credits

AB-211 Intermediate Arabic II

LASC Categories: TLC

Prerequisites: AB-210

Reading and discussion of texts dealing with literature, arts, geography, history, and culture of Arabic-speaking world.

3 Credits

FR-101 Beginning French I

LASC Categories: TLC, GP

Fundamentals of pronunciation, patterns of speech, basic structures. Develops listening, speaking, reading, and writing skills.

Fall and Spring and every year. 3 Credits

FR-102 Beginning French II

LASC Categories: TLC, GP

Continuation of FR101.

Fall and Spring and every year. 3 Credits

FR-210 Intermediate French I

LASC Categories: TLC, GP

Prerequisites: FR-102

Review of fundamentals and presentation of more complex grammatical features; development of conversational skills; selected readings; written and oral composition.

Fall and Spring and every year. 3 Credits

FR-211 Intermediate French II

LASC Categories: TLC, GP

Prerequisites: FR-210

Continuation of FR210.

Fall and Spring and every year. 3 Credits

FR-321 Advanced French Composition I

LASC Categories: TLC, WAC

Prerequisites: EN-102 or EN-250 or EN-202

Practice in diverse composition styles as well as review of grammar, and introduction to reading French texts. Conducted in French. [Prerequisite: Two 200-level French courses.]

Other or on demand. 3 Credits

FR-323 Advanced French Conversation

LASC Categories: TLC

Prerequisites: FR-211 or any 300 level French course.

Development of fluency and accuracy, free discussions, prepared oral presentations, practical exercises in oral expression. Conducted in French. Spring only and other or on demand. 3 Credits

FR-331 General French Civilization

LASC Categories: TLC

Prerequisites: 6 credits department FR At level 200; Significant aspects of French history, geography, cultural achievements to world War I. Conducted in French. [Prerequisite: Two FR 200 level courses or equivalent.]

Other or on demand. 3 Credits

FR-341 Introduction to French Literature

LASC Categories: TLC, GP, DAC

Prerequisites: 6 credits department FR At level 200;

Major periods and genres of French literature; for majors and minors. Conducted in French.

[Prerequisites: Two FR 200 level courses or equivalent.]

Other or on demand. 3 Credits

FR-342 Survey of French Literature I**LASC Categories:** TLC

Prerequisites: 6 credits department FR At level 200; Selections from the epic, drama, lyric poetry, and the major prose writers to major authors of the classical period. Conducted in French. [Prerequisite: Two FR 200 level courses or equivalent.]

Every 2-3 years. 3 Credits

FR-344 Survey of French Literature II**LASC Categories:** TLC

Prerequisites: 6 credits department FR At level 200; Major authors of the eighteenth and nineteenth centuries. Conducted in French. [Prerequisites: Two FR 200 level courses.]

Every 2-3 years. 3 Credits

FR-346 Twentieth Century French Literature**LASC Categories:** TLC, GP

Prerequisites: 6 credits department FR At level 200; Major novelists, dramatists and poets from the turn of the century to the present. Conducted in French. [Two FR 200 level courses or equivalent.]

Other or on demand. 3 Credits

FR-403 Teaching Assistantship French

Teaching Assistants in French will regularly attend the beginning or intermediate-level classes to which they are assigned to assist the professor. Suggested for advanced students of French.

Other or on demand. 3 Credits

FR-408 Directed Study: French

Other or on demand. 3 Credits

LA-150 Introduction to Latinx Cultures in the US**LASC Categories:** TLC, USW

This is an introductory course that discusses the Latinx experience in the US. Students examine issues of language, identity, culture, and immigration among Latinx communities in the US. Students explore the history of Latin American diaspora communities in the US in order to identify cultural traits and identity marks. By discussing these topics, students analyze the particular significance and contribution of Latinx people and their relationship with their countries of origin. In order to achieve that goal, students examine and compare different types of sources including official documents, media releases, films, and podcasts. The class will be conducted in English. Other or on demand and every year. 3 Credits

LA-350 Immigration, Dreamers, and Latinx Youth Issues

Students explore issues regarding Latinx immigration, citizenship, and the fate of Latinx youth in the US. Students examine US immigration policies and reforms focusing on Latinx populations and the current immigration debate. Through newspaper articles, scholarly articles, and films, students analyze and discuss relevant topics such as constitutional regulations related to documented and undocumented Latinx immigrants; Visa and Green Card issues, and access to education for young Latinx populations, including DREAMers and DACA students. Class discussions include legal, economic, and political issues related to immigration policies and the impact these have on youth. The class will be conducted in English.

Alternating and every 2-3 years. 3 Credits

LA-355 Latin American Fiction

This course is designed to familiarize students with Latin American works of fiction and to provide them with an overview of literature written throughout the region during the twentieth century. The course will focus on narrative and will discuss a variety of literary movements, aesthetics, and techniques such as realism, fantastic literature, magical realism, crime fiction, and postmodernism. Authors include Horacio Quiroga, María Luisa Bombal, Gabriel García Márquez, Adolfo Bioy Casares, Julio Cortázar, Rosario Ferré, Mario Vargas Llosa, among others. The class will be conducted in English.

Alternating and every 2-3 years. 3 Credits

LA-357 Latinx Podcasts**LASC Categories:** USW, DIV**Prerequisites:** EN-102.

In this seminar we will explore a wide range of topics regarding the Latinx experience in the United States. While listening to curated Latinx podcasts, students will examine issues of language, identity, culture, immigration, generational gaps, healthcare, politics, and economics among Latinx communities in the US. Latinx podcasts have become a tool to being in sync with Latinx and Latin American current issues, providing those who rely on the internet to obtain information with an opportunity to access news rather than traditional media. We will also analyze news articles in order to make connections, criticize, and identify informative trends.

Other or on demand and every 2-3 years. 3 Credits

LA-360 Survey of Latin American Cinema

Organized both chronologically and nationally, the course focuses on clusters of Latin American films (both feature and documentary) that have intervened in a series of social and cultural debates: colonization, migration, modernity, tradition, inequality, national utopias, etc. Students develop their skills in film analysis as they examine the specific role of film in representing, contesting, or defining questions of national, personal, and cultural identity in the region. Class discussions and assignments familiarize students with the characteristics of the distinct film aesthetics and socio-political and cultural contexts in which these works were produced. The class will be conducted in English.

Other or on demand and every 2-3 years. 3 Credits

SP-101 Beginning Spanish I

LASC Categories: TLC, GP

Basic oral and written proficiency for daily communication; may be taken as a self-contained unit or as a basis for further development. Audio-visual method. Closed to students who have already taken a 300-level* Closed to Native/Heritage speakers. Native and/or Heritage speakers are encouraged to take SP390 instead. * Unless recommended to a specific student by the Department of World Languages, on a per-case basis. Fall and Spring and every year. 3 Credits

SP-102 Beginning Spanish II

LASC Categories: TLC, GP

Continuation of SP101. This course is intended for students with at least one year of past Spanish instruction in high school, or one semester in college at the beginning level. Closed to students who have already taken a 300-level Spanish course*. Native and/or Heritage speakers are encouraged to take SP390 instead*. * Unless recommended to a specific student by the Department of World Languages, on a per-case basis.

Fall and Spring and every year. 3 Credits

SP-191 Special Topics in Spanish

LASC Categories: TLC, DAC, GP

An introductory level course in Spanish on current or specialized topics.

Every year. 3 Credits

SP-193 First Year Seminar Spanish

LASC Categories: FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

Every year. 3 Credits

SP-210 Intermediate Spanish I

LASC Categories: TLC, GP

This course is a review of language constructions and everyday vocabulary at a slighter faster pace than an elementary course. Grammar review starts with the most basic structures, such as present, preterite, and imperfect tenses, *ser/estar*, *por/para*, command forms, pronouns, and ends with present subjunctive. Vocabulary fields include feelings and emotions; urban living; family relationships; the media; and the environment. Readings, videos, and short films related to different Spanish speaking countries will add a cultural component to the course. This course is intended for students with 2 years of past Spanish instruction. Closed to students who have already taken a 300-level* Closed to Native/Heritage speakers. Native and/or Heritage speakers are encouraged to take SP390 instead. * Unless recommended to a specific student by the Department of World Languages, on a per-case basis. Fall and Spring and every year. 3 Credits

SP-211 Intermediate Spanish II

LASC Categories: TLC, GP

Prerequisites: SP-210 or appropriate placement score.

Continuation of SP210. [Formerly SP213.] Closed to students who have already taken a 300-level* Closed to Native/Heritage speakers. Native and/or Heritage speakers are encouraged to take SP390 instead. * Unless recommended to a specific student by the Department of World Languages, on a per-case basis. Fall and Spring and every year. 3 Credits

SP-290 Introduction to Medical Spanish**LASC Categories:** ICW, TLC**Prerequisites:** SP-211 or above or have 3 years of language instruction.

Students will learn basic phrases in Spanish as related to their daily activities in various health fields. This course focuses on language used in health professions as well as cultural situations, which doctors, technicians, nurses, and EMTs may experience. By familiarizing students with conversational and medical Spanish, it will enable students to apply their learning to real-world situations, to assist in communications, and ultimately to break down the barrier between doctors and patients. Designed for students to gain beginning-level competence in Medical Spanish topics such as pediatrics, women's health, physical exams, dental care, checkups, and hospital visits. Fall only and every year. 3 Credits

SP-291 Foundations of Medical Spanish**LASC Categories:** ICW, TLC**Prerequisites:** SP-211 or above or have 3 years of language instruction.

Students will learn basic phrases in Spanish as related to their daily activities in various health fields. This course focuses on language used in health professions as well as cultural situations, which doctors, technicians, nurses, and EMTs may experience. By familiarizing students with conversational and medical Spanish, it will enable students to apply their learning to real-world situations, to assist in communications, and ultimately to break down the barrier between doctors and patients. Designed for students to gain beginning-level competence in topics such as nutrition, emergencies, diabetes, hypertension, cancer, STIs, and addiction. Fall only and every year. 3 Credits

SP-292 Spanish for Women's Health**LASC Categories:** GP, ICW, DAC**Prerequisites:** SP-211 or above, or 3 years of language instruction.

In this course, students will develop communication skills in Spanish using information and vocabulary related to women's health. The content of this course focuses on language used in health professions as well as cultural situations. By familiarizing students with conversational Spanish and medical Spanish, this course will enable students to apply their learning to real-world situations, to assist in communications, and ultimately to break down the barrier between professionals and Spanish-speakers. Finally, the course's focus on cultural competency interrogates intersections between women's health and topics including but not limited to politics, economics, gender, sexuality, race and age. Spring only and every 2-3 years. 3 Credits

SP-293 Health and the Latino Community**LASC Categories:** HBS, TLC**Prerequisites:** SP-211 or above or have 3 years of language instruction.

Students will explore the ways in which language and culture shape the approach to health and healthcare experiences of Latinos in the US, and the factors that contribute to health disparities among this group (social, cultural, economic, environmental, and biological). Students will examine how health outcomes and risk factors are arrayed across different generations. Language barriers and sociolinguistic issues will also be studied. Students will identify and discuss causes of health inequities, survey major Latino health issues, and analyze the current and future context of Latino health and healthcare in the U.S.

Fall only and every 2-3 years. 3 Credits

SP-294 Spanish for the Nutrition and Dietitian Professional**LASC Categories:** GP, ICW**Prerequisites:** SP-211 or above, or 3 years of language instruction.

Students will develop their reading, writing, speaking, and listening skills in Spanish using information and vocabulary related to health, nutrition and dietetics. The content of this course focuses on language used in medical professions as well as cultural situations, which doctors, nutritionists, dietitians, nurses, public health workers, social workers, and other health professionals may experience. By familiarizing students with conversational Spanish and medical Spanish, this course will enable students to apply their learning to real-world situations, to assist in communications, and ultimately to break down the barrier between professionals and Spanish-speakers. Spring only and every 2-3 years. 3 Credits

SP-295 The Human Body: Spanish for Anatomy**LASC Categories:** ICW, TLC

This course focuses on the study of the Spanish terminology and basic grammatical structures needed to communicate effectively with Spanish-speaking patients and/or their families in a medical/health setting. It introduces the student to a wide array of vocabulary particular to the human body, body systems, organs, and their functioning, as well as some common diseases (and their symptoms) that affect each system. Class time will be devoted to practicing new vocabulary, via role-play, conversations with classmates, readings, and written activities. Conducted in Spanish. Fall only and every 2-3 years. 3 Credits

SP-315 Health and the Latino Community**LASC Categories:** HBS, TLC**Prerequisites:** SP-211 or above or have 3 years of Spanish language instruction. Take one course from SP-290 through SP-295.

Students will explore the ways in which language and culture shape the approach to health and healthcare experiences of Latinos in the US, and the factors that contribute to health disparities among this group (social, cultural, economic, environmental, and biological). Students will examine how health outcomes and risk factors are arrayed across different generations. Language barriers and sociolinguistic issues will also be studied. Students will identify and discuss causes of health inequities, survey major Latino health issues, and analyze the current and future context of Latino health and healthcare in the U.S.

Fall only and every 2-3 years. 3 Credits

SP-321 Advanced Spanish Composition I**LASC Categories:** TLC, WAC**Prerequisites:** SP-211 or appropriate placement score.

Facility in prose writing; study of style of selected authors; variety of expression through word discrimination, and advanced grammatical structures. [Prerequisites: Two SP 200 level courses.] Every year. 3 Credits

SP-322 Advanced Spanish Composition II**LASC Categories:** TLC, WAC**Prerequisites:** SP-321

Continuation of SP321.

Spring only and every year. 3 Credits

SP-323 Advanced Spanish Conversation Through Film**LASC Categories:** TLC, USW**Prerequisites:** Two 200-level or above Spanish courses.

The main objective of this course is to develop the student's oral proficiency and communication skills, while building on vocabulary, and learning about different aspects of the Hispanic cultural world with a special emphasis on immigration issues. Regarding the class format, it will be mainly based on group/pair discussions and debates, in which the students will ask questions, express their views, elaborate on their ideas, and defend them by providing supporting examples drawn from their own experiences, analysis, or comparisons.

Fall and Spring and every year. 3 Credits

SP-326 Spanish for the Professions**LASC Categories:** GP, TLC**Prerequisites:** SP-321.

Intensive practice with language and documents used in private and public sectors including business, medicine, communication, education and social services.

Fall and Spring and every year. 3 Credits

SP-327 Introduction to Translation**Prerequisites:** SP-321.

SP-327 will prepare you for careers in translation and will satisfy professional and academic requirements. It seeks to introduce the student to the techniques required for translation in a competitive environment. Within the context of the development of greater cross-cultural awareness, it will develop the following language skills for business purposes: speaking, listening comprehension, reading, writing, and translation.

Spring only and every year. 3 Credits

SP-331 Spanish Civilization**LASC Categories:** CA**Prerequisites:** SP-321

An historical survey of Spanish social, cultural, and political life. Conducted in Spanish.

Spring only and every year. 3 Credits

SP-332 Cultures of Latin America**LASC Categories:** DAC, GP**Prerequisites:** SP-321.

Introduction to the cultures and history of Latin America from pre-Columbian times to the present day. This course will introduce students to colonial, modern and contemporary cultural, historical and political issues that influenced the development of Latin American identities. The course is taught in Spanish.

Fall only and every year. 3 Credits

SP-333 Hispanic Presence in US**LASC Categories:** GP, USW, DAC**Prerequisites:** SP-321

Socio-cultural study of Hispanics in the United States, with a focus on major contemporary issues. Conducted un Spanish. [Prerequisites: Two SP 200 level courses.]

Fall only and every year. 3 Credits

SP-341 Readings in Spanish Literature**Prerequisites:** SP-321, and SP-323 or SP-324

Selected masterpieces from Middle Ages to present; social, cultural, and stylistic features of different periods. Recommended as a first course in Spanish literature.

Every 2-3 years. 3 Credits

SP-346 Latin American Theater**Prerequisites:** SP-321 or SP-390.

This course explores the historical and aesthetic development of Latin American Theater, focusing upon the particular factors that distinguish this theater from the Western European tradition.

We will analyze dramatic texts (from Argentina, Uruguay, Perú, México, Puerto Rico, Chile, Cuba, and Colombia), performances, and critical and theoretical perspectives to engage in the following questions: How does theater create and represent social and political transformation? How might we reevaluate civic responsibility and accountability through the study of audience? And, finally what are the major innovations in Latin American theater and performance in the 20th & 21st Centuries?

Other or on demand and every 2-3 years. 3 Credits

SP-347 Latin American Colonial Literature**Prerequisites:** SP-321 or SP-390.

This course will examine the colonial history of the American continent as interpreted through the various historical accounts written by eyewitnesses of the conquest. We will cover two centuries of writings from the late fifteenth to the seventeenth century. We will examine many historical accounts of the conquest, letters, documents, poetry and other historical artifacts to learn of the social, political, religious and economical significance of the colonial era. It combines an overview of the political economy of the region over three centuries with a study of how social groups interacted among themselves and with imperial rule over time.

Other or on demand and every 2-3 years. 3 Credits

SP-348 Contemporary Spanish Literature**Prerequisites:** SP-321

Literary works from the generation of 1898 to the present.

Every 2-3 years. 3 Credits

SP-349 Spanish-American Literature**Prerequisites:** SP-321

Representative works from South and Central American authors from the colonial period to the present.

Fall only and every 2-3 years. 3 Credits

SP-350 Advanced Spanish Grammar**LASC Categories:** TLC**Prerequisites:** SP-321 or SP-390

This applied linguistics advanced class provides a background of Spanish grammar, and delves into topics of the Spanish language that are usually challenging for English-speaking learners of Spanish. The goals are to clarify important aspects of the Spanish language and related cultural features, including uses of technology and assessment. Spring only and every 2-3 years. 3 Credits

SP-352 Lexicography and Terminology: Computer - Assisted Translation (cat)**Prerequisites:** SP-321.

This groundbreaking course provides both a practical and a theoretical framework to the study of lexicography and collection of terminology, an essential adjunct to the work of the translator. The role of international standards is pointed out, and principles of construction of terminological banks elaborated. Terminographic procedures in the context of computation technology and terminology management systems are discussed such as the use of the most Computer Assisted Translation (CAT) tools.

Spring only and every 2-3 years. 3 Credits

SP-355 Effective Teaching of a Foreign Language

Examines and evaluates effective teaching techniques and strategies as well as second-language acquisition theory for middle/secondary foreign language classrooms. The course is conducted in English for anyone interested in foreign language teaching. All students should have an advanced proficiency of a foreign language, meaning they have taken at least one 300-level course or its equivalent.

Fall only and every 2-3 years. 3 Credits

SP-390 Spanish for Native Speakers**LASC Categories:** TLC, DAC

This course is designed for native or heritage speakers of Spanish, who have oral proficiency but may not have received formal training in the language. These students were raised speaking Spanish at home. Therefore, this course is designed to work with the language base students already possess. All of four language skills (listening, speaking, reading, and writing) are emphasized, however, the purpose of the course is to develop reading and writing skills through cultural-related activities.

Fall and Spring and every year. 3 Credits

SP-395 The Human Body: Spanish for Anatomy**LASC Categories:** ICW, TLC**Prerequisites:** SP-211.

This course focuses on the study of the Spanish terminology and basic grammatical structures needed to communicate effectively with Spanish-speaking patients and/or their families in a medical/health setting. It introduces the student to a wide array of vocabulary particular to the human body, body systems, organs, and their functioning, as well as some common diseases (and their symptoms) that affect each system. Class time will be devoted to practicing new vocabulary, via role-play, conversations with classmates, readings, and written activities. Conducted in Spanish.

