COLLEGE OF ARTS AND SCIENCES

WESTMINSTER COLLEGE OF ARTS AND SCIENCES PROGRAMS

Matt Neves, Dean

The Westminster College of Arts and Sciences empowers you to explore different ways of understanding and changing the world around you through programs in which you'll take charge of your education and define your career goals and how to meet them. Through experiential learning, community engagement, hands-on research, internships, and other educational opportunities, you will be prepared to be a life-long learner. Your program curriculum will challenge you to become a critical thinker, a better communicator, and an engaged citizen that draws from multiple fields—STEM disciplines, the humanities, the fine and performing arts—to make informed decisions and address complex problems.

Undergraduate Programs in Arts and Sciences

The Westminster College of Arts and Sciences offers academic programs in the fine and performing arts, the social and behavioral sciences, the physical and natural sciences, and mathematics and computer science. Students may also pursue interdisciplinary programs, such as environmental studies, gender studies, and justice studies.

- Art
- Arts Administration
- Biology
- Business Computer Information Systems
- Chemistry
- Communication
- Computer Science
- Dance
- Data Science
- Engineering 3-2
- Environmental Studies
- Film Studies
- First Scholars Certificate
- French
- Gender Studies
- Geology
- History
 Justice St
- Justice StudiesLanguage
- Literature, Media, and Writing
- Mathematics
- Music
- Neuroscience
- Philosophy
- Physics
- Political Science
- Psychology
- Sociology
- Spanish-Latin American Studies
- Theatre

See individual programs in Arts and Sciences to determine whether a B.A., B.S., or B.F.A. degree is conferred.

Faculty

- Ranjan Adiga, Associate Professor (Literature, Media, and Writing)
- Jonathan Amburgey, Associate Professor (Psychology)
- Deyanira Ariza-Velasco, Associate Professor (Spanish)
- Kelly Asao, Assistant Professor (Psychology)
- David Baddley, Professor (Art)
- · Spencer Bagley, Associate Professor (Math)
- Matt Baker, Associate Professor (Communications)
- Kara Barnette, Associate Professor (Philosophy)
- Bonnie Baxter , Professor (Biology)
- Frank Black, Associate Professor (Chemistry)
- Bradford (Bill) Bynum, Associate Professor (Mathematics)
- Eileen Chanza Torres, Associate Professor (Literature, Media, and Writing)
- **Christine Clay**, Professor (Environmental Biology)
- Erin Coleman Serrano, Associate Professor (Communication)
- Russell Costa, Professor (Honors/Neuroscience)
- · Jocelyn Cuthbert, Assistant Professor (Biology)
- Jonas D'Andrea, Professor (Mathematics)
- Christopher Davids, Associate Professor (Psychology)
- Brandon Derfler, Associate Professor (Music)
- · Georgiana Donavin, Professor (Literature, Media, and Writing)
- Connie Etter, Assistant Professor (Honors/Justice Studies)

- Gregory Gagne, Associate Professor (Computer Science)
- Anne Gibson, Assistant Professor (Neuroscience)
- Stephen Haslam, Assistant Professor (French)
- Helen Hu, Professor (Computer Science)
- Robyn Hyde, Professor (Chemistry)
- Jessica Johnston, Associate Professor (Chemistry)
- Julia Kamenetzky, Associate Professor (Physics)
- David Kimberly, Associate Professor (Biology)
- Matthew Kruback, Professor (Art)
- Jared Larkin, Associate Professor (Theatre)
- Christopher LeCluyse, Professor (Literature, Media, and Writing)
- Kathryn Lenth, Associate Professor (Computer Science)
- Jingsai Liang, Assistant Professor (Computer Science)
- Julian Mendez, Associate Professor (Psychology)
- Nicholas More, Professor (Philosophy)
- Matt Neves, Associate Professor (Fine Arts)
 Janco Nouman Brofessor (Literature Media and V
- Lance Newman, Professor (Literature, Media, and Writing)
- Jeffrey Nichols, Professor (History)
- Kristjane Nordmeyer, Professor (Sociology)
- Brent Olson, Professor (Environmental Studies)
- David Parrott, Assistant Professor (Biology)
- Nicholas Pollock, Assistant Professor (Honors/Geology)
 Michael Papiek, Professor (Philosophy)
- Michael Popich, Professor (Philosophy)
- Spencer Potter, Associate Professor (Theatre)
- Paul Presson, Associate Professor (Psychology)
 Xiumai Bu Associate Professor (Equipopmental St.
- Xiumei Pu, Associate Professor (Environmental Studies)
- Christopher Puckett, Associate Professor (Music)
- Sean Raleigh, Professor (Mathematics)
- Mark Rubinfeld, Professor (Sociology)
- Christine Seifert, Professor (Communication)
- Stephanie Stroud, Associate Professor (Theatre)
- Bianca Thompson, Assistant Professor (Mathematics)
- Krista Todd, Associate Professor (Neuroscience)
- Meghan Wall, Associate Professor (Dance)
- Janine Wittwer, Professor (Mathematics)
- · Kimberly Zarkin, Professor (Communication)
- Michael Zarkin, Professor (Political Science)

School of Education

ART

Faculty

- David Baddley
- Matthew Kruback

Program Goals

- Students will be exposed to, and gain experience in, a wide variety of fine art disciplines and ideas.
- · Students will learn and develop the skills required to produce artwork of technical quality.
- Students will develop the sensitivity, understanding, and insight to produce artwork which is personally meaningful and creatively expressive.
- Students will develop the ability to write and speak articulately about their own and other's artwork.
- · Students will learn skills needed for preparing, publicizing, and hanging art exhibits.
- Students will learn to produce materials for professional presentation of their art for the purposes of gaining acceptance into exhibits, finding gallery representation, applying for grants, seeking publication and applying for graduate school.

Objectives

The Art Program offers an academic major leading to the Bachelor of Fine Arts degree. It also offers an academic major leading to the Bachelor of Arts degree, as well as an academic minor, and it provides courses for students planning to pursue graduate studies in art, students wishing to concentrate in teaching or practicing art, and those with an avocational interest in the visual arts.

The program is designed to give students the skills and confidence in their abilities needed to produce works of art. To this end, students are given general knowledge about art and art history and are schooled in a variety of techniques, including drawing, painting, photography, and ceramics. Students are encouraged to use and expand their imagination and to express their ideas creatively.

Program Requirements

Students must maintain a minimum 2.3 GPA in courses required for BA and BFA Art majors. With the approval of the instructor, students may repeat specified studio courses for additional credit. Students must meet the university-wide graduation requirements in addition to the Art major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements
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Bachelor of Fine Arts Degree (BFA) in Visual Art

After completing the Lower Division Art Courses, students apply for acceptance into the Bachelor of Fine Arts program by submitting a portfolio during Spring semester of the sophomore year. The portfolio should contain 8–12 examples of artwork that the student has produced while at Westminster University. The portfolio is due by the Friday before spring break in the main office of the College of Arts and Sciences. The BFA admissions committee will review the portfolios and notify students prior to registration for the Fall semester. Students who are not accepted may continue working as art majors in the BA track, and are encouraged to reapply again the following year. Transfer students will follow this same process for acceptance to the BFA track, except that the portfolio may contain artwork produced while studying at other institutions of higher education.

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Fine Arts majors must complete eight credit hours in a single world language.		
II. Core Art Courses	28	
These courses should be completed before or during the fourth semester (spring of second year), during which students submit their portfolios for acceptance into the BFA program.		
ART 106 Drawing, Inquiry, and Expression	4	
ART 111 Paint, Perception, and Alchemy	4	
ART 148 Ceramics I: Material Studies	4	
ART 180 Photography	4	
ART 203 Ceramic Sculpture	4	ART 148
ART 209 Composition and Design	4	
ART 320 Digital Imaging	4	ART 180
III. Elective Studio Art Courses	30	
	e thirty credit hours of ART courses with a minimum of nosen in consultation with student's advisor. All ART c	
IV. Art History Courses	12	
Take twelve credit hours of art history courses		
ART 310 Art History: Emergence to the Renaissance	4	WCore course with Writing Emphasis
ART 311 Art History: Renaissance to Modern Art	4	WCore course with Writing Emphasis
ART 312 History of Contemporary Art	4	WCore course with Writing Emphasis
ART 313 Environmental Art	4	
ART 318 History of Photography	4	WCore course with Writing Emphasis
V. Capstone Experience Courses	4	
ART 475 Studio Seminar This course should be	4	Instructor
taken during Spring semester of student's last year.		permission

Recommended Plan of Study for BFA in Visual Art

	Fall Semester	Spring Semester
Year 1	Take two: ART 106, ART 111, ART 148, ART 180, or ART 209 Language I	Take two: ART 106, ART 111, ART 148, ART 180, ART 203, ART 209 or ART 320 Language II
Year 2	Take two: ART 106, ART 111, ART 148, ART 180, ART 209 or ART 320 ART Elective	Take two: ART 106, ART 111, ART 148, ART 180, ART 203, ART 209 or ART 320 ART Elective
Year 3	Take one: ART 310, ART 312, or ART 318 ART Elective	Take one: ART 311 or ART 313 ART Elective
Year 4	Take one: ART 310, ART 312, or ART 318 ART Elective	ART 475 ART Elective

Bachelor of Arts Degree (BA) in Art

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Art majors must complete eight credit hours in a single world language.		
II. Core Art Courses	28	
These courses should be completed before or during the fourth semester (spring of second year).		
ART 106 Drawing, Inquiry, and Expression	4	
ART 111 Paint, Perception, and Alchemy	4	
ART 148 Ceramics I: Material Studies	4	
ART 180 Photography	4	
ART 203 Ceramic Sculpture	4	ART 148
ART 209 Composition and Design	4	
ART 320 Digital Imaging	4	ART 180
III. Upper Division Art Courses	16	
ART 310 Art History: Emergence to the Renaissance - offered fall	4	WCore course with Writing Emphasis
ART 311 Art History: Renaissance to Modern Art - offered spring	4	WCore course with Writing Emphasis
ART 475 Studio Seminar	4	Instructor permission
Choose one additional Art History course from the following list:		
ART 312 History of Contemporary Art - offered fall	4	WCore course with Writing Emphasis
ART 318 History of Photography - offered even years in spring	4	WCore course with Writing Emphasis
IV. Elective Art Courses	10	
Additional hours of ART coursework		
Total Hours for Art Major	62	

Recommended Plan of Study for Art Major

	Fall Semester	Spring Semester
Year 1	ART 106 or ART 215, ART 111, or ART 180 (take two) Language I	ART 106 or ART 215, ART 111 or ART 180 (take two) Language II
Year 2	Take one: ART 106, ART 215, ART 111, ART 180, or ART 209	Take one: ART 106, ART 215, ART 111, ART 180 or ART 209
Year 3	ART 310, ART 312, ART 318, or ART Elective (take two) ART Elective	Take one: ART 311, ART 315, or ART Elective ART Elective
Year 4	ART 310, ART 312, ART 318, or ART Elective (take one or two) ART Elective	ART 475 Take one: ART 311, ART 315, or ART Elective ART Elective

Art Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	12	
Choose two of the following courses:		
ART 106 Drawing, Inquiry, and Expression	4	
ART 111 Paint, Perception, and Alchemy	4	
ART 148 Ceramics I: Material Studies	4	
ART 180 Photography	4	
Choose one of the following courses:		
ART 310 Art History: Emergence to the Renaissance	4	WCore course with Writing Emphasis
ART 311 Art History: Renaissance to Modern Art	4	WCore course with Writing Emphasis
ART 312 History of Contemporary Art	4	WCore course with Writing Emphasis
II. Electives	11	
Additional hours of ART coursework		
Total Hours for Art Minor	23	

ARTS ADMINISTRATION

Faculty

• Kim Zarkin (Chair)

Program Goals

- To develop writing and editing skills applicable to a variety of professions in the arts community.
- To learn to effectively present skills, interests, accomplishments, and abilities to prospective employers or clients.
- To demonstrate appropriate attitudes, skills, and techniques essential to working in a team as a member and a leader.
- To develop an understanding of the fundamentals of nonprofit organizations.
- To develop a fundamental understanding of business practices.

Objectives

The Arts Administration Program offers a major in Arts Administration leading to a Bachelor of Arts degree. The curriculum is designed to prepare a student for a productive career as a leader of an arts organization.

Program Requirements

Students who major in Arts Administration are required to have a minor in Art, Dance, Film Studies, Music, or Theatre. Students may also create a contract minor of 24 credits.

Students must maintain a minimum cumulative 2.5 GPA in courses required for the major. Prerequisite courses must be satisfied with a grade of C- or better.

Students must meet the university-wide graduation requirements in addition to completing course work for the Arts Administration major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Arts Administration Major

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Arts Administration majors must complete eight cre	dit hours in a single world language.	
II. Required Business Courses	12	
ACCT 213 Financial Accounting	3	BUSI 101A/101B/101C
BUSI 101A Business Fundamentals I: Communicating	3	
BUSI 101B Business Fundamentals I: Calculating	3	MATH 101 or above
BUSI 101C Business Fundamentals I: Company Lab	0	
BUSI 225 Business Law and Ethics	3	BUSI 101A/101B/101C
III. Required Communication Courses	24-28	
COMM 210 Media Writing I	4	
COMM 310 Business & Professional Communication	4	
COMM 326 Introduction to Web Writing and Design	4	
COMM 336 Public Relations Principles	4	
COMM 380 Communication and Nonprofit Organizations	4	
COMM 440* Internship	1-6	Junior standing
COMM 490 Portfolio Workshop (take during last two semesters)	2	
IV. Electives	17	
Take seventeen credit hours of elective courses:		
ACCT 313 Managerial Accounting	3	ACCT 213
COMM 250 Introduction to Human Communication	4	
COMM 325 Designing Dynamic Images	4	
COMM 345 Video Production	4	
COMM 350 Leadership & Decision Making	4	
COMM 360 Race, Gender, Class and the Media	4	
COMM 365 Intercultural and Global Communication	4	
COMM 370 Design Foundations	4	
COMM 371 Multimedia Tools and Production	4	COMM 370

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Requirement Description	Credit Hours	Prerequisites
COMM 372 Design and the User Experience	4	COMM 371
COMM 440* Internship	1-6	Junior standing
MGMT 305 Principles of Management	4	BUSI 101A/101B/101C
MGMT 310 The Entrepreneurial Mindset	2	
MGMT 311 Business Model Development	2	
MGMT 400 Global Business Strategy	4	MGMT 305
MGMT 433 Organizational Behavior	4	MGMT 305
MGMT 460 Organizational Change and Advanced Management	4	MGMT 305
MKTG 300 Principles of Marketing	3	BUSI 101A/B/C
MKTG 303 Professional Selling	4	MKTG 300
V. Accompanying Minor Requirement	21-28	
Students who major in Arts Administration are required to have a minor in Art, Dance, Film Studies, Music, or Theatre. Students may also create a custom minor of 24 credits.		
Art Minor 23		
Dance Minor 21	Audition required	
Film Studies Minor 24		
Music Minor 24-28	Audition required	
Theatre Minor 26		
Custom Minor—Students may choose an existing minor or build a course list in conjunction with the chair of Arts Administration. 24		
Total Hours for Arts Administration Major	82-93	

* If a student is a double major where both majors require an internship, a single internship may count towards both majors, contingent on faculty approval.

Recommended Plan of Study for Arts Administration Major

	Fall Semester	Spring Semester
Year 1	BUSI 101A/B/C	ACCT 213 COMM 210
Year 2	COMM 326	COMM 310 Elective
Year 3	BUSI 225 COMM 336 Elective	COMM 380 Elective
Year 4	COMM 440 Elective	COMM 490 Elective

ARTS AND SOCIAL JUSTICE CERTIFICATE PROGRAM

Undergraduate Certificates

Undergraduate Certificates give students a grounding in a particular skill set, allowing them to supplement their major with learning in other disciplines. Each certificate aligns with National Association of Colleges and Employers (NACE) career readiness competencies, which include Communication, Equity and Inclusion, Leadership, and Technology. Each certificate culminates in an Applied Experience, an internship or service-learning course that involves students in applying their learning outside the classroom. Internships for the Arts and Social Justice Certificate must be approved by the certificate advisor and arranged through the Career Center for 3-4 credit hours. Faculty coordinators for internships must be from the program in which the internship is listed. Some certificates include WCore and Honors courses, which can meet requirements both in the certificate and in WCore or Honors. Note that certificates are designed for undergraduates enrolled in a degree program, and only students completing certificates as part of a degree are eligible for financial aid.

Program Requirements

Advisor: Meghan Wall

Complete all listed courses with a minimum grade of C-.

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	6	
THTR 313 Anti-racist Performing Arts Seminar		
Take one of the following:		
JUST 109 Power and Social Change 4		
HON 211 Global Welfare and Justice 4	Honors College students only	
II. Elective	2-4	
Take one of the following courses:		
DANCE 190 Dance in Global Context 3		
ENVI 103 Radical Hope 4		
GNDR 227 Guerilla Theatre 2		
GNDR 228 Bodies in Motion 2		
HON 213 Environments and the Space of Art 4	Honors College students only	
MUSC 207 World Music, World Perspective 3		
III. Applied Experience	3-4	
Take one of the following courses:		
EDUC 206 How to Change the World 3		
EDUC 373 Juvenile Justice 3		
JUST 221 Community Justice 3		
Internship (must be approved by the certificate advisor) 3-4		
Total Hours for the Arts and Social Justice Certificate	12-14	

Double Dipping Between Certificate and Majors/Minors

"Double-dipping" here refers to (1) allowing students in a particular major or minor pursue a particular certificate and (2) allowing students who pursue a certificate alongside a major/minor to count a course toward both programs. The following guidelines relate to double-dipping between majors/minors and certificates that share courses. No other restrictions apply for programs that do not share courses with particular certificates.

Students in the following majors/minors and also concurrently pursuing the Arts and Social Justice Certificate **MAY** count courses towards both programs:

- Educational Studies major or minor
- Elementary Education major
- Justice Studies major or minor
- Music major, Music Studies major, or Music minor
- Outdoor Education & Leadership major or minor
- Special Education minor
- TESOL minor

Students in the following majors/minors and also concurrently pursuing the Arts and Social Justice Certificate MAY NOT count courses towards both programs:

· Communication major or minor

• Environmental Studies major or minor may not count the same ENVI course toward both their major/minor and the Arts and Social Justice Certificate.

It is otherwise assumed that an internship completed as part of an Undergraduate Certificate may also count toward a major or minor.

BIOLOGY

Faculty

- Bonnie K. Baxter
- Christy Clay
- Jocelyn Cuthbert
- David Kimberly (Co-Chair)
- David Parrott (Co-Chair)

The Biology program features integrated lab/lecture blocks that emphasize active project-based learning models, allowing our majors to engage in scientific investigations from the molecular level to entire ecosystems. While our core classes focus on disciplinary content and the skill sets of experimentation, the upper division course work allows students to engage in research methodology and concentrate on an area of interest. Our curriculum is enriched by significant laboratory and the field work. We strongly encourage interdisciplinary work and allow electives to be taken in other science and math departments. What's more, students receive credit for undergraduate research, internships, and teaching assistantships. Faculty take advantage of Westminster's unique location between the Wasatch Mountains and Great Salt Lake to leverage the natural world into an extension of our laboratories.

Students have the opportunity to engage with faculty mentors who are active scholars and are excited about teaching and learning science. Graduates of our program are skilled at critically assessing scientific problems, collecting and analyzing data, and communicating about their work. Our students are prepared for work or do graduate study in a variety fields such as biotechnology, medicine, public health, ecology, environmental science, law, education, science journalism, government, business, and policy. Our mission is to prepare students for a future in science and to create a lifelong enthusiasm for biology.

Program Goals

Through an innovative and research-rich curriculum, the biology program endeavors to create majors and minors that will be able to:

- 1. Articulate biological principles
- 2. Design and conduct experiments
- 3. Prepare effective written products or presentations
- 4. Collaborate successfully in teams
- 5. Utilize scientific literature, resources, and databases
- 6. Develop values that support inclusion in biology

Objectives

The Biology program offers a Bachelor of Science degree with a breadth of coursework and a focus on laboratory learning ranging from molecular to organismal topics. Undergraduate research is prominent in our program and is offered to students to learn first-hand the process of science. Presentation of research results at national meetings is encouraged. Students receive degree credit for research and internships. Recent biology graduates have been accepted to professional and graduate schools (at a rate of 50–100% each year), worked as laboratory researchers, educators, and biotechnologists.

Program Requirements

The program is designed to allow lateral shifting to other science majors if the student so desires. Students must maintain a minimum 2.3 GPA in biology courses required for the biology major. No more than half of the biology courses required for a major or minor are accepted by transfer. Please note that 300- and 400-level courses are designed for juniors and seniors.

Students choosing a double major or minor within the science program may not apply electives to more than one major or minor. Only classes listed under "required" courses that coincide with both majors/minors may be applied to both.

Students must meet the university-wide graduation requirements in addition to the Biology major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Biology Major

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Biology majors must complete eight credit hours in a single world language.		
II. Lower Division Core Courses	16	
BIOL 202 Organisms and Evolution	4	
BIOL 203 Introduction to Ecology	4	pre- or co- requisite: DATA 220
BIOL 204 Principles of Genetics	4	CHEM 112
BIOL 205 Introduction to Cell Biology	4	CHEM 112

Requirement Description	Credit Hours	Prerequisites
III. Upper Division Courses	4	
BIOL 420 or WCSAM 400 Senior Seminar or Science Capstone	2	
BIOL 311 Scientific Writing	2	pre- or co- requisite: BIOL 204 or BIOL 205
IV. Elective	18	
Take eighteen hours of BIOL upper division elective NEURO, PHYS, or PUBH) with advisor approval. A lim 430, and BIOL 440 is permitted for this elective cate	es or other science upper division electives (from CHI nit of two hours for BIOL 387 and a limit of four hours o gory.	EM, DATA, ENVI, GEOL, each of BIOL 300, BIOL
V. Required Courses from Other Programs	32	
CHEM 111 Principles of Chemistry I and Lab	4	co-requisites: CHEM 111R recommended/ MATH 144 required
CHEM 112 Principles of Chemistry II and Lab	4	CHEM 111
CHEM 303 Organic Chemistry I and Lab	4	CHEM 112
CHEM 304 OR CHEM 350 Organic Chemistry II and Lab OR Biochemistry and Lab	4	BIOL 205 and CHEM 303
DATA 220 Introduction to Statistics	4	
Take one of the following courses:		
DATA 350 Statistical Modeling	4	DATA 220
MATH 201 Calculus I	4	MATH 144 or or placement test
Students must take one first-level (I) and one second-level (II) Physics course:		
PHYS 151 or PHYS 211 Principles of Physics I and Lab or Physics for Scientists and Engineers I and Lab	4	MATH 144 MATH 144 co-requisites: MATH 201
PHYS 152 or PHYS 212 Principles of Physics II and Lab or Physics for Scientists and Engineers II and Lab	4	PHYS 151 or PHYS 211 PHYS 211 co-requisites: MATH 202
Total Hours for the Biology Major	78	

Recommended Plan of Study for Biology

	Fall Semester
Year 1	BIOL 202 BIOL 203 CHEM 111/112 DATA 220 (and prerequisites if necessary) WCore Courses
Year 2	BIOL 204 BIOL 205 BIOL 311 DATA 350 Statistical Modeling or MATH 201 Calculus I (if not taken in the previous year) *CHEM 303/304 BIOL Biology elective WCore Courses
Year 3	BIOL Biology Electives (8–12) *PHYS 151/152 or PHYS 211/212 WCore Courses
Year 4	BIOL 420 or WCSAM 400 BIOL Biology electives

*Alternatively, a student could take the PHYS 151/152 (or 211/212) sequence his or her sophomore year and the CHEM 303/304 sequence his or her junior year.

Biology Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	16	
BIOL 202 Organisms and Evolution	4	
BIOL 203 Introduction to Ecology	4	pre- or co- requisite: DATA 220
BIOL 204 Principles of Genetics	4	consent of instructor
BIOL 205 Introduction to Cell Biology	4	
II. Electives	8	
BIOL coursework numbered at the 200-, 300- or 400-level		
Total Hours for the Biology Minor	24	

BUSINESS COMPUTER INFORMATION SYSTEMS

Faculty

- Greg Gagne (Arts & Sciences)
- Helen Hu (Arts & Sciences)
- Kathryn Lenth (Arts & Sciences)
- Jingsai Liang (Arts & Sciences)
 Alysse Morton (Business)
- Alysse Morton (Business)

Business Computer Information Systems is a joint program between Arts & Sciences and the Bill & Vieve Gore School of Business.

Program Goals

- Actively participate in and execute the practice of software development.
- Plan, design, test, and implement a hardware or software project both individually and as part of a group.
- Apply business, statistical, modeling, and computer science principles and skills to identify business problems, research and craft solution strategies, and develop an effective course of action.
- Use a data and computer science platforms to process structured and unstructured data, construct data architecture, design visual dashboards, and deploy predictive models to find solutions to business problems that achieve stated objectives.

Objectives

Business Computer Information Systems (BCIS) is an interdepartmental program combining studies in computer information systems from Westminster's Department of Computer Science and Bill and Vieve Gore School of Business.

Business Computer Information Systems professionals must have sound technical knowledge of computers, communications, software, but they must also understand how organizations and how they function. Thus, the Business Computer Information Systems major provides a combination of technical computer science coursework as well as several business courses, including a strong emphasis on the acquisition, deployment, and management of information technology and data architecture, applying statistical and quantitative methods, employing predictive models, and making data-driven decisions on a solid foundation of business and economic knowledge.

Program Requirements

Students must maintain a minimum 2.5 GPA in all courses required for the Business Computer Information Systems major.

Students must meet the university-wide graduation requirements in addition to the Business Computer Information Systems major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Business Computer Information Systems Major

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Business Computer Information Systems majors must complete eight credit hours in a single world language.		
II. Prerequisite Programming Courses	4	
Take four credits from:		
CMPT 190 Learning to Code	2	
CMPT 210 Just Enough Java	2	CMPT 190 or prior programming experience
CMPT 201 Introduction to Computer Science	4	Co-requisite CMPT 215
Students with prior programming experience may apply any upper division CMPT coursework toward the Programming Course requirement.		
III. Lower Division Courses	20	
BUSI 101A Business Fundamentals I: Communicating	3	
BUSI 101B Business Fundamentals I: Calculating	3	MATH 101 or above
CMPT 202 Introduction to Data Structures	4	CMPT 201 or CMPT 210
ACCT 213 Financial Accounting	3	BUSI 101A, BUSI 101B*
DATA 220 Introduction to Statistics	4	
ECON 253 Elementary Macroeconomics	3	MATH 101 or above
IV. Upper Division Courses	27	
BUSI 300 Information Technology	3	BUSI 101A and BUSI 101B and CMPT 190 or CMPT 201*
BUSI 400 Business Analytics**	4	BUSI 300
BUSI 405 Business Analytics Project	1	BUSI 400; co- requisite CMPT 385
CMPT 307 Databases	4	CMPT 202

Requirement Description	Credit Hours	Prerequisites
CMPT 322 Software Engineering	4	CMPT 307
CMPT 385 Senior Project Proposal Writing	1	CMPT 322
CMPT 390 Senior Capstone	2	CMPT 385, BUSI 400
MGMT 305 Principles of Management	4	BUSI 101A, BUSI 101B*
Complete one of the following:		
DATA 350 Statistical Modeling	4	DATA 220
DATA 360 Data Science with Python	4	DATA 220, CMPT 190 or CMPT 202
V. Electives	10	
CMPT 300/400-level course (excluding May Term)		
Business Electives - Complete two of the following:		
ACCT 313 Managerial Accounting	3	ACCT 213
ECON 263 Elementary Microeconomics	3	MATH 101 or above
FINC 300 Business Finance	3	ACCT 213, BUSI 101A, BUSI 101B, CMPT 190 or CMPT 201*
MGMT 309 Operations Management	3	BUSI 101A, BUSI 101B, CMPT 190 or CMPT 201*
MKTG 300 Principles of Marketing	3	BUSI 101A and BUSI 101B*
Total Hours for BCIS Major	69	

*Transfer students take BUSI 102 in lieu of BUSI 101A and BUSI 101B. Students may also take CMPT 190 and 210 in lieu of CMPT 201.

**BCIS majors should take BUSI 400 after they complete the two business electives. They can take it prior to or alongside CMPT 385.