Other or on demand and every year. 3 Credits

SP-401 Advanced Study: Special Topics

Special topics in language, literature, civilization or field work of mutual interest to student and instructor. For advanced students.

Other or on demand. 3 Credits

SP-402 Independent Study: Spanish

Study of a special topic. Both content and eligibility are subject to departmental guidelines and approval. Other or on demand. 1-6 Credits

SP-403 Teaching Assistantship in Spanish

Teaching Assistants in Spanish will regularly attend the beginning or intermediate-level Language classes to which they are assigned to assist the professor. Other or on demand. 3 Credits

SP-408 Directed Study: Spanish

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

Other or on demand. 3 Credits

SP-453 Medical Translation

Prerequisites: SP-321 and SP-327.

This course focuses on building ENG/SPAN, SPAN/ENG translation competence in a health care setting, and provides guided practice in the translation of actual documents within the bio-medical and medical-legal fields. The course covers linguistic concepts, translation techniques, cultural & linguistic issues, professional ethics, medical genres & terminology, resources, and translation exercises. Through weekly translations, reading assignments, and text-analysis activities students will familiarize themselves with health text subgenres, such as patient education pamphlets, lab results, health certificates, prescriptions, informed consents, or health proxies. Students will learn to detect frequent translation challenges in health texts, and develop problem-solving strategies for these issues.

Fall only and every 2-3 years. 3 Credits

SP-454 Legal Translation: Eng/Span-Span/Eng

Prerequisites: SP-321 and SP-327.

This course is designed to provide a general overview of translation practices, techniques and specialized terminology in the discipline of legal translation. The main objective of this class is to teach students how to switch safely and accurately between the source and the target language (Spanish/English - English/Spanish). This class will include an intensive study of vocabulary, grammar, sentence structure, and translation difficulties in specialized legal texts. This class will be conducted in Spanish as the base language for lectures. However, given the nature of the course of study, we will fluctuate between Spanish and English, depending on the object.

Fall only and every 2-3 years. 3 Credits

SP-475 Internship: Spanish

LASC Categories: CAP

Prerequisites: SP-321 and SP-322 and SP-326

Prerequisites or Corequisite: SP-327

Provides majors practical experience in areas where their speaking, reading, and writing skills may be applied.

Every year. 3 Credits

WL-101 Beginning World Language

LASC Categories: GP

Beginning level I instruction in world languages that are not otherwise offered by the Department of Languages and Literature.

Other or on demand. 3 Credits

WL-102 Beginning World Language II

LASC Categories: GP

Prerequisites: WL-101 or equivalent. Anyone with 2+ years of language exposure should enroll in this course or higher.

Beginning level II instruction in world languages that are not otherwise offered by the Department of Languages and Literature.

Other or on demand. 3 Credits

WL-191 Special Topics in World Language

An introductory level course in a world language covering linguistic issues, socio-historical or cultural aspects, or current or specialized topics. Course may be taught in English.

Every year. 3 Credits

WL-193 First Year Seminar

LASC Categories: FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

3 Credits

WL-210 Intermediate World Language I

Prerequisites: WL-102

Intermediate level I instruction in world languages that are not otherwise offered by the Department of Languages and Literature.

Other or on demand. 3 Credits

WL-211 Intermediate World Language II

Prerequisites: WL-210

Intermediate level II instruction in world languages that are not otherwise offered by the Department of Languages and Literature.

Other or on demand. 3 Credits

WL-408 Directed Study: World Languages

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

3 Credits

The Department of World Languages currently offers German as WL courses

Arabic

Courses in Arabic are designed for students whose interests and career plans have an international or multi-ethnic focus. Students who study Arabic will develop listening, speaking, reading, and writing fluency at the beginning and intermediate levels.

Arabic Faculty

Mohamed Brahim, Instructor (2009) B.A., M.A., Suffolk University.

Arabic Courses

AB-101 Beginning Arabic I

LASC Categories: TLC

Introduction to the Arabic language and cultures of the Arabic-speaking world.
3 Credits

AB-102 Beginning Arabic II

LASC Categories: TLC

Prerequisites: AB-101

A continuation of AB 101, designed for students to acquire additional vocabulary, grammar, and reading ability.
3 Credits

AB-210 Intermediate Arabic I

LASC Categories: TLC

Prerequisites: AB-102

Instruction in advanced rules of Arabic grammar and verb system, and in advanced writing and reading.
3 Credits

AB-211 Intermediate Arabic II

LASC Categories: TLC

Prerequisites: AB-210

Reading and discussion of texts dealing with literature, arts, geography, history, and culture of Arabic-speaking world.
3 Credits

French

Department of World Languages

Courses in French are designed for students whose interests and career plans have an international or multi-ethnic focus. Students who enroll in French

courses will develop listening, speaking, reading, and writing fluency and will study the culture, history and literature of the people who use the language.

Alpha Mu Gamma, a national honor society in foreign languages, recognizes excellence in the study of foreign languages. Any Worcester State University student who receives two "A's" in French at any level at Worcester State University and a 3.0 cumulative G.P.A. is eligible to join. Application for membership is in early February. Contact Professor Naida Saavedra.

Placement for French Courses

Students are encouraged to discuss placement with the World Languages Department Chair. The following are intended to be general placement guidelines to help students with previous experience with French:

0-2 years of French in high school: FR-101

1-2 years of French in high school: FR-102

3 years of French in high school: FR-210

4 years of French in high school: FR-211

Students who have earned the Commonwealth of Massachusetts' Seal of Biliteracy in French are awarded 12 credits in French, equivalent to FR-101, FR-102, FR-210, and FR-211.

Native speakers of French or students with advanced knowledge of the language are encouraged to take the College Level Examination Program (CLEP) test in order to earn up to 12 credits in French. Interested students should contact the Academic Success Office to inquire about the CLEP test in French.

French Courses

FR-101 Beginning French I

LASC Categories: TLC, GP

Fundamentals of pronunciation, patterns of speech, basic structures. Develops listening, speaking, reading, and writing skills.
Fall and Spring and every year. 3 Credits

FR-102 Beginning French II

LASC Categories: TLC, GP

Continuation of FR101.

Fall and Spring and every year. 3 Credits

FR-210 Intermediate French I**LASC Categories:** TLC, GP**Prerequisites:** FR-102

Review of fundamentals and presentation of more complex grammatical features; development of conversational skills; selected readings; written and oral composition.

Fall and Spring and every year. 3 Credits

FR-211 Intermediate French II**LASC Categories:** TLC, GP**Prerequisites:** FR-210

Continuation of FR210.

Fall and Spring and every year. 3 Credits

FR-321 Advanced French Composition I**LASC Categories:** TLC, WAC**Prerequisites:** EN-102 or EN-250 or EN-202

Practice in diverse composition styles as well as review of grammar, and introduction to reading French texts. Conducted in French. [Prerequisite: Two 200-level French courses.]

Other or on demand. 3 Credits

FR-323 Advanced French Conversation**LASC Categories:** TLC**Prerequisites:** FR-211 or any 300 level French course.

Development of fluency and accuracy, free discussions, prepared oral presentations, practical exercises in oral expression. Conducted in French.

Spring only and other or on demand. 3 Credits

FR-331 General French Civilization**LASC Categories:** TLC**Prerequisites:** 6 credits department FR At level 200;

Significant aspects of French history, geography, cultural achievements to world War I. Conducted in French. [Prerequisite: Two FR 200 level courses or equivalent.]

Other or on demand. 3 Credits

FR-341 Introduction to French Literature**LASC Categories:** TLC, GP, DAC**Prerequisites:** 6 credits department FR At level 200;

Major periods and genres of French literature; for majors and minors. Conducted in French.

[Prerequisites: Two FR 200 level courses or equivalent.]

Other or on demand. 3 Credits

FR-342 Survey of French Literature I**LASC Categories:** TLC**Prerequisites:** 6 credits department FR At level 200;

Selections from the epic, drama, lyric poetry, and the major prose writers to major authors of the classical period. Conducted in French. [Prerequisite: Two FR 200 level courses or equivalent.]

Every 2-3 years. 3 Credits

FR-344 Survey of French Literature II**LASC Categories:** TLC**Prerequisites:** 6 credits department FR At level 200;

Major authors of the eighteenth and nineteenth centuries. Conducted in French. [Prerequisites: Two FR 200 level courses.]

Every 2-3 years. 3 Credits

FR-346 Twentieth Century French Literature**LASC Categories:** TLC, GP**Prerequisites:** 6 credits department FR At level 200;

Major novelists, dramatists and poets from the turn of the century to the present. Conducted in French. [Two FR 200 level courses or equivalent.]

Other or on demand. 3 Credits

FR-403 Teaching Assistantship French

Teaching Assistants in French will regularly attend the beginning or intermediate-level classes to which they are assigned to assist the professor. Suggested for advanced students of French.

Other or on demand. 3 Credits

FR-408 Directed Study: French

Other or on demand. 3 Credits

Latin American and Latinx Studies Minor

The minor in Latin American and Latinx Studies offers an interdisciplinary approach that allows students to develop a better appreciation for and understanding of multifaceted aspects central to contemporary and past Latin American societies and/or to Latinx communities in the U.S., such as their histories, literatures, and cultural knowledge; identity, Latinidad, and Diaspora; systems of power and privilege; the Arts – visual, performing, and/or alternative manifestations – as mechanisms to express identity, ideology, or resistance; and socio-political processes, among other topics. Due to its nature, the Minor in Latin American and Latinx Studies also provides new opportunities for service

learning and community engagement. Courses are to be taught in English unless noted otherwise (18 credits).

1-2 content courses from SP or LA (LA courses will be offered in English unless otherwise noted) (3-6 credits)

Code	Title	Credits
LA-150	Introduction to Latinx Cultures in the US	3
LA-350	Immigration, Dreamers, and Latinx Youth Issues	3
LA-355	Latin American Fiction	3
LA-360	Survey of Latin American Cinema	3
SP-293	Health and the Latino Community	3
SP-332	Cultures of Latin America	3
SP-333	Hispanic Presence in US	3
SP-346	Latin American Theater	3
SP-347	Latin American Colonial Literature	3
SP-349	Spanish-American Literature	3
SP-401	Advanced Study: Special Topics ¹	3

Two Spanish language courses or satisfied via CLEP (6 credits)

Code	Title	Credits
SP-101	Beginning Spanish I	3
SP-102	Beginning Spanish II	3
SP-210	Intermediate Spanish I	3
SP-211	Intermediate Spanish II	3
SP-321	Advanced Spanish Composition I	3
SP-323	Advanced Spanish Conversation Through Film	3
SP-390	Spanish for Native Speakers	3

2-3 electives from other departments or taken abroad (with prior approval) (6-9 credits)

Code	Title	Credits
HI-213	Colonial Latin America	3
HI-214	Modern Latin America	3
HI-226	Latin American History Through Film	3
HI-230	Nicaragua, the US and the World	3

HI-247	Central America and the Caribbean	3
HI-267	US-Latin American Relations	3
HI-333	Women in Latin America	3
PO-222	Latin American Politics	3
SO-228	Latina-Latino Experiences in the U.S. and the World	3
SO-307	Puerto Rican Diaspora	3

The same SP courses for the Latin American and Latinx Studies minor cannot be applied to a student's Spanish major or Spanish minor. Students must take at least one course with substantial content on Latin America and at least one course with substantial content on Latinx Studies. Other courses may be approved in prior consultation with the student's advisor for the Latin American and Latinx Studies minor.

¹SP-401: "Special Topics" courses must have Latin American and/or Latinx content to be applied towards the minor. Students should receive pre-approval from their SP advisors during the advising period.

Spanish Department of World Languages

Courses in Spanish are designed for students whose interests and career plans have an international or multi-ethnic focus. Students who major or minor in a language will develop listening, speaking, reading, and writing fluency and will study the culture, history and literature of the people who use the language.

Students with interest in business, international relations, careers in the health professions, nursing, education, global studies, ethnic studies, social work, or criminal justice -among other disciplines- are strongly encouraged to take Spanish courses, as the demand in the global marketplace for individuals who are can demonstrate cultural awareness and communicate in more than one language increases daily.

Spanish Proficiency Test:

The Spanish proficiency test allows students to earn WSU credit for Spanish language classes FOR FREE. It also determines at what level students should begin taking Spanish classes at WSU.

Students must select the level that best corresponds with their knowledge and pass the test at that level. If they pass the test, then they earn credit for that level and all previous levels. There are four tests available, one for each course of the language sequence: 101, 102, 210, and 211.

Please refer to the FAQ for more information. If you have any other questions not answered here or need to make an appointment to take the test, please email spanishtest@worchester.edu.

Institutional Credit for Spanish Proficiency Tests

Native or Heritage Speakers of Spanish should enroll in 300-level courses

Students who have earned AP credit in Spanish should enroll in 300-level courses.

Students who have earned a Seal of Biliteracy in Spanish will receive WSU credit for SP-101, SP102, SP-210, and SP-211, and should enroll in 300-level courses.

Study-Abroad opportunities are available for language study in several Spanish-speaking countries.

Alpha Mu Gamma, a national honor society in foreign languages, recognizes excellence in the study of foreign languages. Any Worcester State University student who receives two "A's" in Spanish, or two "A's" in French, at any level and who has a 3.0 cumulative GPA is eligible to join. Application for membership is in early February. Contact Dr. Naida Saavedra: nsaavedra@worchester.edu

Spanish Clinic

The Spanish Clinic is a free tutoring service where Spanish students of any level can practice their language skills. Advanced Spanish majors work as tutors to help their peers with grammar reviews, homework, conversational practice, feedback on class presentations, etc.

The Spanish Clinic is located in SUL 302-B. Open daily, from early morning to mid-afternoon, during regular semesters. No appointment needed.

For more information, please contact Dr. Elizabeth Osborne: eosborne1@worchester.edu

Spanish Club

The Spanish Club is a student organization at WSU open to Spanish students, Spanish speakers, or anyone interested in the language and cultures of the Hispanic world. The Spanish Club holds activities on a regular basis, such as movie nights, cooking lessons, dancing events, board-game evenings, open mics, etc.

For more information, please contact Dr. Naida Saavedra, faculty advisor to the club: nsaavedra@worchester.edu

- Spanish Translation Major (p. 484)
- Spanish Major, Concentration in Spanish for the Professions (p. 485)
- Spanish Major, Concentration in Spanish/ Education (p. 487)
- Spanish Minor (p. 489)
- Spanish Minor for Health Professionals (p. 489)

Spanish Faculty Spanish Courses

SP-101 Beginning Spanish I

LASC Categories: TLC, GP

Basic oral and written proficiency for daily communication; may be taken as a self-contained unit or as a basis for further development. Audio-visual method. Closed to students who have already taken a 300-level* Closed to Native/Heritage speakers. Native and/or Heritage speakers are encouraged to take SP390 instead. * Unless recommended to a specific student by the Department of World Languages, on a per-case basis. Fall and Spring and every year. 3 Credits

SP-102 Beginning Spanish II

LASC Categories: TLC, GP

Continuation of SP101. This course is intended for students with at least one year of past Spanish instruction in high school, or one semester in college at the beginning level. Closed to students who have already taken a 300-level Spanish course*. Native and/or Heritage speakers are encouraged to take SP390 instead*. * Unless recommended to a specific student by the Department of World Languages, on a per-case basis.

Fall and Spring and every year. 3 Credits

SP-191 Special Topics in Spanish**LASC Categories:** TLC, DAC, GP

An introductory level course in Spanish on current or specialized topics.

Every year. 3 Credits

SP-193 First Year Seminar Spanish**LASC Categories:** FYS

Introductory level course covering topics of special interest to first year students. Offered only as a First Year Seminar.

Every year. 3 Credits

SP-210 Intermediate Spanish I**LASC Categories:** TLC, GP

This course is a review of language constructions and everyday vocabulary at a slighter faster pace than an elementary course. Grammar review starts with the most basic structures, such as present, preterite, and imperfect tenses, *ser/estar*, *por/para*, command forms, pronouns, and ends with present subjunctive. Vocabulary fields include feelings and emotions; urban living; family relationships; the media; and the environment. Readings, videos, and short films related to different Spanish speaking countries will add a cultural component to the course. This course is intended for students with 2 years of past Spanish instruction. Closed to students who have already taken a 300-level* Closed to Native/Heritage speakers. Native and/or Heritage speakers are encouraged to take SP390 instead. * Unless recommended to a specific student by the Department of World Languages, on a per-case basis. Fall and Spring and every year. 3 Credits

SP-211 Intermediate Spanish II**LASC Categories:** TLC, GP

Prerequisites: SP-210 or appropriate placement score.

Continuation of SP210. [Formerly SP213.] Closed to students who have already taken a 300-level* Closed to Native/Heritage speakers. Native and/or Heritage speakers are encouraged to take SP390 instead. * Unless recommended to a specific student by the Department of World Languages, on a per-case basis. Fall and Spring and every year. 3 Credits

SP-290 Introduction to Medical Spanish**LASC Categories:** ICW, TLC

Prerequisites: SP-211 or above or have 3 years of language instruction.

Students will learn basic phrases in Spanish as related to their daily activities in various health fields. This course focuses on language used in health professions as well as cultural situations, which doctors, technicians, nurses, and EMTs may experience. By familiarizing students with conversational and medical Spanish, it will enable students to apply their learning to real-world situations, to assist in communications, and ultimately to break down the barrier between doctors and patients. Designed for students to gain beginning-level competence in Medical Spanish topics such as pediatrics, women's health, physical exams, dental care, checkups, and hospital visits. Fall only and every year. 3 Credits

SP-291 Foundations of Medical Spanish**LASC Categories:** ICW, TLC

Prerequisites: SP-211 or above or have 3 years of language instruction.

Students will learn basic phrases in Spanish as related to their daily activities in various health fields. This course focuses on language used in health professions as well as cultural situations, which doctors, technicians, nurses, and EMTs may experience. By familiarizing students with conversational and medical Spanish, it will enable students to apply their learning to real-world situations, to assist in communications, and ultimately to break down the barrier between doctors and patients. Designed for students to gain beginning-level competence in topics such as nutrition, emergencies, diabetes, hypertension, cancer, STIs, and addiction. Fall only and every year. 3 Credits

SP-292 Spanish for Women's Health**LASC Categories:** GP, ICW, DAC**Prerequisites:** SP-211 or above, or 3 years of language instruction.

In this course, students will develop communication skills in Spanish using information and vocabulary related to women's health. The content of this course focuses on language used in health professions as well as cultural situations. By familiarizing students with conversational Spanish and medical Spanish, this course will enable students to apply their learning to real-world situations, to assist in communications, and ultimately to break down the barrier between professionals and Spanish-speakers. Finally, the course's focus on cultural competency interrogates intersections between women's health and topics including but not limited to politics, economics, gender, sexuality, race and age. Spring only and every 2-3 years. 3 Credits

SP-293 Health and the Latino Community**LASC Categories:** HBS, TLC**Prerequisites:** SP-211 or above or have 3 years of language instruction.

Students will explore the ways in which language and culture shape the approach to health and healthcare experiences of Latinos in the US, and the factors that contribute to health disparities among this group (social, cultural, economic, environmental, and biological). Students will examine how health outcomes and risk factors are arrayed across different generations. Language barriers and sociolinguistic issues will also be studied. Students will identify and discuss causes of health inequities, survey major Latino health issues, and analyze the current and future context of Latino health and healthcare in the U.S.

Fall only and every 2-3 years. 3 Credits

SP-294 Spanish for the Nutrition and Dietitian Professional**LASC Categories:** GP, ICW**Prerequisites:** SP-211 or above, or 3 years of language instruction.

Students will develop their reading, writing, speaking, and listening skills in Spanish using information and vocabulary related to health, nutrition and dietetics. The content of this course focuses on language used in medical professions as well as cultural situations, which doctors, nutritionists, dietitians, nurses, public health workers, social workers, and other health professionals may experience. By familiarizing students with conversational Spanish and medical Spanish, this course will enable students to apply their learning to real-world situations, to assist in communications, and ultimately to break down the barrier between professionals and Spanish-speakers. Spring only and every 2-3 years. 3 Credits

SP-295 The Human Body: Spanish for Anatomy**LASC Categories:** ICW, TLC

This course focuses on the study of the Spanish terminology and basic grammatical structures needed to communicate effectively with Spanish-speaking patients and/or their families in a medical/health setting. It introduces the student to a wide array of vocabulary particular to the human body, body systems, organs, and their functioning, as well as some common diseases (and their symptoms) that affect each system. Class time will be devoted to practicing new vocabulary, via role-play, conversations with classmates, readings, and written activities. Conducted in Spanish.

Fall only and every 2-3 years. 3 Credits

SP-315 Health and the Latino Community**LASC Categories:** HBS, TLC**Prerequisites:** SP-211 or above or have 3 years of Spanish language instruction. Take one course from SP-290 through SP-295.

Students will explore the ways in which language and culture shape the approach to health and healthcare experiences of Latinos in the US, and the factors that contribute to health disparities among this group (social, cultural, economic, environmental, and biological). Students will examine how health outcomes and risk factors are arrayed across different generations. Language barriers and sociolinguistic issues will also be studied. Students will identify and discuss causes of health inequities, survey major Latino health issues, and analyze the current and future context of Latino health and healthcare in the U.S.

Fall only and every 2-3 years. 3 Credits

SP-321 Advanced Spanish Composition I**LASC Categories:** TLC, WAC**Prerequisites:** SP-211 or appropriate placement score.

Facility in prose writing; study of style of selected authors; variety of expression through word discrimination, and advanced grammatical structures. [Prerequisites: Two SP 200 level courses.] Every year. 3 Credits

SP-322 Advanced Spanish Composition II**LASC Categories:** TLC, WAC**Prerequisites:** SP-321

Continuation of SP321.

Spring only and every year. 3 Credits

SP-323 Advanced Spanish Conversation Through Film**LASC Categories:** TLC, USW**Prerequisites:** Two 200-level or above Spanish courses.

The main objective of this course is to develop the student's oral proficiency and communication skills, while building on vocabulary, and learning about different aspects of the Hispanic cultural world with a special emphasis on immigration issues. Regarding the class format, it will be mainly based on group/pair discussions and debates, in which the students will ask questions, express their views, elaborate on their ideas, and defend them by providing supporting examples drawn from their own experiences, analysis, or comparisons.

Fall and Spring and every year. 3 Credits

SP-326 Spanish for the Professions**LASC Categories:** GP, TLC**Prerequisites:** SP-321.

Intensive practice with language and documents used in private and public sectors including business, medicine, communication, education and social services.

Fall and Spring and every year. 3 Credits

SP-327 Introduction to Translation**Prerequisites:** SP-321.

SP-327 will prepare you for careers in translation and will satisfy professional and academic requirements. It seeks to introduce the student to the techniques required for translation in a competitive environment. Within the context of the development of greater cross-cultural awareness, it will develop the following language skills for business purposes: speaking, listening comprehension, reading, writing, and translation.

Spring only and every year. 3 Credits

SP-331 Spanish Civilization**LASC Categories:** CA**Prerequisites:** SP-321

An historical survey of Spanish social, cultural, and political life. Conducted in Spanish.

Spring only and every year. 3 Credits

SP-332 Cultures of Latin America**LASC Categories:** DAC, GP**Prerequisites:** SP-321.

Introduction to the cultures and history of Latin America from pre-Columbian times to the present day. This course will introduce students to colonial, modern and contemporary cultural, historical and political issues that influenced the development of Latin American identities. The course is taught in Spanish.

Fall only and every year. 3 Credits

SP-333 Hispanic Presence in US**LASC Categories:** GP, USW, DAC**Prerequisites:** SP-321

Socio-cultural study of Hispanics in the United States, with a focus on major contemporary issues. Conducted un Spanish. [Prerequisites: Two SP 200 level courses.]

Fall only and every year. 3 Credits

SP-341 Readings in Spanish Literature

Prerequisites: SP-321, and SP-323 or SP-324

Selected masterpieces from Middle Ages to present; social, cultural, and stylistic features of different periods. Recommended as a first course in Spanish literature.

Every 2-3 years. 3 Credits

SP-346 Latin American Theater

Prerequisites: SP-321 or SP-390.

This course explores the historical and aesthetic development of Latin American Theater, focusing upon the particular factors that distinguish this theater from the Western European tradition.

We will analyze dramatic texts (from Argentina, Uruguay, Perú, México, Puerto Rico, Chile, Cuba, and Colombia), performances, and critical and theoretical perspectives to engage in the following questions: How does theater create and represent social and political transformation? How might we reevaluate civic responsibility and accountability through the study of audience? And, finally what are the major innovations in Latin American theater and performance in the 20th & 21st Centuries?

Other or on demand and every 2-3 years. 3 Credits

SP-347 Latin American Colonial Literature

Prerequisites: SP-321 or SP-390.

This course will examine the colonial history of the American continent as interpreted through the various historical accounts written by eyewitnesses of the conquest. We will cover two centuries of writings from the late fifteenth to the seventeenth century. We will examine many historical accounts of the conquest, letters, documents, poetry and other historical artifacts to learn of the social, political, religious and economical significance of the colonial era. It combines an overview of the political economy of the region over three centuries with a study of how social groups interacted among themselves and with imperial rule over time.

Other or on demand and every 2-3 years. 3 Credits

SP-348 Contemporary Spanish Literature

Prerequisites: SP-321

Literary works from the generation of 1898 to the present.

Every 2-3 years. 3 Credits

SP-349 Spanish-American Literature

Prerequisites: SP-321

Representative works from South and Central American authors from the colonial period to the present.

Fall only and every 2-3 years. 3 Credits

SP-350 Advanced Spanish Grammar

LASC Categories: TLC

Prerequisites: SP-321 or SP-390

This applied linguistics advanced class provides a background of Spanish grammar, and delves into topics of the Spanish language that are usually challenging for English-speaking learners of Spanish. The goals are to clarify important aspects of the Spanish language and related cultural features, including uses of technology and assessment.

Spring only and every 2-3 years. 3 Credits

SP-352 Lexicography and Terminology: Computer - Assisted Translation (cat)

Prerequisites: SP-321.

This groundbreaking course provides both a practical and a theoretical framework to the study of lexicography and collection of terminology, an essential adjunct to the work of the translator. The role of international standards is pointed out, and principles of construction of terminological banks elaborated. Terminographic procedures in the context of computation technology and terminology management systems are discussed such as the use of the most Computer Assisted Translation (CAT) tools.

Spring only and every 2-3 years. 3 Credits

SP-355 Effective Teaching of a Foreign Language

Examines and evaluates effective teaching techniques and strategies as well as second-language acquisition theory for middle/secondary foreign language classrooms. The course is conducted in English for anyone interested in foreign language teaching. All students should have an advanced proficiency of a foreign language, meaning they have taken at least one 300-level course or its equivalent.

Fall only and every 2-3 years. 3 Credits

SP-390 Spanish for Native Speakers**LASC Categories:** TLC, DAC

This course is designed for native or heritage speakers of Spanish, who have oral proficiency but may not have received formal training in the language. These students were raised speaking Spanish at home. Therefore, this course is designed to work with the language base students already possess. All of four language skills (listening, speaking, reading, and writing) are emphasized, however, the purpose of the course is to develop reading and writing skills through cultural-related activities.

Fall and Spring and every year. 3 Credits

SP-395 The Human Body: Spanish for Anatomy**LASC Categories:** ICW, TLC**Prerequisites:** SP-211.

This course focuses on the study of the Spanish terminology and basic grammatical structures needed to communicate effectively with Spanish-speaking patients and/or their families in a medical/health setting. It introduces the student to a wide array of vocabulary particular to the human body, body systems, organs, and their functioning, as well as some common diseases (and their symptoms) that affect each system. Class time will be devoted to practicing new vocabulary, via role-play, conversations with classmates, readings, and written activities. Conducted in Spanish.

Other or on demand and every year. 3 Credits

SP-401 Advanced Study: Special Topics

Special topics in language, literature, civilization or field work of mutual interest to student and instructor. For advanced students.

Other or on demand. 3 Credits

SP-402 Independent Study: Spanish

Study of a special topic. Both content and eligibility are subject to departmental guidelines and approval.

Other or on demand. 1-6 Credits

SP-403 Teaching Assistantship in Spanish

Teaching Assistants in Spanish will regularly attend the beginning or intermediate-level Language classes to which they are assigned to assist the professor.

Other or on demand. 3 Credits

SP-408 Directed Study: Spanish

Directed study offers students, who because of unusual circumstances may be unable to register for a course when offered, the opportunity to complete an existing course with an established syllabus under the direction and with agreement from a faculty member.

Other or on demand. 3 Credits

SP-453 Medical Translation**Prerequisites:** SP-321 and SP-327.

This course focuses on building ENG/SPAN, SPAN/ENG translation competence in a health care setting, and provides guided practice in the translation of actual documents within the bio-medical and medical-legal fields. The course covers linguistic concepts, translation techniques, cultural & linguistic issues, professional ethics, medical genres & terminology, resources, and translation exercises. Through weekly translations, reading assignments, and text-analysis activities students will familiarize themselves with health text subgenres, such as patient education pamphlets, lab results, health certificates, prescriptions, informed consents, or health proxies. Students will learn to detect frequent translation challenges in health texts, and develop problem-solving strategies for these issues.

Fall only and every 2-3 years. 3 Credits

SP-454 Legal Translation: Eng/Span-Span/Eng**Prerequisites:** SP-321 and SP-327.

This course is designed to provide a general overview of translation practices, techniques and specialized terminology in the discipline of legal translation. The main objective of this class is to teach students how to switch safely and accurately between the source and the target language (Spanish/English - English/Spanish). This class will include an intensive study of vocabulary, grammar, sentence structure, and translation difficulties in specialized legal texts. This class will be conducted in Spanish as the base language for lectures. However, given the nature of the course of study, we will fluctuate between Spanish and English, depending on the object.

Fall only and every 2-3 years. 3 Credits

SP-475 Internship: Spanish**LASC Categories:** CAP**Prerequisites:** SP-321 and SP-322 and SP-326**Prerequisites or Corequisite:** SP-327

Provides majors practical experience in areas where their speaking, reading, and writing skills may be applied.

Every year. 3 Credits

Note: Courses in other foreign languages such as German, Chinese, French and Arabic, are offered when demand warrants and staffing permits.

Spanish Program Learning Outcomes

Linguistic and Content-based Knowledge

Listening: Students should be able to understand spoken language, even when delivered at native-level speed, and to summarize and paraphrase the main ideas of extended speech.

Reading: Students should be able to understand complex and/or extended works on general topics in Spanish, and low-difficulty texts that are discipline specific.

Speaking: Students should be able to express themselves clearly, accurately and effectively in a variety of communicative contexts and situations. They will be able to sustain an advanced level of spoken interaction with native speakers in academic, professional and informal settings.

Writing: Students should be able to write clearly, precisely, and cohesively using the disciplinary conventions, and use field-specific terminology. Students should be able to write expository, analytical or argumentative texts with a good range of vocabulary and syntax, and with attention to register.

Literary Texts and Movements: Students should be able to identify major literary, artistic, and cultural figures of the Spanish-speaking world and their main works. Students should be able to demonstrate knowledge of different approaches, principles, and schools of literary analysis (e.g. stylistic, historical, intertextual analyses); distinguish the principal characteristics of major trends, periods, and movements in the Hispanic literary traditions;

recognize the limitations of such categorization, and consider that conventions and canons may be questioned.

Socio-Cultural, Historical Concepts: Students should be able to situate literary works in the context of their historical, cultural, and aesthetic traditions; to demonstrate knowledge of significant historical events that have impacted Spanish/ Spanish American literature and culture across the centuries and to consider relationships between culture, society, history, politics, religion, and economics in the production of texts.

Intercultural Competence

Students should be able to demonstrate an awareness of the linguistic, ethnic, racial, religious, cultural, and social diversity of Latin America, Spain, and the U.S., and to work professionally with these different groups.

Global Citizenship

Students should be able to recognize and respect difference, and to engage the perspective of others to better understand and critically reflect on their own world view. Student should have developed a critical understanding of the U.S. and abroad experience. Students should be able to discuss contemporary ethical issues related to Latin America and Spain and to act with informed awareness of contemporary issues in their historical contexts.

Independent Learning

Students should be able to discover meanings and solutions for themselves through active participation in their own learning process. They should be able to adapt the knowledge and skills they have learned to new experiences and learning opportunities, to integrate multiple ways of knowing into their daily lives, and to develop attitudes that will form the foundation for a life-long interest and continued engagement with Iberian and Latin American cultures.

Critical Thinking

Students should be able to apply analytical skills to the interpretation of a wide spectrum of cultural phenomena including art, film and popular media. Students should be able to decipher implicit meanings beyond the surface level of the text

through multiple modes of inquiry; to discern between well-argued and poorly articulated points of view and to use this critical perspective to formulate their own arguments. Students should be prepared to recognize stated and unstated assumptions and to judge the validity of inferences, and to assess the claims of competing interpretations of a literary text.

Information Literacy

Students will be able to support their judgments with textual evidence, bibliographical research and relevant secondary sources. They will be prepared to appraise the merits of ideas and materials from a variety of bibliographic sources, to differentiate between popular and scholarly material, to understand the principles of thorough and scrupulous documentation of secondary sources in order to avoid plagiarism, and to apply the standard citation format of literary studies (MLA).

Spanish Translation Major

Spanish programs have been configured to maximize the potential of the student in today's professional climate as well as to prepare the student for admittance into graduate programs at other institutions. Students who major in Spanish will develop fluency in listening, speaking, reading and writing skills and will study the culture, history and literature of Spain and the Americas.

In addition to general linguistic and cultural knowledge, the major in Spanish Translation will provide students with professional training, tools, skills, and hands-on experience to join the Translation profession. During the program of study, students will be introduced to the main translation techniques and problem solving strategies, software and computer assisted tools, and will complete general translation exercises. Later in the program, students will delve into the translation of more specialized texts, in particular in the legal and medical disciplines - both fields in very high demand. As a culminating experience, students will complete a capstone in the form of an internship.

Students competing the Spanish Translation major are strongly encouraged to minor in Criminal Justice and/or Health Sciences, as a good understanding of the subject matter as well as terminology acquisition are key to successful professional translators.

A minimum grade of 70 (C-) is required for all SP major courses.

Requirements for a Major in Spanish

Code	Title	Credits
Required Courses		(27 credits)
SP-210 & SP-211	Intermediate Spanish I and Intermediate Spanish II 1,2	6
SP-321	Advanced Spanish Composition I ³	3
SP-327	Introduction to Translation	3
SP-350	Advanced Spanish Grammar	3
SP-352	Lexicography and Terminology: Computer - Assisted Translation (cat)	3
SP-453	Medical Translation	3
SP-454	Legal Translation: Eng/Span-Span/Eng	3
SP-475	Internship: Spanish	3
Electives		(9 credits)
Select 3 courses from the following:		9
SP-322	Advanced Spanish Composition II	
SP-323	Advanced Spanish Conversation Through Film	
SP-326	Spanish for the Professions	
SP-331	Spanish Civilization	
SP-332	Cultures of Latin America	
SP-333	Hispanic Presence in US	
SP-341	Readings in Spanish Literature	
SP-348	Contemporary Spanish Literature	
SP-349	Spanish-American Literature	
SP-401	Advanced Study: Special Topics	
Total Credits		36

¹ 6 credits maximum: These courses may be waived by oral and/or written examination

² Students with advanced knowledge of Spanish should begin at 300-level.

³ Required of all students unless exempted by the Department of World Languages.

A minimum grade of 70 (C-) is required for all courses in the Spanish Major.

Sample Timetable for Completion of Degree: Spanish

Year One

Semester One		Credits
LASC	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I	3
SP-210	Intermediate Spanish I	3
LASC	LASC Elective (NSP) (p. 49)	3
LASC	LASC Elective (QR/MA)	3
Credits		15

Semester Two

EN-102	College Writing II	3
LASC	LASC Elective (CON) (p. 38)	3
SP-211	Intermediate Spanish II	3
LASC	LASC Elective (QR) (p. 50)	3
LASC	LASC Elective (GP) (p. 42)	3
Credits		15

Year Two

Semester Three

SP-321	Advanced Spanish Composition I	3
SELECT	General Elective	3
SP-300/400	Spanish elective at 300/400 level	3
LASC	LASC Elective (NSP) (p. 49)	4
LASC	LASC Elective (USW) (p. 51)	3
Credits		16

Semester Four

SP-327	Introduction to Translation	3
SP-350	Advanced Spanish Grammar	3
LASC	LASC Elective (HBS) (p. 44)	3
LASC	LASC Elective (CA) (p. 39)	3
SELECT	General Elective	3
Credits		15

Year Three

Semester Five

SP-453	Medical Translation	3
SP-300/400	Spanish Elective at 300/400 Level	3
SELECT	General Elective	3
LASC	LASC Elective (ICW) (p. 46)	3

LASC	LASC Elective (QAC)	3
Credits		15

Semester Six

SP-352	Lexicography and Terminology: Computer - Assisted Translation (cat)	3
LASC	LASC (TLC)	3
LASC	LASC Elective (DAC)	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15

Year Four

Semester Seven

SP-454	Legal Translation: Eng/Span-Span/Eng	3
SP-3XX+	SP Major Literature Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15

Semester Eight

SP-475	Internship: Spanish	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15

Total Credits 121

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Spanish Major, Concentration in Spanish for the Professions

36 credits

The Spanish Major with a concentration in Spanish for the Professions is designed for students whose interests and career plans have an international,

interdisciplinary, or multi-ethnic focus, or who wish to become bilingual professionals in the realms of business, international relations, health professions, nursing, education, psychology, social work, politics, or criminal justice, among other fields.

In addition to developing listening, speaking, reading, and writing fluency, students who major in Spanish with a concentration in Spanish for the Professions will study the culture, history and literature of the people who use the language, as the demand in the global marketplace for individuals who can demonstrate cultural awareness and communicate in more than one language increases daily.

Students completing the Spanish major with a concentration in Spanish for the Professions must complete a second major or minor in a different discipline.

As a culminating major experience, students in the Spanish for the Professions concentration will complete an Internship that combines and puts into practice their two specializations.

A minimum grade of 70 (C-) is required for all SP major courses.

Requirements for a Major in Spanish, Concentration in Spanish for the Professions

Code	Title	Credits
SP-210 & SP-211	Intermediate Spanish I and Intermediate Spanish II ¹	6
SP-321	Advanced Spanish Composition I ²	3
SP-323 or SP-390	Advanced Spanish Conversation Through Film Spanish for Native Speakers	3
SP-326	Spanish for the Professions	3
SP-327	Introduction to Translation	3
SP-331	Spanish Civilization	3
SP-332 or SP-333	Cultures of Latin America Hispanic Presence in US	3
Spanish Literature courses (3 credits minimum)		3
Internship in Spanish (3 credits minimum)		3
Spanish Electives in Advanced Language, Civilization, Literature, Internship or Special Topics in Spanish for the Professions		6
Total Credits		36

¹ 6 credits maximum: These courses may be waived by oral and/or written examination.