Recommended Plan of Study for BCIS

	Fall Semester	Spring Semester
Year 1	BUSI 101A BUSI 101B CMPT 201	BUSI 300 CMPT 202 DATA 220
Year 2	ACCT 213 CMPT 307 ECON 253	CMPT 322 MGMT 305 Business Elective*
Year 3	Business Elective* DATA 350 or DATA 360	CMPT Elective** BUSI 400
Year 4	BUSI 405 CMPT 385 Language 1	CMPT 390 Language 2

For language 1 & language 2, choose from CHIN 110 & 111, FREN 110 & 111, JAPN 110 & 111, LATN 110 & 111, or SPAN 110 & 111.

*Must complete two of the following business electives: ACCT 313, ECON 263, FINC 300, MGMT 309, or MKTG 300. These should be taken before BUSI 405.

**Must complete one non-May Term CMPT 300/400 elective.

CHEMISTRY

Faculty

- Frank Black
- Robyn Hyde
- Jessica Johnston (Chair)

Program Goals

Content: Students will identify, apply, and analyze concepts across a broad spectrum of chemical disciplines, and use evidence to evaluate interpretations and draw conclusions.

Collaboration: Students will actively engage with their peers in small learning teams to collect and process information, exchange ideas, and synthesize knowledge in order to achieve collective goals in a respectful team environment.

Laboratory: Students will design and carry out experiments utilizing modern instruments and techniques. Students will interpret their results and revise experiments based upon the information they learn.

Communication: Students will communicate chemistry-related concepts, experimental results, and conclusions in written, visual, and oral formats to scientists and non-scientists.

Civic Responsibility: Students will develop a global perspective on chemistry issues and engage in practices informed by social responsibility across the spectrum of differences.

Objectives

The Chemistry program offers an academic major leading to a Bachelor of Science degree and an academic minor. The program provides: (1) preparation for a professional career or graduate study in chemistry; (2) an understanding of basic chemistry concepts and experience in laboratory operations for those planning careers in related fields; (3) pre-professional study for those preparing for careers in medicine, dentistry, veterinary medicine, and nursing; and (4) preparation for those who wish to teach at the secondary level.

Program Requirements

Students must maintain a cumulative 2.3 GPA or better in courses required in the academic major. Students choosing a double major or minor within the science program may not apply electives to more than one major or minor. Only classes listed under "required courses" that coincide between both majors/ minors may be applied to both. Students must meet the university-wide graduation requirements in addition to the Chemistry major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Chemistry Major

To fulfill the requirements for a major in Chemistry, students must complete the following as well as demonstrate competency in MATH 144:

Requirement Description	Credit Hours	Prerequisites	
I. World Language Requirement	8		
Chemistry majors must complete eight credit hours	Chemistry majors must complete eight credit hours in a single world language.		
II. Lower Division Courses	8		
CHEM 111 Principles of Chemistry I and Lab	4	Pre- or co- requisite MATH 144	
CHEM 112 Principles of Chemistry II and Lab	4	CHEM 111	
III. Upper Division Courses	24		
CHEM 303 Organic Chemistry I	3	CHEM 112 Recommended pre-/co-requisite: CHEM 303L	
CHEM 303L Organic Chemistry l Lab	1	Pre-/co-requisite: CHEM 303	
CHEM 304 Organic Chemistry II	3	CHEM 303 Recommended pre-/co-requisite: CHEM 304L	
CHEM 304L Organic Chemistry II Lab	1	Pre-/co-requisite: CHEM 304	

Requirement Description	Credit Hours	Prerequisites
CHEM 306 Quantitative Analysis and Lab	4	CHEM 112 and PHYS 151 or PHYS 211 Co-requisite: CHEM 306L
CHEM 320 Inorganic Chemistry	4	CHEM 112
CHEM 421 Quantum Chemistry and Lab	4	CHEM 112, MATH 202, PHYS 212 Co-requisite: CHEM 421L
CHEM 422 Thermodynamics & Statistical Mechanics and Lab	4	CHEM 112, MATH 202, PHYS 212 Co-requisite: CHEM 422L
IV. Electives	12	
Students must take two of the following three course	es:	
CHEM 307 Instrumental Analysis and Lab	4	CHEM 112 and PHYS 151 or PHYS 211 Co-requisite: CHEM 307L
CHEM 350/L Biochemistry and Lab	4	BIOL 205 and CHEM 303 Co-requisite: CHEM/BIOL 350L
CHEM 370 Scientific Computing	4	CMPT 190 and PHYS 151 or PHYS 211
Students must complete an additional four credit hours of coursework from the following:		
CHEM 300 Special Topics in Chemistry	2-4	Instructor permission
CHEM 307 Instrumental Analysis and Lab	4	CHEM 112 and PHYS 151 or PHYS 211 Co-requisite: CHEM 307L
CHEM 350/L Biochemistry and Lab	4	BIOL 205 and CHEM 303 Co-requisite: CHEM/BIOL 350L
CHEM 370 Scientific Computing	4	CMPT 190 and PHYS 151 or PHYS 211
GEOL 405 Geochemistry	4	CHEM 112 or GEOL 301
CHEM 400 Advanced Topics in Chemistry	1-5	Instructor permission
CHEM 401 Directed Studies in Chemistry	1-4	Senior standing, consent of instructor and school dean
CHEM 430 Undergraduate Research	1-4	Faculty mentor permission
CHEM 440 Internship	1-2	Junior/senior standing, see course description
V. Required Courses from Other Programs	22	
MATH 201 Calculus I	4	MATH 144 or placement test
MATH 202 Calculus II	4	MATH 201 or placement test

Requirement Description	Credit Hours	Prerequisites
PHYS 211 Physics for Scientists and Engineers I and Lab	4	MATH 144 and co- requisite: MATH 201
PHYS 212 Physics for Scientists and Engineers II and Lab	4	PHYS 211 and co- requisite: MATH 202
WCSAM 400 Science Capstone	2	
Total Hours for the Chemistry Major	72	

Listed below is a suggested plan of study for completing the chemistry requirements. Students should meet with their advisors at least once a year as course offerings may change from what is listed. Students must also meet WCore and university wide requirements for graduation.

Recommended Plan of Study for Chemistry

	Fall Semester	Spring Semester
Year 1	CHEM 111 MATH 201* Learning Community	CHEM 112 MATH 202*
Year 2	CHEM 303 PHYS 211	CHEM 304 PHYS 212
Year 3	CHEM 306 CHEM 421	CHEM 422 CHEM Elective
Year 4	CHEM 320 CHEM Elective	CHEM Elective WCSAM 400

*Assumes student already has credit for MATH 144

Chemistry Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	16	
CHEM 111 Principles of Chemistry l and Lab	4	Co-requisites: CHEM 111R recommended; MATH 144 required
CHEM 112 Principles of Chemistry II and Lab	4	CHEM 111
CHEM 303 Organic Chemistry I	3	CHEM 112 Recommended pre-/co-requisite: CHEM 303L
Organic Chemistry I Lab	1	Pre-/c0-requisite: CHEM 304L
CHEM 304 Organic Chemistry II	3	CHEM 303 Pre-/ co-requisite: CHEM 304L
CHEM 304L Organic Chemistry II Lab	1	Pre-/co-requisite: CHEM 304
II. Electives	8	
Complete four hours of coursework from the follow	ing:	
CHEM 300 Special Topics in Chemistry	2-4	Instructor permission
CHEM 306 Quantitative Analysis and Lab	4	CHEM 112 and PHYS 151 or PHYS 211 Co-requisite: CHEM 306L
CHEM 307 Instrumental Analysis and Lab	4	CHEM 112 and PHYS 151 or PHYS

Requirement Description	Credit Hours	Prerequisites
		211 Co-requisite: CHEM 307L
CHEM 320 Inorganic Chemistry	4	CHEM 112
CHEM 350/L Biochemistry and Lab	4	BIOL 205 and CHEM 303 Co-requisite: CHEM/BIOL 350L
CHEM 370 Scientific Computing	4	CMPT 190 and either PHYS 151 or PHYS 211
CHEM 401 Directed Studies in Chemistry	1-4	Senior standing, consent of instructor and school dean
CHEM 421 Quantum Chemistry and Lab	4	CHEM 112, MATH 202, PHYS 212 Co-requisite: CHEM 421L
CHEM 422 Thermodynamics & Statistical Mechanics and Lab	4	CHEM 112, MATH 202, PHYS 212 Co-requisite: CHEM 422L
CHEM 430 Undergraduate Research	1-4	Faculty mentor permission
CHEM 440 Internship	1-4	Junior/senior standing, see course description
Complete at least four additional hours from the following:		
CHEM 306 Quantitative Analysis and Lab	4	CHEM 112 and PHYS 151 or PHYS 211 Co-requisite: CHEM 306L
CHEM 307 Instrumental Analysis and Lab	4	CHEM 112 and PHYS 151 or PHYS 211 Co-requisite: CHEM 307L
CHEM 320 Inorganic Chemistry	4	CHEM 112
CHEM 350/L Biochemistry and Lab	4	BIOL 205 and CHEM 303 Co-requisite: CHEM/BIOL 350L
CHEM 370 Scientific Computing	4	CMPT 190 and either PHYS 151 or PHYS 211
CHEM 422 Thermodynamics & Statistical Mechanics and Lab	4	CHEM 112, MATH 202, PHYS 212 Co-requisite: CHEM 422L
Total Hours for the Chemistry Minor	24	

CODING CERTIFICATE PROGRAM

Undergraduate Certificates

Undergraduate Certificates give students a grounding in a particular skill set, allowing them to supplement their major with learning in other disciplines. Each certificate aligns with National Association of Colleges and Employers (NACE) career readiness competencies, which include Communication, Equity and Inclusion, Leadership, and Technology. Each certificate culminates in an Applied Experience, an internship or service-learning course that involves students in applying their learning outside the classroom. Some certificates include WCore and Honors courses, which can meet requirements both in the certificate and in WCore or Honors. Note that certificates are designed for undergraduates enrolled in a degree program, and only students completing certificates as part of a degree are eligible for financial aid.

Program Requirements

Advisor: Helen Hu

Complete all courses with a minimum grade of C-.

Requirement Description	Credit Hours	Prerequisites
I. Introductory Courses	4	
Take four (4) credits:		
CMPT 201 Introduction to Computer Science 4		
CMPT 190 Learning to Code 2		
CMPT 210 Just Enough Java 2		
II. Required Courses	8	
CMPT 202 Introduction to Data Structures		
CMPT 307 Databases 4		
III. Applied Experience	4	
Take one of the following courses:		
CMPT 322 Software Engineering 4		
CMPT 375 Web Application 4		
Total Hours for the Coding Certificate	16	

Double Dipping Between Certificate and Majors/Minors

"Double-dipping" here refers to (1) allowing students in a particular major or minor pursue a particular certificate and (2) allowing students who pursue a certificate alongside a major/minor to count a course toward both programs. The following guidelines relate to double-dipping between majors/minors and certificates that share courses. No other restrictions apply for programs that do not share courses with particular certificates.

Students in the following majors/minors **MAY NOT** concurrently pursue the Coding Certificate:

- Business Computer Information Systems major
- Computer Science major or minor
- Applied Computing minor

It is otherwise assumed that an internship completed as part of an Undergraduate Certificate may also count toward a major or minor.

COMMUNICATION

Faculty

- Matt Baker
- Erin Coleman Serrano
- Christine Seifert
- Tamara Stevenson
- Kim Zarkin (Chair)

Program Goals

- To develop writing and editing skills applicable to various communication professions.
- To learn basic layout and design principles and to use a broad range of industry-standard software applications in applying those principles to the
 production of quality communication pieces for print and electronic media.
- To learn to effectively present skills, interests, accomplishments, and abilities to audiences, including prospective employers or clients.
- To demonstrate appropriate attitudes, skills, and techniques essential to working in a team as a member and a leader.
- To analyze and evaluate the historical, legal, and ethical contexts within which communication professionals operate.

Objectives

The Communication program offers an academic major leading to a Bachelor of Arts degree, as well as an academic minor. The Communication program teaches students theoretical principles and practical skills in the context of humanistic inquiry.

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Working with electronic and traditional media, students acquire skills needed for careers in corporate and government communication, nonprofit organizations, public affairs, advertising, public relations, technical writing, and journalism, as well as for graduate studies. By selecting courses across the entire communication curriculum, students can develop a program that has breadth, while students who are interested in a more focused major may wish to choose classes from one of the suggested concentrations that follow.

Program Requirements

Students must maintain a minimum 2.3 GPA in all courses required for the Communication major.

Students must meet the university-wide graduation requirements in addition to the Communication major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Communication Major

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Communication majors must complete eight credit hours in a single world language.		
II. Lower Division Courses	20	
COMM 101 Disinformation in the USA	4	
COMM 210 Media Writing I	4	
COMM 211 Media Writing II	4	COMM 210
COMM 240 Media and Society	4	
COMM 250 Introduction to Human Communication	4	
III. Upper Division Courses	32	
COMM 302 Forum Student Media	4	COMM 211
COMM 310 Business and Professional Communication	4	
COMM 350 Leadership & Decision Making	4	
COMM 370 Design Foundations	4	
COMM 371 Multimedia Tools and Production	4	COMM 370
COMM 372 Design and the User Experience	4	COMM 371
COMM 425 Communication Law and Ethics	4	Junior Status
COMM 440 Internship*	2	Junior Status
COMM 490 Portfolio Workshop	2	Senior Status
IV. Electives	12	
Complete twelve hours of coursework from the following courses:		
ART 320 Digital Imaging	4	ART 180
ART 322 Digital Drawing	4	ART 106
ART 380 Advanced Photography	4	ART 320 or ART 379
COMM 300 Special Topics in Communication	1-4	
COMM 325 Designing Dynamic Images	4	
COMM 326 Introduction to Web Writing and Design	4	
COMM 336 Principles of Public Relations	4	
COMM 345 Video Production	4	

Requirement Description	Credit Hours	Prerequisites
COMM 360 Race, Gender, Class and the Media	4	
COMM 365 Intercultural & Global Communication	4	
COMM 380 Communication & Nonprofit Organizations	4	
COMM 440 Internship*	1-6	Junior Status
Any 300-level FILM course	1-4	
LMW 300E Fiction and Nonfiction Narratives	4	Instructor Permission
LMW 375 Lit in MS, Print & New Media	4	
MKTG 300 Principles of Marketing	3	BUSI 101 or Instructor Permission
MKTG 303 Professional Selling	4	MKTG 300 or Instructor Permission
MKTG 428 Advertising	4	MKTG 303 or Instructor Permission
NOTE: Students may only count four credits from Special Topics classes toward their communication electives.		
Total Hours for the Communication Major	72	

* If a student is a double major where both majors require an internship, a single internship may count towards both majors, contingent on faculty approval.

Recommended Plan of Study for Communication

	Fall Semester	Spring Semester
Year 1	COMM 101 COMM 210	COMM 211
Year 2	COMM 250	COMM 240 COMM 370
Year 3	COMM 302 COMM 371 Elective	COMM 350 COMM 372 Elective
Year 4	COMM 310 COMM 425 Elective	COMM 440 COMM 490 Elective

Communication Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Courses: Pick 3	12	
COMM 101 Disinformation in the USA	4	
COMM 210 Media Writing I	4	
COMM 240 Media and Society	4	
COMM 250 Introduction to Human Communication	4	
II. Elective Courses	12	
Choose any twelve credit hours of upper division Communication courses		
Total Hours for the Communications Minor	24	

COMPUTER SCIENCE

Faculty

- Greg Gagne
- Helen Hu (Chair)
- Kathryn LenthJingsai Liang
- Jingsai Liang

Program Goals

- To attain a system-level understanding of the computer.
- To understand the concepts and techniques of software design.
- To acquire significant project experience working both individually and in a group setting.
- To develop effective problem solving skills.

Objectives

The Computer Science Program offers an academic major leading to the Bachelor of Science degree, as well as an academic minor and a minor in applied computing. The curriculum in computer science is designed to meet the needs of students whose ultimate objective is to pursue a career in the field or to go on to postgraduate study. Students planning to pursue postgraduate study in computer science should consider an additional math minor.

Program Requirements

Students must maintain an overall 2.5 GPA in courses required for the academic major, the academic minor, and the minor in applied computing. A 2.8 GPA in CMPT 201 and CMPT 202 is a prerequisite for enrollment in upper division courses for the academic major and minor. Computer Science major and minor requirements must be satisfied with a grade of C- or better. No more than four (4) credit hours from May term courses and two (2) credit hours from internships may be applied to the elective upper division computer science requirement for the academic major. May term courses and internship credit hours may not be applied towards the upper division elective requirement for either the academic minor or the minor in applied computing.

Students must meet the university-wide graduation requirements in addition to the Computer Science major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Computer Science Major

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Computer Science majors must complete eight credit hours in a single world language.		
II. Prerequisite Programming Courses	4	
Take four (4) credits:		
CMPT 190 Learning to Code	2	
CMPT 201 Introduction to Computer Science	4	C0-requisite CMPT 215
CMPT 210 Just Enough Java	2	CMPT 190 or prior programming experience
Students with prior programming experience may apply any upper division CMPT coursework toward the Programming Course requirement.		
III. Lower Division Computer Science Courses	8	
CMPT 202 Introduction to Data Structures	4	CMPT 201 or CMPT 210
CMPT 251 Computer Systems and Programming	4	CMPT 201 or CMPT 210
IV. Upper Division Computer Science Courses	27	
CMPT 306 Algorithms	4	CMPT 202 and MATH 210

College of Arts and Sciences

Requirement Description	Credit Hours	Prerequisites
CMPT 307 Databases	4	CMPT 202
CMPT 322 Software Engineering	4	CMPT 202 and CMPT 307
CMPT 328 Computer Architecture	4	CMPT 251
CMPT 351 Operating Systems	4	CMPT 251
CMPT 352 Computer Networks	4	CMPT 251 or both CMPT 202 and command- line experience
CMPT 385 Senior Project Proposal Writing—offered fall	1	CMPT 322
CMPT 390 Senior Capstone—offered spring	2	CMPT 385
V. Electives	12	

Computer Science Majors must complete **twelve (12)** credits of additional upper-division coursework in CMPT. Students may apply at most four (4) credits of May term hours and at most two (2) credits of internship hours toward the upper division elective requirement.

VI. Required Courses from Other Programs	8	
MATH 210 Discrete Mathematics	4	
Choose one:		
MATH 201 or DATA 220 or WCSAM 203 Calculus I or Introduction to Statistics or Linear Algebra	444	
Total Hours for the Computer Science Major	67	

Double dipping is allowed for courses listed in Section VI.

Recommended Plan of Study for Computer Science

	Fall Semester	Spring Semester
Year 1	CMPT 201 MATH 201/DATA 220/WCSAM 203	CMPT 202 MATH 210
Year 2	CMPT 251 CMPT 307	CMPT 328 CMPT Elective*
Year 3	CMPT 306 CMPT Elective*	CMPT 322 CMPT Elective*
Year 4	CMPT 352 CMPT 385 CMPT Elective*	CMPT 351 CMPT 390 CMPT Elective*

* Must complete three electives.

Computer Science Minor

Requirement Description	Credit Hours	Prerequisites
I. Prerequisite Programming Courses	4	
Take four (4) credits:		
CMPT 190 Learning to Code	2	
CMPT 201 Introduction to Computer Science	4	
CMPT 210 Just Enough Java	2	CMPT 190 or prior programming experience

Requirement Description	Credit Hours	Prerequisites
Students with prior programming experience may apply any upper division CMPT coursework toward the Programming Course requirement.		
II. Required Courses	16	
CMPT 202 Introduction to Data Structures	4	CMPT 201 or CMPT 210
CMPT 251 Computer Systems and Programming	4	CMPT 201 or CMPT 210
MATH 201 Calculus I	4	MATH 144 or consent of instructor or placement test
MATH 210 Discrete Mathematics	4	
III. Electives	4	
Additional upper division computer science coursework (4)		
May term courses and internship hours may not be a	applied toward this requirement.	
Total Hours for the Computer Science Minor	24	

Applied Computing Minor

Requirement Description	Credit Hours	Prerequisites
I. Prerequisite Programming Courses	4	
Take four (4) credits:		
CMPT 190 Learning to Code	2	
CMPT 201 Introduction to Computer Science	4	
CMPT 210 Just Enough Java	2	CMPT 190 or prior programming experience
Students with prior programming experience may apply any upper division CMPT coursework toward the Programming Course requirement.		
II. Required Courses	8	
CMPT 202 Introduction to Data Structures	4	CMPT 201 or CMPT 210
CMPT 251 Computer Systems and Programming	4	CMPT 201 or CMPT 210
III. Core Courses	4	
Choose one of the following:		
CMPT 307 Databases	4	CMPT 202
CMPT 328 Computer Architecture	4	CMPT 251
CMPT 352 Computer Networks	4	Consent of instructor
CMPT 355 Compilers	4	CMPT 202 and CMPT 251
IV. Electives	8	
Additional upper division computer science coursewo	xr/ (8)	

Additional upper division computer science coursework (8)

Requirement Description	Credit Hours	Prerequisites
May term courses and internship hours may not be applied towards this requirement.		
Total Hours for the Applied Computing Minor 24		

DANCE

Faculty

- Meghan Wall (Chair)
- Bethany Hansen (Assistant to the Chair Core Adjunct Faculty)
- Michelle Armstrong (Adjunct Faculty)
- Carly Schaub (Adjunct Faculty)
- Allison Shir (Core Adjunct Faculty)

Program Description

Dance is a form of human expression that invites each one of us to create meaning through movement, embody knowledge, and translate our lived experiences into creative content and dynamic performance. Westminster's Dance program offers rigorous dance training and cultivates your individual artistic voice, placing value in real-world practice and promoting dance as a fully collaborative, culturally-relevant, socially-aware, and deeply imaginative art form.

Program Goals

- Students will work to master individual physicality as it relates to technical proficiency, artistic performance, and modes of communication, discovering the role of the human body in dance in terms of anatomy, kinesiology, and human development.
- Students will develop and practice their physical, cognitive, and creative research skills, within the full scope of multidisciplinary physical art-making.
- Students will develop their artistic voice by taking risks in individualized and innovative creative practices.
- Students will understand dance as a cultural practice that reflects and impacts local and global communities.
- Students will engage with a professional environment conducive to advanced learning and collaboration among students and professors.
- Students will analyze and evaluate dance processes and productions through varying perspectives of history, culture, society, self, and aesthetics.
- Students will explore potential careers in professional dance companies, arts organizations, arts administration, education, community development, health, fitness, human/social services, or further graduate studies in a myriad of interdisciplinary areas.
- · Students will cultivate project management skills that incorporate effective group dynamics.

Objectives

The Dance program offers 2 academic major degree tracks (Bachelor of Fine Arts, Bachelor of Arts) and a Dance minor. The Dance program emphasizes rigorous technique training in western and non-western physical practices, composition, improvisation, performance, creative process, and theories of dance through the lenses of history, technology, cultural impact, and social justice. Students gain practical skills in dance production, teaching, and administration. Students will be fully prepared for a variety of career paths such as professional dance performance and choreography, arts and non-profit sectors, education, community development, health and fitness, human services, as well as graduate studies in a myriad of interdisciplinary studies.

Program Options

Bachelor of Fine Arts in Dance

The Bachelor of Fine Arts (BFA) in dance is a pre-professional degree. This degree track builds upon the core foundations of dance theory, technique, and practice by providing expanded coursework and in-depth training in more specific areas, including the opportunity to delve deeply into an area of dance that interests you. Completing this track signifies that you are ready to get into entry-level, professional work in dance after graduation.

Bachelor of Arts in Dance

The Bachelor of Arts (BA) in dance is a generalist degree that allows you to explore a broad foundation of studies in dance theories, techniques, and practices. You will choose your dance elective courses based on your interests. If you plan to double major, this degree path is a great option.

Minor in Dance

The Dance program also offers a minor that is a great addition to a multitude of majors at Westminster. Dance coursework can also be a component of a customized major. You are welcome to meet with the dance chair at any time to review requirements for the minor in conjunction with your major requirements and overall course of study.

Program Requirements

All students who declare a dance major enter the program in the Bachelor of Arts (BA) degree track through open enrollment, and can choose to remain on the BA degree track, or transition to the Bachelor of Fine Arts (BFA) degree track as outlined below.

Transitioning to the Bachelor of Fine Arts Degree Track

After completing two semesters as a BA dance major, continuing students are eligible to request a transition into the BFA degree track through a formal review by the dance faculty. If not initially accepted into the BFA track, students can continue pursuing the BA degree track and request another formal review at the end of each subsequent semester.

Transfer students are eligible to seek acceptance into the BFA degree track before their first semester. To do so, they will receive an audit of previous coursework paired with a formal review by the dance faculty in the spring before entering the Dance program. If they also want to be considered for a dance program scholarship, their audition for scholarship consideration will be used as their formal review for the degree track.

Liberal Education Courses

Students must complete the WCore program or join the Honors College (and complete requirements) to fulfill liberal education credits.

Dance Major Requirements

- 124 total hours
- 30 upper-division hours
- WCore or Honors College requirements

Students must maintain a minimum 2.3 GPA in all courses required for the major. For course prerequisites, please refer to the course descriptions.

Holistic Health and Well-being Requirement

The Dance program values healthy practices including self-care, mindfulness, body awareness, and conditioning. Dance students are encouraged to cultivate these practices through requisite hours engaged in physical and mental health training over their course of study. Hours can be completed at the Dolores Doré Eccles Health, Wellness and Athletic Center, or completed in the personal practice of your choice, including yoga, pilates, outdoor activities, meditation, journaling, etc. Dance students will design an individual health and wellness plan with a faculty member to meet individual needs and goals.

Collaborative Participation Requirement

Students are expected to complete a minimum of twenty hours of program service work each year (e.g., production, crew, recruitment, non-curricular creative projects, etc.). This can be satisfied working in or on any program production, including Dance Company, Glint (screendance installation), performing for Senior Showcase, and choreographing/performing for Kaleidoscope.

Applied Dance/Community Requirement

At least once during their course of study, Dance majors are required to apply their dance training in a community setting (e.g., education, healthcare, the justice system, community development, transportation services, social service agencies, business and industry, etc.) through an experience that is collaborative, socially relevant, and culturally aware. Students will design and coordinate the project with their advisor.

Students will meet each semester with a faculty advisor to discuss successful completion of these requirements and to review the student's goals, as well as academic and artistic progress.

- Casper College AA to BA Dance Transfer Pathway
- Casper College AA to BFA Dance Transfer Pathway
- Snow College AA to BA Dance Transfer Pathway
- Snow College AA to BFA Dance Transfer Pathway

Bachelor of Fine Arts Dance Major

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Dance majors must complete eight credit hours in a	single world language.	
II. Studio Technique Components		
All BFA dance majors are required to take a Modern OR Contemporary and a Ballet OR Jazz course (DANCE 230/232 and DANCE 235/237)* Spring of Freshman year and both semesters of Sophomore year; three additional Dance Technique Courses are required to be taken during Junior and Senior year. In addition, majors must enroll in Dance Performance/Company Workshop for 1 credit per year (4 credits minimum by graduation); and 3 additional credits of coursework in either Somatic Landscapes OR Dance Performance must also be completed (totaling 34 studio technique credits upon graduation). They must meet a minimum of 12 combined upper division Technique Component credits upon graduation. Students are placed into a course level in collaboration with the instructors at the beginning of Fall semester. All courses, except for DANCE 200 Somatic Landscapes, are repeatable for credit toward the studio technique requirement. *DANCE 230/232 and DANCE 235/237 alternate by semester so that two dance technique courses 230 or 232 and 235 or 237 are available each semester.		