² Required of all students unless exempted by the Department of World Languages.

There is no second foreign language requirement for this concentration.

A minimum grade of C- is required for all courses in the Spanish Major.

Sample Timetable for Completion of Degree: Spanish for the Professions

Year One

Semester One		Credits
LASC	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I	3
SP-210	Intermediate Spanish I	3
LASC	LASC Elective (QR) (p. 50)	3
LASC	LASC Elective (GP) (p. 42)	3
Credits		15

Semester Two

EN-102	College Writing II	3
LASC	LASC Elective (CON) (p. 38)	3
SP-211	Intermediate Spanish II	3
LASC	LASC Elective (USW) (p. 51)	3
LASC	LASC Elective (NSP) (p. 49)	3
Credits		15

Year Two

Semester Three

SP-321	Advanced Spanish Composition I	3
SP-323 or SP-390	Advanced Spanish Conversation Through Film or Spanish for Native Speakers	3
LASC	LASC Elective (NSP) (p. 49)	4
SELECT	General Elective	3
LASC	LASC Elective (TLC) (p. 53)	3
Credits		16

Semester Four

LASC	LASC Elective (CA) (p. 39)	3
SELECT	General Elective	3
LASC	LASC Elective (HBS) (p. 44)	3
SELECT	General Elective	3

SP3xx+	Upper Level Spanish Elective	3
Credits		15
Year Three		
Semester Five		
SP-326	Spanish for the Professions	3
SP-332 or SP-333	Cultures of Latin America or Hispanic Presence in US	3
SELECT	General Elective	3
SELECT	General Elective	3
LASC	LASC Elective (ICW) (p. 46)	3
Credits		15
Semester Six		
SP-327	Introduction to Translation	3
SP-331	Spanish Civilization	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Year Four		
Semester Seven		
SP-3XX+	SP Major Elective	3
LASC	Capstone	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Semester Eight		
SP-475	Internship: Spanish	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Total Credits		121

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Spanish Major, Concentration in Spanish/Education

The Spanish Major with a Minor in Secondary Education is intended for those students seeking a K-12 Teaching Certification in Spanish.

This program has been configured to maximize the potential of the student in today's professional climate, consolidate their study of the language, as well as to prepare the student for admittance into graduate programs.

Students who major in Spanish will develop fluency in listening, speaking, reading and writing skills and will study the culture, history and literature of Spain and the Americas.

Requirements for a Major in Spanish with Concentration in Spanish/Education

36 credits including:

Code	Title	Credits
SP-210 & SP-211	Intermediate Spanish I and Intermediate Spanish II 1,2	6
SP-321	Advanced Spanish Composition I ³	3
SP-323 or SP-390	Advanced Spanish Conversation Through Film Spanish for Native Speakers	3
SP-326	Spanish for the Professions	3
SP-331	Spanish Civilization	3
SP-332 or SP-333	Cultures of Latin America Hispanic Presence in US	3
SP-355	Effective Teaching of a Foreign Language	3
Spanish Literature courses ⁴		12
Total Credits		36

¹ 6 credits maximum: These courses may be waived by oral and/or written examination.

² Students with advanced knowledge of Spanish should begin at 300-level.

³ Required of all students unless exempted by the Department of World Languages.

⁴ 9 credits minimum.

Students must also complete the requirements established by the Education Department. The course of study which leads to teaching certification is in Secondary Education.

Students must also demonstrate competency in a second foreign language at the intermediate level. ("Intermediate level" means completion of 4 semesters of the same language, 101, 102, 210 and 211).

A minimum grade of C- is required for all courses in the Major in Spanish with Concentration in Spanish/Education.

Year One

Semester One		Credits
LASC	First-Year Seminar (FYS) (p. 41)	3
EN-101	College Writing I	3
SP-210	Intermediate Spanish I	3
ED-149	Introduction to the Teaching Profession Middle/Secondary School	3
LASC	LASC Elective (QR) (p. 50)	3
Credits		15

Semester Two

EN-102	College Writing II	3
LASC	LASC Elective (CON) (p. 38)	3
SP-211	Intermediate Spanish II	3
ED-207	The Adolescent in Schools & Society	3
WL	Other Language 101 Course (TLC)	3
Credits		15

Year Two

Semester Three

SP-321	Advanced Spanish Composition I	3
SP-323 or SP-390	Advanced Spanish Conversation Through Film or Spanish for Native Speakers	3
ED-251	Principles of Curriculum, Instruction, And Assessment in Middle and High School	3
LASC	Other Language 210 Course (GP)	3
LASC	LASC Elective (NSP)	4
Credits		16

Semester Four

SP-331	Spanish Civilization	3
ED-270	Diversity & Multicultural Ed	3
WL	Other Language 210 Course	3
LASC	LASC Elective (NSP) (p. 49)	3
SP-3xx+	Upper Level Spanish Elective	3
Credits		15

Year Three

Semester Five

SP-326	Spanish for the Professions	3
SP-332 or SP-333	Cultures of Latin America or Hispanic Presence in US	3
ED-304	Best Practices for English Language Learners	3
WL	Other language 211 Course	3
LASC	LASC Elective (QR) (p. 50)	3
LASC	LASC Elective (CA) (p. 39)	3
Credits		18

Semester Six

SP	300/400 Literature Elective	3
SP	300/400 Literature Elective	3
ED-351	Exceptionalities and Accommodating Diverse Learners in Secondary Schools	3
SELECT	General Elective	3
LASC	LASC Elective (USW) (p. 51)	3
Credits		15

Year Four

Semester Seven

LASC/SP	300 or 400 Level Literature Elective	3
SP-355	Effective Teaching of a Foreign Language	3
ED-353	Assessment, Adjustment to Practice, and Classroom Management in the Secondary School	3
ED-375	Prepracticum: Instruction, Classroom Management, and Family and Community Engagement in the Elementary School	3
ED-383	Prepracticum Experience in Secondary School	1
SELECT	General Elective	3
Credits		16

Semester Eight

ED-480	Practicum Tchg Secondary Sch	9
ED-424	Sem: Teaching Practicum	3
Credits		12
Total Credits		122

¹ Students must take and pass the MTEL in their subject matter to be admitted into Stage 3.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus (p. 56) section of this catalog.

Spanish Minor

Requirements for a Minor in Spanish

18 credits are required to complete the minor. A minimum of 12 credits must be earned by completing 4 of the following courses:

Code	Title	Credits
SP-210	Intermediate Spanish I	3
SP-211	Intermediate Spanish II	3
SP-300 through SP-499, advanced courses (6 credits minimum)		6-18
6 credits in Spanish at any level. SP-101, SP-102 and SP 290-SP 299 courses cannot be applied to the minor in Spanish.		6-12
Total Credits		18

(Students with advanced knowledge of Spanish should begin at 300-level)

SP29X courses can not be applied towards the Minor in Spanish.

A minimum grade of C- is required for all courses in the Minor in Spanish.

Students who have earned a Seal of Biliteracy are granted 12 WSU credits in that language, and must take 2 courses at the 300-level to complete their Minor.

Spanish Minor for Health Professionals

Minor in Spanish for Health Professionals (18 credits)

The Minor in Spanish for Health Professionals will equip students with the terminology, linguistic tools, and cultural competence needed to communicate successfully and effectively in many health-related real-life situations and settings. To that end, the minor will focus on four main areas:

- 1) building the student's medical/health vocabulary (related to topics such as the human body, at the doctor's office, diet and nutrition, medical emergencies, women's health, common illnesses and diseases, etc.),
- 2) developing and further practicing grammatical constructions (command forms and polite requests, numbers, question words, measurements and equivalencies with metric system, etc.),
- 3) increasing the student's self-confidence and effectiveness in oral communication
- 4) understanding the diversity within the Hispanic community, as well as its different customs, cultural practices, and approaches related to medical/health matters.

Requirements for Spanish Minor for Health Professionals

Students must demonstrate Spanish proficiency at the 200-level or above to enroll in Spanish Health courses. Completing SP-210 and SP-211 prior to registering for Spanish Health courses is highly recommended.

A minimum grade of 70 (C-) is required for all courses in the Spanish Minor for Health Professionals.

18 credits are required to complete the Spanish for Health Professionals minor. Students may take a combination of the courses below, but a minimum of 12 credits must be earned by completing four of the following Spanish Health elective courses:

Code	Title	Credits
<i>Spanish Health Elective Courses - Take at least 4</i>		<i>12-18</i>
SP-191	Special Topics in Spanish	
SP-290	Introduction to Medical Spanish	
SP-291	Foundations of Medical Spanish	
SP-292	Spanish for Women's Health	
SP-293	Health and the Latino Community	
SP-294	Spanish for the Nutrition and Dietitian Professional	
SP-295	The Human Body: Spanish for Anatomy	
SP-395	The Human Body: Spanish for Anatomy	
SP-401	Advanced Study: Special Topics	
<i>Composition/Conversation Courses</i>		<i>3-6</i>
SP-210	Intermediate Spanish I	
SP-211	Intermediate Spanish II	
SP-321	Advanced Spanish Composition I	
SP-322	Advanced Spanish Composition II	
SP-323	Advanced Spanish Conversation Through Film	
SP-326	Spanish for the Professions	

Professors Emeriti

Helen G. Agbay, Spanish (1974)

Dr. Joshua U. Aisiku, Education (2009)

Dr. Francisco Alcalá, Spanish (1996)

Dr. Susan Alix, Nursing (2019)

Dr. M. June Allard, Psychology (2005)

Francis I. Amory, Urban Studies (2009)

Dr. Eleanor Ashton, Psychology (2004)

Charles D. Avedikian, Mathematics and Computer Science (1990)

James R. Ayer, Languages and Literature (2000)

Dr. Joseph Baratta, History and Political Science (2018)

Nora M. Barraford, English (1984)

William A. Belanger, Earth Environment and Physics (2016)

Dr. Patricia Benjamin, Earth Environment and Physics (2020)

Dr. Andrea Bilics, Occupational Therapy (2015)

Dr. Elizabeth T. Binstock, Education (2002)

Dr. Richard C. Bisk, Mathematics (2015)

Dr. Lynn G. Bloomberg, Health Sciences (2016)

Dr. Edwin A. Boger, Biology (2000)

Dr. Arnold J. Bornfriend, Business Administration and Economics (2000)

Dr. Margaret P. Bouchard, Education (2016)

Dr. Peter M. Bradley, Biology (2016)

Jacqueline R. Brennan, Occupational Therapy (2017)

Betsey J. Brenneman, Library (2016)

Dr. Nancy Brewer, Health Sciences (2012)

Francis L. Brooker, Sociology (2012)

Dr. Anne M. Brown, Nursing (2002)

Dr. Donald F. Bullens, Communication (2020)

Dr. Josefina S. Bunuan, Education (1999)

Michael A. Burke, Health Sciences (1998)

Dr. Philip J. Burns, English (2013)

William Byers, Communications (2002)

Dr. Paula L. Bylaska-Davies, Nursing (2022)

Dr. Jean A. Campaniello, Nursing (2002)

Dr. Alta Carroll, Communication (2022)

Dr. Doris M. Carter, Visual and Performing Arts (1998)

Jacqueline G. Casale, Art (1991)

Dr. Jennie M. Celona, French (1996)

Louis J. Celona, Music (1992)

Dr. Stephanie Chalupka, Nursing (2024)

Dr. Harold L. Chapman, Physics (1988)

Carol Chauvin-Fortier, Biology (1993)

Dr. Yvonne Chen, Health Sciences (2001)

Dr. Caroline M. Chiccarelli, Education (2021)

Dr. Kee Il Choi, Business Administration and Economics (1992)

Anna B. Cohen, Communication Disorders (1999)

Bruce C. Cohen, History and Political Science (2016)

Dr. Alan D. Cooper, Chemistry (2014)

Phyllis A. Crowley, English (1996)

Dr. Joyce Cummings, Psychology (2002)

Philip S. Dalton, History and Political Science (2000)

Aldona Daly-Boxshus, Psychology (1995)

Krishna DasGupta, Library (2011)

Dr. Paul Davis, Media Arts and Philosophy (1992)

Vincent R. DeBenedictis, Foreign Languages (1990)

- Clement S. Delaney, History and Political Science (2008)
- Dr. Barbara A. Desrosiers, Psychology (1998)
- Daniel E. Dick, Natural and Earth Sciences (1989)
- Dr. Patricia A. Donovan, Occupational Therapy (2020)
- Vera M. Dowden Baldwin, Education (1974)
- Dr. John R. Dowling, Education (1998)
- Helen B. Duquette, Physical Education (1992)
- Francis T. Dyson, Physical Education (1993)
- Alfred F. Eddy, English (1990)
- Dr. Guillermina Elissondo, World Languages (2016)
- Robert P. Ellis, English (1995)
- Dr. Anne M. Falke, Chemistry (2021)
- Dr. Leonard F. Farrey, Business Administration and Economics (2002)
- Dr. Arthur Ferguson, Chemistry (2006)
- Dr. Robert Fink, Business Administration and Economics (2019)
- Dr. James E. Foley, English (2016)
- Dr. Vivian C. Fox, History and Political Science (2004)
- Florence Fraumeni, Education (1985)
- Dr. Linda Fuller, Communications (2000)
- Dr. Ellen F. Fynan, Biology (2021)
- Yvonne Gallant-Martel, French (1977)
- Dr. Geoffrey J. Garrett, Physical and Earth Science (2004)
- Dr. C. Kenneth Gibbs, English (2010)
- Dr. Barbara A. Giguere, Nursing (2018)
- James E. Girouard, Physical Education (1985)
- Bernard Goldsmith, History and Political Science (1995)
- Dr. Merrill H. Goldwyn, Languages and Literature (1998)
- Dr. John Goodchild, Chemistry (2013)
- Dr. Linda S. Gordon, Languages and Literature (2003)
- Loren N. Gould, Natural and Earth Sciences (1993)
- Dr. Terry E. Graham, Biology (2003)
- Emmet J. Grandone, Languages and Literature (1998)
- Ruth E. Greenslit, Library (1989)
- Dr. Bernard J. Guarini, Psychology (2020)
- Dr. Ruth Haber, English (2015)
- Sandra A. Hall, Nursing (2002)
- Dr. Nancy E. Harris, Education (1999)
- Dr. Margaret D. Hart, Occupational Therapy (2016)
- Dr. Robert J. Hartwig, Business Administration and Economics (2004)
- Mary T. Hayes, Education (1974)
- Bruce Henry, Mathematics and Computer Science (2001)
- Mary Ellen Herx, English (1989)
- Dr. Nancy Hicks, Physical and Earth Science (2005)
- Dr. W. Mack Hill, Mathematics (2004)
- David W. Hilton, Computer Science (1999)
- Dr. Donald D. Hochstetler, Library (2012)
- Paul A. Holle, Biology (1989)
- Dr. Robert V. Holmes, Business Administration and Economics (2020)
- Dr. John H. Hood, Visual and Performing Arts (2022)
- Richard G. Hunt, Physical and Earth Science (2007)
- Ronald W. Hurd, Physical and Earth Science (2004)
- Dr. Renuka Jain, Business Administration and Economics (2017)

- Marion J. Jennings, Education (1978)
- Dr. Judith Jeon-Chapman, World Languages (2024)
- Dr. Matthew Johnsen, Sociology (2020)
- Alfred C. Johnson, Mathematics (2004)
- Jean E. Johnson, English (1990)
- Nancy A. Johnson, Education (1995)
- Dr. Joline N. Jones-Matheson, Psychology (2006)
- Dr. Donna M. Joss, Occupational Therapy (2004)
- Dr. Donald L. Joyal, Business Administration and Economics (2008)
- Dr. Joan K. Juralewicz, Education (2002)
- Dr. Richard S. Juralewicz, Business Administration and Economics (2001)
- Dr. Tejendra Kalia, Business Administration and Economics (2024)
- Robert G. Kane, History (1999)
- George T. Kelley, Economics (1997)
- Robert F. Kelley, Physics (1988)
- Dr. Baheej B. Khleif, Sociology (1994)
- Dr. Richard K. Kimball, Psychology (2016)
- Margaret A. Kittredge, Spanish (1995)
- Sandra Kocher, Art (1992)
- Dr. Ellen V. Kosmer, Visual and Performing Arts (2004)
- Marshall J. Kotzen, Mathematics (2013)
- Dr. Fransisco J. Lamelas, Earth Environment and Physics (2021)
- Jerome L. Langer, Business Administration and Economics (1982)
- Dr. Wei-Pang Lee, Business Administration and Economics (2021)
- Edward H. Leonard, Physics (1984)
- Robert E. Lingner, Physical and Earth Science (2005)
- Dr. Mary Lou Lovering, Nursing (2000)
- Dr. Augustus N. Luparelli, Business Administration and Economics (2014)
- Dr. Carol E. Lysaght, Communication Disorders (1996)
- Dr. Aparna Mahadev, Computer Science (2021)
- Dr. Joan D. Mahoney, Business Administration and Economics (2021)
- Alison K. Majeau, Library (2016)
- Dr. Gordon S. Matheson, Psychology (2004)
- Gary W. McEachern, Business Administration and Economics (1998)
- Bernard L. McGough, Media (1994)
- Robert F. McGraw, History (1991)
- Pamela McKay, Library (2013)
- John F. McLaughlin, Communication Disorders (1996)
- Catherine McNeil, Occupational Therapy (2013)
- Dr. Mary Ellen Meegan, Education (2009)
- Dr. Melvin Merken, Chemistry (2010)
- Michel D. Merle, Visual and Performing Arts (2005)
- Dr. Susanna E. Meyer, Communication Sciences and Disorders (2021)
- Frank S. Minasian, History and Political Science (2016)
- Dr. A.Gibbs Mitchell, History and Political Science (1996)
- John P. Mockler, Physical Education (1992)
- Dennis P. Moore, Business Administration and Economics (2012)
- Dr. Pearl Mosher-Ashley, Psychology (2011)
- Michael E. Mulcahy, Mathematics (2005)
- Dr. John M. Nash, Psychology (1993)
- Dr. Christie Nigro, Visual and Performing Arts (2022)

Dr. William O'Brien, Business Administration and Economics (2019)

Dr. Virginia Ogozalek, Computer Science (2003)

Dr. Juan Orbe, Spanish (2014)

Dr. Chad C. Osborne, Education (2002)

Dr. Ruth Ostenson, Psychology (2002)

Francis J. O'Connor, Spanish (1980)

Dr. Patrick O'Connor, Education (2016)

Richard A. O'Connor, Psychology (1994)

Paul F. O'Neil, Education (1997)

Dr. Surindar Paracer, Biology (2013)

Dr. Hemant Pendharkar, Computer Science (2019)

Dr. Robert F. Perry, Geography (1987)

Dr. Robert J. Perry, Mathematics (2008)

Vincent Piccolo, Media Arts (1988)

Dr. Frank C. Pizziferri, Sociology (1995)

Dr. Maryann C. Power, Communication Sciences and Disorders (2011)

Dr. Maureen E. Power, Urban Studies (2016)

Dr. Vincent E. Powers, Urban Studies (2000)

Catherine I. Quint, Education (1985)

Dr. David Quist, Education (2003)

Dr. Donald A. Read, Health Sciences (2001)

Dr. Robert Redding, Mathematics (2004)

Dr. Josna Rege, English (2022)

Dr. Susan V. Rezen, Communication Sciences and Disorders (2008)

Gerald Robbins, Philosophy (2007)

Dr. Jeffrey L. Roberts, Languages and Literature (2001)

Dr. Thomas L. Roberts, Biology (1988)

Evelyn Robinson, Mathematics (1978)

Dr. Helen M. Rogers, Nursing (2006)

Bruce D. Russell, Biology (2003)

Dr. Robert Sahagian, Visual and Performing Arts (2020)

Dr. Najib E. Saliba, History and Political Science (2021)

Dion Schaff, Philosophy (1993)

Dr. Courtney Schlosser, Philosophy (2013)

Helena Semerjian, Health Sciences (2016)

Robert L. Shafner, Business Administration and Economics (2010)

William E. Shakalis, Library (2021)

Dr. Maureen D. Shamgochian, Biology (2016)

Dr. Daniel C. Shartin, Philosophy (2018)

Helen G. Shaughnessy, Education (1986)

Dr. Ann Marie Shea, Visual and Performing Arts (2005)

Dr. Emmett A. Shea, History and Political Science (2012)

Dr. Katherine M. Shea, Foreign Languages (1991)

Dr. Robert M. Spector, History and Political Science (2008)

Dr. Maureen C. Stefanini, Business Administration and Economics (2016)

William L. Sullivan, English (1983)

Dr. Sudha R. Swaminathan, Earth Environment and Physics (2021)

James J. Swanson, Business Administration and Economics (2015)

Dr. Antonieto S. Tan, Biology (2018)

Dr. Elaine G. Tateronis, Dean School of Education Health and Natural Sciences (2012)

G. Flint Taylor, Psychology (1985)

Robert W. Thompson, Physical and Earth Science
(2005)

Anthony W. Thurston, Biology (1983)

Dr. Roger L. Towne, Communication Sciences and
Disorders (2022)

Dr. Donald F. Traub, Philosophy (1998)

F. Stephen Trimby, Business Administration and
Economics (2004)

David J. Twiss, History and Political Science (2015)

Richard S. Tyrell, English (1994)

Dr. Andrea J. Wallen, Nursing (2011)

Dr. Charles Wasilko, English (2020)

Dr. Kristin Waters, Philosophy (2019)

Lloyd P. Wheaton, Chemistry (2002)

Dr. James R. Wicka, Communication Sciences and
Disorders (2006)

Dr. Catherine Wilcox-Titus, Visual and Performing Arts
(2022)

Dr. Audrey E. Wright, Education (2016)

Dr. Sharon Yang, English (2019)

Dr. Gary G. Young, Business Administration and
Economics (2002)

Dr. Cheng Yuan, History and Political Science (2000)

Dr. Barbara Zang, Communication (2018)

Dr. Manuel Zax, Mathematics (1992)

Faith T. Zeadey, Sociology (2003)

Matthew Zelman, Sociology (2004)

Dr. Estelle C. Zoll-Resnik, Chemistry (1997)

Officials of Worcester State University

Massachusetts Board of Higher Education

Voting Officers:

Chris Gabrieli, Chair

Veronica Conforme

Alex Cortez

Bill Walczak

Danielle Allen, Ph.D

Mary Burns

Harneen Chernow

Ann Christensen

Paul Mattera, J.D.