Requirement Description	Credit Hours	Prerequisites
Lower Division Technique Courses		
DANCE 230 or Modern II or	3	DANCE 130 and instructor permission
DANCE 232 Contemporary	3	DANCE 230 or by level placement
DANCE 235 or Ballet II or	3	DANCE 135 or instructor permission or level placement
DANCE 237 Jazz II	3	
Somatic Practices - Lower Division		
DANCE 210 Somatic Landscapes* *Not repeatable for credit	2	
Upper Division Technique Courses		
DANCE 330 or Modern III or	3	DANCE 230 or by level placement or by instructor permission
DANCE 332 Contemporary III	3	DANCE 323 or by level placement or instructor permission
DANCE 335 or Ballet III or	3	DANCE 235 or by level placement or by instructor permission
DANCE 337 Jazz III	3	DANCE 237 or by level placement or instructor permission
DANCE 430 or Modern IV or	3	DANCE 330 or by level placement or instructor permission
DANCE 432 Contemporary IV	3	DANCE 332 or level placement or instructor permission
DANCE 435 or Ballet IV or	3	DANCE 335 or by level placement or instructor permission
DANCE 437 Jazz IV	3	DANCE 337 or by level placement or instructor permission
Dance Performance - Upper Division		
Dance 310 Dance Performance/Company Work	1-4	
III. Lower Division Courses	27	
DANCE 110 Creative Process in Movement and Dance	3	
DANCE 130 Modern/Contemporary I	2	
DANCE 135 Ballet/Jazz I	2	
DANCE 180 Dance in Culture and History	2	

Requirement Description	Credit Hours	Prerequisites
6 Credits Required of Modern/Contemporary Technique Components. (These credits can be satisfied by upper division courses). See Studio Techniques Components section for options. 6		
6 Credits Required of Ballet/Jazz Technique Components. (These credits can be satisfied by upper division courses). See Studio Techniques Components section for options 6		
6 Credits Required of Modern/Contemporary OR Ballet/Jazz Technique. Components OR Dance Performance OR Somatic Landscapes. (These credits can be satisfied by upper division courses). See Studio Techniques Components section for options 6		
IV. Upper Division Courses	32	
DANCE 300 Dance Performance/Company Workshop	1-4 (minimum of 1 credit a year)	
DANCE 350 Pedagogy	4	
DANCE 351 Applied Anatomy and Kinesiology	4	
DANCE 370 Composition and Choreography	4	DANCE 110 or with instructor permission
DANCE 490 Senior Seminar	2	Instructor permission
DANCE 491 Senior Showcase	2	Instructor permission
12 Combined Credits Required of Modern/ Contemporary Upper Division. Technique, Ballet/ Jazz Upper Division Technique Components, and Dance. Performance. See Studio Techniques Components section for options 12		
V. Elective Courses	7	
Take seven credit hours of elective courses.		
DANCE 190 Dance in Global Context	3	
DANCE 280 Dance History II	3	
DANCE 380 Dance Forms	3	
DANCE 381 Ballet Studies	4	
DANCE 382 Moving Images: Dance For Film	3	
DANCE 440 Internship	1-4	Instructor Permission
THTR 225 Lighting Design	3	THTR 145, 160, or instructor permission
Total Hours for the BFA in Dance	74	

Recommended Plan of Study for BFA Dance (for incoming student placed in technique 130/135 level)

	Fall Semester	Spring Semester
Year 1	DANCE 110 (3) DANCE 130 (2) DANCE 135 (2)	DANCE 230 (3) DANCE 237 (3) DANCE 300 (1)
Year 2	DANCE 232 (3) DANCE 235 (3) DANCE 180 (2) DANCE 300 (1)	DANCE 200 (2) DANCE 330 (3) DANCE 337 (3)
Year 3	DANCE 332 or DANCE 335 (3) DANCE 350 (4) DANCE 300 (1)	DANCE 370 (4) DANCE 430 or DANCE 437 (3)
Year 4	DANCE 490 (2) DANCE 430 or DANCE 435 (3)	DANCE 300 (2) DANCE 351 (4) DANCE 491 (2)

• Must fit in 7 credits of elective courses and 8 credits of a language course.

• Must fulfill all WCore requirements.

• This plan is an example of levels of studio technique components that could be taken. Dance majors will vary in which level of technique courses they take each year, depending on their readiness.

Recommended Plan of Study for BFA Dance (for incoming student placed in technique 230/232 or 235/237 level)

	Fall Semester	Spring Semester
Year 1	DANCE 110 (3) DANCE 232 (3) DANCE 235 (3)	DANCE 230 (3) DANCE 237 (3) DANCE 300 (1)
Year 2	DANCE 332 (3) DANCE 335 (3) DANCE 180 (2)	DANCE 300 (1) DANCE 330 (3) DANCE 337 (3)
Year 3	DANCE 332 or DANCE 335 (3) DANCE 350 (4) DANCE 300 (1)	DANCE 370 (4) DANCE 430 or DANCE 437 (3)
Year 4	DANCE 490 (2) DANCE 432 or DANCE 437 (3) DANCE 300 (2)	DANCE 351 (4) DANCE 491 (2) DANCE 200 (2)

• Must fit in 7 credits of elective courses and 8 credits of a language course.

• Must fulfill all WCore requirements.

• This plan is an example of levels of studio technique components that could be taken. Dance majors will vary in which level of technique courses they take each year, depending on their readiness.

Bachelor of Arts Dance Major

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Dance majors must complete eight credit hours in a	single world language.	
II. Studio Technique Components		
All dance majors are required to take a Modern OR Contemporary and a Ballet OR Jazz course (DANCE 230/232 and DANCE 235/237)* Spring of Freshman year and must take at least one studio technique course in the Fall semester of Sophomore year; two additional dance technique classes are required to be taken one semester of Junior and Senior year (totaling 17 credits upon graduation). Students are placed into a course level in collaboration with the instructors at the beginning of Fall semester. All courses, except DANCE 200 are repeatable for credit toward the studio technique requirement. *DANCE 230/232 and DANCE 235/237 are offered in		

Requirement Description	Credit Hours	Prerequisites
rotation by semester so that two dance technique courses 230 or 232 and 235 or 237 are available each semester.		
Lower Division Technique Courses		
DANCE 230 or Modern II or	3	DANCE 130 and instructor permission
DANCE 232 Contemporary	3	DANCE 230 or by level placement
DANCE 235 or Ballet II or	3	Dance 135 or instructor permission
DANCE 237 Jazz II	3	
Somatic Practices - Lower Division		
DANCE 200 Somatic Landscapes* *Not repeatable for credit	2	
Upper Division Technique Courses		
DANCE 330 or Modern III or	3	DANCE 230 or by level placement or by instructor permission
DANCE 332 Contemporary III	3	DANCE 323 or by level placement or instructor permission
DANCE 335 or Ballet III or	3	DANCE 235 or by level placement or by instructor permission
DANCE 337 Jazz III	3	DANCE 237 or by level placement or instructor permission
DANCE 430 or Modern IV or	3	DANCE 330 or by level placement or instructor permission
DANCE 432 Contemporary IV	3	DANCE 332 or level placement or instructor permission
DANCE 435 or Ballet IV or	3	DANCE 335 or by level placement or instructor permission
DANCE 437 Jazz IV	3	DANCE 337 or by level placement or by instructor permission
Dance Performance - Upper Division		
Dance 300 Dance Performance	1-4	
III. Lower Division Courses	32	
DANCE 110 Creative Process in Movement and Dance	3	
DANCE 130 Modern/Contemporary l	2	
DANCE 135 Ballet/Jazz l	2	

Requirement Description	Credit Hours	Prerequisites
DANCE 180 Dance in Culture and History	2	
DANCE 280 Dance History II	3	
THTR 225 Lighting Design	3	THTR 145, 160, or instructor permission
3 Credits Required of Modern/Contemporary Technique Components(These credits can be satisfied by upper division courses) See Studio Techniques Components section for options 3		
3 Credits Required of Ballet/Jazz Technique Components (These creditscan be satisfied by upper division courses) See Studio Techniques Components section for options 3		
11 Credits Required of Modern/Contemporary OR Ballet/Jazz TechniqueComponents OR Dance Performance OR Somatic Landscapes (Thesecredits can be satisfied by upper division courses) See Studio Techniques Components section for options 11		
IV. Upper Division Courses	17	
DANCE 350 Pedagogy	4	
DANCE 351 Applied Anatomy and Kinesiology	4	
DANCE 370 Composition and Choreography	4	DANCE 110 or with instructor permission
DANCE 380 Dance Forms	3	
DANCE 490 Senior Seminar	2	Instructor permission
Total Hours for the BA in Dance	57	

Recommended Plan of Study for Dance (for incoming student placed in technique 130/135 levels)

	Fall Semester	Spring Semester
Year 1	DANCE 110 (3) DANCE 130 (2) DANCE 135 (2)	DANCE 230 (3) DANCE 237 (3)
Year 2	DANCE 232 or DANCE 235 (3) DANCE 180 (2)	DANCE 200 (2) DANCE 280 (3)
Year 3	DANCE 332 or DANCE 335 (3) DANCE 350 (4)	DANCE 370 (4) DANCE 380 (3)
Year 4	DANCE 490 (2) DANCE 432 or DANCE 335/325 (3)	THTR 225 (3) DANCE 351 (4)

• Must fit in 8 credits of elective courses and 8 credits of a language course.

Must fulfill all WCore requirements.

• This plan is an example of levels of technique components that could be taken. Dance majors will vary in which level of technique courses they take each year, depending on their evaluations.

Recommended Plan of Study for Dance (for incoming student placed in technique 230/235 levels)

	Fall Semester	Spring Semester
Year 1	DANCE 110 (3) DANCE 232 (3) DANCE 235 (3)	DANCE 230 (3) DANCE 237 (3)
Year 2	DANCE 232 or DANCE 235 (3) DANCE 180 (2)	DANCE 280 (3)
Year 3	DANCE 332 or DANCE 335 (3) DANCE 350 (4)	DANCE 370 (4) DANCE 380 (3)
Year 4	DANCE 490 (2) DANCE 432 or DANCE 435 (3)	THTR 225 (3) DANCE 351 (4)

• Must fit in 8 credits of elective courses and 8 credits of a language course.

• Must fulfill all WCore requirements.

• This plan is an example of levels of technique components that could be taken. Dance majors will vary in which level of technique courses they take each year, depending on their evaluations.

Dance Minor

Requirement Description	Credit Hours	Prerequisites
I. Studio Technique Components	7	
All dance minors are required to take a combined total of 7 studio technique credit hours within their 4 years at Westminster University. Students are placed into a course level in collaboration with the instructors at the beginning of Fall semester. All courses, except DANCE 200 are repeatable for credit toward the studio technique requirement.		
Lower Division Technique Courses		
DANCE 230 or Modern II or	3	DANCE 130 and instructor permission
DANCE 232 Contemporary	3	DANCE 230 or by level placement
DANCE 235 or Ballet II or	3	DANCE 135 or instructor permission
DANCE 237 Jazz II	3	
Somatic Practices - Lower Division		
DANCE 200 Somatic Landscapes* *Not repeatable for credit	2	
Upper Division Technique Courses		
DANCE 330 or Modern III or	3	DANCE 330: DANCE 230 or by level placement or by instructor permission
DANCE 332 Contemporary III	3	DANCE 323 or by level placement or instructor permission
DANCE 335 or Ballet III or	3	DANCE 235 or by level placement or by instructor permission
DANCE 337 Jazz III	3	DANCE 237 or by level placement or instructor permission

College of Arts and Sciences

Requirement Description	Credit Hours	Prerequisites
DANCE 430 or Modern IV or	3	DANCE 330 or by level placement or instructor permission
DANCE 432 Contemporary IV	3	DANCE 332 or level placement or instructor permission
DANCE 435 or Ballet IV or	3	DANCE 335 or by level placement or instructor permission
DANCE 337 Jazz IV	3	DANCE 337 or by level placement or instructor permission
Dance Performance - Upper Division		
Dance 300 Dance Performance	1-4	
II. Lower Division Courses	9	
DANCE 110 Creative Process in Movement and Dance	3	
DANCE 130 Modern/Contemporary l	2	
DANCE 135 Ballet/Jazz l	2	
DANCE 180 Dance in Culture and History	2	
III. Upper Division Courses	8	
Choose two of the following upper division requireme	ents:	
DANCE 350 Pedagogy	4	
DANCE 351 Applied Anatomy and Kinesiology	4	
DANCE 370 Composition and Choreography	4	DANCE 110 or with instructor permission
Total Hours for the Minor in Dance	24	

DATA SCIENCE

Faculty

- Jonathan Amburgey
- Spencer Bagley
- Bill BynumRuss Costa
- Jonas D'Andrea
- Helen Hu
- Kathy Lenth
- Jingsai Liang (Chair)
- Sean Raleigh
- Bianca Thompson

Data Science Goals

- Critical thinking
 - Apply data analysis to solve real problems and make predictions in real world contexts.
 - Scrape, clean, process, and evaluate the validity of data from publicly available sources.
 - Explore and contrast different methods of data visualization.
- Creativity
 - Employ novel and flexible strategies for attacking real-world issues.

- Collaboration
 - Effectively work in teams to use data science.
 - Leverage unique talents and skills in a group setting to make the whole better than the sum of its parts.
- Communication
 - Discuss data and conclusions using effective verbal presentation and written explanation.
- Global responsibility
 - Apply data analysis to better understand real problems around the globe.
 - Consider the ethical ramifications of gathering, storing, and analyzing data.

Program Objectives

The program offers an academic minor.

The Data Science minor is designed to help students develop the ability to use data to answer research questions and make predictions and decisions. The minor offers core classes that provide a foundation in mathematics, computer science, and statistics. The program culminates in a capstone project that requires students to apply their data knowledge to a project related to their major or another area of interest.

Data Science Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Core Courses	22	
CMPT 190 Learning to Code (Python)	2	
DATA 110 Explorations in Data Science*	4	
DATA 220 Introduction to Statistics	4	
DATA 350 Statistical Modeling	4	DATA 220
DATA 360 Data Science with Python	4	CMPT 190 or CMPT 202 AND DATA 220
WCSAM 203 Linear Algebra	4	
II. Electives	4	
Take four credit hours of elective courses		
BUSI 400 Business Analytics	4	BUSI 300
CMPT 307 Databases Note: Students with credit for DATA 307 should not register for CMPT 307. Contact CMPT faculty for directed studies options.	4	CMPT 202
CMPT 311 Machine Learning	4	CMPT 202 or CMPT 306
DATA 307 Databases for Data Science Note: DATA 307 cannot be taken by students who already have credit for CMPT 307.	2	CMPT 190
DATA 370 Statistical Learning	4	DATA 350
Any 300-level DATA course Special Topics in DATA	2	Varies by course
III. Capstone Project	1	
DATA 470 Capstone Project	1	Complete all core courses except DATA 360, which may be taken as a co-requisite.
Total Hours for the Data Science Minor	27	

*Honors students may use HON 232 Data/Society/Decision-Making as a substitute for DATA 110 Explorations in Data Science.

Note: Students majoring in Computer Science can use CMPT 202 Introduction to Data Structures as a substitute for DATA 190 Learning to Code (Python).

Note: The courses listed in Section II (Electives) cannot be "double-dipped" with courses in other majors. In practice, what this means is that Computer Science and Business Computer Information Systems majors may not use CMPT 307 Databases as an elective for Data Science, and CMPT 311 Machine Learning may only be used once, either to satisfy upper-division elective credit in CMPT or to satisfy elective credit for the Data Science minor, but not both.

DIVERSITY EQUITY AND INCLUSION CERTIFICATE PROGRAM

Undergraduate Certificates

Undergraduate Certificates give students a grounding in a particular skill set, allowing them to supplement their major with learning in other disciplines. Each certificate aligns with National Association of Colleges and Employers (NACE) career readiness competencies, which include Communication, Equity and Inclusion, Leadership, and Technology. Each certificate culminates in an Applied Experience, an internship or service-learning course that involves students in applying their learning outside the classroom. Internships for the Arts and Social Justice Certificate must be approved by the certificate advisor and arranged through the Career Center for 3-4 credit hours. Faculty coordinators for internships must be from the program in which the internship is listed. Some certificates include WCore and Honors courses, which can meet requirements both in the certificate and in WCore or Honors. Note that certificates are designed for undergraduates enrolled in a degree program, and only students completing certificates as part of a degree are eligible for financial aid.

Program Requirements for DEI Certificate

Advisor: Tamara Stevenson

Complete all courses with a minimum grade of C-.

Requirement Description	Credit Hours	Prerequisites	
I. Required Courses	8		
COMM 365 Intercultural and Global Communication			
Take one of the following:			
SOC 205 Social Problems 4			
HON 211 Global Welfare and Justice 4	Honors College students only		
II. Elective	4		
Take one of the following courses:			
GNDR 101 Gender, Sex, and Identity 4			
HIST 319 American Women's History 4			
HON 222 Science, Power, and Diversity 4	Honors College students only		
LMW 368 US Minority Literature 4			
PHIL 221 Ethics of Diversity 4			
III. Applied Experience	3-4		
Take one of the following courses:			
EDUC 302 Foundations of Education in a Diverse Society 4			
EDUC 309 Advocacy Under the Dome 4			
JUST 221 Community Justice 3			
Internship (must be approved by the certificate advisor) 3-4			
Total Hours for the Diversity, Equity, and Inclusion Certificate	15-16		

Double Dipping Between Certificate and Majors/Minors

"Double-dipping" here refers to (1) allowing students in a particular major or minor pursue a particular certificate and (2) allowing students who pursue a certificate alongside a major/minor to count a course toward both programs. The following guidelines relate to double-dipping between majors/minors and certificates that share courses. No other restrictions apply for programs that do not share courses with particular certificates.

Students in the following majors/minors and also concurrently pursuing the Diversity, Equity, and Inclusion Certificate **MAY** count courses towards both programs:

- Educational Studies major or minor
- Elementary Education major
- History major or minor

- Literature, Media, and Writing major or minor
- Film Studies minor
- Gender Studies minor
- · Outdoor Education & Leadership major or minor
- Philosophy major or minor
- Sociology major or minor
- Special Education minor
- TESOL minor

Communication majors or minors **MAY** count COMM 365 toward both programs. Communication majors or minors who pursue an internship to meet a Communication requirement must complete an **additional** internship for a Diversity, Equity, and Inclusion or Arts and Social Justice certificate. That is, the same internship **cannot** count toward both a Communication major or minor and an Undergraduate Certificate.

It is otherwise assumed that an internship completed as part of an Undergraduate Certificate may also count toward a major or minor.

ENGINEERING 3+2

Faculty

• Jonas D'Andrea

Objectives

Westminster offers a 3+2 Engineering Program in conjunction with the University of Southern California, in Los Angeles, California (USC), and Washington University in St. Louis, Missouri. Students who successfully complete the requirements for this program will earn two degrees:

- A Bachelor of Science or Arts with a major either in Biology, Chemistry, Computer Science, Physics, or Mathematics. (Students may pursue other majors,
- but it may take them longer than 5 years to complete the two degrees.)
- A Bachelor of Science in an engineering discipline from either Washington University or USC.

The 3+2 program is perfect for the student who wants to enhance and broaden their undergraduate education as a prelude to the focused work of engineering school. In all their pre-engineering classes, students receive the benefits of Westminster's small class sizes and tradition of teaching excellence. Westminster's math and science programs offer "learning communities" that couple courses like math and biology and utilize group-based, hands-on learning. Moreover, students often develop close nurturing relationships with faculty and their peers at Westminster that might not happen at a larger school.

Under the 3+2 program, a student attends Westminster University for approximately three years and then transfers to either the University of Southern California (USC) or Washington University for an additional two years of study in the selected engineering discipline.

- 1. As a Westminster first-year, students must meet entrance requirements for USC or Washington University.
- 2. The 3+2 program advisor at Westminster University must recommend them. (To be considered for this recommendation a students must satisfy all the program requirements listed below, maintain a cumulative grade point average of 3.00, and maintain a 3.00 average in the major courses.)
- 3. Students must complete at least four semesters of full-time study at Westminster before transferring to the engineering school.
- 4. Students must have completed 12 upper division credits in their major prior to transfer. Students who complete the 3+2 program by transferring to either USC or Washington University of St. Louis automatically have the Westminster residency requirement waived. (Westminster requires that the last 36 hours of course work be completed at Westminster.)
- 5. Students must file a Leave of Absence Request with the Registrar's Office.

Fields of Engineering Offered by the University of Southern California and Washington University:

University of Southern California	Washington University of St. Louis
Astronautics/Space Technology	Chemical
Biomedical	Civil
Chemical/Materials Science	Computer Science
Civil/Environmental	Computer Engineering
Computer Science	Electrical
Electrical	Mechanical
Industrial and Systems Engineering	System Science & Engineering

*After successful completion of both portions of the program the student is awarded degrees from both institutions.

Program Requirements at Westminster University

Students in this program are encouraged to meet with the 3+2 program advisor at Westminster during their first year to ensure satisfaction of all the requirements for their chosen field of engineering during their time at Westminster University and to learn about the coursework that will be required during their two years at the other institution. Students must complete all of their WCore requirements and the following set of engineering core courses:

College of Arts and Sciences

Requirement Description	Credit Hours	Prerequisites
I. Required Core Courses	48	
CHEM 111 Principles of Chemistry I	4	Co-requisites: MATH 144, CHEM 111R recommended
CHEM 112 Principles of Chemistry II	4	CHEM 111
CMPT 201 Introduction to Computer Science	4	Consent of instructor
CMPT 401 Directed Studies (FORTRAN, C++, or Java)	4	
MATH 201 Calculus I	4	MATH 144
MATH 202 Calculus II	4	MATH 201
MATH 203 Multivariate Calculus	4	MATH 202
MATH 363 Differential Equations II	4	MATH 202
PHYS 211 Physics for Scientists and Engineers I	4	MATH 144
PHYS 212 Physics for Scientists and Engineers II	4	Co-requisites: MATH 201/202
PHYS 301 Introduction to Modern Physics	4	PHYS 151 or PHYS 212
WCSAM 203 Linear Algebra	4	
II. Additional classes that may be required, depending on the field of engineering chosen, include:		
BIOL 310 Plant Biology and Lab	4	BIOL 202, 203, 205, and CHEM 112
CHEM 303 Organic Chemistry I	4	CHEM 112
CHEM 304 Organic Chemistry II and Lab	4	CHEM 303
CHEM 306 Quantitative Chemistry and Lab	4	CHEM 112 and PHYS 151 or 211
CHEM 350 Biochemistry and Lab	4	BIOL 205 and CHEM 303; BIOL 204 is strongly recommended
CHEM 421 Quantum Chemistry and Lab (Same as PHYS 410)	4	CHEM 112, MATH 202, PHYS 212, 309
CHEM 422 Thermodynamics and Statistical Mechanics and Lab (Same as PHYS 411)	4	CHEM 112, MATH 202, PHYS 212, 309
CMPT 351 Operating Systems	4	CMPT 251, 306
DATA 220 Introduction to Statistics	4	
MATH 310 Probability and Statistics	4	MATH 202
MATH 311 Linear Algebra II	4	MATH 210 and MATH 211 or WCSAM 203
MATH 362 Topics in Applied Mathematics	4	MATH 201 and MATH 211, WCSAM 203, or PHYS 309
PHYS 309 Mathematical Methods for Physics	4	MATH 202 and PHYS 211
PHYS 311 Analytical Mechanics	4	MATH 203, PHYS 212, 309
PHYS 410 Quantum Mechanics (Same as CHEM 421)	4	CHEM 112, MATH 202, PHYS 212, 309

Requirement Description	Credit Hours	Prerequisites
PHYS 411 Thermodynamics and Statistical Mechanics and Lab (Same as CHEM 422)	4	CHEM 112, MATH 202, PHYS 212, 309

Sample Student Timetable

In order for the student to complete the dual degree program in five years, it is important to follow closely the timetable set up by the advisor.

The following is a sample timetable for a student majoring in Physics at Westminster and desiring a dual degree in Electrical Engineering. A particular student's course schedule will depend upon their prior coursework, their major at Westminster, the desired engineering discipline, and the specific requirements of the engineering school.*

	Fall Semester	Spring Semester
Year 1: First- Year See the	MATH 201 Calculus I <u>or</u> higher CHEM 111 Principles of Chemistry I and Lab	MATH 202 Calculus II or higher
3+2 advisor**	PHYS 211 Phys for Scientists & Engineers I and Lab	CHEM 112 Principles of Chemistry II and Lab
	Other required WCore courses***	PHYS 212 Phys for Scientists & Engineers II and Lab
		Other required WCore courses
Year 2: Sophomore	MATH 203 Multivariate Calculus PHYS 301 Introduction to Modern Physics	WCSAM 203 Linear Algebra
Review program	Other required WCore courses	PHYS 309 Mathematical Methods of Physics
with advisor		PHYS 370 Scientific Computing
		Other required WCore courses
Year 3: Junior Review program with advisor. At the end of Fall semester, apply to desired engineering school. Meet with 3+2 advisor and request letter of recommendation File for Leave of Absence from Westminster.	PHYS 305 Principles of Optics PHYS 311 Analytic Mechanics Other required WCore courses	PHYS 431 Principles of Electrodynamics Remaining WCore courses
Year 4: First year at engineering school	Summer after completing Year 4: Send copy of transcripts from engineering school to Registrar's Office at Westminster.	
Year 5: Second year at engineering school	Student applies for graduation from both Westminster and the engineering school in the spring.	After spring semester, student receives degrees from the engineering school and from Westminster University.

*Some engineering disciplines require specific pre-engineering classes. These can be taken at the engineering school.

**The current 3+2 advisor is Dr. Jonas D'Andrea, Professor of Mathematics.

***Westminster University requires all first-year to enroll in one learning community. These are classes linked with a common theme. Typically at least one of these courses will satisfy a WCore requirement.

Financial Aid

Merit-based and need-based financial aid is available from Westminster University and the engineering schools. However, these programs are not linked. Students receiving financial aid from Westminster must reapply for financial aid at the engineering school.

ENVIRONMENTAL STUDIES

Faculty

- Jonathan Amburgey
- David Baddley
- Matthew Baker
- Bonnie Baxter
- Christy Clay
 Lance Newman
- Lance NewmanJeff Nichols
- Brent Olson (Chair)
- Michael A. Popich
- Xiumei Pu
- Michael Zarkin

Program Goals

- Use interdisciplinary and intersectional approaches to analyze the complexity of environmental issues and potential responses.
- · Communicate environmental knowledge effectively, to specialized and general audiences.
- Collaborate effectively to understand environmental issues and potential responses.
- Engage in and reflect upon work that improves the environment in which living beings live, work, and play.

Objectives

Environmental Studies is an interdisciplinary program combining the perspectives of the humanities, natural sciences, and social sciences to provide students with multiple perspectives in some of the most challenging and exciting fields of inquiry today: the relationship between humans and the natural world, along with issues of conservation, preservation, climate change, rehabilitation, mitigation, endangered species, international development, and global change. The program emphasizes experiential learning and encourages students to pursue internships, research, and off-campus study experiences. The B.A. or B.S. degree in Environmental Studies can lead to careers working with business, industry, nonprofit environmental organizations, formal and informal education, and federal, state, and local governments, including jobs in National Parks and National Forests, in addition to continuing studies in graduate school in science or law. The minor in Environmental Studies provides a useful multidisciplinary supplement to studies in other fields.

Program Requirements

Students interested in the Environmental Studies major or minor should, during their first year, choose a faculty advisor who is a member of the Environmental Studies faculty and plan to meet with them for an in-depth conversation about the program and their degree options.

Students must meet the university-wide graduation requirements in addition to the Environmental Studies major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Environmental Studies Major—Bachelor of Science Degree

Requirement Description	Credit Hours	Prerequisites		
I. World Language Requirement	8			
Environmental Studies majors must complete eight crec	Environmental Studies majors must complete eight credit hours in a single world language.			
II. Required Core Courses	21			
BIOL 203 Introduction to Ecology	4	DATA 220		
CHEM 111 Principles of Chemistry I and Lab	4	Co-requisites: CHEM 111R recommended/ MATH 144 required		
CHEM 112 Principles of Chemistry II and Lab	4	CHEM 111		
DATA 220 Introduction to Statistics	4			
ENVI 101 Environment: Science, Society, and Culture	4			
ENVI 201 Green Careers	1	ENVI 101 and sophomore standing		
III. Tools and Methods	6-8			
Take two of the following courses in consultation with yo	our advisor:			
ART 345 Video Production	4			

Requirement Description	Credit Hours	Prerequisites
COMM 240 Media Writing	4	
CMPT 201 Introduction to Computer Science	4	MATH 101
COMM 210 Media Writing I	4	
DATA 350 Statistical Modeling	4	DATA 220
ENVI 305 Introduction to Geographic Information Systems	4	
ENVI 361 Writing the Environment	4	ENVI 101
ENVI 420RR Community-Based Natural Resource Management must be enrolled in the Round River Study abroad semester	3	
ENVI 430RR Biological Field Methods must be enrolled in the Round River Study abroad semester	3	
MATH 201 Calculus I	4	MATH 144 or by placement test
IV. Experiential Learning	3	
Take three credit hours from the following courses:		
ENVI 301 Field Study (can be taken more than once)	1-4	
ENVI 330 Extended Field Study (course cannot be used elsewhere)	4	ENVI 101
ENVI 331 Environmental Cooperation and Conflict must be enrolled in the Westminster Expedition	4	
ENVI 401 Directed Study	1-4	
ENVI 440 Internship	1-4	
ENVI 450 Undergraduate Research	1-4	ENVI 101 and instructor permission
A course taken during a study abroad or off- campus experience may also be accepted but cannot be counted for credit elsewhere.		
V. Environmental Studies Electives	8	
Take eight credit hours from the following list or with	n advisor approval; only four credit hours may be earn	ed during May Term:
ART 313 Environmental Art	4	
ECON 325 Environmental Economics	4	ECON 253 or 263
ENVI 203 Climate Resilience	4	
ENVI 300 Special Topics in Environmental Studies	1-4	
ENVI 301 Field Study (can be taken more than once)	1-4	
ENVI 305 Introduction to Geographic Information Systems	4	
ENVI 330 Extended Field Study (course cannot be used elsewhere)	4	ENVI 101
ENVI 332 Landscape and Meaning must be enrolled in the Westminster Expedition	4	
ENVI 333 The Native West must be enrolled in the Westminster Expedition		
ENVI 334 America's Best ldea must be enrolled in the Westminster Expedition	4	
ENVI 340 Special Topics in Environmental Sciences (may be taken more than once)	4	

Requirement Description	Credit Hours	Prerequisites
ENVI 350 Special Topics in the Civic Environment	4	
ENVI 351 The Global Environment	4	ENVI 101
ENVI 352 Water in the West	4	ENVI 101
ENVI 353 Environmental Movements	4	ENVI 101 or instructor permission
ENVI 355 Special Topics in Environmental Humanities and Social Sciences	1-4	ENVI 101
ENVI 363 Gender and the Environment	4	ENVI 101 or instructor permission
ENVI 364 Spiritual Ecology	4	ENVI 101
ENVI 365 Literature of the Environment	4	ENVI 101
ENVI 370 Theories of Nature	4	ENVI 101
ENVI 440 Internship	1-8	ENVI 101
HIST 202 America's Best Idea	4	
HIST 320 Environmental History of the US	4	One lower division HIST course or ENVI 101
JUST 344 Environmental Justice	4	
PHIL 307 Environmental Ethics	4	PHIL 102
PLSC 327 Environmental Politics	4	
VI. Science and the Environment Concentration	20	
Take twenty credit hours from the following list or w credit hours may be earned during May Term.	vith advisor approval, of which, sixteen must be 300-le	vel or above; only four
BIOL 202 Organisms and Evolution	4	
BIOL 204 Principles of Genetics	4	CHEM 112
BIOL 205 Introduction to Cell Biology	4	CHEM 112
BIOL 300 Special Topics	1-4	
BIOL 303 Microbiology	4	BIOL 204, 205, and CHEM 112
BIOL 306 Aquatic Biology	4	BIOL 203, CHEM 112, DATA 220
BIOL 310 Plant Biology and Lab	4	BIOL 202, 203, 205, and CHEM 112
BIOL 404 Advanced Ecology and Lab	4	BIOL 202, 203, CHEM 112 and MATH 240 or DATA 220
CHEM 303 Organic Chemistry I and Lab	4	CHEM 112
CHEM 304 Organic Chemistry II and Lab	4	CHEM 303
CHEM 306 Quantitative Analysis and Lab	4	CHEM 112 and PHYS 151 or 211
CHEM 307 Instrumental Analysis and Lab	4	CHEM 112 and PHYS 151 or 211
CHEM 320 Inorganic Chemistry and Lab	4	CHEM 112
ENVI 102 Ecology of Food Systems	4	
ENVI 115 Science of the Environment	4	

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Requirement Description	Credit Hours	Prerequisites
ENVI 305 Introduction to Geographic Information Systems	4	
ENVI 410RR Applied Conservation Biology must be enrolled in the Round River Study abroad semester	3	
ENVI 415RR Applied Ecology must be enrolled in the Round River Study abroad semester	3	
ENVI 435RR Introduction to Natural History must be enrolled in the Round River Study abroad semester	3	
ENVI 340 Special Topics in Environmental Sciences (may be taken more than once)	4	Variable
ENVI 341 Environmental Toxicology	4	
GEOL 107 Geology of the American West	4	
GEOL 111 Geology of National Parks	4	
GEOL 205 Climate Science & Consequences	4	
PHYS 151 Principles of Physics I and Lab	4	MATH 144
PHYS 152 Principles of Physics II and Lab	4	PHYS 151 or 211
PHYS 211 Physics for Scientists and Engineers I and Lab	4	MATH 144
PHYS 212 Physics for Scientists and Engineers II and Lab	4	PHYS 211
PSYC 388 Environmental Psychology	4	PSYC 270 and PSYC 216
PUBH 320 Environmental Health	4	PUBH 305
WCSAM 104 Explorations in Oceanography	4	
WCSAM 202 Isotope Biogeochemistry	3	
VII. Senior Capstone	2-4	
ENVI 405 OR WCSAM 400 Senior Capstone offered spring (this course fulfills the WCore "Making Connections" requirement) OR Science Capstone (by advisor approval)	4 OR 2	
Total Hours for the BS in Environmental Studies Major	70-72	

Recommended Plan of Study for Environmental Studies—Bachelor of Science Degree

	Fall Semester	Spring Semester
Year 1	BIOL 203 CHEM 111 DATA 220 WCore course (3-4)	CHEM 112 ENVI 101 WCore course (3-4) WCore course (3-4)
Year 2	Environmental Studies elective (4) Language course (4) WCore course (3-4)	Language course (4) Science Concentration course (4) WCore course (3-4) ENVI 201 (1)
Year 3	Science Concentration course (4) Tools course (4) WCore course (3-4) Or off-campus experience	Science Concentration course (4) Experiential Learning course (1) Environmental Studies elective (4) Or off-campus experience
Year 4	Environmental Studies elective (4) Experiential Learning course (2) Science Concentration course (4)	ENVI 405 Senior Capstone (4) OR WCSAM 400 Science Capstone (2) Tools course (4) Science Concentration course (4)

Environmental Studies Major—Bachelor of Arts Degree

Requirement Description	Credit Hours	Prerequisites		
I. World Language Requirement	8			
Environmental Studies majors must complete eight credit hours in a single world language.				
II. Required Core Courses	17			
ENVI 101 Environment: Science, Society, and Culture	4			
ENVI 201 Green Careers	1	ENVI 101 and sophomore standing		
ENVI 351 The Global Environment	4	ENVI 101		
ENVI 361 Writing the Environment	4	ENVI 101		
ENVI 370 Theories of Nature	4	ENVI 101		
III. Science Elective	3-4			
Students must take one of the following courses in co	nsultation with their advisor:			
BIOL 202 Organisms and Evolution	4			
BIOL 203 Introduction to Ecology	4	DATA 220		
ENVI 102 Ecology of Food Systems	4			
ENVI 115 Science of the Environment	4			
GEOL 107 Geology of the American West	4			
GEOL 111 National Parks Geology	4			
GEOL 205 Climate Science & Consequences	4			
PSYC 105 Bust That Psych Myth	4			
WCSAM 104 Explorations in Oceanography	4			
IV. Tools and Methods	6-8			
Take two of the following courses in consultation with	your advisor:			
ART 180 Exploring Photography	4			
ART 345 Video Production	4			

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Requirement Description	Credit Hours	Prerequisites
COMM 210 Media Writing I	4	
DATA 220 Introduction to Statistics	4	
ENVI 305 Introduction to Geographic Information Systems	4	
ENVI 420RR Community-Based Natural Resource Management must be enrolled in the Round River Study abroad semester	3	
ENVI 430RR Biological Field Methods must be enrolled in the Round River Study abroad semester	3	
HIST 240 Making History	4	
PLSC 390 Research Methods	4	
SOC 390 Social Research Methods	4	
V. Experiential Learning	3	
Complete three credit hours from the following cour	rses:	
ENVI 301 Field Study (can be taken more than once)	1-4	
ENVI 330 Extended Field Study (course cannot be used elsewhere)	1-4	ENVI 101
ENVI 331 Environmental Cooperation and Conflict must be enrolled in the Westminster Expedition	4	
ENVI 401 Directed Study	1-4	
ENVI 440 Internship	1-8	
ENVI 450 Undergraduate Research	1-4	ENVI 101
A course taken during a study abroad or off- campus experience may also be accepted but cannot be counted for credit elsewhere.		
VI. Society and Culture Concentration	22	
Complete twenty-two credit hours		
ART 313 Environmental Art	4	
ECON 325 Environmental Economics	4	
ENVI 203 Climate Resilience	4	
ENVI 300 Special Topics in Environmental Study	1-4	
ENVI 301 Field Study (can be taken more than once)	1-4	
ENVI 305 Introduction to Geographic Information Systems	4	
ENVI 330 Extended Field Study (course cannot be used elsewhere)	4	ENVI 101
ENVI 332 Landscape and Meaning must be enrolled in the Westminster Expedition	4	
ENVI 333 The Native West must be enrolled in the Westminster Expedition	4	
ENVI 334 America's Best Idea must be enrolled in the Westminster Expedition	4	
ENVI 350 Special Topics in the Civic Environment	4	
ENVI 352 Water in the West	4	ENVI 101
ENVI 355 Special Topics in Environmental Humanities and Social Sciences	1-4	

Requirement Description	Credit Hours	Prerequisites
ENVI 360 Special Topics in Environmental Humanities	1-4	
ENVI 363 Gender and the Environment	4	ENVI 101 or instructor permission
ENVI 364 Spiritual Ecology	4	ENVI 101
ENVI 365 Literature of the Environment	4	ENVI 101
ENVI 410RR Applied Conservation Biology must be enrolled in the Round River Study abroad semester	3	
ENVI 415RR Applied Ecology must be enrolled in the Round River Study abroad semester	3	
ENVI 435RR Introduction to Natural History must be enrolled in the Round River Study abroad semester	3	
ENVI 440 Internship	1-8	
ENVI 450 Undergraduate Research	1-4	ENVI 101
HIST 202 America's Best Idea	4	
HIST 320 Environmental History of the U.S.	3	One lower- division HIST course or ENVI 101
HIST 365 Utah and the West	3	One lower-division HIST course
JUST 344 Environmental Justice	4	
OEL 120 Outdoor Leadership	4	
PHIL 307 Environmental Ethics	4	PHIL 102
PLSC 327 Environmental Politics and Policy	4	
VII. Senior Capstone	2-4	
ENVI 405 OR WCSAM 400 Senior Capstone offered spring (this course fulfills the WCore "Making Connections" requirement) OR Science Capstone (by advisor approval)	4 OR 2	
Total Hours for the BS in Environmental Studies Major	63-65	

Recommended Plan of Study for Environmental Studies—Bachelor of Arts Degree

	Fall Semester	Spring Semester
Year 1	WCore Course (3-4) WCore Course (3-4) Language I (4)	WCore Course (4) WCore Course (3-4) Language II (4) ENVI 101 (4)
Year 2	Science Distribution course (4) WCore course (3-4) WCore course (3-4) Elective (1)	ENVI 361 Writing the Environment (4) WCore course (3-4) WCore course (3-4) Tools and Methods course (3-4) ENVI 201 (1)
Year 3	ENVI 351 The Global Environment (4) Elective (1-4) Experiential Learning course (1-4) ENVI 370 Theories of Nature (1-4) Or off-campus experience	Elective (4) Tools and Methods course (3-4) Or off-campus experience
Year 4	Experiential Learning course (1-2) Elective (4)	ENVI 405 Senior Capstone (4) OR WCSAM 400 Science Capstone (2) Elective (4)

Environmental Studies Minor

Requirement Description	Credit Hours	Prerequisites	
I. Required Courses	19-20		
A. ENVI 101 Environment: Science, Society, Culture (4) B. Experiential Learning (3-4)Complete at least three credit hours from the following courses: ENVI 301 Field Study (1-4) (can be taken more than once) ENVI 330 Extended Field Study (4) (course cannot be used elsewhere) ENVI 331 Environmental Conflict and Cooperation (4) must be enrolled in the Westminster Expedition A course taken during a study abroad or off-campus experience may also be accepted but cannot be counted for credit elsewhere. C. Environmental Studies Distribution (12) One course in each of Humanities, Natural Sciences, and Social Sciences, chosen from the lists below or in consultation with your advisor:			
Humanities			
ART 313 Environmental Art	4		
ENVI 332 Landscape and Meaning must be enrolled in the Westminster Expedition	4	ENVI 101 or a HIST WCore course	
HIST 202 America's Best Idea	4		
ENVI 360 Special Topics in Environmental Humanities	1-4		
ENVI 361 Writing the Environment	4	ENVI 101	
ENVI 363 Gender and the Environment	4	ENVI 101 or instructor permission	
ENVI 364 Spiritual Ecology	4	ENVI 101	
ENVI 365 Literature of the Environment	4	ENVI 101	
HIST 320 Environmental History of the U.S.	3	One lower division HIST course or ENVI 101	
PHIL 307 Environmental Ethics	4	PHIL 102	
Natural Sciences			
BIOL 203 Introduction to Ecology	4	Pre- or co- requisite: DATA 220	
ENVI 102 Ecology of Food Systems	4		
ENVI 115 Science of the Environment	4		
ENVI 305 Introduction to Geographic Information Systems	4		

Requirement Description	Credit Hours	Prerequisites	
ENVI 410RR Applied Conservation Biology must be enrolled in the Round River Study Abroad Semester	3		
ENVI 415RR Applied Ecology must be enrolled in the Round River Study Abroad Semester	3		
ENVI 430RR Biology Field Methods must be enrolled in the Round River Study Abroad Semester	3		
ENVI 435RR Intro to Natural History must be enrolled in the Round River study abroad	3		
GEOL 205 Climate Science & Consequences	4		
Social Sciences			
ECON 325 Environmental Economics	4	ECON 253 or 263	
ENVI 331 Environmental Conflict and Cooperation must be enrolled in the Westminster Expedition	4		
ENVI 333 The Native West must be enrolled in the Westminster Expedition	4		
ENVI 351 The Global Environment	4	ENVI 101	
ENVI 352 Water in the West	4	ENVI 101	
ENVI 353 Environmental Movements	4	ENVI 101 or instructor permission	
ENVI 370 Theories of Nature	4	ENVI 101	
ENVI 420RR Community Based Natural Resource Management must be enrolled in the Round River Study abroad semester	3		
ENVI 425RR Humans and the Environment must be enrolled in the Round River Study abroad semester	3		
JUST 344 Environmental Justice	4		
PLSC 327 Environmental Politics and Policy	4		
II. Electives	4		
Four additional hours chosen in consultation with the	Four additional hours chosen in consultation with the student's minor advisor. Choose from the list above or with advisor approval.		
Total Hours for the Environmental Studies Minor	23-24		

FILM STUDIES

Faculty

- Ranjan Adiga
- Eileen Chanza Torres
- Alicia Cunningham-BryantGeorgiana Donavin (Chair)
- Nick Moore
- Spencer Potter
- Mark Rubinfeld
- Stephanie Stroud
- Kim Zarkin

Program Goals

- Students will use terms and methods of film analysis effectively, and identify the concepts used by film scholars from various perspectives.
 Students will grasp film history in an international context, recognizing it as a dynamic set of economic, sociopolitical, technological, and aesthetic
- confrontations.

- Students will situate film as an element of culture—how it influences, and is influenced by, the culture in which it is made; how film influences the ways we view ourselves and others in cultural terms such as race, gender, economics, and history; and how film is both an agent and result of social change.
- Students will perform detailed film critiques in various media, critically evaluating the use of formal elements, narrative structure, and the place of films in their historical and cultural contexts.

Objectives

The program offers an academic minor. The Film Studies minor provides students with the skills and knowledge necessary to understand the nature and function of moving images in contemporary global culture. The Film Minor deepens students' understanding of American and world history, communications and media, visual arts, and literature. It will serve students in careers stemming from any of those fields.

Program Requirements

Students must meet the university-wide graduation requirements in addition to the Film minor:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Film Studies Minor

Requirement Description	Credit Hours	Prerequisites
I. Lower Division Core	12	
FILM 110 Making Sense of Movies	4	
LMW 222 Texts and Media in Context	4	
LMW 223 Critical Theory for Text and Media	4	
II. Upper Division Electives	12	
Twelve additional upper division credit hours in FILM	A courses or related electives, as approved by program	chair:
FILM 300 Special Topics in Film	1-4	
FILM 331 These Films Are So Gay!	4	
FILM 345 Video Production	4	
FILM 380 Video Game Culture	4	
FILM 381 Bollywood to Hollywood	4	
FILM 401 Directed Studies	1-4	
FILM 440 Internship	1-8	
LMW 332 Shakespeare and Film	4	
LMW 355 Arthurian Fantasy and the Other	4	LMW 222 and LMW 223
SOC 320 Sociology of Popular Culture	4	
Total Hours for the Film Studies Minor	24	

FIRST SCHOLARS PROGRAM

First Scholars offers a certificate with an academic focus on personal, community, academic, and professional development. Courses in this program are designed to promote the social and academic integration of first generation and traditionally underrepresented students on the Westminster campus. Participants in this program receive a book award of up to \$500 per semester, for four years. The program provides students with academic support, scholarship enrichment, faculty mentorship, and scholastic and professional preparation. The First Scholars Program is a collaboration between the Student Diversity and Inclusion Center, the Dumke Center for Civic Engagement, and the College of Arts and Sciences.

First Scholars Goals

- To gain an understanding of the strengths of personal and interpersonal cultural communication.
- To engage in conversations of diversity and inclusion.
- To promote the academic integration of first-generation and traditionally underrepresented students on Westminster campus.
- Promote strong academic development.
- Facilitate social integration of first-generation and traditionally underrepresented students on Westminster campus.
- Bridge family and community integration.
- Help students achieve prestigious outcomes post-graduation.

• Promote financial literacy and forecast planning.

Program Requirements

Students must maintain good academic standing to be eligible for the \$500 book award scholarship each semester. In addition to the university-wide graduation requirements, First Scholars must:

- Maintain a 2.0 GPA
- Attend the Summer Bridge First Scholars Program prior to their Freshman year of school
- Complete a First Scholars cohort course every fall semester for 4 years, for a total of 4 courses
- Maintain an 80% attendance to all mandatory First Scholars events each semester

First Scholars Certificate

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	0-6	
FIRST 100 College Success	0-2	
FIRST 200 Community-Based Learning	0-2	
FIRST 300 Accessing Developmental Opportunities	0-1	
FIRST 400 Graduation Transition	0-1	
Total Units for the First Scholars Certificate	0-6	-

FRENCH

Faculty

Steve Haslam

Objectives

The French Program offers a minor in French. This program is designed to help students deepen their sensitivity of language in its everyday and artistic forms and to understand cultures other than their own.

Entering students wishing to continue with a world language studied elsewhere are assigned to appropriate courses on an as-needed basis through placement tests and/or interviews (by appointment with Language Faculty). Students who have completed one or two years of high school language study are usually eligible for FREN 111. Students who have completed three or more years of high school level language are specifically excluded from FREN 110 and FREN 111; faculty may therefore initially place an incoming student in a 200-level course, if prior study reached an intermediate level. Placement does not reduce, however, the total number of hours needed for major or minor requirements in world language.

Program Requirements

A maximum of 12 external hours (transfer, CLEP, Prior Learning, Challenge exam, or other external language exams) may be applied toward the minor (see below under "Additional Requirements and Procedures"). French 110 is not counted toward the minor.

Students must meet the university-wide graduation requirements in addition to the French Minor:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

French Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	12	
FREN 111 French II	4	
FREN 220 French III	4	FREN 111
FREN 221 French IV	4	FREN 220
II. Elective Courses	8	

Requirement Description	Credit Hours	Prerequisites
Additional 300- or 400-level courses		
Total Hours for the French Minor	20	

*Students wishing to minor in French are advised that, due to the size and staffing of the Language Department, many language courses have only one section in a given semester. Night students wishing to minor in French are asked to note that most of the language classes are not offered in the evenings and must be taken as day classes. For further information and advising please see the chair of the Language Department or French faculty.

Additional Academic Requirements and Procedure for the French Program

Note: Please consult your individual academic major listings in this catalog for any language requirement under their governance.

Native Fluency—Students demonstrating native fluency in a language other than English may request and receive upon proper documentation a waiver for the world language requirement for the major (see Language Department or Registrar's Office for proper procedure). No credit, however, is awarded for this waiver.

Transfer Credit—Only a maximum of 12 credit hours may be transferred toward the Spanish or French minor. Transfer credit may apply toward the 16 hours world language required for the International Business degree. Transfer hours beyond the 12-hour minor limit may apply toward total hours for graduation (see the Registrar's Office for details).

GENDER STUDIES

Faculty

- Kara Barnette
- Eileen Chanza Torres (Chair)
- Chris Davids
- Georgiana Donavin
- Julian Mendez
- Jeff Nichols
- Kristjane Nordmeyer
- Xiumei Pu
- Tamara Stevenson
- Kim Zarkin

Program Goals

- To think critically about the historical and current impact of sex and gender on societies, individuals, organizations (or institutions), and understanding of humanity.
- To analyze the ways in which issues such as race, class, ethnicity, culture, sexual orientation, etc. intersect with, and complicate understandings of, gender.
- To become familiar with theories that underlie studies of feminism as well as studies of female and male identities.
- To integrate the study of gender with various fields of study.
- To learn how various disciplines approach the study of gender.

Objectives

The interdisciplinary minor in gender studies provides students with the opportunity to understand and critically analyze the impact gender has on individuals and society. Some courses focus exclusively on women or on men, while others focus on broader issues relevant to both women and men. The minor is based on an inclusive framework that encourages and supports an emphasis on issues of race, ethnicity, sexual orientation, class, and culture.

The minor is designed to help students develop a deeper understanding of themselves and the world in which they live; sharpen critical thinking skills; and prepare for careers in business, industry, government, and academic settings.

Program Requirements

The minor requires students to complete twenty-four credit hours of Gender Studies courses, many of which are cross-listed with courses offered in other disciplines including COMM, ENGL, HIST, MATH, PHIL, PSYC, and SOC. The final requirement is the senior project or thesis; students who must complete a senior project or thesis for their major may undertake one thesis or project that will count for both requirements. Students must maintain a cumulative GPA of 2.3 in all Gender Studies courses.

Students must meet the university-wide graduation requirements in addition to the Gender Studies minor:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Gender Studies Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	7	
GNDR 101 Gender, Sex, and Identity	4	
GNDR 400 Senior Project/Thesis	3	Completion of 20 hours of Gender Studies, see course description
II. Elective Courses	16-17	
Complete 16-17 credits from the following courses:		
GNDR 300 Special Topics in Gender Studies	2-4	
GNDR 319 American Women's History	4	
GNDR 320 Gender, Stories, and Migration	4	One Writing Emphasis course
GNDR 325 Human Trafficking	4	Junior standing
GNDR 330 Sex, Gender, and Power	4	
GNDR 335 Psychology of Women	4	PSYC/SOC 105, PSYC 216, or PSYC 270
GNDR 339 Queer Theory and Posthumanism	4	
GNDR 345 Sociology of Sexualities	4	
GNDR 350 Gender in Society	4	
GNDR 360 Race, Gender, Class and the Media	4	
GNDR 378 Podcasting	4	
GNDR 380 Video Game Culture	4	
GNDR 440 Internship	1-8	Junior/senior standing, see course description
Total Hours for the Gender Studies Minor	23-24	

GEOLOGY

Faculty

· Nick Pollock (Chair)

Program Goals

- · Ability to synthesize multiple lines of evidence and multiple sources of data to support geologic hypotheses
- Ability to use an Earth Systems perspective to integrate understanding of geologic processes across disciplines
- Ability to evaluate data necessary to answer a particular question
- Ability to think and extrapolate across a broad range of temporal and dimensional scales
- Ability to work collaboratively to break a complex problem into simpler, individually achievable tasks Ability to work together constructively in challenging field environments
- Ability to explain geologic information at a level appropriate to the audience •
- Ability to read and understand the geologic literature and to create original research reports
- Ability to communicate scientific information through verbal and written presentation of data, graphics, and maps.
- Ability to assess the effects of human activity on the natural environment
- Ability to bring a geologic perspective to discussions of social issues

Objectives

The Geology program offers a Bachelor of Science degree for students interested in understanding the earth. The degree incorporates a diversity of both perspectives and methods. Classes incorporate lecture, lab, and fieldwork to study our planet's physical, chemical, and biological history.

Program Requirements

Students must maintain a minimum 2.3 GPA in all courses required for the major.

Students must meet the university-wide graduation requirements in addition to the Geology major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

For course prerequisites, please refer to the course descriptions.

Geology Major

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
The student must complete eight credit hours in a single w	vorld language.	·
II. Lower Division Geology Courses	16	
GEOL 201 Earth Materials I: Mineralogy	4	GEOL 107 or 111 or CHEM 111Co-requisite: GEOL 201L
GEOL 210 Historical Geology	4	
GEOL 214 Sedimentology & Stratigraphy	4	GEOL 107 or 111 or PHYS 151 or 211Co-requisite: GEOL 214L
Choose one of the following courses:		
GEOL 107 Geology of the American West	4	
GEOL 111 National Parks Geology	4	
III. Upper Division Geology Courses	16	
GEOL 301 Earth Materials II: Petrology	4	GEOL 201 and CHEM 111Co- requisite: GEOL 301L
GEOL 310 Structural Geology and Tectonics	4	GEOL 107 or 111 and PHYS 152 or 212Co-requisite: GEOL 310L
GEOL 311 Scientific Writing	2	GEOL 107 or 111
GEOL 360 Field Geology (summer even years)	6	GEOL 214, 301, 310
IV. Electives	12	
Students must take an additional twelve credits in geology	, including at least one course at the 400	level.
V. Required Courses from Other Programs	24	
CHEM 111 Principles of Chemistry I	4	Recommended MATH 144
CHEM 112 Principles of Chemistry II	4	CHEM 111
MATH 201 Calculus I	4	MATH 144 or placement test
MATH 202 or DATA 220 Calculus II or Introduction to Statistics	4	MATH 201 (for MATH only)
PHYS 151 or PHYS 211 Principles of Physics I or Physics for Scientists and Engineers I	4	MATH 144 or placement test; MATH 201 as pre-

Requirement Description	Credit Hours	Prerequisites
PHYS 152 or PHYS 212 Principles of Physics II or Physics for Scientists and Engineers II	4	or co-requisite for PHYS 211 only PHYS 151 or PHYS 211 MATH 202 as pre- or co-requisite for PHYS 212 only
Total Hours for the Geology Major	76	

Recommended Plan of Study for Geology

	Fall Semester	Spring Semester
Year 1	GEOL 107 or GEOL 111 MATH 201 WCore Elective	GEOL 214 MATH 202 or DATA 220 WCore Elective
Year 2	GEOL 201 GEOL 210 CHEM 111 Language	GEOL 301 CHEM 112 Language WCore
Year 3	GEOL 311 PHYS 151 or PHYS 211 WCore Elective	GEOL 310 PHYS 152 or PHYS 212 Elective Elective
Year 4	GEOL 4XX WCore Elective Elective	WCore Elective Elective Elective

Geology Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Geology Courses	14	
GEOL 201 Earth Materials I: Mineralogy	4	GEOL 107 or 111 or CHEM 111 Co-requisite: GEOL 201L
GEOL 210 Historical Geology	4	
GEOL 311 Scientific Writing	2	GEOL 107 or 111
Choose one of the following courses:		
GEOL 107 Geology of the American West	4	
GEOL 111 National Parks Geology	4	
II. Electives	12	
Students wishing to complete a minor must take an additional twelve credits in Geology, at least eight of which are at the 300 level. ENVI 305 is also an acceptable elective.		
Total Hours for the Geology Minor	26	

HISTORY

Faculty

Jeff Nichols

Program Goals

Westminster University History students will:

- · Learn and practice traditional, digital, and community-based methods of primary historical research.
- · Learn and practice constructing valid historical arguments based on original research in primary sources.
- Learn and practice communicating historical knowledge creatively and effectively via written, oral, digital and other means.
- Learn and practice skills of critical analysis of evidence, arguments, and conflicting historical interpretations.
- Begin to build a broad and deep content knowledge of global human history.

Objectives

The History Program is committed to helping students learn to make sense of the past. The Program emphasizes research and communication skills applicable to further History study and teaching, as well as to many other disciplines and careers. Students learn to ask significant questions about the past, often onsite or in the field; find and critically analyze the best primary and secondary sources, and communicate their findings to a variety of audiences through many means. Students may elect an academic major or minor.

Program Requirements

Enrollment in most history courses, except those designed exclusively for majors and minors, is open to all students who are enrolled in, or have completed, the history area WCore requirement, regardless of major field or class standing.

History majors and minors are encouraged to take HIST 241 (The Craft of History) in their second year of course work. HIST 241 is a prerequisite for HIST 390/490.

Students need to check with their History advisor regarding offerings for upcoming semesters. Upper division (300-level) history courses listed in the catalog may not be offered on a regular schedule. No student may register for HIST 390/490 more than three times unless there are legitimate circumstances outside of a student's control preventing successful completion of the first or second course.

Students may substitute up to four hours of elective credit with an approved internship.

Note for Honors College students: HON 201 *Foundational Conversations I* may be substituted for HIST 102 or 124 required for the program while HON 202 may substitute for HIST 111, 204 or 206.