Judy Pagliuca

Christina Royal, Ed.D.

Patrick Tutwiler, Ph.D Secretary of the Executive Office of Education

Non-Voting Officers & Advisors:

Noe Ortega, Ph.D., Ex Officio, Commissioner of Higher Education

J.D. LaRock, J.D., Ed.D.

Francesca Purcell, Ph.D.

Andrew Whitcomb

Worcester State University Board of Trustees

Lisa M. Colombo '87, Chair

Maureen F. Power, Vice Chair

Lawrence M. Sasso '90, '13, Vice Chair

Karen M. LaFond

Dina A. Nichols

Amy L. Peterson '03

Kyram R. Pou '25

Marina L. Taylor

David H. Tuttle '01

Presidents of Worcester State University

Elias Harlow Russell 1874-1909

Francis Ransom Lane 1909-1912

William B. Aspinwall 1912-1939

Clinton E. Carpenter 1940-1946

Eugene A. Sullivan 1947-1970

Robert E. Leestamper 1970-1975

Joseph J. Orze 1975-1982

Philip D. Vairo 1982-1991

Kalyan K. Ghosh 1992-2002

Janelle C. Ashley 2002-2011

Barry M. Maloney 2011-

Alumni Association and Foundation Board

Alumni Association's Advisory Board 2023-2024

President

Dana F. Perry '16

Vice President

Jillian M. Russo '16

Secretary

Nana A. Darkwa '19

Executive Committee at Large

Ellis J. Cropper '96

Robert G. Doyle '73

Directors

Thomas P. Cieszynski '07

Caitlyn A. Costello '13

Meaghan K. Dougherty '19

Sonela Demirazi '15, MS '17

Shakira E. Floyd '13

Manasseh A. Konadu '19

Jacob D. Labonte '22

Taneisha S. Mings '13

Suzanne Singh Nebelung, M.Ed. '00, Worcester State
University Advancement Office Representative

Maia Shalev '20, MS '21

Debra F. Tambeau '74

Elizabeth C. Wheeler '18, M.S.N. '22

Michael E. Whitman, M.S. '21

Marilyn F. Willand '69, M.Ed. '81

Elaine Zingarelli 1970

SGA President—Student Representative

Lily Morgan '25

Foundation Board Members Chair

Kevin T. Campbell '73

Vice Chair

James D. Glickman

Vice Chair

Satyra B. Mitra, Ph.D.

Treasurer

Edward L. Sherr

Immediate Past Chair

Ann L. DeBiasio '79

President & Clerk

Thomas M. McNamara '94

Directors

Diana Aisiku

Omozuanvbo Aisiku '98

Greta Bajrami Campoverde

Jennifer Beaton

David E. Bedard '74

Craig A. Bovaird '77

John P. Brissette '88

John R. Buckley '94

Marybeth Campbell

Derek E. Canton '15

Geovanna I. Diaz '12

Daniel F. Figueiredo '15

Allen J. Falke '93, Esq.

Mary Burke Fallon

Alan I. Gordon '80

Maryanne M. Hammond '69

Warren D. Hayden '86

Sandy Hubbard

Helder Machado

Robert C. Mailloux '67

Barry M. Maloney, Ex Officio

Dorothy Manning, M.Ed. '88

Rosanne Sullivan Matulaitis '65

Catheryn M. McEvoy '95

Michael J. Mills '72

Robert J. Morton '87

Suzanne Singh Nebelung, M.Ed. '00

Marina Taylor, Board of Trustees Representative

Alan Osmolowski, CPA '91

Seth A. Pitts '10

Maureen Power '05, Board of Trustees
Representative, Ex. Officio

Kyram Pou '25, Student Senate, SGA Representative,
Ex. Officio

Gregg H. Rosen '86

Kimberly Salmon

Sharen C. Shipley '74

Robert J. Spain '78

Peter J. Staiti '02

George W. Tetler, III

Adi Tibrewal

Randal D. Webber '91

Administrative Offices

Office of the President

Ashlynn Allain, Staff Assistant, President's Office (2022) B.A., Clark University

Meredith Bond, Staff Assistant, Conference and Event Services (2023)

Omarthan Clarke, Assistant Director, Diversity, Inclusion and Equal Opportunity (2022) M.A., Ohio State University

Carl A. Herrin, Assistant to the President/Chief of Staff, President's Office (2012) B.A., Georgetown University

Nicole D. Kapurch, Assistant Director, President's Office (2012) B.A., Worcester State College

Joshua L. Katz, Director, Conference and Event Services (2006) B.A., Worcester State University

Caitlin Kincaid, Assistant Director, Conference and Event Services (2023)

Stacey A. Luster, General Counsel and Assistant to the President, President's Office (2015) B.A., St. John's University; J.D., Boston University

Barry M. Maloney, President of the University, President's Office (2011) B.S., M.A., University of Maine, Orono

Edgar A. Moros, Executive Director, Diversity, Inclusion and Equal Opportunity (2019) B.S., M.A., Kent State University; Ph.D., Binghamton University

Tenere Taylor, Staff Assistant, Diversity, Inclusion and Equal Opportunity (2022) B.S., Bay Path University

Academic Affairs

Anthony K. Adade, Associate Vice President & Chief Information Officer, Information Technology Services (2013) B.S., Northeastern University; M.S., Ph.D., Lesley University

Paul Aldonis, Staff Assistant, Information Technology Services (2023) A.S., Quinsigamond Community College

Matthew M. Bejune, Executive Director, Library (2013) B.A., University of Massachusetts Amherst; M.S., Syracuse University

Laxmi Bissoondial, Director, Multicultural Affairs (2012) B.S., Worcester State College; M.Ed., C.A.G.S., University of Massachusetts Amherst

Juliet Boisselle, Staff Associate, Academic Affairs (2022) B.A., Smith College; M.L.S., College of Library and Information Services

Kenton Brister, Staff Associate, Information Technology Services (2014) A.S., Quinsigamond Community College

Jorge E. Brown, Associate Librarian, Library (2016) B.A., Concordia University; M.L.S., Emporia State University

Tarik Buxton, Staff Associate, Information Technology Services (2014) B.S., Worcester State University

Andrew Calcutt, Staff Associate, Information Technology Services (2006)

Midaly Carrasquillo, Assistant Director, Urban Action Institute (2021) M.A., Worcester State University

Candace P. Casey, Staff Associate, Worcester Center for Crafts (2013)

Laura A. Caswell, Assistant Director, Information Technology Services (1998) A.S., Quinsigamond Community College; B.S., M.S., Worcester State University

Julie Connor, Assistant Director, Academic Success Center (2018) B.S., Worcester State University

Steven Coppellotti, Staff Assistant, Information Technology Services (2021) B.A., University of Massachusetts Amherst; M.S., Northeastern University

Simon Coude, Staff Associate, Earth, Environment and Physics (2022) B.S., Université de Sherbrooke; Ph.D., Université de Montréal

Suzanne Crawford-Stacy, Staff Associate, Communication Sciences and Disorders (2013) B.S., Worcester State College; M.S., University of Vermont

Edward J. Crowley III, Staff Associate, Information Technology Services (2014) A.S., Quinsigamond Community College

Huy Dao, Staff Associate, Information Technology Services (1998) B.S., M.S., Worcester State University

Jin DelPrato, Staff Associate, Information Technology Services (2024) M.S., Pace University; M.B.A., Rensselaer Polytechnic Institute

Noah M. Dion, Director, Academic Affairs (2018) B.A., University of Connecticut; M.A., Brown University; Ph.D., Yale University

Nicholas Dudo, Staff Assistant, Information Technology Services (2022) B.S., Worcester State University

Thanas Dudo, Staff Associate, Information Technology Services (2018) B.A., Assumption College

Dara Duong, Staff Assistant, Academic Success Center (2023) B.A., M.P.A., UMass Lowell

Gina-Marie Fleury, Staff Associate, Nursing (2012) A.S., Quinsigamond Community College; A.D.N., Mt. Wachusett Community College; B.S., M.S., Worcester State University

Telese Forbes, Assistant Director, Graduate and Continuing Education (2001) A.S., Springfield Technical Community College; B.S., M.S., Worcester State University

Helen Ganas, Staff Assistant, Nursing (2022) A.S.N., Mount Wachusett Community College; B.S., M.S.N., Worcester State University

Jenna Glazer, Associate Director, Academic Success Center (2023) B.A., Clark University; M.S., Fitchburg State University

Catherine A. Goodwin, Staff Assistant, Graduate and Continuing Education (2009) B.A., Mount Holyoke College; M.A., School for International Training

Sara J. Grady, Associate Dean, Graduate and Continuing Education (2008) B.A., M.B.A., Assumption College

Ross M. Griffiths, Librarian, Library (2016) B.A., Temple University; M.S., University of Pittsburgh; M.L.I.S., Illinois State University

Victoria Gruzynski, Librarian, Library (2016) B.A., Illinois State University; M.A., M.S., Indiana University

Nelson E. Guaman, Staff Associate, Information Technology Services (2002) B.S., M.Ed., Atlantic Union College; M.A., Worcester State University

Veronica Guay, Director, Graduate and Continuing Education (2023) M.B.A., Fitchburg State University

Leah Guzman, Assistant Director, Graduate and Continuing Education (2007) B.A., B.S., M.S., Worcester State College

Christopher Herbert, Staff Associate, Information Technology Services (2020)

Tiffany Hexter, Staff Assistant, Academic Success Center (2019) B.A., Bay Path University; M.S., Worcester State University

Susan L. Johnson-Hood, Staff Assistant, Visual and Performing Arts (2011) B.F.A., Arizona State University; M.F.A., University of Minnesota

Maria Juncos-Gautier, Executive Director, Latino Education Institute (2022) B.A., University of Massachusetts Amherst; M.S., Ana G. Mendez University; Ph.D., York University

Chyna Kavan, Staff Assistant, Academic Affairs (2022) B.A., The University of Iowa

Roberta L. Kyle, Associate Vice President, Graduate and Continuing Education (2008) B.A., M.A., University of New Hampshire; M.A., School for International Training; Ed.D., University of San Francisco

Monique M. Labelle, Staff Assistant, School of Humanities and Social Sciences (2010) B.A., Clark University

Sacha Langford, Staff Assistant, Academic Success Center (2022) B.S., Worcester State University

Lordia Larbi-Asare, Staff Associate, Multicultural Affairs (2022) B.S., University of Massachusetts Amherst

Linda S. Larrivee, Dean, School of Science, Technology & Health (2013) B.S., M.S., Worcester State College; Ph.D. University of Kansas

Jeffrey R. LeBrun, Associate Director, Information Technology Services (2008) B.S., Worcester State College; M.S., Worcester State University

Raynold M. Lewis, Dean, Education, Liberal & Interdisciplinary Studies (1998) B.A., West Indies College; M.Ed., Worcester State College; Ph.D., Illinois State University

William J. Lundmark Jr., Librarian, Library (2016) B.A., Purchase College, SUNY; M.A., The City College of New York, CUNY; M.L.I.S., Long Island University

Andy Luong, Staff Assistant, Information Technology Services (2022) A.S., Quinsigamond Community College

Jaime L. Marino, Staff Assistant, Communication Sciences and Disorders (2021) B.A., Simmons College; M.S., Worcester State University

Mary Jo Marion, Associate Vice President, University and Community Engagement (2008) B.A., Suffolk University; M.A., University of Chicago

Michael J. Mayko, Staff Associate, Biology (2009) B.S., M.S., Worcester State University

Elaine McKenna-Yeaw, Executive Director, Worcester Center for Crafts (2019) B.A., M.A., Rhode Island College

Eriberto Mora-Carrera, Assistant Director, Multicultural Affairs (2019) B.A., Clark University

David Needham, Assistant Director, Information Technology Services (2009) B.S., Worcester State University

Cuong C. Nguyen, Staff Assistant, Information Technology Services (2011) A.S., Quinsigamond Community College; B.S., Worcester State University

Thomas P. O'Malley, Assistant Director, Worcester Center for Crafts (2009) B.F.A., Alfred University; M.F.A., Rhode Island School of Design

Kathleen Orengo, Staff Assistant, Latino Education Institute (2001) B.S., Worcester State College

Deirdre Palmer, Staff Assistant, Nursing (2015) B.S.W., Marist College; B.S.N., Mass College of Pharmacy

Katey C. Palumbo, Director, International Programs (2010) B.S., University of Miami; M.Ed., Fitchburg State University

Delaney Parke, Staff Assistant, International Programs (2023)

Russ Pottle III, Dean, School of Humanities and Social Sciences (2017) B.A., M.A., Southeastern Louisiana University; Ph.D., Louisiana State University

Jorge J. Poueriet Rolffot, Staff Associate, Information Technology Services (2004) B.A., Universidad Dominicana O&M

Shu Qian, Librarian, Library (2016) B.S., M.S., Shanghai University; M.S., Florida State University

Andrea Quinn, Director, Communication Science and Disorders (2023) B.S., Northeastern University; M.S., MGH Institute of Health Professions

Athena Reese, Staff Associate, Communication Science and Disorders (2023) B.A., University of Louisville; M.S., University of North Texas

Ilyasah Shabazz, Director, Academic Affairs (2023) B.S., SUNY New Paltz; M.S., Fordham University

Robert Soderman, Staff Associate, Information Technology Services (2000) A.S., Quinsigamond Community College

Sarah L. Strout, Assistant Vice President, Assessment and Planning (2017) B.A., Assumption College; M.A., Ph.D., Clark University

Tammy L. Tebo, Assistant Dean, Academic Success Center (2013) B.A., Westfield State College; M.Ed., Springfield College

Henry C. Theriault, Associate Vice President, Academic Affairs (2008) B.A., Princeton University; Ph.D., University of Massachusetts

Catherine Thomas, Associate Dean, Associate Dean (2023) B.S.N., University of Saint Joseph; M.S.N., University of Hartford; D.N.P., Regis College

Maria Isabel Urbina, Staff Assistant, Assessment and Planning (2019) B.S., Andrew University; M.S., Boston University

Amber Vaill, Associate Dean, Online Programming (2021) B.A., Bay Path University; Ed.M., Westfield State University; Ed.M., Framingham State University; Ph.D., Northcentral University

Karen Wigren, Staff Assistant, School of Science, Technology & Health (2018)

Lois A. Wims, Provost/Vice President, Academic Affairs (2015) B.S., Bryant College; M.S., Salve Regina; Ph.D., University of Rhode Island

Amanda Wittman, Director, Binienda Center for Civic Engagement (2023) B.A., Clark University; M.S., Oregon State University; Ph.D., University of Edinburgh

Administration and Finance

David J. Ayotte, Director, Employee Services (2020) B.S., University of New Hampshire, Durham

Kathleen Bates, Controller, Administration and Finance (2023) B.S., Boston College Wallace E. Carroll School of Management

John Capuano, Assistant Director, Facilities (2021)

Julie C. Carmel, Director, Office of the Bursar (1992) A.B., Becker Junior College

Kiran Chamankar, Staff Associate, Financial Sustainability Taskforce (2024) B.Com., Mumbai University; M.S., Clark University

Jennifer L. Collins, Director, Employee Services (2021) B.A., M.A., Framingham State University

Jesilka Cortez Curran, Executive Director, Accounts Payable & Procurement (2022) B.A., College of Our Lady of the Elms; M.S., M.B.A., Nichols College

Robert P. Daniels, Director, Facilities (2004) A.S., Quinsigamond Community College

Joshua Dell'Aquila, Assistant Director, Facilities (2023)

Kathleen M. Eichelroth, Chief Financial Officer & Vice President, Administration and Finance (1998) B.A., University of Massachusetts Dartmouth; CPA, Massachusetts

Peter M. Fenuccio, Director, Facilities (2004)

Nora Goguen, Staff Associate, Accounts Payable & Procurement (2024) B.S., Framingham State University

Eric W. Hansen, Director, Facilities (2012) B.S., Western New England College

Edward M. Horniak, Staff Associate, Facilities (2010) A.S., New England Institute of Anatomy and Mortuary Science

Anisa Hoxha, Director, Administration and Finance (2012) B.S., Nichols College; M.S., Worcester State University

Suze Jean-Charles, Assistant Director, Employee Services (2014) B.A., M.A., Clark University

Kayla Klemba, Associate Director, Office of the Bursar (2012) B.A., Worcester State University

Heather M. Lamarche, Assistant Director, Administration and Finance (2014) B.S., Worcester State University

Lucinda M. Lambert-Hutchinson, Staff Associate, Facilities (2021) B.S., Elmira College

Matthew MacDougall, Staff Associate, Facilities (2011)

Jodi Meagher, Assistant Director, Administration and Finance (2024) B.S., Fitchburg State University

Sathi Mitra, Assistant Vice President / CHRO, Employee Services (2023) B.A., M.A., Osmania University; M.S., Rochester Institute of Technology