Students must meet the university-wide graduation requirements in addition to the History major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

History Major

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
History majors must complete two semesters of a single world language or its equivalent.		
II. Lower Division History Courses	16	
HIST 120 The Story of America	4	
HIST 241 The Craft of History	4	
Choose one course:		
HIST 102 Alien Encounters in History	4	
HIST 111 Patterns of Global Immigration	4	
HIST 124 Film and Memory	4	
Choose one course:		
HIST 202 America's Best Idea	4	
HIST 204 Truth and Reconciliation	4	
HIST 206 Homelands and Contested Spaces	4	
HIST 230 Global Coffee Cultures	4	
III. Interdisciplinary Elective	4	
One 300-level course in English or Philosophy		

Requirement Description	Credit Hours	Prerequisites
IV. Upper Division History Courses	6	
HIST 390 Research Seminar in History	3	HIST 241
HIST 490 Research Seminar in History	3	HIST 390
V. Upper Division Distribution	24	
Twelve upper division hours from Americas category Twelve upper division hours from World category 12 One lower division HIST course		
Total Hours for the History Major	58	

Recommended Plan of Study for History

	Fall Semester	Spring Semester
Year 1	HIST 102, 111 or 124 Language I	HIST 120 Language II
Year 2	HIST 202 HIST 204, or 206	HIST 241* (World) (Americas)
Year 3	(World) (Americas)	(World) (Americas)
Year 4	Interdisciplinary Elective HIST 390**	HIST 490**

*HIST 241 is offered only in Spring semester. **HIST 390 is offered only in Fall semester and must be taken sequentially with 490, which is only offered in Spring semester.

Academic Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	8	
History 241 The Craft of History	4	
Choose one course from the following:		
HIST 102 Alien Encounters in History	4	
HIST 124 Film and Memory	4	
HIST 111 Patterns of Global Immigration	4	
HIST 120 The Story of America	4	
II. Elective Courses	12	
Four upper division hours from Americas category		
Four upper division hours from World category 4	One lower division HIST course	
Four upper division hours from any category 4	One lower division HIST course	
Total Hours for the History Minor	20	

History Categories

• Americas

- HIST 313 Our Troubled Times: US History since 1945
- HIST 316 The Civil War Through 1890
- HIST 317 Empire & Power: US History, 1890-1945
- HIST 319 American Women's History
- HIST 320 Environmental History of the United States
- HIST 325 The Indigenous West
- HIST 340 Conquest & Resistance: Colonial Latin America
- HIST 341 Democracy, Revolution, Repression: Modern Latin America
- HIST 365 Utah and the West

• World

- HIST 307 Comparative Revolutions
- HIST 308 Supernatural Europe
- HIST 324 Global Cold War
- HIST 327 History of the Holocaust
- HIST 328 Death on Display
- HIST 329 Culture and Society of East Asia
- HIST 330 History of the Middle East

INTERDISCIPLINARY PROGRAM

Westminster University offers interdisciplinary courses that draw from several fields of study. Such courses are labeled INTR and include offerings like an orientation to college, May term study experiences, career shadowing, or research methods.

JUSTICE STUDIES

Faculty

- Connie Etter
- Mike Zarkin (Chair)

Program Goals

- To develop effective verbal and written communication skills
- To develop, critique, and conduct research
- · To demonstrate collaborative problem solving skills
- To develop critical thinking skills
- To develop practices of global responsibility

Objectives

The Westminster Justice Studies program treats justice as a broad category of social and ethical problems that includes issues relating to crime and justice, economic and social justice, community rights, environmental justice and global justice. Accordingly, students who choose a major in Justice Studies are encouraged to take interdisciplinary coursework that exposes them to different ways of thinking about justice. This includes, but is not limited to, coursework in fields such as Economics, English, Gender Studies, Philosophy, and Political Science that helps students understand the nature of justice and why individuals and institutions may or may not behave in a just manner. Justice Studies majors are also required to engage in independent research and experiential learning activities such as internships. The Justice Studies minor affords students an opportunity to view justice through broad, interdisciplinary lenses.

Program Requirements

The Justice Studies program offers a Bachelor of Science in Justice Studies as an academic major and provides for an academic minor in Justice Studies. The Justice Studies academic major requires completion of 58 semester hours of credit selected from Justice Studies' coursework and related classes in the social sciences and selected other coursework. Thirty-two of those hours must be in Justice Studies and related courses numbered 300 or above. Students must maintain a cumulative 2.5 GPA or better in the academic major and minor.

Students must meet the university-wide graduation requirements in addition to the Justice Studies major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Justice Studies Major

Requirement Description	Credit Hours	Prerequisites		
I. World Language Requirement	8			
Justice Studies majors must complete eight credit hours in a single world language.				
II. Lower Division Courses	10			
JUST 109 Power and Social Change	4			
JUST 221 Community Justice	3			
PLSC 203 Courts, Law, and Social Justice	3			
III. Upper Division Courses	20			
The following classes are required:				
JUST 324 Gender, Work, and Justice	4			
JUST 325 Justice in Everyday Life	4			
PLSC 355 Constitutional Law: Civil Liberties	4			
PLSC 390 Research Methods	4			
JUST 490 Senior Capstone	4			
IV. Electives	15-16			
Take fifteen-sixteen credits; minimum ten credits as				
upper division.				
COMM 360 Race, Gender, Class, & Media	4			
COMM 365 Intercultural & Global Communication	4			
EDUC 373 Juvenile Justice	3			
EDUC 375 Indigenous Knowledges & Lifeways	4			
ENVI 353 Environmental Movements	4			
ENVI 363 Gender & the Environment	4			
GNDR 101 Gender, Sex, & Identity	4			
HIST 307 Comparative Revolutions	4			
HIST 327 History of the Holocaust	4			
JUST 300 Special Topics	1-4			
JUST 440 Internship	1-4			
LMW 223 Critical Theory	4			
LMW 335 Englishes of the World	4			
PHIL 129 Race, Power & Privilege	4			
PHIL 209 Poverty & Global Justice	3			
PHIL 365 Economic Justice	4			
PLSC 316 Issues in Global Politics	4			
PSYC 335 Psychology of Women	4			
SOC 313 Social Theory	4			
SOC 350 Gender in Society	4			
WCSBS 220 Social Justice by the Numbers	4			
Total Hours for the Justice Studies Major	53-54			

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Recommended Plan of Study for Justice Studies

	Fall Semester	Spring Semester
Year 1	JUST 109 Language I WCore Courses	JUST 221 PLSC 203 Language II WCore Courses
Year 2	Major Elective WCore Courses	JUST 324, 325, or PLSC 355 WCore Courses
Year 3	Major Elective	JUST 324, 325, or PLSC 355 Major Elective
Year 4	PLSC 390 Major Elective	JUST 324, 325, or PLSC 355 JUST 490

Justice Studies Minor

To fulfill the requirements for an academic minor in Justice Studies, students must complete a minimum of 20 semester hours in Justice Studies or related coursework. Twelve of these hours must be in coursework numbered 300 or above.

Requirement Description	Credit Hours	Prerequisites	
I. Required Courses	14		
JUST 109 Power and Social Change	4		
JUST 221 Community Justice	3		
JUST 325 Justice in Everyday Life	4		
PLSC 203 Courts, Law, & Social Justice	3		
II. Elective Courses	8		
Eight additional hours of 300 or 400 level JUST or PLSC coursework			
Total Hours for the Justice Studies Minor	22		

LANGUAGE PROGRAM

Faculty

- Deyanira Ariza-Velasco (Spanish)
- Alan Davison (Spanish)
- Steve Haslam (Chair) (French)
- Georgiana Donavin (Latin)

The Language Program offers an academic major in Spanish-Latin American Studies and academic minors in French and Spanish, as well as multiple course sequences in Chinese, Japanese, and Latin.

Chinese

The Language Program offers a one-year Mandarin Chinese course sequence with occasional second-year and May term offerings. Classes are designed to give students practical tools for communicating in written and spoken Mandarin and to deepen their knowledge and appreciation of Chinese culture. The study of Mandarin will broaden the international horizon of liberal arts students and will be of great value in many professions and enterprises (business, trade, politics, travel, history and literature). No minor is offered in Chinese. Students who have had two or more years of high school Mandarin Chinese should register for Chinese 111 or discuss placement with course instructor or program chair.

Japanese

The Language Program offers a one-year Japanese course sequence with occasional second-year and May term offerings. Classes are designed to give students practical tools for communicating in written and spoken Japanese and to deepen their knowledge and appreciation of Japanese culture. The study of Japanese will broaden the international horizons of liberal arts students and will be of great value in many professions and enterprises (business, trade, politics, travel, history and literature). No minor is offered in Japanese. Students who have previously studied Japanese should register for Japanese 111 or discuss placement with course instructor or program chair.

Latin

The Language Program offers basic and intermediate Latin, as well as directed study courses in such topics as Latin linguistics and literature. It creates opportunities for those interested in advanced Latin to craft a personalized minor. Latin is the language that has been the most widely used throughout Western world history. It had tremendous influence on the development of English and other world languages. Latin offers great practical advantages, especially for students pursuing careers in the humanities, law, medicine, nursing, public health, and the sciences. Students who have had two or more years of high school Latin should discuss course placement with Georgiana Donavin.

LEADERSHIP CERTIFICATE

Undergraduate Certificates

Undergraduate Certificates give students a grounding in a particular skill set, allowing them to supplement their major with learning in other disciplines. Each certificate aligns with National Association of Colleges and Employers (NACE) career readiness competencies, which include Communication, Equity and Inclusion, Leadership, and Technology. Each certificate culminates in an Applied Experience, an internship or service-learning course that involves students in applying their learning outside the classroom. Internships for the Leadership Certificate must be approved by the certificate advisor and arranged through the Career Center for 3-4 credit hours. Faculty coordinators for internships must be from the program in which the internship is listed. Some certificates include WCore and Honors courses, which can meet requirements both in the certificate and in WCore or Honors. Note that certificates are

Some certificates include WCore and Honors courses, which can meet requirements both in the certificate and in WCore or Honors. Note that certificates are designed for undergraduates enrolled in a degree program, and only students completing certificates as part of a degree are eligible for financial aid.

Program Requirements

Advisor: Lindsie Smith

Complete all courses with a minimum grade of C-.

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	6	
INTR 205 Leadership Essentials		
COMM 350 Leadership & Decision Making 4		
II. Elective	4	
Take one of the following:		
COMM 250 Introduction to Human Communication 4		
EDUC 352 Management of Nonprofit Organizations 4		
MGMT 305 Principles of Management 4		
OEL 120 Outdoor Leadership 4		
III. Applied Experience	2-4	
Take one of the following courses:		
INTR 305 Lead by Doing 2		
Internship (must be approved by the certificate advisor) 3-4		
Total Hours for the Leadership Certificate	12-14	

Double Dipping Between Certificate and Majors/Minors

"Double-dipping" here refers to (1) allowing students in a particular major or minor pursue a particular certificate and (2) allowing students who pursue a certificate alongside a major/minor to count a course toward both programs. The following guidelines relate to double-dipping between majors/minors and certificates that share courses. No other restrictions apply for programs that do not share courses with particular certificates.

Students in the following majors/minors and also concurrently pursuing the Leadership Certificate MAY count courses towards both programs:

- Communication major or minor
- Education Studies major or minor
- Management major
- Outdoor Education and Leadership major or minor

LITERATURE, MEDIA, AND WRITING (FORMERLY ENGLISH)

Faculty

- Ranjan Adiga
- Eileen Chanza Torres
- Georgiana Donavin (Chair)
- Christopher LeCluyse
- Lance Newman

Program Goals

- Generate Effective Written and Oral Communication
 - Creatively and effectively practice writing and revision across a variety of genres
 - Locate, evaluate, and synthesize secondary sources and integrate them with analyses of texts and media
 - Collaborate with peers to give and receive constructive feedback on writing
- Closely Analyze Texts and Media
 - Closely analyze texts and media from a range of periods and genres and generate written and spoken arguments about them supported by evidence
 and reasoning
 - · Understand the social foundation and functions of language and media and their effects on communication
 - Develop interpretations and evaluations of texts and media through discussion with others
- Understand Literary and Media History and Their Contexts
 - Demonstrate awareness of the width and breadth of Literature, Media, and Writing and the ability to make informed connections across these fields
 - Understand how literature and media emerge from, respond to, and influence various historical, cultural, and political contexts
 - Understand the role of race, class, gender, sexuality, and other categories of identity in how authors produce and how readers interpret texts and media
- Engage with Contemporary Literary and Critical Discourses
 - Read and interpret literary and theoretical texts in relation to one another
 - Critically approach contemporary literary and theoretical discourses
 - Develop self-awareness by questioning biases and embracing diverse perspectives in reading, viewing, and writing

Objectives

Students who major in Literature, Media, and Writing (LMW) learn how to read and analyze literature and media across periods, cultures, and genres. They develop evidence-supported written and spoken arguments. They research literature's historical and intersectional relationship with media, including oral, manuscript, print, film, and digital texts and media. They evaluate aspects of identity such as race, class, gender, and sexuality in the creation and interpretation of texts. Creative writing students take workshops in poetry, fiction, creative nonfiction, and screenwriting--preparation for publishing their own work. LMW majors succeed in many careers, not only in education and publishing, but in government, business, law, and health sciences.

Program Highlights

- The LMW program publishes a national literary magazine, *ellipsis*, each April. Editors and staff are students enrolled in LMW 326 and LMW 327 (1 credit each).
- LMW students may work in the Writing Center, where they gain experience in teaching writing through individual consultations.
- LMW courses offer unique opportunities for both creative and academic writing in a variety of media.
- The LMW program houses Film Studies, encouraging interdisciplinary projects in film and literature.

Program Requirements

Majors must complete one LMW WCore course as well as two required lower-division LMW courses (LMW 222 and 223) as prerequisites for upper-division courses. Upper-division LMW courses are grouped into four categories: Periods and Movements, Language and Media, Theory, and Writing. Some courses fit multiple categories and will count toward whichever category is not already met or as electives if other categories are already fulfilled. Majors pursuing the literary studies emphasis must complete two Periods and Movements courses, one Language and Media course, and one Writing course. Majors pursuing the creative writing emphasis must complete two Periods and Movements courses, one Language and Media course, and one Theory course. Additional requirements are outlined in the tables below.

Students must maintain a minimum 2.3 GPA in courses required for the majors.

Students must meet the university-wide graduation requirements in addition to the LMW major:

- 124 total hours
- 30 upper-division hours
- WCore or Honors College requirements

Literature, Media, and Writing Major with Literary Studies Emphasis

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
LMW majors must complete eight credit hours in a single world language.		
II. Lower-Division Literature, Media, and Writing Courses	12	

Requirement Description	Credit Hours	Prerequisites
Take three of the following courses.		
LMW 104 Books That Changed the World	4	
LMW 114 Searching for America	4	
LMW 115 The Bible and Literature	4	
LMW 116 The Serious Art of Humor	4	
LMW 121 How Literature Matters Now	4	
LMW 130 Self-Discovery: Film and Literature	4	
LMW 131 Shakespeare, Culture and Society	4	
LMW 133 Walking	4	
LMW 204 Epistolarity: Letters to and From	4	
LMW 205 Goddesses, Heroes, and Others	4	
LMW 207 Global Food Movements	4	
LMW 210 Digital Narratives	4	
LMW 211 Reading and Detection	4	
LMW 215 Vampire Literature	4	
LMW 202 Worlds of Fantasy	4	
Take Courses:		
LMW 222 Texts and Media in Context	4	One LMW WCore
LMW 223 Critical Theory - Texts and Media	4	One LMW WCore
III. Upper-Division Literature, Media, and Writing Courses	19	
Take two Periods and Movements courses, one of w	hich must be designated pre-1800:	
LMW 300 Special Topics in Periods and Movements	1-4	One LMW WCore and LMW 222 or 223
LMW 332 Shakespeare and Film (pre-1800)	4	One LMW WCore and LMW 222 or 223
LMW 350 Constructing Gender in Medieval Literature (pre-1800)	4	One LMW WCore and LMW 222 or 223
LMW 353 American Literature after 1945: Modern Anxieties and Hopes	4	One LMW WCore and LMW 222 or 223
LMW 354 Medieval Entertainments (pre-1800)	4	One LMW WCore and LMW 222 or 223
LMW 357 Environmental Literature	4	One LMW WCore and LMW 222 or 223 or ENVI 101
LMW 365 History of Genre	4	One LMW WCore and LMW 222 or 223
LMW 367 Literatures of the African Diaspora	4	One LMW WCore and LMW 222 or 223
LMW 368 US Minority Literature: Writing from the Margins	4	

Requirement Description	Credit Hours	Prerequisites
LMW 373 Postcolonial Literature and Theory	4	One LMW WCore and LMW 222 or 223
Take one Language and Media course: 4		
LMW 331 History and Structure of English	4	One LMW WCore and LMW 222 or 223
LMW 332 Shakespeare and Film (pre-1800)	4	One LMW WCore and LMW 222 or 223
LMW 335 Englishes of the World: Accents and Affects	4	One WE or HON 202
LMW 374 Studies in Language and Media	1-4	One LMW WCore and LMW 222 or 223
LMW 375 Literature in Manuscript, Print, and New Media	4	One LMW WCore and LMW 222 or 223
LMW 376 Adaptation, Distortion, and Fidelity	4	One LMW WCore and LMW 222 or 223
LMW 378 Podcasting	4	
LMW 379 Narrative Theory: Methods and Approaches	4	One LMW WCore and LMW 222 or 223
LMW 380 Video Game Culture	4	
Take one Theory course: 4		
LMW 310 Theory and Teaching of Writing	3-4	Two WCFAH courses and one WE or HON 202
LMW 339 Studies in Method, Theory, and Genre	1-4	One LMW WCore and LMW 222 or 223
LMW 350 Constructing Gender in Medieval Literature (pre-1800)	4	One LMW WCore and LMW 222 or 223
LMW 354 Medieval Entertainments (pre-1800)	4	One LMW WCore and LMW 222 or 223
LMW 357 Environmental Literature	4	LMW 222 or 223 and LMW WCore or ENVI 101
LMW 365 History of Genre	4	One LMW WCore and LMW 222 or 223
LMW 367 Literatures of the African Diaspora	4	One LMW WCore and LMW 222 or 223
LMW 368 US Minority Literature: Writing from the Margins	4	
LMW 373 Postcolonial Literature and Theory	4	One LMW WCore and LMW 222 or 223
LMW 376 Adaptation, Distortion, and Fidelity	4	One LMW WCore and LMW 222 or 223

Requirement Description	Credit Hours	Prerequisites
LMW 377 Queer Theory and Posthumanism	4	One LMW WCore and LMW 222 or 223
LMW 379 Narrative Theory: Methods and Approaches	4	One LMW WCore and LMW 222 or 223
Take one Writing course: 3		
LMW 230 Intro to Creative Writing	3	One WE or HON 202
LMW 310 Theory and Teaching of Writing	3-4	Two WCFAH courses and one WE or HON 202
LMW 320 Creative Writing: Fiction	3	LMW 230
LMW 321 Creative Writing: Plays	3	LMW 230
LMW 322 Creative Writing: Poetry	3	LMW 230
LMW 323 Creative Writing: Screenwriting	3	
LMW 324 Creative Writing: Nonfiction	4	LMW 230
LMW 329 Special Topics in Creative Writing	1-4	LMW 230
IV. Literature, Media, and Writing Electives	15	
Additional LMW coursework numbered 300 and above.		-
V. Interdisciplinary Elective	4	
One 300-level course in History or Philosophy		
VI. Senior Capstone	4	
LMW 403 Thesis	4	Senior Standing or by instructor permission
Total Hours for LMW Major with Literary Studies Emphasis	62	

Recommended Plan of Study for Literature, Media, and Writing with Literary Studies Emphasis

	Fall Semester	Spring Semester
Year 1	WCore Fine Arts & Humanities (WCFAH) Course or LMW WCore course WCore Writing Emphasis (WE) Course Language I	WCore Fine Arts & Humanities (WCFAH) Course or LMW WCore course Other WCore courses Language II
Year 2	WCore courses LMW 222 Texts and Media in Context	WCore courses LMW 223 Critical Theory - Texts and Media Writing Course
Year 3	Periods & Movements Course Theory or Language & Media Course Elective	WCore Engaging the World course Periods & Movements Course Theory or Language & Media Course
Year 4	LMW Elective(s) Interdisciplinary Elective LMW 403	LMW Elective(s)

Literature, Media, and Writing Major with Creative Writing Emphasis

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
LMW majors must complete eight credit hours in a single world language.		

Requirement Description	Credit Hours	Prerequisites
II. Lower-Division LMW Courses	15	
One Literature, Media, and Writing WCore course:		<u></u>
LMW 104 Books That Changed the World	4	
LMW 114 Searching for America	4	
LMW 115 The Bible and Literature	4	
LMW 116 The Serious Art of Humor	4	
LMW 121 How Literature Matters Now	4	
LMW 130 Self-Discovery: Film and Literature	4	
LMW 131 Shakespeare, Culture and Society	4	
LMW 133 Walking	4	
LMW 204 Epistolarity: Letters to and From	4	
LMW 205 Goddesses, Heroes, and Others	4	
LMW 207 Global Food Movements	4	
LMW 210 Digital Narratives	4	
LMW 211 Reading and Detection	4	
LMW 215 Vampire Literature	4	
LMW 202 Worlds of Fantasy	4	
Take Courses:		
LMW 222 Words in the World: Texts in Contexts	4	One LMW WCore
LMW 223 Words on Words: Critical Theory	4	One LMW WCore
LMW 230 Introduction to Creative Writing	3	One WE course or HON 202
III. <i>ellipsis</i> Experience	2	
LMW 326 College Publications: Ellipsis	1	
LMW 237 College Publications: Ellipsis	1	
At least two consecutive semesters are required. LMW 326 and 327 may be repeated for up to four total semesters of Writing Elective credit.		
IV. Upper-Division LMW Courses	16	
Take two Periods and Movements courses, one of w	hich must be designated pre-1800:	J
LMW 300 Special Topics in Periods and Movements	1-4	One LMW
		WCore and LMW 222 or 223
LMW 332 Shakespeare and Film (pre-1800)	4	One LMW WCore and LMW 222 or 223
LMW 350 Constructing Gender in Medieval Literature (pre-1800)	4	One LMW WCore and LMW 222 or 223
LMW 353 American Literature after 1945: Modern Anxieties and Hopes	4	One LMW WCore and LMW 222 or 223
LMW 354 Medieval Entertainments (pre-1800)	4	One LMW WCore and LMW 222 or 223

Requirement Description	Credit Hours	Prerequisites
LMW 357 Environmental Literature	4	One LMW WCore and LMW 222 or 223 or ENVI 101
LMW 365 History of Genre	4	One LMW WCore and LMW 222 or 223
LMW 367 Literatures of the African Diaspora	4	One LMW WCore and LMW 222 or 223
LMW 368 US Minority Literature: Writing from the Margins	4	One LMW WCore and LMW 222 or 223
LMW 373 Postcolonial Literature and Theory	4	One LMW WCore and LMW 222 or 223
Take one Language and Media course: 4		
LMW 331 History and Structure of English	4	One LMW WCore and LMW 222 or 223
LMW 335 Englishes of the World: Accents and Affects	4	One WE or HON 202
LMW 374 Studies in Language and Media	1-4	One LMW WCore and LMW 222 or 223
LMW 375 Literature in Manuscript, Print, and New Media	4	One LMW WCore and LMW 222 or 223
LMW 376 Adaptation, Distortion, and Fidelity	4	One LMW WCore and LMW 222 or 223
LMW 378 Podcasting	4	
LMW 380 Video Game Culture	4	
Take one Theory course: 4		
LMW 339 Studies in Method, Theory, and Genre	1-4	One LMW WCore and LMW 222 or 223
LMW 350 Constructing Gender in Medieval Literature (pre-1800)	4	One LMW WCore and LMW 222 or 223
LMW 354 Medieval Entertainments (pre-1800)	4	One LMW WCore and LMW 222 or 223
LMW 357 Environmental Literature	4	LMW 222 or 223 and LMW WCore or ENVI 101
LMW 365 History of Genre	4	One LMW WCore and LMW 222 or 223
LMW 368 US Minority Literature: Writing from the Margins	4	One LMW WCore and LMW 222 or 223
LMW 373 Postcolonial Literature and Theory	4	One LMW WCore and LMW 222 or 223
LMW 377 Queer Theory and Posthumanism	4	One LMW WCore and LMW 222 or 223

Requirement Description	Credit Hours	Prerequisites
LMW 379 Narrative Theory: Methods and Approaches	4	One LMW WCore and LMW 222 or 223
V. Writing Electives	13	
These courses may be repeated for credit. Additional courses in the Writing category may be substituted with advisor consent.		
LMW 320 Creative Writing: Fiction	3	LMW 230
LMW 321 Creative Writing: Plays	3	Two WCFAH courses and one WE or HON 202
LMW 322 Creative Writing: Poetry	3	LMW 230
LMW 323 Creative Writing: Screenwriting	3	LMW 230
LMW 324 Creative Writing: Nonfiction	4	LMW 230
LMW 326 College Publications: Ellipsis *fall	1	
LMW 327 College Publications: Ellipsis *spring	1	
LMW 329 Special Topics in Creative Writing	1-4	LMW 230
*May be repeated for up to four total semesters of Writing Elective credit.		
VI. Interdisciplinary Elective	4	
One 300-level course in History or Philosophy		
VII. Senior Capstone	4	
LMW 405 Thesis—Creative Writing	4	Senior Standing or by instructor permission
Total Hours for LMW Major with Creative Writing Emphasis	62	

Recommended Plan of Study for Literature, Media, and Writing with Creative Writing Emphasis

	Fall Semester	Spring Semester
Year 1	WCore Fine Arts & Humanities (WCFAH) Course or LMW WCore course WCore Writing Emphasis (WE) Course Language I LMW 326 College Publications: <i>ellipsis</i> (if desired)	WCore Fine Arts & Humanities (WCFAH) Course or LMW WCore course LMW 230 Intro to Creative Writing Language II LMW 327 College Publications: <i>ellipsis</i> (if desired)
Year 2	WCore courses LMW 222 Texts and Media in Context LMW 326 College Publications: <i>ellipsis</i> (if desired)	WCore courses LMW 223 Critical Theory - Text and Media Writing Elective LMW 327 College Publications: <i>ellipsis</i> (if desired)
Year 3	Periods & Movements Course Theory or Language & Media Course Writing Elective LMW 326 College Publications: <i>ellipsis</i> (if desired)	WCore Engaging the World course Theory or Language & Media Course Writing Elective LMW 327: College Publications: <i>ellipsis</i> (if desired)
Year 4	Periods & Movements Course Writing Elective Interdisciplinary Elective LMW 326: College Publications: <i>ellipsis</i> (if desired)	LMW 405: Thesis—Creative Writing Writing Elective LMW 327: College Publications: <i>ellipsis</i> (if desired)

Literature, Media, and Writing Minor

Requirement Description	Credit Hours	Prerequisites
I. Lower-Division Literature, Media, and Writing Courses	12	
One Literature, Media, and Writing WCore course:		
LMW 104 Books That Changed the World	4	
LMW 114 Searching for America	4	
LMW 115 The Bible and Literature	4	
LMW 116 The Serious Art of Humor	4	
LMW 121 How Literature Matters Now	4	
LMW 130 Self-Discovery: Film and Literature	4	
LMW 131 Shakespeare, Culture and Society	4	
LMW 133 Walking	4	
LMW 204 Epistolarity: Letters to and From	4	
LMW 205 Goddesses, Heroes, and Others	4	
LMW 207 Global Food Movements	4	
LMW 210 Digital Narratives	4	
LMW 211 Reading and Detection	4	
LMW 215 Vampire Literature	4	
LMW 202 Worlds of Fantasy	4	
Take Courses:		
LMW 222 Texts and Media in Context	4	One LMW WCore
LMW 223 Critical Theory - Text and Media	4	One LMW WCore
II. Elective Courses	12	
Additional LMW coursework numbered 230 and above		
Total Hours for the LMW Minor	24	

MATHEMATICS

Faculty

- Spencer Bagley
- Bill Bynum
- Jonas D'Andrea
- Sean Raleigh
 Bianca Thoma
- Bianca ThompsonJanine Wittwer (Chair)

Program Goals

- Critical Thinking
 - To develop the cognitive and affective skills to address previously unsolved problems.
 - In all courses, to construct well-reasoned arguments with no gaps, and critique the arguments of others. In more advanced courses, to learn to read and construct valid mathematical proofs, and critique proofs constructed by others.
 - To learn appropriate uses of technology at all levels.
 - In all courses, to develop competencies in the core curriculum of mathematics that prepare students for success in a major program. For majors, to develop competencies in the core curriculum of mathematics that prepare students for success in a graduate program or mathematically-focused career.

• Creativity

- To appreciate the sociocultural context of mathematics and its role in human cultures and societies.
- To experience the beauty, creativity, and power of mathematics.
- To develop students' identity as mathematicians, doers of mathematics, and members of mathematical communities.

Collaboration

- To offer curricular and co-curricular opportunities for student leadership and collaboration.
- To collaborate with others in posing and addressing problems.

Communication

- · To learn how to effectively communicate one's mathematical ideas in words, symbols, numbers, and diagrams, both orally and in writing.
- To communicate mathematics at appropriate levels with others inside and outside of the mathematical community.
- Global Responsibility
 - To engage the community through applying mathematical knowledge, service learning, internships, and other opportunities.
 - To experience non-Western-European mathematics as equally valid forms of mathematical practice.
 - To appreciate the contributions of mathematicians from historically minoritized, oppressed, and/or non-European backgrounds.
- Career Planning
 - To learn about career opportunities and internships in mathematics and related fields.

Objectives

The Mathematics Program offers an academic major, minor, and applied minor as well as an elementary teaching minor. The curriculum in mathematics at Westminster meets the needs of students preparing to teach mathematics, students planning on graduate studies, students desiring to pursue non-teaching degrees in mathematics, students majoring in other academic disciplines who need a mathematics foundation, and students desiring practice in the art of logical thinking.

Program Requirements

Students must maintain a minimum cumulative 2.5 GPA in courses (excluding the world language requirement) required for both the academic major and minors and the teaching minors. For students seeking a mathematics teaching Level 2 endorsement, each course grade must be at least C. No more than six (6) credit hours from May term courses may be applied to the elective upper division mathematics requirement for the academic major. Prerequisite courses must be satisfied with a grade of C- or better. Students enrolled in mathematics courses without the required prerequisites may be withdrawn by the instructor.

Students must meet the university-wide graduation requirements in addition to the Mathematics major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Mathematics Major

Requirement Description	Credit Hours	Prerequisites	
I. World Language Requirement	8		
Mathematics majors must complete eight credit hours in a single world language.			
II. Lower Division Courses	24		
DATA 220 Introduction to Statistics	4		
MATH 201 Calculus I (if needed)	4	MATH 144 or placement test	
MATH 202 Calculus II	4	MATH 201 or placement test	
MATH 203 Multivariate Calculus	4	MATH 202	
MATH 210 Discrete Mathematics	4		
WCSAM 203 Linear Algebra	4		
III. Upper Division Courses	10		
MATH 312 Abstract Algebra	4	MATH 210	
MATH 321 Advanced Calculus	4	MATH 201, 210	
Choose one of the following:			
MATH 485 or Senior Seminar or	2	Senior standing or consent of instructor	
WCSAM 400 Science Capstone (by advisor approval)	2		

Requirement Description	Credit Hours	Prerequisites
IV. Electives	15	
Additional upper-division coursework in MATH (fifte upper division elective requirement.	een). Students may apply at most six credits of May	term hours toward the
V. Required Courses from Other Programs	8-10	
PHYS 211 Physics for Scientists and Engineers I and Lab (or 4 or 5 on the AP Physics Exam)	4	MATH 144; Co- requisite: MATH 201
Computational Requirement: Choose one option from the following list*		
CMPT 201 Introduction to Computer Science	4	
CMPT 202 Intro to Data Structures	4	CMPT 201 OR CMPT 210
CMPT 190 AND DATA 360 Learning to Code (Python) AND Data Science with Python	2	CMPT 190 OR CMPT 202 AND DATA 220
CMPT 190 AND BIOL/CHEM/PHYS 370 Learning to Code (Python) AND Scientific Computing	2 AND 4	PHYS 211 OR MATH 201 AND PHYS 151
Total Hours for the Mathematics Major	65-67	

***Note:** "Double-dipping" is allowed for the computational requirement. For example, a Computer Science major can use credit for CMPT 201 or CMPT 202 to meet this requirement. A Data Science minor can use DATA 360 to satisfy this requirement. However, a student cannot use DATA 360 both to satisfy this requirement and receive upper-division elective credit in Section IV above for the MATH major.

Recommended Plan of Study

Listed below is a suggested plan of study for completing the mathematics course requirements. Students should check with their advisors at least once a year as course offerings may change from what is listed. Students must also meet university-wide requirements for graduation.

	Fall Semester	Spring Semester
Year 1	DATA 220 or Computational Requirement MATH 201	MATH 202 MATH 210
Year 2	DATA 220 or Computational Requirement MATH 203	WCSAM 203 MATH elective (upper division)
Year 3	MATH elective (upper division) PHYS 211	MATH 312 MATH elective (upper division)
Year 4	MATH 321 MATH elective (upper division)	MATH 485

Mathematics Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	20	
DATA 220 Introduction to Statistics	4	
MATH 201 Calculus I (if needed)	4	MATH 144 or placement test
MATH 202 Calculus II	4	MATH 201 or placement test
MATH 210 Discrete Mathematics	4	
WCSAM 203 Linear Algebra	4	
II. Elective Courses	7	
Chosen from MATH 203 Multivariate Calculus, and upper-division coursework in MATH		
Total Hours for the Mathematics Minor	27	

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Applied Minor

Students may count credit hours in sections I and II below toward this minor and toward completion of a major. In other words, this is an exception to the university policy that disallows double-counting of elective courses.

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	12	
DATA 220 Introduction to Statistics	4	
MATH 201 Calculus I	4	MATH 144 or placement test
WCSAM 203 Linear Algebra	4	
II. Upper Division Courses	4	
Take one of the following courses, from any of the groups	:	
Computation		
BIOL/CHEM/PHYS 370 Scientific Computing	4	PHYS 211 or both PHYS 151 and MATH 201
CMPT 306 Algorithms	4	CMPT 202, MATH 210
MATH 362 Topics in Applied Mathematics	4	MATH 201 and WCSAM 203, MATH 211, or PHYS 309
Economics/Finance		
ECON 499 Introduction to Econometrics	4	ECON 253 or 263, and either DATA 150 or DATA 220
FINC 305 Investments and Analysis	4	FINC 300
Science		
MATH 363 Differential Equations	4	MATH 202
PHYS 309 Mathematical Methods of Physics	4	MATH 202, PHYS 211
Statistics		
MATH 310 Probability and Statistics	4	MATH 202
PSYC 390 Quantitative Research Methods	4	DATA 220, PSYC 270
PUBH 305 Epidemiology	4	PUBH 101, 210
III. Electives	10	
MATH 202 Calculus II	4	MATH 201 or placement test
MATH 203 Multivariate Calculus	4	MATH 202
MATH 210 Discrete Mathematics	4	
MATH 308 Putnam Seminar	1	WCSAM 203 or MATH 211
MATH 310 Probability and Statistics	4	MATH 202
MATH 311 Linear Algebra II		MATH 210, WCSAM 203
MATH 321 Advanced Calculus	4	MATH 201, 210
MATH 362 Topics in Applied Mathematics	4	MATH 201 and WCSAM 203 or PHYS 309

Requirement Description	Credit Hours	Prerequisites
MATH 363 Differential Equations	4	MATH 202
MATH 300 Special Topics in Mathematics designated as applied math topics.		Instructor permission
DATA 350 Statistical Modeling	4	DATA 220
DATA 370 Statistical Learning	4	DATA 350
Other MATH course work as approved by the program chair.		
Total Hours for the Applied Minor	26	

Elementary Teaching Minor (Level II)

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	23	
EDUC 387 Methods of Teaching Secondary School Math	3	
MATH 201 Calculus I	4	MATH 144 or placement test
MATH 210 Discrete Mathematics	4	
MATH 314 Foundations of Geometry	4	MATH 201; pre- or co-requisite: MATH 210
Take one course from the following group:		
DATA 150 or Data and Society or	4	
DATA 220 Introduction to Statistics	4	
Total Hours for the Elementary Teaching Minor	23	

Placement in Mathematics Courses

A member of the mathematics faculty should be consulted for any questions about placement in mathematics courses.

Proper placement in mathematics is critical, especially for students registering for a freshman-level mathematics course. Students with questions regarding placement should consult with their academic advisors.

Students receiving scores of 4 or 5 on one of the calculus advanced placement examinations receive the following Westminster credit:

Exam	Score	Credit Given
Calculus AB	4-5	MATH 201 (4 credits)
Calculus BC	4-5	MATH 201 and MATH 202 (8 credits)

MEDIA LITERACY CERTIFICATE PROGRAM

Undergraduate Certificates

Undergraduate Certificates give students a grounding in a particular skill set, allowing them to supplement their major with learning in other disciplines. Each certificate aligns with National Association of Colleges and Employers (NACE) career readiness competencies, which include Communication, Equity and Inclusion, Leadership, and Technology. Each certificate culminates in an Applied Experience, an internship or service-learning course that involves students in applying their learning outside the classroom. Internships for the Media Literacy Certificate must be approved by the certificate advisor and arranged through the Career Center for 3-4 credit hours. Faculty coordinators for internships must be from the program in which the internship is listed. Some certificates include WCore and Honors courses, which can meet requirements both in the certificate and in WCore or Honors. Note that certificates are designed for undergraduates enrolled in a degree program, and only students completing certificates as part of a degree are eligible for financial aid.

Program Requirements

Advisor: Kim Zarkin

Complete all courses with a minimum grade of C-.

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	8	
COMM 101 Disinformation in the USA		
COMM 240 Media and Society 4		
II. Elective	2-4	
Take one of the following:		
FILM 110 Making Sense of Movies 4		
FILM/GNDR/LMW 378 Video Game Culture 4		
FILM/GNDR/LMW 380 Podcasting 4		
GNDR 223 Gender and the Media 2		
GNDR 226 I want my MTV! 2		
III. Applied Experience	3-4	
Take one of the following courses:		
COMM 310 Business & Professional Communication 4		
COMM 326 Introduction to Web Writing and Design 4		
FILM 345 Video Production 4		
MUSC 410 Audio Production and the Music Business 3		
Internship (must be approved by the certificate advisor) 3-4		
Total Hours for the Media Literacy Certificate	13-16	

Double Dipping Between Certificate and Majors/Minors

"Double-dipping" here refers to (1) allowing students in a particular major or minor pursue a particular certificate and (2) allowing students who pursue a certificate alongside a major/minor to count a course toward both programs. The following guidelines relate to double-dipping between majors/minors and certificates that share courses. No other restrictions apply for programs that do not share courses with particular certificates.

Students in the following majors/minors and also concurrently pursuing the Media Literacy Certificate **MAY** count courses towards both programs:

- Film Studies minor
- Gender Studies minor
- Literature, Media, and Writing major or minor
- Music major, Music Studies major, or Music minor

Students in the following majors/minors MAY NOT concurrently pursue a Media Literacy Certificate:

Communication major or minor

It is otherwise assumed that an internship completed as part of an Undergraduate Certificate may also count toward a major or minor.

MUSIC

Faculty

- Brandon Derfler
- Chris Puckett
- Kimi Kawashima (Chair)

Program Goals

Our goal is to graduate students with unique abilities to:

- · Perform with a high degree of competency on one or more instruments or voice in both solo and ensemble capacities and in different settings
- Apply the subdisciplines of music theory, aural skills, and music history to learning, insightfully interpreting, and successfully creating or performing music
 Communicate effectively about music in a variety of fundamental ways beyond performance—perhaps most essentially through teaching, writing, analysis, and public speaking
- Evaluate music as a cultural phenomenon closely connected with other art forms, increasingly interwoven with traditions and influences from around the world, and reflecting and affecting all local and global communities
- Synthesize and acquire the musical and technological skills necessary to succeed within the ever changing, complex world of professional music making

Objectives

The Florence J. Gillmor School of Music at Westminster offers a Bachelor of Arts degree with a major in music and also offers a music minor. Music majors must select an emphasis in vocal performance, piano performance, or music studies. The BA degree in music is an excellent choice for talented students who plan to pursue graduate work in music, for liberal arts students pursuing two majors in preparation for graduate school, and for musical pre-law or pre-med students. It is also a degree that would qualify students for any number of music-related jobs following university. Among musicians with sufficient talent and training for careers in the field, those with degrees in music are at an advantage over those without.

The School of Music also offers opportunities for anyone on campus interested in making music, regardless of backgrounds or areas of formal study. School performing ensembles—open to capable and committed students and, in some cases, members of the community—include the Westminster Community Choir, Westminster Chamber Singers, SugarTown, Westminster Chamber Orchestra, Westminster Jazz Ensemble, Westminster Chamber Players, and Westminster Opera Studio. (All of the above require at least an informal audition.) Private lessons and WCore courses in music are also available to students.

Program Requirements

An audition is required for status as a major or minor in music. Students must choose a primary instrument and audition on that particular instrument (e.g., piano, voice, guitar, violin, etc.). Live auditions are held each year on specific dates as announced on the School of Music web page. Music major aspirants auditioning before the end of March who are planning to enroll as first-year students the following fall semester will automatically be considered for music scholarships. Due to strict course sequencing, students wishing to graduate with a music major within a four-year course of study must begin their required course work fall semester of their freshman year, and audition for status no later than the end of their first semester.

Students seeking a music minor must audition before their sophomore year and begin their required course work no later than fall semester of that same year. In order to maintain music major or minor status, each student must maintain a minimum 2.5 cumulative GPA in music courses, and additionally pass each required music course with a minimum grade of C-.

Transfer students wishing to complete a music major at Westminster must complete at least half their total number of required music credits at Westminster, and be enrolled in a performing ensemble each semester while at Westminster. Transfer students wishing to complete a music minor must complete a minimum of nine credits of music—including two semesters of ensemble credit—at Westminster University. For more information, email the Music Department Chair, currently Dr. Christopher Puckett, at cpuckett@westminsteru.edu.

Students must meet the university-wide graduation requirements in addition to the Music major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Music Studies Major

Requirement Description	Credit Hours	Prerequisites		
I. World Language Requirement	8			
Music majors must complete eight credit hours in a single world language.				
II. Performance-Based Coursework	14			
Piano Proficiency Requirement: Students must demonstrate reasonable piano proficiency, either through successful completion of a diagnostic test or alternately by taking a group piano course or private piano lessons at the discretion of the student's music advisor.				
Private Lessons (primary instrument) 8				
Four consecutive semesters are required. MUSC 191, 192, 291, and 292 2 credits each				
Performing Ensembles 6				
One of the following must be taken six different semesters:				
MUSC 315 Westminster Community Choir	1	placement audition required		
MUSC 325 Westminster Jazz Ensemble	1	audition required		
MUSC 335 Westminster Chamber Orchestra	1	audition required		

Requirement Description	Credit Hours	Prerequisites
MUSC 345 Westminster Chamber Singers Six semesters required for all voice students	1	audition required
MUSC 365 Westminster Opera Studio	1	audition required
MUSC 375 Westminster Percussion Ensemble	1	placement audition required
MUSC 385 Westminster Chamber Players	1	audition required
MUSC 395 SugarTown Acappella	1	audition required
III. Academic Coursework	19	
MUSC 171 Music Theory I	3	
MUSC 207 World Music, World Perspectives	3	
MUSC 271 Music Theory II	3	MUSC 171
MUSC 281 Aural Skills II	2	MUSC 181
Choose two of the following:		
MUSC 372 Music History I	3	MUSC 171
MUSC 373 Music History II	3	MUSC 271
MUSC 374 Music History III	3	MUSC 271
IV. Elective Courses	14	
Fourteen hours of music coursework and music-rela eleven elective credit hours must be upper-division a	ited WCFAH courses (any 100-level or higher music co cademic music courses.	burses). A minimum of
V. Senior Project	2	
MUSC 421 Senior Project	2	MUSC 292
Total Hours for the Music Studies Major	57	

Recommended Plan of Study for BA Music Studies

	Fall Semester	Spring Semester
Year 1	WRIT 110 or Writing Emphasis WCore Course (take MUSC 104 instead if indicated by diagnostic test) MUSC 191 Ensemble Learning Community	MUSC 171 MUSC 181 MUSC 192 Ensemble Music Elective Elective (piano class if needed)
Year 2	MUSC 271 MUSC 281 MUSC 291 Ensemble Music Elective WCSAM	MUSC 292 Ensemble MUSC 373 WCFAH 132 Music Elective Elective
Year 3	World Language I Ensemble WCFAH 219 Music Elective WCSBS	World Language II Ensemble MUSC 207 Music Elective Elective
Year 4	WCSAM MUSC 372 or 374 Music Elective Elective	MUSC 421 WCSBS Music Elective Elective

Music Major– Performance Emphasis (Piano)

Requirement Description	Credit Hours	Prerequisites	
I. World Language Requirement	8		
Music majors must complete eight credit hours in a single world language.			
II. Performance-Based Coursework	24		
Private Piano Lessons		·	
Two credits must be taken every semester except the eighth. MUSC 191, 192, 291, 292, 391, 392, 491			
MUSC 420 Senior Recital (final year)	2	MUSC 491	
Performing Ensembles 4			
Must be repeated for four semesters.			
MUSC 385 Westminster Chamber Players	1	audition required	
Collaborative Piano Performance 4			
MUSC 331 Collaborative Piano I	2		
MUSC 332 Collaborative Piano II	2		
III. Academic Coursework	38		
MUSC 171 Music Theory I	3		
MUSC 181 Aural Skills I	2		
MUSC 207 World Music, World Perspective	3		
MUSC 271 Music Theory II	3	MUSC 171	
MUSC 281 Aural Skills II	2	MUSC 181	
MUSC 372 Music History I	3	MUSC 171	
MUSC 373 Music History II	3	MUSC 271	
MUSC 374 Music History III	3	MUSC 271	
MUSC 371 Music Theory III	3	MUSC 271	
MUSC 381 Aural Skills III	2	MUSC 281	
MUSC 471 Music Theory IV	3	MUSC 371	
MUSC 481 Aural Skills IV		MUSC 381	
MUSC 341 Piano Literature I	2		
MUSC 342 Piano Literature II	2		
MUSC 343 Piano Pedagogy	2		
IV. Elective Courses	4		
Four hours of music coursework and music-related W	CFAH courses (any 100-level or higher music of	ourses).	
Total Hours for the Piano Performance Major	74		

Recommended Plan of Study for Piano Performance Major

	Fall Semester	Spring Semester	
Year 1	MUSC 331 or 341 MUSC 385 MUSC 191 Learning Community (WCSBS)	MUSC 171 MUSC 181 MUSC 192 MUSC 385 MUSC 332 or 342 WCSAM Elective	
Year 2	MUSC 271 MUSC 281 MUSC 291 WCFAH 207 MUSC 331 or 341 MUSC 385 Elective	MUSC 292 MUSC 373 MUSC 385 WCFAH 132 MUSC 371 MUSC 381	
Year 3	MUSC 372 or 374 MUSC 391 MUSC 471 MUSC 481 World Language	MUSC 392 MUSC 207 MUSC 332 or 342 World Language WCSAM	
Year 4	MUSC 343 MUSC 372 or 374 MUSC 491 Music Elective WCSBS Elective	MUSC 420 Elective	

Music Major- Performance Emphasis (Vocal)

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Music majors must complete eight credit hours in a s	single world language.	
II. Performance-Based Coursework	28	
Piano Proficiency Requirement Students must demonstrate reasonable piano proficiency, either through successful completion of a diagnostic test or alternately by taking a group piano course or private piano lessons at the discretion of the student's music advisor.		
Private Music Lessons (voice) 16		
Two credits must be taken every semester except the eighth. MUSC 191, 192, 291, 292, 391, 392, 491 14		
MUSC 420 Senior Recital (final year)	2	MUSC 491
Performing Ensembles 10		
At least one of the following must be taken every semester.		
MUSC 345 Westminster Chamber Singers	1	audition required
MUSC 365 Westminster Opera Studio	1	audition required
Conducting Courses 2		
MUSC 301 Choral Conducting	2	
III. Academic Coursework	37	
MUSC 171 Music Theory I	3	
MUSC 181 Aural Skills I	2	

Requirement Description	Credit Hours	Prerequisites
MUSC 207 World Music, World Perspective	3	
MUSC 311 English & Italian Diction for Singers	2	
MUSC 312 French & German Diction for Singers	2	
MUSC 271 Music Theory II	3	MUSC 171
MUSC 281 Aural Skills II	2	MUSC 181
MUSC 371 Music Theory III	3	MUSC 271
MUSC 381 Aural Skills III	2	MUSC 281
MUSC 471 Music Theory IV	3	MUSC 371
MUSC 481 Aural Skills IV	2	MUSC 381
MUSC 303 Vocal Pedagogy	2	
MUSC 320 Vocal Literature Survey	2	
Choose two of the following:		
MUSC 372 Music History I	3	MUSC 171
MUSC 373 Music History II	3	MUSC 271
MUSC 374 Music History III	3	MUSC 271
Total Hours for the Vocal Performance Major	73	

Recommended Plan of Study for BA Music- Vocal Performance

	Fall Semester	Spring Semester
Year 1	WRIT 110 or WCore Writing Emphasis Course (MUSC 103 & 104 if indicated by diagnostic test) MUSC 191 MUSC 311 MUSC 345 Learning Community	MUSC 171 MUSC 181 MUSC 192 MUSC 345 MUSC 312 or 320 WCSBS
Year 2	MUSC 271 MUSC 281 MUSC 291 MUSC 345 MUSC 219 MUSC 303 Elective	MUSC 292 MUSC 345 WCFAH 132 MUSC 373 MUSC 371 MUSC 381
Year 3	MUSC 365 MUSC 345 MUSC 391 MUSC 471 MUSC 481 MUSC 372 or 374 World Language I	MUSC 365 MUSC 345 WCSAM MUSC 392 MUSC 207 World Language II Elective
Year 4	MUSC 365 MUSC 372 or 374 MUSC 491 MUSC 301 WCSAM Elective	MUSC 312 or 305 MUSC 365 MUSC 420 WCSBS Elective

Music Minor

Requirement Description	Credit Hours	Prerequisites
I. Piano Proficiency Requirement	0-2	
Students must demonstrate reasonable piano proficiency, either through successful completion of a diagnostic test or alternately by taking a group piano course or private piano lessons at the discretion of the student's music advisor.		

Requirement Description	Credit Hours	Prerequisites
II. Performance-Based Coursework	4–6	
Private Lessons (primary instrument)		
Two consecutive semesters are required. MUSC 191, 192 1-2 credits each		
Performing Ensembles 2		
One of the following must be taken two different semesters.		
MUSC 315 Westminster Community Choir	1	placement audition required
MUSC 325 Westminster Jazz Ensemble	1	audition required
MUSC 335 Westminster Chamber Orchestra	1	audition required
MUSC 345 Westminster Chamber Singers	1	audition required
MUSC 365 Westminster Opera Studio	1	audition required
MUSC 375 Westminster Percussion Ensemble	1	
MUSC 385 Westminster Chamber Players	1	audition required
MUSC 395 SugarTown Acappella	1	audition required
III. Academic Coursework	16	
MUSC 171 Music Theory I	3	
MUSC 181 Aural Skills I	2	
MUSC 271 Music Theory II	3	MUSC 171
MUSC 281 Aural Skills II	2	MUSC 181
Choose two of the following:		
MUSC 372 Music History I	3	MUSC 171
MUSC 373 Music History II	3	MUSC 271
MUSC 374 Music History III	3	MUSC 271
IV. Elective Courses	4	
Four hours of music coursework and music-related V	VCFAH courses (any 100-level or higher music courses)	
Total Hours for the Music Minor	24-28	

Recommended Plan of Study for Music Minor

	Fall Semester	Spring Semester
Year 1	Piano Proficiency Requirement MUSC 191 Music Ensemble	MUSC 171 MUSC 181 MUSC 192 Music Ensemble
Year 2	MUSC 271 MUSC 281	Music Elective(s)
Year 3	MUSC 372	MUSC 373
Year 4	Music Elective(s)	Music Elective(s)

Note: Ensemble and elective scheduling are flexible within the four-year plan of study, but the Department of Music strongly encourages every music minor to participate in a music ensemble whenever his/her schedule allows.

NEUROSCIENCE

Faculty

- Russell Costa
- Krista Todd (Chair)

Program Goals

- To develop critical and interdisciplinary thinking skills.
- · To enhance both oral and written communication and information literacy skills
- To acquire depth and breadth of knowledge in neuroscience.
- To gain knowledge of and respect for the varying levels of analysis in neuroscience, and to develop the ability to synthesize information across such levels.
- To develop an understanding of issues pertinent to ethics in neuroscience, as well as the ambiguity inherent in neuroscience
- To develop knowledge of and experience with a number of research methodologies employed in the field of neuroscience
- To gain an understanding of future employment and educational opportunities available to individuals majoring in neuroscience.

Objectives

Neuroscience is the scientific study of normal and abnormal development, structure, and function of the nervous system. In addition, Neuroscience seeks to better understand the role of the nervous system in behavior. The Interdisciplinary Program in Neuroscience offers a Bachelor of Science degree with a breadth of coursework across Psychology and the Natural Sciences. Undergraduate research is prominent, and students are encouraged to explore relations between brain and behavior across multiple levels. The curriculum provides students with an academic and experiential background for graduate study in the neurosciences and/or employment in a research setting. The program is designed to offer both breadth of background while allowing a degree of specialization.

Requirements

Students must maintain at least a cumulative 2.5 GPA in courses required for the Neuroscience major. Students desiring further specialization are encouraged to pursue a relevant minor in combination with the major. For example, students interested in Theoretical Neuroscience may choose a minor in Mathematics, Physics, or Computer Science. Students interested in Clinical Neuropsychology are encouraged#to pursue a minor in Psychology. Pre-Med students are strongly advised to complete applicable Chemistry and#Biology coursework as needed for medical school acceptance. Consultation with program advisors is#crucial in preparing the best pathway for the individual students.

Classes listed as required classes for both majors/minors may be applied to both. The Neuroscience program allows for the double-dipping of up to four credits from neuroscience-related fields (Biology, Math, Physics, Computer Science, Data Science, Psychology, or Chemistry) that can be applied toward fulfilling the elective requirements of the Neuroscience major. Other than this, students choosing a double major or minor within the science program or psychology may not apply electives to more than one major or#minor.