Kristyn Neale, Staff Assistant, Office of the Bursar (2018) B.S., Framingham State University

Gabrielle M. Noe, Staff Associate, Employee Services (2021)

Sandra K. Olson, Assistant Vice President, Facilities (2003) B.S., Worcester Polytechnic Institute; M.B.A., Clark University

Michelle Price, Staff Assistant, Employee Services (2021)

Nancy M. Ramsdell, Director, Facilities (2005)

Melissa A. Staiti, Staff Assistant, Administration and Finance (2005) A.A., Becker College; B.A., Worcester State College

Benito Vega, Assistant Director, Accounts Payable & Procurement (2023)

Jonathan Walker, Director, Financial Sustainability Taskforce (2018) B.A., Worcester State University

Council of Presidents

Julia Del Sobral, Assistant Director, Council of Presidents (2021) B.A., Union College; J.D., University of Connecticut School of Law

Vincent Pedone, Executive Director, Council of Presidents (2016)

Enrollment Management

Amy Belina, Associate Director, Financial Aid (2023) B.A., Westfield State University; M.S., Bay Path College

Tiana D. Carrasquillo, Associate Director, Admissions (2013) B.A., University of Connecticut, Storrs; M.Ed., University of Massachusetts Amherst

Julie A. Chaffee, Registrar, Registrar (1994) B.A., St. Anselm College

Rebecca Cross, Assistant Director, Communications and Marketing (2021) B.A., Newbold College; M.A., University of Sussex

Tania S. Delehanty, Assistant Director, Communications and Marketing (2019) B.A., Gustavus Adolphus College

Joseph J. DiCarlo, Dean, Admissions (2012) B.A., Assumption College; M.A., Framingham State University

Kirshner Donis, Associate Director, Admissions (2003) B.A., Clark University; M.S., Worcester State College

Christopher J. Dooley, Assistant Director, Admissions (2005) B.S., Becker College

Ryan G. Forsythe, Vice President, Enrollment Management (2014) B.S., Westfield State University; M.Ed. University of Massachusetts Amherst; Ed.D., Trevecca Nazarene University

Alex Gariepy, Assistant Director, Admissions (2021) B.A., Worcester State University

Simon Goodacre, Associate Director, Communications and Marketing (2024) B.A., M.S., Clark University

Jeremy Greenhouse, Director, Financial Aid (2021) B.A., Ithaca College; Ed.M., Northeastern University

Thomas Kelley, Director, Retention (2014) B.A., Westfield State University; M.S., University of Rhode Island

Mark A. LaCroix, Director, Publications and Printing Services (2008) A.S., Quinsigamond Community College

Mary Leufstedt, Staff Associate, Communications and Marketing (2022) B.S., Fitchburg State University

Kelly Lin, Director, Communications and Marketing (2021) B.A., Mount Holyoke College; M.Phil., M.A., Columbia University

Lisa McCormack, Staff Assistant, Publications and Printing Services (2021) B.F.A., Massachusetts College of Art and Design

Benjamin T. McElroy, Assistant Director, Admissions (2000) B.A., Worcester State College

Gloria E.F. McElroy, Assistant Director, Admissions (2021) B.A., Birmingham-Southern College; M.A., Florida State University

Deborah O'Neil, Director, Communications and Marketing (2022) B.A., University of South Florida; M.A., Florida International University

Kimberly A. Oikle, Assistant Director, Financial Aid (2008) B.S., Worcester State College

Danely Rosado, Staff Assistant, Financial Aid (2023) B.S., Kaplan University

Maureen O. Stokes, Assistant Vice President, Communications and Marketing (2018) B.A., University of Southern California; M.A., Seton Hall University

Allison Vickstrom, Staff Assistant, Enrollment Management (2023) B.S., Worcester State University; M.S., Fitchburg State University

Maribeth Wrobel, Associate Registrar, Registrar (2003) B.S., M.S., Worcester State College

Student Affairs

Jason F. Anderson, Staff Assistant, Athletics (2019) B.S., University of Florida; M.S., Bridgewater State University

Dean D. Bowen, Assistant Director, Athletics (2016) B.S., M.S., The College at Brockport, SUNY

Donald Brickman, Assistant Director, University Police (2018) A.S., Becker College; B.S., M.A., Anna Maria College

Casey Brown, Staff Assistant, Residence Life and Housing (2023) B.S., Keene State College

Benjamin Concepcion, Assistant Director, Career Services (2023) B.A., University of Rhode Island

Kelly K. Downs, Staff Assistant, Athletics (2012) B.A., Bridgewater State University; M.A., Endicott College

Kathleen Edwards, Staff Assistant, Residence Life and Housing (2022)

Teresia Encarnacion, Associate Director, Career Services (2019) A.S., Mount Wachusett Community College; B.S., Nichols College

Kevin J. Fenlon, Associate Director, Counseling Services (2008) B.A., M.A., Assumption College

Adrian C. Gage, Assistant Dean, Residence Life and Housing (2005) B.S., Oklahoma State University; M.Ed., Clemson University

Julie A. Glovin, Assistant Director, Counseling Services (2016) B.A., Tulane University; M.S.W., Boston University

Andrew Goins, Staff Associate, Counseling Services (2022) B.A., Montclair State University; M.A., Roger Williams University

Rachel Graddy, Assistant Dean, Student Accessibility Services (2023) B.A., University of Puget Sound; Ph.D., Washington University

Bridget P. Joiner, Staff Associate, Student Affairs (2012)

Jason M. Kapurch, Chief/Director, University Police (1991) B.S., Worcester State University

Julie A. Kazarian, Dean/Vice President, Student Affairs (2000) B.A., M.S., Worcester State College

Jennifer Lane, Staff Assistant, Student Accessibility Services (2023) B.A., University of Phoenix; M.Ed., Ottawa University

David A. Lindberg, Assistant Director, Athletics (1994) B.S., Worcester State University

Kevin M. MacLennan, Staff Assistant, Athletics (2003) B.A., Westfield State College

William J. Marrier, Assistant Director, University Police (2006) A.S., Quinsigamond Community College

Linzy Martinez, Assistant Director, Student Involvement and Leadership Development (2019) B.A., M.S., Central Connecticut State University

Kristie M. McNamara, Director, Student Involvement and Leadership Development (2001) B.A., Framingham State College; M.Ed., Bridgewater State College

Jessica Meany, Staff Associate, Athletics (2002) B.A., M.Ed., Worcester State College

John W. Meany, Associate Director, Athletics (2004) B.A., Middlebury College

Michael A. Mudd, Director, Athletics (2014) B.A., St. Lawrence University; M.S., Miami University

Kristen A. Nelson, Director, Residence Life and Housing (2009) B.A., Keene State College; M.S., C.W. Post-Long Island

Alison Park, Assistant Director, Title IX and Alcohol & Other Drug Prevention Education (2022) B.A., Syracuse University; M.Ed., University of Massachusetts Lowell

Adam P. Peloquin, Staff Associate, Athletics (2016) B.A., M.A., Worcester State University

Sarah E. Potrikus, Assistant Director, Student Involvement and Leadership Development (2013) B.S., Eastern Connecticut State University; M.S., University of Rhode Island

Jennifer A. Quinn, Assistant Dean, Title IX and Alcohol & Other Drug Prevention Education (2010) B.S., M.Ed., Worcester State College

Krystyanna Ramsdell, Staff Associate, Athletics (2022) B.A.S., Catholic University of America; M.S., Northeastern University

Rochelle Santiago, Staff Assistant, Counseling Services (2024) B.S., Worcester State University; M.S.W. Springfield College

Stephanie Teixeira, Director, Military Affairs and Veterans Services (2023) A.A., Quinsigamond Community College; B.A., M.S.H.E., Baypath University; D.L.P., Northeastern University

Karen E. Tessmer, Associate Director, Athletics (1994) B.A., Gettysburg College; M.A., James Madison University

Sarah T. Valois, Assistant Director, Counseling Services (2016) B.A., Clark University; M.S.W., Boston College

Scott VanderMolen, Staff Associate, Athletics (2023) B.S., UMass Amherst; M.S., Southern New Hampshire University

Sonja Wagner, Staff Associate, Counseling Services (2023) B.S., Florida Southern College; M.A., University of South Florida

University Advancement

Ursula Arello, Director, University Advancement (2022) B.A., St. Lawrence University; M.B.A., Anna Maria College

Caitlyn Costello, Assistant Director, University Advancement (2022) B.A., Worcester State University; M.S., Northeastern University

Andrea Dever, Director, Alumni Relations and Engagement (2020) B.A., Keene State College

Elizabeth Doyle, Staff Assistant, University Advancement (2022) B.A., Boston University College of Communication

Lisa G. Godfrin-Saulnier, Director, University Advancement (2006) A.S., New England Institute of Technology; A.A., Community College of Rhode Island; B.S., Worcester State University

Anna Griffin, Staff Associate, Grants and Sponsored Research (2022) M.S., Fitchburg State University

Paul Madden, Staff Assistant, University Advancement (2023) B.S., M.S., University of Massachusetts Lowell

Thomas M. McNamara, Vice President, University Advancement (1998) B.A., Worcester State College

Suzanne Nebelung, Associate Director, Alumni Relations and Engagement (2024) B.A., Clark University; M.Ed., Worcester State University

Felicia Riffelmacher, Executive Director, University Advancement (2024) A.S., Quinsigamond Community College; B.S., Becker College; M.B.A., Suffolk University

Louise Q. Taylor, Director, University Advancement (2004)

Susan L. Vigeant, Staff Associate, University Advancement (2020) A.S., Becker College

Jennifer Zajac, Staff Associate, Grants and Sponsored Research (2024) B.S., M.B.A., Nichols College

Directions to Campus

By Auto

From Massachusetts Turnpike (I-90):

Take Exit 10 (Auburn) to Rt. 290 East. (see from 290 East)

From Rt. 495:

Take Exit 25 to Rt. 290 West. (see from 290 West)

From Rt. 9 West:

Follow Rt. 9 West into Worcester. (see from Highland Street)

From Rt. 146 North:

Take Rt. 146 North to Rt. 290 East. (see from 290 East)

From Rt. 190 South:

Take Rt. 290 West. (see from 290 West)

From Rt. 290 West:

Take Exit 18 (Rt. 9 West); turn right off exit ramp and stay in center lane, following directions for Rt. 9 West. Turn right onto Rt. 9 West, also known as Highland Street. (see from Highland Street)

From Rt. 290 East:

Take Exit 17 (Rt. 9 West); turn left onto Rt. 9 West which will turn into Highland Street at the bottom of the hill. Proceed up the hill onto Highland Street. (see from Highland Street)

From Highland Street:

While on Highland Street, stay in the right lane. Stay on Highland Street for 1.5 miles. (You'll pass Elm Park and Doherty High School on the left.) At the rotary, take the third right onto June Street. At the second light, turn right onto May Street. The main entrance to the University will be three blocks ahead on the left.

For more information on public transportation, airport and carpooling, visit <http://www.worcester.edu/directions>

For GPS Purposes - Main Campus:

486 Chandler Street, Worcester, MA 01602

Discipline Information

University Switchboard: 508-929-8000

Web Site: <http://www.worcester.edu>

Discipline	Location	Sponsoring Department	Phone	Fax
Art	Learning Resource Center (LRC325)	Visual Performing Arts	508-929-8145	508-929-8166
Biology	Science & Tech Bldg (ST 310)	Biology	508-929-8569	508-929-8148
Biotechnology	Science & Tech Bldg (ST 310)	Biology	508-929-8569	508-929-8148
Business Administration	Sullivan Academic Center (S203)	Business Administration and Economics	508-929-8091	508-929-8048
Chemistry	Science & Tech Bldg (ST410)	Chemistry	508-929-8583	508-929-8171
Communication	Learning Resource Center (L332B)	Communication	508-929-8829	508-929-8170
Communication Sciences & Disorders	Science & Tech Bldg (ST115L)	Communication Sciences & Disorders	508-929-8055	508-929-8175
Computer Science	Science & Tech Bldg (ST110)	Computer Science	508-929-8832	508-929-8156
Criminal Justice	Learning Resource Center (L120)	Criminal Justice	508-929-8417	508-929-8426
Economics	Sullivan Academic Center (S203)	Business Administration and Economics	508-929-8091	508-929-8048
Education	Sullivan Academic Center (S226, S227, S218)	Education	508-929-8671	508-929-8164
English	Sullivan Academic Center (S303)	English	508-929-8154	508-929-8174
Environmental Science	Science & Tech Bldg (ST410)	Earth, Environment & Physics	508-929-8583	508-929-8171
French	Sullivan Academic Center (S303)	World Languages	508-929-8154	508-929-8174
Geography	Science & Tech Bldg (ST410)	Earth, Environment & Physics	508-929-8583	508-929-8171
Health	Science & Tech Bldg (ST110Q)	Health Science	508-929-8832	508-929-8176
History	Sullivan Academic Center (S327)	History & Political Science	508-929-8162	508-929-8155
Liberal Studies	Learning Resources Center (L305A)	Liberal Studies (p. 154)	508-929-8692	
Mathematics	Sullivan Academic Center (S145)	Mathematics	508-929-8912	508-929-8197
Music	Learning Resource Center (LRC325)	Visual Performing Arts	508-929-8145	508-929-8166
Nursing	Science & Tech Bldg (ST222)	Nursing	508-929-8129	508-929-8168
Occupational Therapy	Science & Tech Bldg (ST210B)	Occupational Therapy	508-929-8624	508-929-8178

508 Discipline Information

Philosophy	Sullivan Academic Center (S316)	Philosophy	508-929-8406	508-929-8105
Physics	Science & Tech Bldg (ST410)	Earth, Environment & Physics	508-929-8583	508-929-8171
Political Science	Sullivan Academic Center (S327)	History & Political Science	508-929-8162	508-929-8155
Psychology	Sullivan Academic Center (S241)	Psychology	508-929-8159	508-929-8172
Sociology	Sullivan Academic Center (S218)	Sociology	508-929-8408	508-929-8177
Spanish	Sullivan Academic Center (S303)	World Languages	508-929-8154	508-929-8174
Theatre	Learning Resource Center (LCR Suite 325)	Visual Performing Arts	508-929-8145	508-929-8166
Urban Studies	Sullivan Academic Center (S129)	Urban Studies	508-929-8940	508-929-8144
Visual/Perform Arts	Learning Resource Center (L132B)	Visual Performing Arts	508-929-8145	508-929-8166
World Languages	Sullivan Academic Center (S303)	World Languages	508-929-8154	508-929-8174

Faculty A-Z

A

Ali Al-Faris, Assistant Professor (2021), B.S., College of Electronic Technology at Bani-Walid, Libya; M.S., University of Technology, Malaysia; Ph.D., University of Science, Malaysia

Kayla Aliengena, Assistant Professor (2024), B.S.N., M.S.N., American International College; D.N.P., UMass Amherst

Kyle T. Allaire, Assistant Professor (2020), B.A., M.A., Rhode Island College; Ph.D., University of Connecticut

Nada AlSallami, Associate Professor (2019), B.S., University of Technology, Iraq; M.S., University of Technology, Iraq; Ph.D., University of Technology, Iraq

Latifeh Amini-Kormi, Professor (1994), B.S., Tehran University; Ph.D., University of Pennsylvania

Jeremy R. Andreatta, Professor (2012), B.S., Tarleton University; Ph.D., Texas A&M University

David Angell, Visiting Assistant Professor (2023), B.A., Rhode Island College; M.F.A., Vermont College of Fine Arts

Nathan Angelo, Associate Professor (2016), B.A., Hofstra University; M.A., New York University and City University of New York; Ph.D., New School for Social Research

Timothy Antonelli, Associate Professor (2015), B.S.E., Duke University; Ph.D., North Carolina State University

Anne Armstrong, Assistant Professor (2022), B.A., Hamilton College; M.P.S., SUNY College of Environmental Science and Forestry; M.S., Ph.D., Cornell University

B

Daron C. Barnard, Professor (2006), B.A., Middlebury College; Ph.D., Vanderbilt University

Mark H. Beaudry, Associate Professor (2018), A.S., Mount Wachusett Community College; M.S., B.S., Northeastern University; Ph.D., Capella University

Elizabeth Bidinger, Professor (2007), A.B., University of Michigan; M.A., Boston University; Ph.D., University of Connecticut

Jeremy Birkline, Visiting Assistant Professor (2024), A.A., LoneStar Community College; B.A., University of Texas at Austin; M.F.A., Emerson College

Frank Boardman, Department Chair, Associate Professor (2017), B.A., Hunter College; Ph.D., The City University of New York Graduate Center

Elena Braynova, Department Chair, Professor (2003), M.S., State University of New York, Buffalo; M.S., Ph.D., Moscow State University, Russia

Alex Briesacher, Department Chair, Professor (2015), B.S., Illinois State University; M.A., Southern Illinois University Edwardsville; Ph.D., Kent State University

Erika Briesacher, Professor (2012), B.A., Illinois Wesleyan University; M.A., Southern Illinois University, Edwardsville; Ph.D., Kent State University

Robert A. Brooks, Professor (2004), B.M., Wayne State University; M.A., Antioch University, Los Angeles; J.D., University of Detroit Law School; Ph.D., American University

Abir A. Bukhatwa, Assistant Professor (2019), B.A., M.A., University of Benghazi; M.A., Ph.D., Clark University

Alexandra M. Burgess, Associate Professor (2017), B.A., Smith College; M.A., Ph.D., University of Hawai'i at Manoa

Andrew Burkhardt, Assistant Professor (2022), B.S., University of Michigan; M.S., Ph.D., University of Virginia

C

Mariana Calle, Professor (2012), B.S., University of Buenos Aires, Argentina; M.S., Ph.D., University of Connecticut

Kristine A. Camacho, Assistant Professor (2020), B.S., Westfield State University; M.S., Worcester State University; C.A.G.S., Worcester State University; Ph.D., University of Massachusetts Amherst

William Chadbourne, Department Chair, Assistant Professor (2015), A.S., Mount Wachusett Community College; B.S., Worcester State College; M.S., Worcester State University

Mary E. Clay, Department Chair, Professor (2012), B.S., Fitchburg State University; M.B.A., Anna Maria College; D.B.A., Argosy University; C.P.A., Commonwealth of Massachusetts

Maura Collins, Professor (2001), B.S., Worcester Polytechnic Institute; M.S., Ph.D. Rutgers University

Siri J. Colom, Assistant Professor (2019), B.A., Tufts University; M.A., University of Massachusetts; Ph.D., University of California Berkeley

Thomas E. Conroy, Department Chair, Professor (2010), B.A., Salem State University; M.A., Ph.D., University of Massachusetts, Amherst

Diane Cooke, Professor (2002), B.S., Louisiana State University; M.A., Ph.D., University of Colorado Boulder

Michelle Corbin-Izaurre, Professor (2011), B.S., Western Michigan University; M.S., Eastern Michigan University; Ph.D., University of Maryland

Amy Cota-McKinley, Department Chair, Professor (2002), B.A., University of Wisconsin; M.S., Jacksonville State University; Ph.D., Colorado State University

Suzanne Crawford-Stacy, Clinical Instructor (2013), B.S., Worcester State University; M.S., University of Vermont

Kristina A. Curro, Department Chair, Associate Professor (2015), B.A., University of Rochester; M.A., University of Massachusetts Amherst

Laura A. Curtis, Assistant Professor (2023), B.S., University of Saint Joseph; M.S., Northeastern University

D

Laurie A. Dahlin, Professor (2001), B.S., Nichols College; M.B.A., Assumption College; D.B.A., Nova Southeastern University; C.M.A., Institute of Management Accountants

Noah Daleo, Associate Professor (2015), B.S., Kennesaw State University; Ph.D., North Carolina State University