Students must meet the university-wide graduation requirements in addition to the Neuroscience major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Neuroscience Major

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Neuroscience majors must complete eight (8) credit	hours in a single world language.	
II. Required Core Courses	38	
BIOL 204 Principles of Genetics	4	CHEM 112
BIOL 205 Intro to Cell Biology	4	CHEM 112
CHEM 111–112 Principles of Chemistry I and II and Labs	4-4	CHEM 111 co- requisites: CHEM 111R recommended, MATH 144 required/CHEM 111
DATA 220 Intro to Statistics	4	
NEURO 205 Introduction to Brain and Behavior	4	
NEURO 302 Research Methods in Neuroscience	4	NEURO 205, DATA 220; co- requisite: BIOL 205
NEURO 409 Advanced Topics in Neuroscience	2	PSYC 105, BIOL 204, NEURO 205,

Requirement Description	Credit Hours	Prerequisites
		and PSYC 390 or NEURO 302
PSYC 105 Bust That Psychology Myth	4	
Choose one of the following courses:		
DATA 350 Statistical Modeling	4	DATA 220
MATH 201 Calculus I	4	MATH 144 or placement test
WCSAM 203 Linear Algebra	4	MATH 144 or placement test
III. Natural Science and Math Electives	20	
Complete twenty (20) credit hours from the following list of courses. Twelve (12) of these hours must be upper division courses.		
Biology		
BIOL 103 Human Anatomy and Lab	4	
BIOL 104 Human Physiology and Lab	4	BIOL 103
BIOL 304 Stem Cells and Development and Lab	4	BIOL 204, 205, CHEM 111, 112
BIOL 350 Biochemistry and Lab	4	BIOL 205 and CHEM 303
BIOL/CHEM/PHYS 370 Scientific Computing	4	PHYS 211 or PHYS 151 and MATH 201
BIOL 405 Cell Biology of Cancer and Lab	4	BIOL 204, 205; CHEM 111, 112, 303, 304
Chemistry		
CHEM 303 Organic Chemistry I and Lab	4	CHEM 112
CHEM 304 Organic Chemistry II and Lab	4	CHEM 303
Computer Science		
CMPT 201 Introduction to Computer Science	4	co-requisite: MATH 101
Data Science		
DATA 370 Statistical Learning	4	DATA 350
Mathematics		
MATH 202 Calculus II	4	MATH 201 or placement test
MATH 203 Multivariate Calculus	4	MATH 202
MATH 363 Differential Equations	4	MATH 202
Neuroscience		
NEURO 300 Special Topics in Neuroscience	2-4	
NEURO 305 Human Brain Development	4	NEURO 205; co- requisite: PSYC 203
NEURO 402 Behavioral Endocrinology	4	NEURO 302 or PSYC 390 and NEURO 205
NEURO 430 or WCSAM 400 Independent Thesis Research (May be taken two semesters for credit) or Science Capstone	2	NEURO 302 or 390

Requirement Description	Credit Hours	Prerequisites
NEURO 434 Social Neuroscience	4	PSYC 390 or NEURO 302 and PSYC 216 or NEURO 205
Physics		
PHYS 151 Principles of Physics I and Lab	4	MATH 144
PHYS 152 Principles of Physics II and Lab	4	PHYS 151 or 211
PHYS 211 Physics for Scientists and Engineers I and Lab	4	MATH 144; co- requisite: MATH 201
PHYS 212 Physics for Scientists and Engineers II and Lab	4	PHYS 211; co- requisite: MATH 202
Psychology		
PSYC 203 Lifespan Development	4	
PSYC 209 Cognitive Psychology	4	PSYC 105
PSYC 362 Psychological Disorders	4	PSYC 252, PSYC 270
Note: Students may count either PHYS 150- level coursework OR PHYS 200-level coursework as elective credit toward the major, but not both. Students desiring to take additional hours in a particular discipline should consider an academic minor in the pertinent field. Special topics and directed studies hours are limited to a total of 6 credits and must be approved by an academic advisor prior to registration. Additional coursework may be approved for elective credit by an academic advisor if the advisor and student feel that the suggested course is pertinent to the individual student's plan of study and educational goals.		
IV. Additional Neuroscience Electives	8	
Neuroscience majors must choose eight (8) hours of additional neuroscience electives chosen from the following courses:		
NEURO 306 Behavioral Neuroscience and Lab	4	NEURO 205
NEURO 310 Applied Neuroanatomy	4	
NEURO 403 Cellular Neuroscience and Lab	4	BIOL 204, 205, CHEM 112, and NEURO 302
NEURO 408 Cognitive Neuroscience and Lab	4	PSYC 105, NEURO 205, and PSYC 390 or NEURO 302
Total Hours for the Neuroscience Major	74-76	

Recommended Plan of Study

	Fall Semester	Spring Semester
Year 1	PSYC 105 or NEURO 205 CHEM 111 Language or WCore	PSYC 105 or NEURO 205 CHEM 112 Language or WCore
Year 2	DATA 220 or MATH 201 BIOL 204 or 205 NEURO 302 Language or WCore	DATA 220 or MATH 201 BIOL 204 or 205 NEURO 302 Language or WCore
Year 3	Part III and/or Part IV Elective(s) WCore	Part III and/or Part IV Elective(s) WCore
Year 4	NEURO 409 and/or Part III/IV Elective(s) WCore	NEURO 409 and/or Part III/IV Elective(s) WCore

PHILOSOPHY

Faculty

- Kara Barnette
- Nicholas D. More (Chair)
- Michael A. Popich

Program Goals

- To become effective analytical and critical thinkers, and to communicate such thinking orally and in writing.
- To gain familiarity with philosophical and its central issues.
- To think and write in the form and by the method proper to the discipline of Philosophy, i.e., rational argumentation in support of a significant thesis.
- To pursue in depth one field of philosophy, either theoretical or applied.
- To produce a substantial piece of original scholarship in Philosophy.
- To become more reflective of the human condition, and the effect of globalization and diversity; to understand the relevance of philosophical thinking to one's own life and public policies and practices.

Objectives

The Philosophy Program offers an academic major in philosophy leading to a Bachelor of Arts degree or a Bachelor of Science degree, as well as an academic minor. It provides students with the critical and philosophical thinking skills necessary to examine human systems of value, knowledge, and belief, and to make rational analyses of ideas fundamental to living thoughtfully in the world. Philosophy is an excellent choice of study for pre-law students, as preparation for graduate school in philosophy, as a minor or second major for liberal arts students preparing for graduate school, and for anyone who would benefit from a discipline of clear thinking, writing, and problem solving in the pursuit of wisdom.

Students majoring in Philosophy who plan to pursue an M.A. or Ph.D. in the field should plan for graduate school, with the assistance of the Philosophy faculty, no later than the second semester of their junior year. Students intending to pursue a degree in theology are advised to major in English, History, Philosophy, Psychology, Sociology, or any broad liberal arts program. The Association of Theological Schools in the United States and Canada recommends that students have a background in history, religions of non-western cultures, and a world language.

Students majoring or minoring in philosophy with a GPA of 3.5 overall and in philosophy coursework may be invited to become members of Phi Sigma Tau, the international undergraduate Philosophy Honor Society. Westminster University's Utah chapter is the oldest in the state.

Program Requirements

Students must maintain a minimum cumulative 2.3 GPA in courses required in the Philosophy major.

Students must meet the university-wide graduation requirements in addition to the Philosophy major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Philosophy Major Bachelor of Arts Degree

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Philosophy majors must complete eight (8) credit hours in a single world language.		

Requirement Description	Credit Hours	Prerequisites
II. Lower Division Philosophy Courses	3-4	
Any 100- or 200-level PHIL course, except PHIL 102, F	PHIL 201 and PHIL 202	
III. Core Philosophy Courses	15-16	
PHIL 102 Critical Thinking	4	
PHIL 201 Ancient Philosophies	4	PHIL 102
PHIL 202 Modern and Contemporary Philosophies	4	PHIL 102
One additional 200-level PHIL course 3-4		
IV. Upper Division Philosophy Courses	8	
PHIL 390 Thesis Research Preseminar in Philosophy	4	senior standing, consent of instructor
PHIL 490 Research Seminar in Philosophy*		PHIL 390; senior standing, consent of instructor
V. Electives	14	
Additional 14 upper-division credit hours of coursewo	rk in Philosophy	
VI. Required Courses from Other Programs	6	
300-level coursework in English and/or History		
Total Hours for Bachelor of Arts Philosophy Major	54-56	

HON 201 and 202 *Foundational Conversations I & II* may be substituted for any two of the following three courses required of philosophy program majors: PHIL 102, one lower-division course, an additional 200 level course. HON 203 *Foundational Conversations III* may be substituted for one of these courses. For the minor, HON 201 and 202 *Foundational Conversations I & II* may be substituted for any two of the following courses: PHIL 102, PHIL 216, or PHIL 221, and HON 203 *Foundational Conversations III* may be substituted for one of these courses.

Philosophy Major Bachelor of Science Degree

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Philosophy majors must complete eight (8) credit ho	urs in a single world language.	
II. Lower Division Philosophy Courses	3-4	
Any 100- or 200-level PHIL course, except PHIL 102, F	PHIL 201 and PHIL 202	
III. Core Philosophy Courses	15-16	
PHIL 102 Critical Thinking	4	
PHIL 201 Ancient Philosophies	4	PHIL 102
PHIL 202 Modern and Contemporary Philosophies	4	PHIL 102
One additional 200-level PHIL course 3-4		
IV. Upper Division Philosophy Courses	8	
PHIL 390 Thesis Research Preseminar in Philosophy	4	senior standing, consent of instructor

Requirement Description	Credit Hours	Prerequisites
PHIL 490 Research Seminar in Philosophy*	4	PHIL 390; senior standing, consent of instructor
V. Electives	14	
Additional fourteen (14) upper division credit hours of coursework in Philosophy		
VI. Required Courses from Other Programs 8		
Two semesters of a laboratory science		
Total Hours for Bachelor of Science Philosophy Major	56-58	

For a Bachelor of Science degree in Philosophy, students must fulfill the same requirements as for the Bachelor of Arts degree, except that students are required to take eight credit hours of a laboratory science in lieu of the history requirement.

HON 201 and 202 *Foundational Conversations I & II* may be substituted for any two of the following three courses required of philosophy program majors: PHIL 102, one lower-division course, an additional 200 level course. HON 203 *Foundational Conversations III* may be substituted for one of these courses. For the minor, HON 201 and 202 *Foundational Conversations I & II* may be substituted for any two of the following courses: PHIL 102, PHIL 216, or PHIL 221, and HON 203 *Foundational Conversations III* may be substituted for one of these courses.

Recommended Plan of Study (B.A. or B.S.)

	Fall Semester	Spring Semester
Year 1	Language I 100-level PHIL elective PHIL 102 (or in Spring)	Language II PHIL 200-level elective
Year 2	PHIL 201 (or in Junior year) PHIL elective	PHIL 202 (or in Junior year) PHIL elective
Year 3	Upper division PHIL elective ENGL or HIST elective (BA) or Science lab course (BS)	Upper division PHIL elective ENGL or HIST elective (BA) or Science lab course (BS)
Year 4	PHIL 390 Upper division PHIL elective	PHIL 490 Overall upper division credit to reach 30

* It is recommended that students take 2 hours of PHIL 300 during May term for all four years.

Philosophy majors can take a combination of upper division courses in order to meet the catalog requirements for 14 (minimum) elective hours in Philosophy. For example, in their sophomore and junior years they could take 2 or 3 courses as 300-level electives (offered in the Fall and Spring semesters) and then take several 2-credit May Term Philosophy 300 special topics courses. Alternatively, the student could take several 300-level electives in their junior and senior years and several 2-credit Philosophy 300 special topics May Term courses over their sophomore, junior and senior years in order to reach the 14hour (minimum) electives requirement in Philosophy. Note: 30 upper division credits overall are needed for a Bachelor's degree.

Honors College students who complete HON 201 and HON 202 can have two of the three lower-division philosophy major course requirements fulfilled. To meet the lower-division requirement, Honors College students may take any one WCore course offered by the department, including PHIL 124: Ethics and the Profit Motive; PHIL 207: Humor and Philosophy; PHIL 208: The Philosophy of Love and Sex; PHIL 209: Poverty and Global Justice; and PHIL 216: Ethical Issues in Health Care.

Philosophy Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	18	
PHIL 102 Critical Thinking	4	
PHIL 216 or Ethical Issues in Health or	4	
PHIL 221 Ethics of Diversity	4	
PHIL 390 Thesis Research Preseminar in Philosophy	4	
Choose one of the following courses:		
PHIL 201 or Ancient Philosophies or	4	PHIL 102
PHIL 202 Modern and Contemporary Philosophies	4	

Requirement Description	Credit Hours	Prerequisites
*Please see PHIL 390 course description regarding Philosophy minors.		
II. Electives	6	
Additional six (6) credit hours of coursework in Philos	sophy	
Total Hours for Philosophy Minor	24	

PHYSICS

Faculty

- Christopher Cline (Chair)
- Julia Kamenetzky

Program Goals

- Students should develop a good functional understanding of physics, including mechanics, electricity & magnetism, quantum physics, statistical mechanics, thermodynamics, optics, and relativity.
- Students should develop expert-like problem solving skills.
- Students should develop critical thinking and reasoning skills.
- Students should develop laboratory skills.
- Students should develop technology skills.
- Students should improve their communication, interpersonal, and questioning skills.
- Students should develop and/or retain student cognitive attitudes and beliefs (expectations) that are favorable for learning physics with deep understanding.

Objectives

The Physics Program offers an academic major leading to the Bachelor of Science Degree. In addition, the program offers an academic and a teaching minor in physics. A Physical Science composite major is offered for students seeking a physical science composite endorsement for secondary education. The program is designed to meet the needs of (1) students intending to specialize in physics and pursue graduate work in physics, engineering, material science, or biophysics; (2) students preparing for a professional career in science and engineering; (3) students desiring to broaden their knowledge of the natural world; and (4) students who wish to teach at the secondary level.

Program Requirements

Students choosing a double major or minor within the science program may not apply electives to more than one major or minor. Only classes listed under "required courses" that coincide between both majors/minors may be applied to both.

Students must maintain a cumulative 2.3 GPA or better in courses required in the academic majors.

Students must meet the university-wide graduation requirements in addition to the Physics major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Physics Major

To fulfill the requirements for a major in Physics, students must complete the following as well as demonstrate competency in MATH 144:

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Physics majors must complete eight credit hours in a	a single world language.	
II. Lower Division Physics Courses	8	
PHYS 211 Physics for Scientists and Engineers I and Lab	4	MATH 144, co- requisite: MATH 201
PHYS 212 Physics for Scientists and Engineers II and Lab	4	PHYS 211, co- requisite: MATH 202
III. Upper Division Physics Courses	28	

Requirement Description	Credit Hours	Prerequisites
PHYS 301 Introduction to Modern Physics	4	PHYS 151 or PHYS 212
PHYS 309 Mathematical Methods for Physics	4	MATH 202, PHYS 211
PHYS 311 Analytical Mechanics	4	MATH 203, PHYS 212, 309
PHYS 370 Scientific Computing	4	CMPT 190, PHYS 211, or PHYS 151
PHYS 411 Thermodynamics and Statistical Mechanics	4	CHEM 112, Math 202, PHYS 212
PHYS 425 Quantum Physics	4	PHYS 212, 301, 309 and MATH 203, 204, or 211
PHYS 431 Electrodynamics	4	PHYS 212, 309, MATH 203, and either MATH 204, MATH 211, or WCSAM 203
IV. Electives	4	
Take one of the following courses:		
PHYS 305 Optics	4	PHYS 152 or 212; MATH 202
PHYS 325 Astrophysics	4	PHYS 152 or 212, MATH 202
PHYS 410 Quantum Chemistry	4	CHEM 112, MATH 202, PHYS 212
V. Required Courses from Other Programs	26	
CHEM 111 Principles of Chemistry l and Lab	4	co-requisites: CHEM 111R recommended/ MATH 144 required
CHEM 112 Principles of Chemistry II and Lab	4	CHEM 111
MATH 201 Calculus I	4	MATH 144 or placement test
MATH 202 Calculus II	4	MATH 201 or placement test
MATH 203 Multivariate Calculus	4	MATH 202
WCSAM 203 Linear Algebra	4	
WCSAM 400 Science Capstone	2	
Total Hours for the Physics Major	74	

*Note: MATH 311 and 363 are highly recommended.

Recommended Plan of Study for Physics

Listed below is a suggested plan of study for completing the physics requirements. Students should check with their advisors at least once a year as course offerings may change from what is listed. Students must also meet university wide requirements for graduation.

	Fall Semester	Spring Semester
Year 1	MATH 201* CHEM 111	MATH 202* CHEM 112
Year 2	MATH 203 PHYS 211	WCSAM 203 PHYS 212 PHYS 309
Year 3	PHYS 301 PHYS 305** or PHYS 325** or PHYS 410**	PHYS 411 PHYS 425** PHYS 370**
Year 4	PHYS 311**	PHYS 411 PHYS 431** WCSAM 400

* Assumes student already has credit for MATH 144

**Course offered every other year, so Junior and Senior year may be interchanged.

Physics Minor

Requirement Description	Credit Hours	Prerequisites	
I. Required Courses	20		
CHEM 111 Principles of Chemistry I and Lab	4	co-requisites: CHEM 111R recommended/ MATH 144 required	
CHEM 112 Principles of Chemistry II and Lab	4	CHEM 111	
PHYS 211 Physics for Scientists and Engineers I and Lab	4	MATH 144, co- requisite: MATH 201	
PHYS 212 Physics for Scientists and Engineers II and Lab	4	PHYS 211, co- requisite: MATH 202	
PHYS 301 Introduction to Modern Physics	4	PHYS 151 or PHYS 212	
II. Electives	4		
Additional coursework in Physics selected from courses numbered 300 or above			
Total Hours for the Physics Minor	24		

POLITICAL SCIENCE

Faculty

• Michael Zarkin (Chair)

Program Goals

- · To develop effective verbal and written communication skills
- To develop the ability to critique and conduct research
- To demonstrate collaborative problem solving skills
- To develop critical thinking skills
- To develop practices of global responsibility

Objectives

Political Science offers an interdisciplinary Bachelor of Arts academic major. With political science as its core focus, the major includes relevant courses from a number of disciplines. The curriculum stresses student mastery of a variety of allied subjects to enhance understanding of the global and domestic contexts of politics. The major prepares students for further study in law or graduate school; to enter public service careers in government or international organizations; to work in nongovernmental organizations; to work in the private sector, the policy arena, the political/legislative process; to work in domestic, transnational, or international/global civil society organizations, movements, or activism; or to conduct research.

The Political Science minor offers non-majors a flexible academic program for exploring politics in both the domestic and global contexts. The curriculum can be designed to fit the needs of students pursuing a variety of careers including public service, civil society organizations, law, global affairs, business, education and mass communication. Students should work with their minor advisor to choose appropriate coursework.

Program Requirements

Students must maintain a cumulative 2.5 GPA in courses required to complete the major. Additional recommended coursework may be taken in a number of disciplines, depending upon approved student interests. Students choosing a double major or minor in any of the fields included within the political science major may not apply a course to more than one major or minor. It is strongly recommended that students take DATA 220 (Introduction to Statistics). Moreover, while the Political Science major requires only 8 credit hours of a world language, students are strongly advised to take up to 16 hours (two full years, four semesters, or equivalent preparation) of a world language.

Students must meet the university-wide graduation requirements in addition to the Political Science major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Political Science Major

Requirement Description	Credit Hours	Prerequisites	
I. World Language Requirement	8		
Political Studies majors must complete eight credit hours in a single world language.			
II. Lower Division Courses	7		
PLSC 106 Explorations in Politics	4		
PLSC 203 Courts, Law, and Social Justice	3		
III. Upper Division Courses	24		
The following four classes are required:			
PLSC 316 Issues in Global Politics	4		
PLSC 367 Political Philosophy	4		
PLSC 390 Research Methods	4		
PLSC 490 Senior Capstone	4		
Take two of the following courses: 8			
PLSC 348 Congress and the Presidency	4		
PLSC 355 Constitutional Law: Civil Liberties	4		
PLSC 359 Law, Politics, and Bureaucracy	4		
IV. Electives	15-16		
Take fifteen-sixteen credits; minimum six credits as upper division.			
COMM 101 Disinformation in the USA	4		
COMM 350 Leadership and Decision-Making	4		
DATA 150 Data and Society	4		
ECON 253 Elementary Macroeconomics	3	MATH 101 or above	
ECON 263 Elementary Microeconomics	3	MATH 101 or above	
ENVI 351 The Global Environment	4	ENVI 101	
JUST 221 Community Justice	3		
JUST 325 Justice in Everyday Life	4		
PHIL 102 Critical Thinking	4		
PHIL 303 Formal Logic	4	PHIL 102	
PHIL 312 Applied Ethics	4	PHIL 102	

Requirement Description	Credit Hours	Prerequisites
PLSC 300 Special Topics in Political Science	1-4	
PLSC 327 Environmental Politics and Policy	4	
PLSC 401 Directed Studies	1-4	
PLSC 440 Internship	1-8	
PUBH 250 Global Health	4	
SOC 205 Social Problems	4	
SOC 372 Race, Ethnicity, and Class	4	
Total Hours for the Political Science Major	54-55	

Recommended Plan of Study for Political Science Major

	Fall Semester	Spring Semester
Year 1	PLSC 106 Language I	PLSC 203 Language II
Year 2	PLSC 316 or 367 PLSC 348 or 359 Major elective	PLSC 355 Major elective
Year 3	PLSC 316 or 367 Major elective	Major elective
Year 4	PLSC 390	PLSC 490

Political Science Minor

Students must maintain a cumulative 2.5 GPA in courses required for the political science minor. Students choosing a double major or minor may not apply a class to more than one major or minor except in the case of core requirements. For course prerequisites, please refer to the course description.

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	12	
PLSC 106 Explorations in Politics	4	
PLSC 315 Theories of Global Politics	4	
PLSC 355 Constitutional Law: Civil Liberties	4	
II. Elective Courses	8	
Eight additional hours of 300 or 400-level PLSC courses		
Total Hours for the Political Science Minor	20	

Recommended Plan of Study for Political Science Minor

	Fall Semester	Spring Semester
Year 1		PLSC 106
Year 2	Four (4) hours upper division PLSC coursework	
Year 3	Four (4) hours upper division PLSC coursework	Four (4) hours upper division PLSC coursework
Year 4	Four (4) hours upper division PLSC coursework	

PSYCHOLOGY

Faculty

- Jonathan Amburgey (Chair)
- Kelly Asao
- Christopher Davids
- Julian Mendez
- Paul Presson

Program Goals

Students will gain a comprehensive understanding and/or application of the following:

- Knowledge Base in Psychology
- Scientific Inquiry and Critical Thinking
- Ethical and Social Responsibility in a Diverse World
- Communication
- Professional Development

Objectives

Psychology is the scientific study of mind and behavior. Psychology offers an academic major leading to a Bachelor of Science degree, as well as an academic minor. The psychology curriculum provides students with an academic and experiential background for graduate study in psychology and/or employment in social service, research, and other settings where an understanding of human behavior, thought, and emotion is relevant. The curriculum in the psychology major gives students a breadth of background while also allowing some specialization. A major or minor in psychology is for students who have a general interest in understanding behavior and its determinants.

Program Requirements

Students must maintain at least a cumulative 2.5 GPA in courses required for the psychology major and minor. To fulfill the requirements for a major in psychology, students must complete a minimum of 45 credit hours of coursework in psychology. Students are encouraged to participate in a field experience in psychology (PSYC 340) and may apply a maximum of 5 credit hours of field experience coursework to the major. For students considering graduate school, high academic achievement in upper-division courses, including Quantitative Research Methods, 400-level coursework, and gaining research experience is strongly recommended.

Students must meet the university-wide graduation requirements in addition to the Psychology major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Psychology Major

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Psychology majors must complete eight credit hours in a single world language.		
II. Lower Division Courses	26	
PSYC 105 Bust That Psych Myth	4	
NEURO 205 Brain and Behavior	4	
DATA 220 Introduction to Statistics	4	
PSYC 255 Career Exploration	2	PSYC 105 and sophomore standing
PSYC 270 Thinking and Writing for Psychology	4	PSYC 105 and sophomore standing
Take two courses from this list:		
PSYC 203 Lifespan Developmental Psychology	4	
PSYC 209 Cognitive Psychology	4	PSYC 105
PSYC 216 Social Psychology	4	PSYC 105
PSYC 252 Personality Theories	4	PSYC 105
III. Upper Division Courses	18-20	
PSYC 390 Quantitative Research Methods	4	DATA 220, PSYC 270

Requirement Description	Credit Hours	Prerequisites	
Take three 300-level courses from at least two different Groups from Groups A-D 12 One 400-level course 2-4	PSYC 270 (groups A-C) and NEURO 205 (group D)		
IV. Electives	6		
Six (6) credits of PSYC or NEURO coursework that does not already fulfill lower and upper-division course requirements.			
Total Hours for the Psychology Major	58-60		

300-Level Course Groups

• Group A

- PSYC 300 Special Topics Courses labeled as Group A (Offered on a semester-by-semester basis)
- PSYC 315 Human Services Practicum
- PSYC 358 Methods of Counseling
- PSYC 362 Psychological Disorders
- PSYC 363 Exploring Addictions

• Group B

- PSYC 300 Special Topics Courses labeled as Group B (Offered on a semester-by-semester basis)
- PSYC 301 Child Development
- PSYC 305 Adolescent Development
- PSYC 334 Psychology of Masculinities (Counts for Group B or C)
- PSYC 335 Psychology of Women (Counts for Group B or C)
- PSYC 345 Learning, Memory, and Motivation (Counts for Group B or D)
- PSYC 351 Animal Minds & Human Evolution (Counts for Group B or C)

• Group C

- PSYC 300 Special Topics Courses labeled as Group C (Offered on a semester-by-semester basis)
- PSYC 318 Health Psychology
- PSYC 325 Multicultural Psychology
- PSYC 335 Psychology of Women (Counts for Group B or C)
- PSYC 351 Animal Minds & Human Evolution (Counts for Group B or C)
- PSYC 356 Sources of Social Influence
- PSYC 388 Environmental Psychology

• Group D

- NEURO 300 Special Topics Courses labeled as Group D (Offered on a semester-by-semester basis)
- NEURO 305 Human Brain Development
- NEURO 306 Behavioral Neuroscience and Lab

Recommended Plan of Study for Psychology

	Fall Semester	Spring Semester	Summer Semester
Year 1	PSYC 105 Languages I WCore	PSYC 200-level course Languages II WCore	PSYC Electives
Year 2	PSYC 200-level course and/or NEURO 205 WCore	PSYC 255 PSYC 270 DATA 220 WCore	PSYC Electives
Year 3	PSYC 300-level course PSYC 390	PSYC 300-level courses WCore	PSYC Electives
Year 4	PSYC 300-level courses	PSYC 400-level capstone	

Psychology with Emphasis in Cognitive Science

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Psychology majors must complete eight (8) credit hours in a single world language.		
II. Lower Division Courses 26		
PSYC 105 Bust That Psych Myth	4	
NEURO 205 Introduction to Brain and Behavior	4	
DATA 220 Introduction to Statistics	4	

Requirement Description	Credit Hours	Prerequisites
PSYC 255 Career Exploration	2	PSYC 105 and sophomore standing
PSYC 270 Thinking and Writing for Psychology	4	PSYC 105 and sophomore standing
PSYC 209 Cognitive Psychology	4	
Take two courses from this list:		
PSYC 203 Lifespan Developmental Psychology	4	
PSYC 216 Social Psychology	4	PSYC 105
PSYC 252 Personality Theories	4	PSYC 105
III. Upper Division Courses	18-20	
PSYC 390 Quantitative Research Methods	4	DATA 220, PSYC 270
Two 300-level courses from Groups A-C 8	PSYC 270	
Take one course from the following:		
NEURO 306 Behavioral Neuroscience	4	NEURO 205
NEURO Special Topics in Neuroscience as advised	4	
Take one course from the following list:		
NEURO 408 Cognitive Neuroscience	4	PSYC 105, NEURO 205, DATA 220, and PSYC/NEURO 390 or NEURO/PSYC 302
NEURO 409 Advanced Topics in Neuroscience	2	PSYC 105, BIOL 204, NEURO 205, and PSYC/NEURO 390 or NEURO 302
NEURO 430 Independent Research Thesis	2-4	NEURO 302 or 390
PSYC 434 Social Neuroscience	4	NEURO/PSYC 390 or NEURO 302, and PSYC 216 or NEURO/PSYC 205
IV. Electives	6	
Six (6) credits of PSYC or NEURO coursework that do	es not already fulfill lower and upper-division course re	equirements.
Total Hours for the Psychology Major With Cognitive Science Emphasis	58-60	

Recommended Plan of Study Psychology with Emphasis in Cognitive Science

	Fall Semester	Spring Semester	Summer Semester
Year 1	PSYC 105 Languages I WCore	PSYC 200-level course Languages II WCore	PSYC Electives
Year 2	PSYC 209 and/or NEURO 205 WCore	PSYC 200-level course PSYC 255 PSYC 270 DATA 220	PSYC Electives
Year 3	PSYC 300-level course (Groups A-C) PSYC 390	PSYC 300-level courses (Groups A-C) NEURO 300-level course (Group D)	PSYC Electives
Year 4	PSYC 300-level courses	PSYC/NEURO 400-level capstone	

Psychology Minor

To fulfill the requirements for a minor in psychology, students must complete a minimum of 24 credit hours in psychology, neuroscience, and data science.

NEURO majors minoring in PSYC must complete PSYC 203, PSYC 216, or PSYC 252 and cannot count PSYC 209 toward the PSYC minor requirements if PSYC 209 is used to fulfill NEURO major requirements.

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	16	
PSYC 105 Bust That Psych Myth	4	
DATA 220 Introduction to Statistics	4	
PSYC 270 Thinking and Writing for Psychology	4	PSYC 105 and sophomore standing
PSYC 390 Quantitative Research Methods	4	DATA 220, PSYC 270
II. Psychology Electives	8	
Take one course from the following list:		
PSYC 203 Lifespan Developmental Psychology	4	
NEURO 205 Brain and Behavior	4	
PSYC 209 Cognitive Psychology	4	PSYC 105
PSYC 216 Social Psychology	4	PSYC 105
PSYC 252 Personality Theories	4	PSYC 105
Take one 300-level course from Groups A-D 4	PSYC 270 (groups A-C) and NEURO 205 (group D)	
Total Hours for the Psychology Major	24	

SOCIOLOGY

Faculty

- Kristjane Nordmeyer (Co-Chair)
- Mark Rubinfeld (Co-Chair)

Program Goals

- To enhance critical, analytical, and integrative thinking skills
- To improve writing and other communication skills
- To be able to understand, evaluate, and conduct different types of social research
- To develop global consciousness, social responsibility, and ethical awareness
- To gain an understanding of the discipline's concepts, foundations, and perspectives

Objectives

Sociology offers an academic major and minor leading to a Bachelor of Science degree. In simplest terms, sociology is the study of social life including social interactions, relationships, groups, organizations, and institutions. In studying the cultural, interactional, and institutional dimensions of society, students learn about the social world in the broadest sense of the term, as well as the social actions, policies, and transformations that can help make a lasting, positive difference in the lives of the people that make up that world. Covering so many facets of social organization and behavior, sociology is a foundational degree for just about any occupation or career that involves working with people. Students are encouraged to use their learning and experience in applied settings such as internships, seminars, and directed studies.