Keith N. Darrow, Professor (2010), B.S., University of Massachusetts; M.S., Brooklyn College; Ph.D., Massachusetts Institute of Technology and Harvard Medical School

Lori J. Dawson, Professor (1995), B.A., Suffolk University; M.A., Ph.D., State University of New York, Albany

William Deane, Associate Professor (2021), B.S.N., Curry College; M.S.N., Framingham State University; Ph.D., University of Massachusetts Dartmouth

Aimée Delaney, Professor (2013), B.A., M.A., C.A.G.S., (Domestic Violence) University of Massachusetts, Lowell; Ph.D., University of New Hampshire

Anthony Dell'Aera, Associate Professor (2016), B.A., Trinity College; M.A., Ph.D. Brown University

Meghna Dilip, Department Chair, Professor (2008), B.S., University of Madras, India; M.S., Anna University India; M.S., Ph.D., University of Alabama

Sarah E. DiMeo, Assistant Professor (2020), B.S., Utica College of Syracuse University; M.S., Tufts University; Ph.D., Texas Woman's University

Carol B. Donnelly, Professor (1997), A.B., Wellesley College; M.A., University of Miami; M.Ed., Harvard University; Ed.D. Boston University

Paul A. Dubrey, Jr, Associate Professor (2016), B.S., Assumption College; M.B.A., Nichols College; C.P.A., Commonwealth of Massachusetts; D.B.A., Walden University

Allison Dunn, Department Chair, Professor (2007), B.A., Oberlin College; M.A., Ph.D., Harvard University

E

Sarah Eagan, Assistant Professor (2022), B.A., Sonoma State University; M.A., Ball State University; Ph.D., University of Nebraska

F

Maria Fahey, Instructor (2022), B.S., M.S., Saint Joseph's College; M.S., The Medical University of the Americas; M.S., Worcester State University

Bo Fan, Assistant Professor (2019), B.B.A., B.CST., Shenyang Institute of Technology; M.S., Ph.D., Southern New Hampshire University

Denise R. Foley, Professor (2010), B.A., College of the Holy Cross; M.Ed., Bridgewater State College; C.A.G.S., Fitchburg State College; C.A.G.S., University of Massachusetts, Boston; Ed.D., Indiana University of Pennsylvania

Elinor Fondell, Assistant Professor (2021), B.S., Stockholm University; Ph.D., Karolinska Institutet, Stockholm, Sweden

Carlos Fontes, Professor (1996), B.A., Escola Superior de Meios de Comunicacao Social, Lisbon; M.A., Ph.D., University of Massachusetts

Sue F. Foo, Professor (2004), M.Ed., Ed.D., University of Cincinnati

Mary S. Fowler, Professor (2004), B.A., New York University; M.S., Ph.D., Carnegie Mellon University

Charles R. Fox, Professor (2013), O.D., New England College of Optometry; B.A., M.A., St. John's University; Ph.D., Brandeis University

Kathryn Frazier, Associate Professor (2016), B.A., Scripps College; M.A., Ph.D., Clark University

Julie D. Frechette, Professor (1999), B.A., University of New Hampshire; M.A., Ph.D., University of Massachusetts

Martin Fromm, Professor (2013), B.A., Brown University; M.A., Stanford University; Ph.D., Columbia University

Maria G. Fung, Professor (2008), B.A., Clark University; M.S., Ph.D., Cornell University

G

Steven Gagliastro, Visiting Instructor (2023), B.M.E., UMass Amherst

Suzanne Gainer, Department Chair, Professor (2001), B.A., St. Vincent College; M.F.A., Rhode Island School of Design

Joanne Gallagher Worthley, Professor (1995), B.S., Quinnipiac College; M.S., Florida International University; Ed.D., Johnson & Wales University

Aldo V. Garcia-Guevara, Department Chair, Professor (2006), B.A., University of North Carolina, Asheville; M.A., Ph.D., University of Texas, Austin

Shiko Gathuo, Professor (2005), B.Ed., Kenyatta University; M.B.A., University of Nairobi; M.S., Ph.D., University of Massachusetts, Boston

Stephen Gee, Visiting Assistant Professor (2022), B.S., University of South Carolina; M.S., Medical University of South Carolina; Ph.D., University of North Carolina at Chapel Hill

Michael Gesin, Professor (2007), B.A., Worcester State College; M.A., Ph.D., Brandeis University

Elizabeth Gilbert, Associate Professor (2016), B.S., M.S., Villanova University; Ph.D., Temple University

Hy Ginsberg, Professor (2011), B.S., State University of New York Stony Brook; M.S., Ph.D., University of Vermont

Kristine Goldynia, Visiting Instructor (2024), B.A., Wayne State University; M.A., Edinboro University; S.L.P.D., Northwestern University

Roger S. Greenwell, Co-Coordinator of the Biotechnology Program, Associate Professor (2014), B.S., Western Kentucky University; Ph.D., University of Wisconsin-Madison

Aleel K. Grennan, Associate Professor (2017), B.S., University of Massachusetts; M.S., Ph.D., University of Illinois

Antonio Guijarro-Donadiós, Department Chair, Professor (2014), B.A., Universidad Complutense de Madrid, Spain; M.A., Salford University, England; M.A., Ph.D., University of Connecticut

H

Michael C. Hachey, Professor (1993), B.F.A., M.F.A., Massachusetts College of Art

Charlotte Haller, Department Chair, Professor (2004), B.A., Brown University; M.A., Ph.D., University of Wisconsin

Tona J. Hangen, Professor (2008), B.S., Massachusetts Institute of Technology; Ph.D., Brandeis University

William Hansen, Professor (2005), B.A., State University of New York Albany; M.A., Hunter College; Ph.D., City University of New York Graduate Center

Jason A. Hardin, Associate Professor (2014), B.A., University of Cincinnati; M.S., Ph.D., University of Nebraska Lincoln

Carter Hardy, Assistant Professor (2022), B.A., University of Central Florida; M.Phil., Ph.D., University of South Florida

Bradley Harris, Visiting Assistant Professor (2023), B.S., University of California, Berkeley; M.S., Kaplan University; M.D., Tufts University School of Medicine

Pamela Harris, Clinical Instructor (2021), B.A., Assumption College; M.S.N.Ed., Worcester State University

Pamela Hollander, Department Chair, Associate Professor (2012), B.A., State University of New York Binghamton; M.Ed., Rutgers University; Ed.D., University of Massachusetts Amherst

Jennifer Hood-DeGrenier, Department Chair, Professor (2012), B.A., Williams College; Ph.D., Harvard University

Jane Howland, Visiting Assistant Professor (2023), B.A., University of Pennsylvania; M.F.A., Brandeis University

Yan Hu, Associate Professor (2018), B.S., Qufu Normal University; Ph.D., Wuhan University

Daniel S. Hunt, Professor (2013), B.A., University of Rhode Island; M.S., Boston University College of Communication; Ph.D., University of Connecticut

J

Eihab Jaber, Professor (2006), B.A., Hunter College; M.S., Ph.D., State University of New York Stony Brook

Benjamin Jee, Associate Professor (2015), B.S., University of Toronto; Ph.D., University of Illinois, Chicago

Brittany Jeye, Assistant Professor (2019), B.S., M.A., Ph.D., Boston College

K

Saba Kadady, Instructor (2022), B.S., MS., Al Nahrain University, Iraq

Laura W. Kane, Associate Professor (2020), B.A., Hunter College, City University of New York; M.Phil., Ph.D., The Graduate Center, City University of New York

Sharisse Kanet, Visiting Assistant Professor (2022), B.A., Wesleyan University; M.A., Ph.D., CUNY Graduate Center

Christina L. Kaniu, Professor (2010), B.A., Stonehill College; M.Ed., Worcester State College; Ed.D., Northeastern University

Bonnie G Kanner, Professor (1997), B.A., M.S., C.A.S., State University of New York, Albany; Ph.D., Clark University

Colleen Karow, Associate Professor (2017), B.A., M.A., Western Illinois University; Ph.D., University of Texas at Austin

Matthew Kaufman, Assistant Professor (2023), B.S.E.S., Keene State College; Ph.D., University of Texas at Austin's Jackson School of Geosciences

Margaret E. Kerr, Professor (2000), B.S., University of Maine; Ph.D., Wesleyan University

Hyesun Kim, Department Chair, Professor (2010), B.A., Dongguk University, South Korea; M.A., Ewha Women's University, South Korea; M.A., John Jay College of Criminal Justice; Ph.D., Indiana University of Pennsylvania

Joshua D. Koenig, Assistant Professor (2022), B.A., M.A., Southern Illinois University Edwardsville; Ph.D., Western Michigan University

Caitlin Krul, Associate Professor (2016), B.S., Salem State College; M.S., Ph.D., University of Rhode Island

L

Angela M. Latter, Assistant Professor (2017), B.S., M.S., Worcester State University

Maxim Lavrentovich, Assistant Professor (2023), B.A., Kenyon College; Ph.D., Harvard University

Mark L. Love, Associate Professor (2006), B.S., M.B.A., Nichols College; C.P.A., Commonwealth of Massachusetts

M

Nabin K. Malakar, Associate Professor (2017), M.S., Ph.D., University at Albany, State University of New York (SUNY)

Jaime G. Mancilla, Assistant Professor (2023), B.S., University of Maryland; Ph.D., University of Chicago

Jaime L. Marino, Clinical Instructor (2021), B.A., Simmons College; M.S., Worcester State University

Kyle D. Martin, Professor (1998), B.M., Hardin-Simmons University; M.M., D.M.A., Eastman School of Music

Penny Martin, Associate Professor (2003), B.S., Weber State College, Utah; M.A., Humboldt State University; Ph.D., University of Miami

Riley B. McGuire, Assistant Professor (2020), B.A., M.A., University of Manitoba; M.A., Ph.D., University of Pennsylvania

Carol McLaughlin, Instructor (2021), A.S., Quinsigamond Community College; B.S., M.S., Worcester State University

Julia A. McNeil, Associate Professor (2018), B.S.N., Austin Peay State University; M.S.N., University of Phoenix

Tanya Mears, Associate Professor (2010), B.S., Tuskegee University; M.A., Ph.D. University of Massachusetts, Amherst

Kenneth S. Melnick, Associate Professor (2004), B.A., University of Michigan; M.A., University of Cincinnati; Ph.D., Vanderbilt University

Kym Meyer, Assistant Professor (2022), B.A., Hofstra University; M.S., Gallaudet University; Ph.D., University of Massachusetts, Amherst

Susan Mitroka-Batsford, Professor (2013), B.A., Rutgers University; Ph.D., Virginia Polytechnic Institute and State University

Syamak Moattari, Associate Professor (2015), M.D., Shahid Beheshti Medical University; Ph.D., Boston University

Susan R. Monaghan, Associate Professor (2016), B.S., University of Massachusetts, Amherst; A.M., Stanford University; Ph.D., Marquette University

Rita Mookerjee, Assistant Professor (2022), B.A., M.A., Temple University; Ph.D., Florida State University

Trinidad Morales, Visiting Assistant Professor (2023), B.A., M.A., The University of Texas at El Paso; Ph.D., Texas A&M University

Stephen A. Morreale, Professor (2007), B.S., University of Massachusetts, Boston; M.P.A., Golden Gate University; D.P.A., Nova Southeastern University

Kaushik Mukherjee, Assistant Professor (2022), B.S., Jadavpur University; M.B.A., Xavier School of Management, India; Ph.D., University of Mississippi

Kathleen Murphy, Associate Professor (2014), B.S., College of William and Mary; M.S., Ph.D., University Of Massachusetts, Amherst

Timothy E. Murphy, Associate Professor (2013), B.A., Indiana University; M.A., Ph.D., University of California, Davis

N

Eric Nichols, Assistant Professor (2019), B.A., Worcester State University; M.F.A., Maine College of Art

Jeffry C. Nichols, Professor (2006), B.A., Texas Tech University; Ph.D., Rice University

Emanuel E. Nneji, Professor (2005), B.A., University of Nigeria; M.S., University of Lagos; Ph.D., University of South Carolina

O

Samuel O'Connell, Department Chair, Professor (2010), B.A., M.A., Washington University; Ph.D., Northwestern University

Jessica O'Connor, Visiting Instructor (2019), B.S., University of New Hampshire

Carlos Odria, Assistant Professor (2020), B.A., M.Mus., Ph.D., Florida State University

Michael Ogunbunmi, Assistant Professor (2023), B.S., Ahmadu Bello University; M.S., African University of Science and Technology; Ph.D., University of Johannesburg

Alison K. Okuda, Associate Professor (2017), B.A., University of California; M.Phil., Ph.D., New York University

Francis G. Olive III, Associate Professor (2016), B.S., Our Lady of the Elms College; M.C.S.W., Fordham University; Ph.D., University of New Haven

Steven J. Oliver, Professor (2003), B.A., University of Montana; Ph.D., Boston University

Bonnie Orcutt, Professor (2003), B.S., Worcester State College; M.A., Ph.D., Clark University

Matthew Ortoleva, Department Chair, Professor (2011), B.A., Rhode Island College; M.A., Ph.D., University of Rhode Island

Elizabeth Osborne, Associate Professor (2016), B.A., The George Washington University; M.A., Universidad de Chile; Ph.D., Stony Brook University

Rodney Oudan, Professor (2005), PgCert., University of the West Indies, UWI; M.M., Cambridge College ; D.B.A., Nova Southeastern University

P

Stacey Parker, Professor (2007), B.F.A., Alfred University; M.F.A., Rochester Institute of Technology

Eileen B. Perez, Developmental Mathematics Program Director, Professor (2013), B.S., M.S. Union College; Ed.D., Nova Southeastern University

Margarita Perez, Professor (1999), B.A., Mount Holyoke College; M.A., Ed.D., Teachers College Columbia University

Andrew J. Piazza, Department Chair, Associate Professor (2017), B.S., M.S., University of Florida; Ph.D., University of Alabama

Miriam L. Plavin-Masterman, Professor (2013), B.S., Cornell University; M.B.A., Dartmouth College; M.A., Ph.D., Brown University

Ana Pérez-Manrique, Professor (2006), B.A., Universidad de Malaga, Spain; M.A., University of South Carolina; Ph.D., Florida State University

Q

Joseph G. Quattrucci, Professor (2011), B.A., University of Southern Maine; Ph.D., University of Massachusetts Amherst

Dennis Quinn, Professor (1996), B.A., Worcester State College; M.A., Assumption College; Ph.D., University of Massachusetts

R

Jacqueline N. Raftery-Helmer, Associate Professor (2017), B.S., Union College; M.A., Ph.D., Clark University

Jamie Remillard, Associate Professor (2017), B.A., Ph.D., University of Rhode Island; M.F.A., Emerson College

Laura C. Reynolds, Assistant Professor (2020), B.A., Dartmouth College; Ph.D., University of California

Nicole Rosa, Associate Professor (2014), B.A., Stonehill College; M.S.W., Boston College; M.A., Ph.D., Brandeis University

Luis Rosado, Assistant Professor (2020), B.S., Boise State University; M.S., Ph.D., University of Massachusetts Amherst

S

Naida Saavedra, Associate Professor (2016), B.A., Universidad de Zulia, Venezuela; M.A., Ph.D., Florida State University

Adam Saltsman, Associate Professor (2016), B.A., Colby College; M.A., Ph.D., Boston College

Christina Santana, Associate Professor (2016), B.A., M.A., University of Nevada, Reno; Ph.D., Arizona State University

MaryLynn Saul, Professor (1995), B.S., M.A., Ph.D., Ohio State

Samantha Scripture, Assistant Professor (2022), B.A., Elms College; M.A., Ph.D., University of Massachusetts, Amherst

Brittany E. Severance, Assistant Professor (2021), B.A., University of Massachusetts; M.A., M.F.A., Emerson College

Noa Shaindlinger, Assistant Professor (2022), B.A., Tel Aviv University, Israel; M.A., Ph.D., University of Toronto, Canada

Shaylynn Shuler, Visiting Assistant Professor (2023), B.S., B.S., B.I.S., Weber State University; M.A., Ph.D., Northern Arizona University

Hardeep Singh Sidhu, Associate Professor (2016), B.A., Boston University; M.A., Ph.D., University of Rochester

Elizabeth A. Siler, Professor (2008), B.A., Boston University; M.B.A., Simmons College; Ph.D., University of Massachusetts, Amherst

Brandi Silver, Professor (2003), B.S., M.S., Ph.D., Colorado State University

Amaryllis Siniosoglou, Professor (2005), P.E.P., Royal College of Art, London; M.F.A., University of Massachusetts, Amherst; Diplome Supérieur d' Art Plastique, School of Art, Athens

Robert W. Smith, Professor (2007), B.A., Syracuse University; M.A., Ph.D., College of William and Mary

Emily Soltano, Professor (1999), B.A., Ph.D. State University of New York, Albany

Champika K. Soysa, Professor (2003), B.A., Mount Holyoke College; M.A., Ph.D., Clark University

Ian W. Stephens, Assistant Professor (2020), B.S., Georgia Institute of Technology; Ph.D., University of Illinois at Urbana - Champaign

Colleen Sullivan, Professor (2012), B.S., Frostburg State University; M.A., Ph.D., University of Maryland, Baltimore

Seth Surgan, Professor (2006), B.A., University of North Carolina, Chapel Hill; M.A., Ph.D., Clark University

T

John R. Tahiliani, Professor (2008), B.A., King's College; M.A., Ph.D., Washington State University

Nafisa Tanjeem, Associate Professor (2022), B.S.S., University of Dhaka, Bangladesh; M.A., University of Toronto, Canada; Ph.D., Rutgers University

Henry C. Theriault, Associate Vice President for Academic Affairs, Professor (1998), B.A., Princeton University; Ph.D., University of Massachusetts

Hansun T. To, Professor (2004), B.A., Rosemont College; M.A., Ph.D., Temple University

Randall Tracy, Professor (2003), B.S., M.S., University of Connecticut; Ph.D., Arizona State University

Heather Treseler, Professor (2011), B.A., Brown University; Ph.D., University of Notre Dame

Tanya Trudell, Department Chair, Associate Professor (2015), B.A., Eastern Connecticut State University; M.O.T., Worcester State University; Ed.D., Johnson & Wales University

V

Jaime F. Vallejos, Associate Professor (2017), B.S., M.D., University of Nicaragua; M.P.H., University of Massachusetts Amherst

Sebastian Velez, Professor (2012), B.S., University of Puerto Rico; M.S., University of Notre Dame; Ph.D., Harvard University

Donald W. Vescio, Jr, Professor (1998), A.B., State University of New York, Oswego; M.A., University of New Hampshire; Ph.D., University of Rochester

Francisco Vivoni, Professor (2013), B.A., Universidad Puerto Rico, Rio Piedras; Ph.D., University of Illinois, Urbana

W

Marc J. Wagoner, Associate Professor (2004), B.A., Morehouse College; Ph.D., University of Minnesota

Lingling Wang, Associate Professor (2016), B.A., Xi'an International University; M.B.A., Ecuador Military School of Technology; M.S., D.B.A., Southern New Hampshire University

Elizabeth J. Wark, Professor (2007), B.A., Mount Holyoke College; M.B.A., University of Massachusetts; M.A., Ph.D., Clark University

Karen Weierman, Professor (2000), B.A., Georgetown University; Ph.D., University of Minnesota

Cleve Wiese, Associate Professor (2014), B.A.,
Rhodes College; M.A., New York University; Ph.D.,
State University of Texas, Austin

Michael Winders, Department Chair, Professor (2004),
B.S., M.S., Ph.D., University of Iowa