Program Requirements

Students must maintain a cumulative 2.5 GPA or better in courses required for the sociology major and minor. Students may apply up to twelve credits from any courses in the sociology-related fields of justice studies (JUST), political science (PLSC), and psychology (PSYC) toward fulfilling the elective requirements of the sociology major; students may apply up to four credits from any courses in the above-listed sociology-related fields toward fulfilling the elective requirements of the sociology major.

Students have the opportunity to take an internship and may apply a maximum of 4 credit hours of internship coursework to the major. Majors must have completed SOC 390 before they can take SOC 470.

The sociology program allows for the double dipping of up to eight credits from courses in the sociology-related fields of justice studies (JUST), political science (PLSC) and/or psychology (PSYC) that can be applied toward fulfilling the elective requirements of the sociology major and, similarly, allows for the double dipping of up to four credits from courses in the above sociology-related fields (JUST, PLSC, PSYC) that can be applied toward fulfilling the elective requirements of the sociology minor.

Students must meet the university-wide graduation requirements in addition to the Sociology major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Sociology Major

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	8	
Sociology majors must complete eight (8) credit hours in a single world language.		
II. Lower Division Courses	8	
SOC 105 The Sociological Imagination	4	
SOC 205 Social Problems	4	
III. Upper Division Sociology & Related Courses	12	
SOC 313 Social Theory	4	SOC 105
SOC 390 Social Research Methods	4	
SOC 470 Senior Thesis	4	SOC 390
IV. Electives	24	
Twenty-four (24) credits of Sociology or Sociology- related electives with 14 of those credits at the 300- level or above. Sociology-related elective course offerings include any sociology-related courses in Justice Studies, Political Science, and Psychology. Sociology elective course offerings include but are not limited to the following;see Sociology course descriptions for a full listing.		
SOC 253 Sociology of the Family	4	
SOC 300 Special Topics in Sociology	4	
SOC 320 Sociology of Popular Culture	4	
SOC 330 Sports and Society	4	
SOC 342 Sociology of the Life Course	4	
SOC 345 Sociology of Sexualities	4	
SOC 350 Gender in Society	4	
SOC 370 Social Work	4	
SOC 372 Race, Ethnicity and Class	4	
SOC 375 Social Welfare Policy	4	
SOC 395 Applied Sociology	4	
SOC 400 Seminar in Sociology	4	
SOC 401 Directed Studies	1-4	
SOC 440 Internship	1-4	
Total Hours for the Sociology Major	52	

Recommended Plan of Study for Sociology

	Fall Semester	Spring Semester
Year 1	SOC 105* (freshman or sophomore year) SOC 205 (freshman or sophomore year)	SOC electives
Year 2	SOC electives	SOC electives
Year 3	SOC electives	SOC 313 SOC electives
Year 4	SOC 390 SOC electives	SOC 470

Optional Concentrations

Sociology students may earn an *optional* concentration in **Gender and Sexuality** or **Social Work and Social Welfare** by completing three courses (12 credits) in the following two areas:

Optional Concentrations	Credit Hours	Prerequisites
Gender and Sexuality (Must complete Gender in Society and Sociology of Sexualities plus one more of the remaining two courses)	12	
SOC 253 Sociology of the Family	4	
SOC 342 Sociology of the Life Course	4	
Social Work and Social Welfare (Must complete Social Work and Social Welfare Policy plus one more of the remaining two courses)	12	
SOC 253 Sociology of the Family	4	
SOC 395 Applied Sociology	4	

Credits from sociology Special Topics classes, May Terms classes, and May Term Trips/Study Abroad Experiences that explicitly cover one of these two concentrations may be applied to that concentration with instructor's permission.

Sociology Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	8	
SOC 105 The Sociological Imagination	4	
SOC 313 Social Theory	4	SOC 105
II. Electives	12	
 Eight hours of Sociology or sociology-related coursework (see above) numbered 300 or above Four hours of Sociology or sociology-related 100, 200, 300, or 400-level coursework 		
Total Hours for the Sociology Minor	20	

SPANISH

Faculty

• Deyanira Ariza-Velasco

Program Goals

- To achieve proficiency in the "5 C's" of language learning: communication, culture, connections, comparisons, and communities.
- 1st Year: Students will master the basic structures of grammar in the target language, demonstrate a "survival" level of written and oral proficiency, and gain a foundation in cultural traditions.

- 2nd Year: Students will achieve standard proficiency in conversation, composition, and the reading of short fiction. They will continue to deepen their knowledge of Spanish culture and history.
- 3rd Year: Students will understand and be understood by native speakers and be knowledgeable about the major aspects of Hispanic literature and cultural history.

Objectives

The Spanish Program offers a minor in Spanish and an interdisciplinary academic major in Spanish-Latin American Studies. Our courses cultivate and deepen a student's understanding of the communication potential of a world language and its cultural value.

Program Requirements

A maximum of 12 external hours (transfer, CLEP, Prior Learning. Challenge Exam, or other approved external language exams) may be applied toward the minor (see below under "Additional Requirements and Procedures"). Students are advised that, due to the size and staffing of the Language Department, some Spanish courses have only one section in a given semester. For further information and advising please schedule an appointment with any member of the Spanish faculty.

The faculty can advise entering students with prior world language study on proper course placement. Student Placement at a 2nd or 3rd year level does not reduce the total number of hours required for a Spanish major or minor. Generally, but subject to advisor and/or instructor recommendation, students who have studied one or two years of secondary level Spanish are excluded from registering for the first semester Spanish 110 course (Spanish I).

Students must meet the university-wide graduation requirements in addition to the Spanish major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Spanish-Latin American Studies Major

Requirement Description	Credit Hours	Prerequisites
I. Lower Division Courses	8	
Students entering the major who demonstrate appropriate levels of Spanish language proficiency can fulfill the SPAN 111 and/or SPAN 220 requirements by substitution with electives in Upper-Division Spanish or courses from the list of approved History, Social Science, and/or other elective courses.		
SPAN 111 Spanish II	4	
SPAN 220 Spanish III	4	SPAN 111
II. Upper Division Required Courses	34-38	
SPAN 310 Spanish IV: Intro to Spanish Literature	4	SPAN 220
SPAN 320 Survey of Peninsular Spanish Culture & Literature	4	SPAN 220
SPAN 321 Spanish Literature and Cultural Studies A, B, C, D, E, F, or G	4	
SPAN 330 Survey of Latin American Culture & Literature	4	SPAN 220
SPAN 331 Latin American Literature and Cultural Studies A, B, C, D, E, F, or G	4	SPAN 220
SPAN 470 Senior Thesis	2	instructor permission
Choose one course from each of the following groups:		
SPAN 301 or SPAN 300 The Spanish-Speaking World or Special Topics in Spanish	4 or 4	
SPAN 300SA* or SPAN 440 Semester Study Abroad or Internship	12 or 8	
*Study Abroad: courses beyond the 12 hours may be eligible for elective credit. See "Study Abroad/Internship Abroad/Domestic		

Requirement Description	Credit Hours	Prerequisites
Internship" description below for more information.		
III. History and Social Science	6-8	
Complete six-eight credit hours of coursework from the following courses:		
HIST 300 Special Topics in History (when relevant, subject to approval)	3-4	
HIST 340 Latin American Hist: Discovery of the Americas —offered spring	4	one lower division HIST course
HIST 341 Latin American Hist: Revolution in the Americas —offered spring	4	one lower division HIST course
HIST 343 History of Mexico: The Quest for Stability	4	one lower division HIST course
SOC 372 Race, Ethnicity, and Class- offered spring	4	
IV. Other Elective Courses	4	
Complete four credit hours of coursework from the following courses:		
ART 311 Art History: Renaissance to Modern Art - offered spring (when relevant, subject to approval)	4	one Writing Emphasis course
ART 312 History of Contemporary Art (when relevant, subject to approval)	4	one Writing Emphasis course
ECON 319 International Economics- offered spring	4	ECON 253, 263, and DATA 150 or 220
FINC 435 International Finance– offered fall	4	FINC 300
JUST 300 Special Topics in Justice (when relevant, subject to approval)	1-4	
MGMT 400 Global Business Strategy	4	MKTG 300 or MGMT 305
PLSC 300 Special Topics in Political Science (when relevant, subject to approval)	1-4	
PLSC 306 Comparative Politics - offered spring	4	
PLSC 367 Contemporary Political Philosophy- offered fall	4	
PLSC 315 Theories of Global Politics	4	
PLSC 415 Issues in Global Politics- offered spring	4	PLSC 315
Total Hours for the Spanish-Latin American Studies Major	48-54	

Recommended Plan of Study for Spanish-Latin American Studies

	Fall Semester	Spring Semester
Year 1	SPAN 110	SPAN 111 HIST/WCFAH
Year 2	SPAN 220 or SPAN 221	SPAN 221 or 301*
Year 3	SPAN 320 HIST 340 or other elective SPAN 301* SPAN 300S, A Semester Abroad, or SPAN 440 Internship	SPAN 330 SPAN 321 HIST 341 or other elective SPAN 301* SPAN 300S, A Semester Abroad, or SPAN 440 Internship
Year 4	SPAN 300S, A Semester Abroad, or SPAN 440 Internship	SPAN 470 SPAN 321 or SPAN 331 SPAN elective

*Two May Term (SPAN 300) classes worth a total of 4 hours may substitute for Spanish 301.

Spanish Minor

To fulfill the requirements for an academic minor in Spanish, students must complete a minimum of 20 credit hours in Spanish coursework.

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	12	
SPAN 111 Spanish II	4	
SPAN 220 Spanish III	4	SPAN 111
SPAN 310 Spanish IV: Intro to Spanish Literature	4	SPAN 220
II. Electives	8	
SPAN 110 or any upper division SPAN courses		
Total Hours for the Spanish Minor	20	

Study Abroad/Internship Abroad/Domestic Internship

Spanish/Latin American Studies majors must complete one of the following:

- A semester of study abroad (12 credits)
- · An internship abroad (8 credits)
- A domestic internship (8 credits)
- 12 credit hours of on-campus Spanish courses

One of these options must be completed during the Fall, Spring, or Summer semester of their junior year or the Fall semester of their senior year. Study or internship abroad should be completed at an international university or organization (internship) and should be decided upon in consultation between the student and major advisor. A domestic internship should take place in any Hispanic/Latino community throughout the United States.

When a student does not take a study abroad course, an internship abroad, or a domestic internship—usually natives from Spanish-speaking countries and, in some cases, non-natives who have spent a significant amount of time in a Spanish-speaking country (for example, those who have completed one to two years of Spanish-speaking volunteer work abroad)—the student must satisfy the 12 credits by completing upper division Spanish courses on campus, and should consult the program chair or advisor for further clarification.

Additional Academic Requirements and Procedures for the Spanish Programs

Students with prior study or knowledge of Spanish should take a Spanish placement exam such as the CLEP, or consult with program faculty, before registering for a Spanish class. This will help determine whether the student should register for Spanish 110, 111, 220, or higher.

Only students who have never studied Spanish before may register for Spanish 110. This class does not count toward a Spanish major or minor, but it does count toward graduation hours or the world language requirement of other majors.

Native Fluency—Students demonstrating native fluency in a language other than English may request and receive, upon interview and documentation, a waiver for the world language requirement in their major (see individual major advisor for verification and procedure). No transcript credit is awarded for this major waiver. Also, the total number of required hours for Westminster graduation must be fulfilled.

Transfer Credit—A maximum of 12 credit hours of transfer credit or credit by examination may be applied toward a Spanish major or minor. Transfer hours exceeding this limit may be applied toward total hours for graduation, if needed (consult your major audit form for verification). For Spanish majors, the 12 hour maximum does not affect or overlap with their Semester Study Abroad requirement (12 hours).

Examinations

Credit by exam is not counted as in-residence credit.

CLEP Exam—the CLEP exam is a national standardized test of listening/reading comprehension in Spanish. Westminster students successfully passing this exam receive up to a maximum of 12 semester credit hours equivalent to SPAN 110, 111, and 220.

Note: Only partial CLEP credit may be applied toward a language major or minor if the student is applying transfer or other credit toward the same major or minor.

External World Language Exam—up to 12 credit hours may be obtained by successfully passing an accredited world language exam administered by another institution, (e.g., University of Utah, Brigham Young University; contact the individual institution directly for world language exam information). It is the student's responsibility to pre-approve transfer credit with the Registrar's Office. External tests generally cover the equivalent of the first year and one-half of the second year of a language.

Challenge Examination—students who have an advanced academic ability in a subject matter may "challenge" a course for credit. (See Catalog listing and/ or Language faculty for details.

Advanced Placement (AP)—Students who received a score of 3 or higher on the Spanish AP exam earn 6 credit hours, distributed as 4 credit hours for SPAN 110 (applicable to world language requirements of the student's major but not to a Spanish major or minor), and 2 hours of 100T credit (applicable to the total hours needed to graduate but not to a Spanish major or minor).

Students with AP credit are encouraged to continue their Spanish studies at Westminster and should register for Spanish 111 or higher. Please direct placement questions to your academic advisor or Spanish faculty member. Questions regarding Spanish exams and placement should be directed to a Spanish faculty member.

THEATRE

Faculty

- Jared Larkin
- Spencer Potter (Co-Chair)
- Stephanie Stroud (Co-Chair)

Mission

The mission of the Department of Theatre at Westminster University is to use the University's core values to frame the way theatre work is conceived and practiced:

- Impassioned teaching and learning
- Respect for diversity
- · Collaboration and teamwork
- Personal and social responsibility
- High ethical standards

The Department of Theatre members is dedicated to creating the academic and artistic contexts that help students: 1) *master* various aspects of theatrical work (i.e., design, directing, dramaturgy, new work development, and performance); 2) *investigate* how theatre, culture, and community have intersected, are linked in the present, and could be connected in the future; and, 3) *cultivate* healthy habits that facilitate powerful theatre work.

Program Goals

- Students will demonstrate the skills needed to produce creative, expressive, and distinctive work—on the page, on-stage, and backstage.
- Students will model the leadership skills necessary to facilitate the collaborative, ensemble environment that is the hallmark of great theatre.
- Students will demonstrate the ability to think, write, and speak self-reflectively, analytically and fluently, about their own and other's work.
- Students will examine their personal, social, and global understanding through engagement in an intentionally diverse array of theatre work—on campus, in site-specific settings, and in community contexts.
- Students will explore the connection between physical, mental, and emotional health and successful theatre work.

Degree Outcomes

- Performance BFAs select and prepare appropriate repertoire to market themselves, audition for future theatre work, and/or successfully pursue graduate studies.
- Technical theatre BFAs will design and produce effective portfolios that showcase their knowledge, skills, and personal qualities and help them secure future theatre work and/or successfully pursue graduate studies.
- BA theatre majors will demonstrate the core artistic and academic competencies that inform all theatre studies and incorporate the knowledge, skills, and personal qualities of focused theatre work in their choice of career paths.
- All theatre students will appreciate the value of authentic inquiry, the need for risk taking, and the lifelong skills of effective self-evaluation, active listening, spontaneous generosity, and insatiable curiosity.

Objectives

The Theatre program offers a Bachelor of Fine Arts (BFA) degree with emphases in performance and technical theatre. It also offers a generalist Theatre major (BA) and a Theatre minor. Our programs prepare students for entry into the professional theatre, graduate studies, educational theatre, applied theatre and a wide array of other fields wherein theatre intersects with various arts, business, and industry. All degree programs are designed to provide students with practical production experience in order to enable their unique creative expression in the theatre. To this end, students will gain a broad understanding of

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theatre history, theory, and practice and they will, depending on their chosen emphasis, train rigorously in specific areas such as auditioning, acting technique, stage lighting, costuming, management, and design.

Program Requirements

Students must maintain a minimum 2.5 GPA in courses required for the major and/or minor. With the approval of the instructor, students may repeat specified courses for additional credit.

Students must meet the university-wide graduation requirements in addition to the Theatre major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Advising note: students pursuing only the BA will need to take additional elective credits within or outside of the major in order to reach the university wide graduation requirements of 124 Total hours and 30 upper division hours.

Ensemble Requirement: All theatre majors are expected to participate in departmental productions as performers, designers, and/or technicians. To fulfill this requirement. Students must take at east 1 cr. each year of THTR 328 for a role or assignment they fulfill during the year. The department makes its best effort to ensure an equitable distribution of roles and assignments, however, students may need to take an assignment or role that isn't their first preference e.g. in the rare occasion a student might not be cast, they can fulfill the THTR 328 requirement by serving on the run crew of a production.

Bachelor of Arts in Theatre Degree (BA)

The bachelor of arts in theatre is a generalist degree which explores a wide range of studies in performance, production, and design, allowing students to incorporate the knowledge, skills, and personal qualities acquired in their chosen career path. There is no audition/interview requirement for this track; students declare the major. The bachelor of arts degree does not have any emphases. Students will take courses covering the core artistic and academic competencies that inform all theatre studies and will choose some elective courses based on their interests.

Requirement Description	Credit Hours	Prerequisites	
I. World Language Requirement	8		
Complete eight credits in a single world language.	Complete eight credits in a single world language.		
II. Required Lower Division Courses	28		
THTR 101 Devised Theatre	3		
THTR 145 Stagecraft I and Lab	2		
THTR 180 Acting I	3		
THTR 190 The Holistic Artist: a Guide to Creative Wellness	3		
THTR 220 Stage Management	3		
THTR 229 Costumes and Makeup	4		
THTR 255 Script Analysis	3		
THTR 260 Visual Storytelling Onstage	3		
THTR 280 Acting II	4	THTR 180	
III. Required Upper Division Courses	18-30		
THTR 328 Theatre Workshop- take at east 1 cr each year as credit for production roles and assignments	4-16		
THTR 358 Global Stages and Stories: Theatre of Ancient Civilizations through the 20th Century	3		
THTR 359 American Stages and Stories: 18th Century-Contemporary American Theatre Movements	3	THTR 358	
THTR 450 Dramatic Theory	4	THTR 358 and THTR 359	
THTR 470 Directing	4	THTR 220	
NOTE: THTR 450 and THTR 470 are both required courses for the Theatre BA. Students pursuing only the Theatre BA will choose to focus on THTR 450 or THTR 470 as their senior capstone course based upon their area of interest. Students focusing on dramatic literature, theory, and criticism should			

Requirement Description	Credit Hours	Prerequisites
focus on THTR 450. Students focusing on directing, stage management, or education should focus on THTR 470 for their senior capstone course.		
NOTE: To reach the 124 credits required to graduate, students may need to take elective courses.		
Total Hours for the BA in Theatre	54-66	

Recommended Plan of Study for BA Theatre

	Fall Semester	Spring Semester
Year 1	THTR 101 Devised Theatre (3) THTR 180 Acting I (3) Take at least 1 cr. THTR 328 in Fall or Spring for production roles and assignments. World Language 1	THTR 229 Costumes and Makeup (4) THTR 190 Holistic Artist (3) World Language 2
Year 2	THTR 145 Stagecraft 1 (2) THTR 260 Visual Story Telling Onstage (3) THTR 280 Acting II (4) Take at least 1 cr. THTR 328 in Fall or Spring for production roles and assignments.	THTR 220 Stage Management (3) THTR 255 Script Analysis (3)
Year 3	THTR 358 Global Stages and Stories (3) Any elective Any elective Take at least 1 cr. THTR 328 in Fall or Spring for production roles and assignments.	THTR 359 American Stages and Stories (3) Any elective Any elective
Year 4	THTR 450 Dramatic Theory (4) Any elective Any elective Take at least 1 cr. THTR 328 in Fall or Spring for production roles and assignments.	THTR 470 Directing (4) Any elective Any elective

Bachelor of Fine Arts in Theatre with Acting Emphasis

Enrollment restricted to admitted BFA Acting Students.

BFA program requirements must be completed in addition to the BA Theatre requirements.

Students may declare an area of emphasis and apply for acceptance into the Bachelor of Fine Arts in Theatre program in the spring of their sophomore year. For the Technical Theatre emphasis, students must submit a portfolio; for the Performance emphasis, students must audition. The portfolio/audition should contain examples of work that the student has produced while at Westminster University. The application is due to the program chair by February 15. The BFA admissions committee will review the portfolios/auditions and notify students prior to registration for the Fall Semester. Students who are not accepted may continue working as academic majors and reapply the following year. Transfer students will apply in their second semester and follow the same process for acceptance to the BFA track, except that the portfolio may contain work produced while studying at other institutions of higher education.

Requirement Description	Credit Hours	Prerequisites
I. BA Theatre Requirements	54-66	
Complete the BA Theatre Requirements		
II. BFA Theatre - Acting Required Courses	21	Declared BFA Acting
THTR 303 Performance Studies	1 credit, take twice for 2 credits	
THTR 371 Movement l	2	
THTR 372 Movement II	2	THTR 371
THTR 379 Voice for the Actor I	4	
THTR 380 Acting III	4	BFA standing or instructor permission.
THTR 479 Voice for the Actor II	3	THTR 379

Requirement Description	Credit Hours	Prerequisites
THTR 480 Acting IV	4	THTR 380
III. Capstone	4	
THTR 461 Auditioning	4	BFA standing or instructor permission
Total Hours for the BFA in Theatre—Acting Emphasis	79-91	

Recommended Plan of Study for BFA Theatre with Acting Emphasis

	Fall Semester	Spring Semester
Year 1	THTR 101 Devised Theatre (3) THTR 180 Acting I (3) World Language 1 Take at least 1 cr. THTR 328 in Fall or Spring for production roles and assignments.	THTR 229 Costumes and Makeup (4) THTR 190 Holistic Artist (3) World Language 2
Year 2	THTR 145 Stagecraft 1 (2) THTR 260 Visual Story Telling Onstage (3) THTR 280 Acting II (4) Take at least 1 cr. THTR 328 in Fall or Spring for production roles and assignments.	THTR 379 Voice for the Actor (4) THTR 385 Musical Theatre (3)
Year 3	THTR 303 Performance Studies (1) THTR 358 Global Stages and Stories (3) THTR 371 Movement I (2) Take at least 1 cr. THTR 328 in Fall or Spring for production roles and assignments.	THTR 359 American Stages and Stories (3) THTR 372 Movement II (2) THTR 380 Acting III (3) THTR 461 Auditioning (4)
Year 4	THTR 450 Dramatic Theory (4) THTR 480 Acting IV (4) THTR 479 Voice for the Actor II (3) Take at least 1 cr. THTR 328 in Fall or Spring for production roles and assignments.	THTR 303 Performance Studies (1) THTR 470 Directing (4)

Bachelor of Fine Arts in Theatre with Production and Design Emphasis

Enrollment restricted to admitted BFA Production and Design Students.

BFA program requirements must be completed in addition to the BA Theatre requirements.

Requirement Description	Credit Hours	Prerequisites
I. BA Theatre Requirements	54-66	
Complete the BA Theatre Requirements		
II. BFA Theatre - Production & Design Required Courses	17	
THTR 160 Computer Aided Drafting for Theatre	3	
THTR 225 Stage Lighting I	3	THTR 145
THTR 275 Period Styles	3	
THTR 262 Scenographic Methods	4	THTR 260
THTR 362 Scenographic Techniques	4	THTR 260
III. Electives	6	
Take six credits from the following:		
THTR 318 Advanced Stage Makeup	3	THTR 229
THTR 325 Lighting Design II	3	THTR 145

Requirement Description	Credit Hours	Prerequisites
THTR 335 Scenic Painting and Properties	3	THTR 145
THTR 329 Costumes Stagecraft II	3	THTR 229
THTR 345 Stagecraft II	3	THTR 145
IV. Capstone	4	
THTR 400 Theatre Design Studio*Take Senior Year	4	THTR 260
Total Hours for the BFA in Theatre—Production and Design Emphasis	81-93	

Recommended Plan of Study for BFA in Theatre with Production and Design Emphasis

	Fall Semester	Spring Semester
Year 1	THTR 101 Devised Theatre (3) THTR 180 Acting I (3) World Language 1 Take at least 1 cr. THTR 328 in Fall or Spring for production roles and assignments	THTR 229 Costumes and Makeup (4) THTR 190 Holistic Artist (3) World Language 2
Year 2	THTR 145 Stagecraft 1 (2) THTR 260 Visual Story Telling Onstage (3) THTR 280 Acting II (4) Take at least 1 cr. THTR 328 in Fall or Spring for production roles and assignments.	Starting even catalog year: THTR 160 Computer Aided Drafting (3) THTR 220 Stage Management (3) THTR 255 Script Analysis (3) Starting odd catalog year: THTR 220 Stage Management (3) THTR 255 Script Analysis (3)
Year 3	Starting even catalog year: THTR 262 Scenographic Methods (4) THTR 275 Period Styles (3) THTR 358 Global Stages and Stories (3) Starting odd catalog year: THTR 225 Lighting Design I (3) THTR 275 Period Styles (3) THTR 358 Global Stages and Stories (3)	Starting even catalog year: THTR 362 Scenographic Techniques(4) THTR 359 American Stages and Stories BFA Elective Starting odd catalog year: THTR 160 Computer Aided Drafting (3) THTR 362 Scenographic Techniques (4) THTR 3559 American Stages and Stories (3)
Year 4	Starting even catalog year: THTR 225 Lighting Design I (3) THTR 450 Dramatic Theory (4) BFA Elective Starting odd catalog year: THTR 450 Dramatic Theory (4) BFA Elective	Starting odd or even catalog year: THTR 400 Theatre Design Studio (4) THTR 470 Directing (4) BFA Elective

Theatre Arts Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	12	
THTR 145 Stagecraft I	2	
THTR 180 Acting I	3	
THTR 255 Script Analysis	3	
THTR 229 Costumes and Makeup	4	
II. Electives	12	
Take at least twelve credits from the following:		
THTR 190 The Holistic Artist: a Guide to Creative Wellness	3	
THTR 220 Stage Management	3	

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Requirement Description	Credit Hours	Prerequisites
THTR 260 Visual Storytelling Onstage	3	
THTR 280 Acting II	4	THTR 180
THTR 303 Performance Studies	1	
THTR 335 Scenic Painting and Properties	3	THTR 145
THTR 345 Stagecraft II	3	THTR 145
THTR 358 Global Stages and Stories: Theatre of Ancient Civilizations through the 20th Century	3	
THTR 359 American Stages and Stories: 18th Century-Contemporary American Theatre Movements	3	THTR 358
THTR 450 Dramatic Theory	4	THTR 358
THTR 470 Directing	4	THTR 220, THTR 358, and THTR 359
Total Hours for the Minor in Theatre	24	

Recommended Plan of Study for Theatre Arts Minor

	Fall Semester	Spring Semester
Year 1	THTR 180 Acting I (3)	THTR 229 Costumes and Makeup (4)
Year 2	THTR 145 Stagecraft I and Lab (2)	THTR 255 Script Analysis (3)
Year 3	Any elective Any elective	Any elective Any elective
Year 4	Any elective Any elective	Any elective Any elective

Musical Theatre Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	10-15	
THTR 180 Acting I	3	
THTR 255 or Script Analysis or	3	
MUSC 104 Fundamentals of Music	2	
MUSC 191 Private Voice Lessons (Voice I)	1	
MUSC 192 Voice 2	1	
THTR 280 Acting II	4	
THTR 385 or Musical Theatre or	3	
MUSC 365 Opera Studio	1	
Take four credits of the following:		
MUSC 121 Class Piano	2	
MUSC 181 Aural Skills I	2	
THTR 229 Costumes and Makeup	4	
Take two of the following: 4		
DANCE 130 Modern/Contemporary 1	4	
DANCE 135 Ballet 1	4	
DANCE 190 World Dance	4	

Requirement Description	Credit Hours	Prerequisites
DANCE 380 Vernacular Forms of Dance	4	
Total Hours for Minor in Musical Theatre	24-27	

Recommended Plan of Study for Musical Theatre Minor

	Fall Semester	Spring Semester
Year 1	THTR 180 Acting I (3) and/or MUSC 104 Music Fundamentals (2)	THTR 280 Acting II (2) and/or THTR 229 Costumes and Makeup (4)
Year 2	MUSC 191 Private Voice I (1) and/or MUSC 181 Aural Skills I	THTR 255 Script Analysis (3)
Year 3	MUSC 192 Private Voice II (1)	THTR 385 Musical Theatre (3) or MUSC 365 Opera Studio (1)
Year 4	DANCE Elective	DANCE Elective