Heidi L. Wojcik, Assistant Professor (2020), B.A.,
M.Ed., Framingham State University; Ed.D., Leslie
University

Thomas Wood, Visiting Assistant Professor (2024),
B.A., University of Exeter; M.A.L.D., Ph.D., Tufts
University

Jamie Wronka, Visiting Instructor (2022), B.S.O.T.,
M.S.O.T., University of New Hampshire

Karl R. Wurst, Professor (1999), B.S., Central
Connecticut State University; M.S., Ph.D., University
of Connecticut

X

Weichu Xu, Co-Coordinator of the Biotechnology
Program, Associate Professor (2016), B.S., Suzhou
University Suzhou China; M.S., Ph.D., Chinese
Academy of Sciences

Y

Janice G. Yee, Professor (2007), B.A., University
of Massachusetts, Dartmouth; M.A., Ph.D., Clark
University

Sara L. Young, Professor (2010), B.A., School for
International Training; M.S.T., New School for Social
Research; Ed.D., University of Massachusetts
Amherst

Z

Adam Zahler, Professor (2007), B.A., University of
Vermont; M.F.A., University of Virginia

Kayleigha Zawacki, Visiting Assistant Professor
(2023), B.F.A., M.F.A., Boston University

INDEX

#

4+ Initial License and M.Ed in Middle School Education	111
4+ Initial License and M.Ed in Secondary School Education	113
4+ Initial License in English as a Second Language	115
4+ Initial License in Middle School Education	116
4+ Initial License in Secondary School Education	117
4+1 Bachelor of Science in Sociology/Masters in Non-Profit Management	431
4+1 Bachelor of Science in Urban Studies / Master of Science in Non-Profit Management	441
4+1 BS/MS Program in Biotechnology	184
4+1 Masters in Communication Sciences and Disorders	209
4+1 Program	306
4+1 Program in History and Political Science / Master of Public Administration and Policy (MPAP)	377
4+1 Program in History and Political Science / Master of Public Management (MPM)	379
4+1 Program in History and Political Science / MS in Nonprofit Management	376
4+1 Program in Urban Studies / Master of Public Administration and Policy (MPAP)	442
4+1 Program in Urban Studies / Master of Public Management (MPM)	443
A	
Academic Achievement Awards Ceremony	35
Academic Advising	35
Academic Calendar	88
Academic Honesty	35
Academic Policies and Procedures	34
Academic Programs	16
Academic Reprive Policy	35
Academic Scholarships for Returning Students	83
Academic Support Services	35
Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science	61
Accreditation	9
Actuarial Mathematics Minor	262
Addictions Counseling	92
Additional Admission Criteria for Selective Majors	30
Administrative Offices	499
Admission Following Withdrawal from Worcester State or Leave of Absence	18
Admission to Non-Degree Programs	19
Admissions	18
Advanced Placement (AP) Guidelines	19
Affordability/Accessibility Disclosure Statement	75
African and African Diaspora Studies Minor .	101
Alternatives for Individual Development (A.I.D.)	20
Alumni Association and Foundation Board ..	497
American Antiquarian Society Seminar	61
American Council on Education (ACE) College Credit Recommendation Service	20
Application Process	21
Application Process	83
Applied Mathematics Minor	262
Arabic	474
Art Major	461
Art Minor	462
Asian Studies Minor	101
Astronomy Minor	293
Athletics and Recreation	66

B

Bachelor of Science Occupational Studies Program	289	Change of Catalog Information	11
Bioinformatics Minor for Biology/Biotechnology Majors	171	Chemistry	190
Bioinformatics Minor for Chemistry Majors ..	172	Chemistry Honors Program	196
Bioinformatics Minor for Computer Science Majors	172	Chemistry Major	194
Bioinformatics Minor for non-Biology, Biotechnology, Chemistry, or Computer Science Majors	173	Civic Engagement Minor	412
Biology	164	College Academic Program Sharing (CAPS) ...	62
Biology Major	174	College Level Examination Program (CLEP) ...	22
Biotechnology	182	Commonwealth Commitment	24
Biotechnology Major	185	Communication	316
Bookstore	66	Communication Education Minor	320
Business Administration	301	Communication Major	320
Business Administration Major	308	Communication Major, Concentration in Advertising and Public Relations	322
Business Administration Major, Concentration in Accounting	310	Communication Major, Concentration in Digital Media Production	323
Business Administration Major, Concentration in Entrepreneurial Studies and Small Business Management	310	Communication Minor	325
Business Administration Major, Concentration in Finance	311	Communication Sciences and Disorders	201
Business Administration Major, Concentration in International Business	312	Communication Sciences and Disorders Honors Program	206
Business Administration Major, Concentration in Management	313	Communication Sciences and Disorders Major	204
Business Administration Major, Concentration in Marketing	314	Communication Sciences and Disorders Minor	207
Business Administration Minor	314	Community Relations	11
C		Composition and Music Technology Minor ..	385
Campus	9	Composition and Music Technology Minor ..	385
Career Services	67	Computer Science	214
Cellular & Molecular Biology Minor	176	Computer Science Major	217
Certificate	35	Computer Science Major, Concentration in Big Data Analytics	219
Certificate in Addictions Counseling	95	Computer Science Major, Concentration in Software Development	221
		Computer Science Minor	223
		Concentration	35
		Concentration in Global Studies	150
		Constitutions (CON)	38

Counseling Services 67
 Course Formats 35
 Creative Arts (CA) 39
 Criminal Justice 326
 Criminal Justice Major 333
 Criminal Justice Minor 334

D

Data Science Minor 224
 Dean’s List Criteria 35
 Delayed (deferred) Enrollment 24
 Department Challenge 62
 DHE Massachusetts High School Unit Requirements (Academic Courses) 24
 Dining Services 68
 Directions to Campus 506
 Discipline Information 507
 Diversity (DIV) 40
 Documentation of High School Diploma or Equivalency 25

E

Early Childhood Education Major 118
 Early Education and Care Program 121
 Ecology Minor 177
 Economics 337
 Economics Major 340
 Economics Minor 343
 Education 104
 Education, Liberal, and Interdisciplinary Studies 100
 Education Studies Major 123
 Education Studies Minor 124
 Electives 35
 Elementary Education Major 125
 English 344

English Major 354
 English Major, Concentration in Journalism . 356
 English Major, Concentration in Writing 358
 English Minor 359
 Enhanced Learning Opportunities 60
 Environmental and Sustainability Studies 133
 Environmental Science 225
 Environmental Science Honors Program 229
 Environmental Science Major 229
 Environmental Science Minor 231
 Ethics Minor 403
 Ethnic Studies 135
 Evening Undergraduate Course Offerings 26
 Evening Undergraduate, Graduate, and Summer Programs 76
 Exceptions 26

F

Faculty A-Z 509
 Family Educational Rights and Privacy Act 12
 Fast-Track Program (RN-to-MS) 279
 Federal Grants and Benefits 83
 Financial Aid 82
 Financial Aid Application Deadlines 83
 Financial Information 75
 First-Year Seminar (FYS) 41
 First-Year Student Admission 26
 Forensic Science Minor 96
 French 474

G

GED/HiSET Recipients 27
 General Information 9
 General Requirements for the Baccalaureate Degree 35
 General Worcester State Refund Policy 76

Geography and Earth Sciences 231

Geography Honors Program 236

Geography Major: Earth Science Education Concentration 237

Geography Major: Earth System Science Concentration 238

Geography Major: Environmental Studies Concentration 240

Geography Major: General Geography Concentration 241

Geography Major: Geographic Information Systems Concentration 243

Geography Minor 244

Geoscience Minor 245

Geospatial Information Science Minor 245

Gerontology Minor 139

Global Perspectives (GP) 42

Global Studies 139

Good Student Policy 36

Graduation Honors 36

Grants and Waivers for Massachusetts Residents 84

H

Health Forms and Immunization 68

Health Sciences 246

Health Services 69

Higher Education Consortium of Central Massachusetts (HECCMA) 62

History 363

History Major 380

History Major Track for History Educators ... 382

History Minor 382

Homeland Security Minor 335

Honors Program in Biology 177

Honors Program in Biotechnology 188

Human Behavior and Social Processes (HBS) 44

Human Development Minor 421

Human Rights and Social Justice Minor 153

I

Individual and Community Well-being (ICW) ... 46

Institutional Learning Outcomes 14

Intent to Graduate 36

Interdisciplinary Minor in Disabilities Studies 207

Interdisciplinary Studies 153

International Applicants 27

International Baccalaureate (IB) Credit 28

International Programs 36

Internships and Professional Experiences 63

J

Journalism 99

L

Laptop and Technology Requirement 37

Latin American and Latinx Studies Minor 475

LGBTQIA+ Resource Center 70

Liberal Arts and Sciences Curriculum WSU - Pathways to Discovery 37

Liberal Studies 154

Library 91

Literature Minor 360

Lt. Col. James F. Sheehan '55 Honors Program 91

M

Major in Biology and prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science 178

Major in Biology, Concentration in Pre-Medicine 294

Major in Biotechnology and prerequisites for the Accelerated Pharmacy Program with Massachusetts College of Pharmacy and Health Science University 188

Major in Biotechnology, Concentration in Bioinformatics	189	Music	384
Major in Biotechnology, Concentration in Pre-Medicine	297	Music Minor	384
Major in Chemistry and prerequisites for the Accelerated Pharmacy Program	197	Music Minor	384
Major in Chemistry, Concentration in Medicinal Chemistry	197	N	
MajorPlus	56	Narrative Studies of Health and Body Minor .	361
MassTransfer	28	Natural Systems and Processes (LAB)	48
Master's of Science in Communication (MSC) Program	325	Natural Systems and Processes (NSP)	49
Mathematics	258	New England Regional Student Program	63
Mathematics for Elementary Education	262	Non-Traditional Applicants	29
Mathematics Major: Concentration in Actuarial Studies	264	Normal and Disordered Speech, Language and Hearing Minor	208
Mathematics Major: Concentration in Secondary Education	265	Nursing	271
Mathematics Major: Concentration in Statistics and Modeling	267	O	
Mathematics Major: Concentration in Traditional Mathematics	268	Occupational Studies	286
Mathematics Minor	270	Off-Campus Courses	64
Matriculation	57	Office of Academic Affairs	90
Merit Scholarships for Entering Students	85	Office of Student Involvement and Leadership Development	70
Middle School Education	128	Officials of Worcester State University	496
Middle School Mathematics Minor	270	P	
Minor in Addictions Counseling	96	Philosophy	397
Minor in Chemistry	198	Philosophy Minor	402
Minor in Chemistry for the Medical Professions	199	Physics	291
Minor in Global Studies	151	Physics Minor	293
Minor in Mental Health Services	421	Policy on Nondiscrimination	14
Minor in Pharmaceutical Science	199	Political Science	405
Minor in STEM	199	Political Science Major	413
Mission	14	Political Science Minor	413
Multicultural Affairs	57	Post-Baccalaureate Pre-medical and Health Professions Program	29
		Pre-entrance Immunization Requirements	32
		Pre-Law Minor	414
		Pre-Law Program	64
		Pre-Medical Concentrations	294

Pre-Medical Courses For Non-Biology, Biotechnology, or Chemistry Majors	299	School of Science, Technology and Health ...	163
Pre-Medical, Pre-Dental, Pre-Veterinary and Pre-Pharmacy Advisory Program	64	Seal of Bilingualism	60
Prior Learning Portfolio Program	58	Second Baccalaureate Degree	32
Professors Emeriti	491	Secondary School Education	130
Program	60	Services for Students	66
Psychobiology Minor	179	Social Inequalities Minor	432
Psychobiology Minor	422	Social Work and Social Policy Minor	444
Psychology	415	Sociology	427
Psychology Major	423	Sociology Major	432
Psychology Major, Concentration in Mental Health Services	425	Sociology Major - Social Inequalities Concentration	433
Psychology Major, Interdisciplinary Concentration in Women's Studies	425	Sociology Minor	434
Psychology Minor	426	Sources of Financial Aid	87
Public Health - Pre-Nursing Program	31	Spanish	476
Public Health - Pre-Nursing Program	251	Spanish Major, Concentration in Spanish for the Professions	485
Public Health Major	253	Spanish Major, Concentration in Spanish/ Education	487
Public Health Major, Concentration in Health Education	257	Spanish Minor	489
Public Health Minor	257	Spanish Minor for Health Professionals	489
Public History Minor	382	Spanish Translation Major	484
Public Policy and Urban Planning Minor	444	Special Admission	32
Q		Special Non-Matriculated Students	32
Quantitative Reasoning (QR)	50	Spiritual Life	71
R		Standards of Progress	60
Registration and Course Information	60	Student Accessibility Services	72
Reserve Officer Training Corps (ROTC)	65	Student and Parent Loans	87
Residence Life and Housing	71	Student Conduct	60
Return of Title IV Funds	77	Student Employment	88
Room and Board	79	Student Health Insurance	80
S		Student Right-to-Know Act	32
Satisfactory Academic Progress Policy	86	Summer Programs	65
School of Humanities and Social Sciences ..	300	T	
		The Binienda Center for Civic Engagement ...	72

The United States and Its Role in the World (USW)	51	Visual and Performing Arts and Education, Double Major	459
The Washington Center for Internships and Academic Seminars	65	Visual and Performing Arts Major	458
Theatre Major	463		
Theatre Minor	464		
Thought, Language, and Culture (TLC)	53		
TITLE IX/Policies and Inquiries	15		
Track One (Undergraduate BS Program)	279		
Track Three (LPN-to-BS Program)	283		
Track Two (RN-to-BS Program)	282		
Transcripts	60		
Transfer Student Admission	32		
Transferring Credit from Other Institutions	32		
Tuition and Fees	80		
Tuition Payment Plan	88		
Tuition Surcharge	82		

U

Undergraduate Catalog	8
Undergraduate Grade Appeal Procedure	60
Undergraduate State-supported Programs	82
University Police Department	72
Urban Studies	435
Urban Studies Major	445
Urban Studies Major, Concentration in Public Administration and Planning	446
Urban Studies Major, Concentration in Social Work and Social Policy	446
Urban Studies Minor	447

V

Veteran/Military Applicants (VALOR Act Academic Credit Evaluation Policy)	33
Veterans Service	72
Visual and Performing Arts	385
Visual and Performing Arts	385

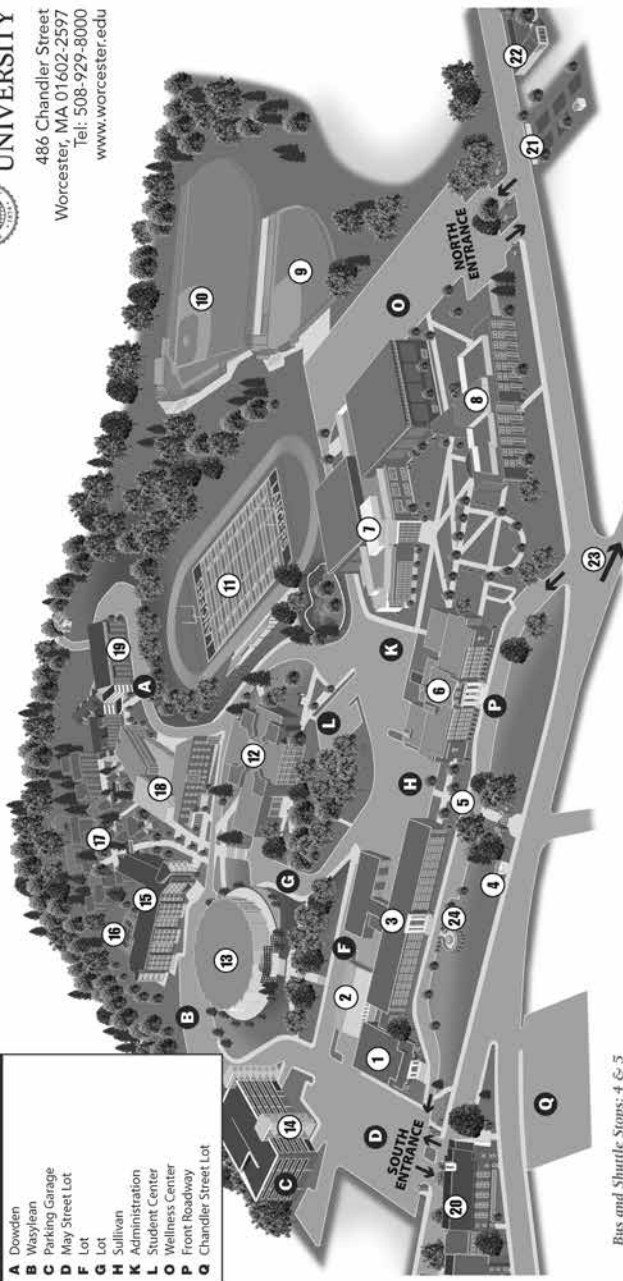
W

Withdrawal from Worcester State University/ Leave of Absence	60
Women’s, Gender, and Sexuality Studies	157
World Languages	465
Writing Minor	361
Writing (WR1 & WR2)	56



486 Chandler Street
Worcester, MA 01602-2597
Tel: 508-929-8000
www.worcester.edu

- PARKING LOTS**
Visitor Spots are in H Lot
- A Dowdlen
 - B Wasylean
 - C Parking Garage
 - D May Street Lot
 - F Lot
 - G Lot
 - H Lot
 - I Sullivan
 - K Administration
 - L Student Center
 - M Wellness Center
 - O Front Roadway
 - Q Chandler Street Lot



Bus and Shuttle Stops: 4 & 5

- | | | | |
|---|--|--|--|
| <ul style="list-style-type: none"> 1 Sullivan Auditorium 2 Facilities 3 Sullivan Academic Center (S)
Eger Auditorium—1st floor 4 WRTA Bus Shelter 5 Sagamore Road Studios Shuttle Stop 6 Shaughnessy Administration Bldg. (A)
Academic Success Center, Registrar,
Financial Aid, Student Accessibility Services,
Student Accounts/OneCard, Transfer Center,
Welcome Center—1st floor
Admissions—2nd floor
Graduate & Continuing Education—4th floor | <ul style="list-style-type: none"> 7 The Gene J. and Julianne DeFeudis
Wellness Center (WELL)
Starbucks—1st floor 8 Ghosh Science & Technology Center (ST)
102 Auditorium—1st floor
Mary Gasgrove Dolphin Gallery—1st floor
Speech-Language-Hearing Center—1st floor 9 Rockwood Softball Field 10 Kevin Lyons Baseball Diamond 11 Coughlin Athletic Field
Bookstore, Food Court, Blue Lounge,
North & South Conference Rooms—1st floor
Lancer's Loft, Fallon & Foster Rooms—3rd floor 12 Student Center (SC) | <ul style="list-style-type: none"> 13 Learning Resources Center (LRC)
Central Receiving & Stockroom Dept
Mail Center—1st floor (student package pickup)
Multicultural Affairs—1st floor
Spiritual Life Lounge—2nd floor
Library—2nd & 3rd floors
Information Technology Services—3rd floor 14 Parking Garage 15 Wasylean Hall—Residence (W) 16 Tennis Courts 17 Chandler Village—Residence (CV) | <ul style="list-style-type: none"> 18 Sheehan Hall—Residence (SRH)
Health Services—Lower level
Sheehan Dining Hall—1st floor 19 Dowden Hall—Residence (DH)
Market at Dowden—Lobby 20 May Street Building (M) 21 IUI Garden for All Ages 22 Latino Education Institute (LEI)
2nd site - Student Center—1st floor 23 Sagamore Road Studios
Worcester Center for Crafts 24 Capt. Ross A. Reynolds '17 Memorial |
|---|--|--|--|

