Advising Handbook

2025-2026

Table of Contents

Allegheny College Advising Mission Statement **4**
Advising Resources **6**
Contact Information 6
Academic Links 6
Areas of Study 7
Academic Divisions - Majors/Minors Fall 2025 Chart 9
Major/Minor Combinations 25/26 10
Navigating Advising Situations 11
Program Guidelines and Requirements **12**
Advising@Allegheny Course Sequence 12
American Sign Language (ASL) Sequence 15
Arabic 16
Art, Science, and Innovation 17
Astronomy 22
Biochemistry 23
Biology 28
Black Studies 35
Business 36
Chemistry 40
Communication and Media 43
Community and Justice Studies 45
Computer Science 49
Cooperative Programs (3+ programs) 55
Engineering 55
Health Professions 55
Policy, Technology, Analytics, and Management 55
Psychology 56
Dance and Movement Studies 57
Data Science 59
Economics 65
Education Studies 69
Energy and Society 71
Engineering Guidelines 72
Engineering Physics (EPHYS) 74
English 78
Environmental Science & Sustainability 84
Filmmaking 89
French 91
General Curricular Requirements 92

German 94
Global Health Studies 95
Graduate Education Preferred and Priority Admissions Agreements 102
Business 102
Business Analysis 102
Healthcare Informatics 102
Health Professions 102
Nursing 103
Psychology 103
Sustainability 103
Sustainability Management 103
Teacher Preparation 103
Healthcare Management 104
History 108
Industrial Design 112
Informatics 114
International Studies 120
Jewish Studies 123
Journalism & Documentary Storytelling 125
Latin American and Caribbean Studies 127
Mathematics 128
Microcredentials 134
2 Dimensional Design 134
3 Dimensional Design 134
Accounting 134
AI-Driven Content Creation 135
Art History Fundamentals 135
Artificial Intelligence Engineering 135
Content Creation 135
Core Skills for Mental Health Professions 135
Cybersecurity Risk Analysis 136
Data Analysis 136
Data-driven Health Informatics 136
Editing and Publishing 136
Embedded Systems Engineering 136
Filmmaking & Media Production 137
Finance 137
Foundations of Industrial Design 137
Game Design 137
German Language and Culture 137
Health Anatomy 138

Investing 138
The Multilingual Mindset 138
Product Development in the Internet of Things 138
Programming with Web Technologies 138
Psychological Research Design and Analysis 139
Site Reliability Engineering 139
Software Development 139
Software Performance Engineering 139
Tax Fundamentals 139
Middle East and North African Studies 141
Music 142
Neuroscience 146
Philosophy 152
Physics 157
Political Science 162
Pre-Health Guidelines 166
Pre-Legal Guidelines 169
Pre-Professional Advising 170
Psychology 171
Public Humanities 174
Religion in American Life 177
Software Engineering 179
Spanish 185
Speaking and Writing Seminars (SWS) 187
Studio Art 190
Theatre 194
Women's, Gender & Sexuality Studies 197
World Languages and Cultures 201

Allegheny College Advising Mission Statement

Advising at Allegheny College holistically empowers students to seek coherence and meaning in their liberal arts educational experience, to develop agency in their individual educational journeys, and to build lasting connections to support their growth and success.

Holistic advising is one of the hallmarks of an Allegheny education and a tangible demonstration of the close interactions we celebrate as an institution. Advising is a multi-faceted, professional activity based on research, standards, and best practices. Effective advising reinforces and extends the education students acquire in the classroom, helping them to take advantage of curricular and co-curricular opportunities, understand academic requirements and college policies, and prepare for career planning and lifelong learning. Research has also demonstrated that successful advising can significantly improve student achievement, retention, and satisfaction.

While students are responsible for all decisions that they make at Allegheny and should understand that not all things are possible and that choices carry with them consequences, advisors are responsible for encouraging students to take ownership of their education and providing them with the guidance and structure to do so. For student and advisor learning outcomes for the Allegheny advising program, see Faculty Advising at Allegheny College in the Faculty Handbook.

Allegheny students have an evolving advising team during their time on campus:

- The Admissions team is often their first contact with Allegheny, providing students with initial information about the Allegheny curriculum and our support structure
- The Academic Success team welcomes them to the community, schedules their first-semester courses, and provides onboarding and orientation support
- Their Exploratory Advisor helps them acclimate to college life and learn how to be successful students through pre-registration meetings in the spring before they matriculate, the Advising@Allegheny courses in fall and spring of their first year, and regular individual advising conversations until they declare their major
- Their Major Advisor(s) help them navigate their academic programs through both curricular and co-curricular opportunities
- Their Senior Project Advisor works with them to complete their Senior Comprehensive Project
- Other faculty and staff form part of their support network, including instructors, coaches, Class Deans, and staff from an array of other offices across campus.

In an effort to support the Allegheny advising network, this handbook brings together information on major and minor program requirements, contact information for campus offices, and quick links to other useful resources. This document is a work in progress, evolving from year to year to best meet the needs of advisors at Allegheny and represent the most current information about our programs and resources. We welcome your feedback and advice on how to refine this resource.

Co-directors of Academic Advising

Ian Binnington
Dean for the Student Experience
Professor of History

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Interim Associate Provost
Professor of Mathematics

Advising Resources

Contact Information

- Athletics
  https://alleghenygators.com/
- Center for Career and Professional Development
  sites.allegheny.edu/career-and-professional-development/
- Center for Political Participation
  sites.allegheny.edu/academics/academic-centers/center-for-political-participation/
- Class Deans
  sites.allegheny.edu/maytum-center-student-success/class-deans/
- Community Engagement
  sites.allegheny.edu/community-engagement/
- Community Impact Hub
  sites.allegheny.edu/academics/community-engaged-learning/
- Financial Aid
  https://allegheny.edu/cost-and-aid/financial-aid/
- Financial Services
  https://allegheny.edu/cost-and-aid/
- Global Education
  sites.allegheny.edu/global-education/
- Health and Wellbeing
  https://allegheny.edu/student-life/health-and-wellbeing/
- International Student Services
  sites.allegheny.edu/international-student-services/
- Maytum Center for Academic Success
  https://sites.allegheny.edu/maytum-center-student-success/
- Residence Life
  sites.allegheny.edu/residence-life/
- Spiritual, Religious and Personal Wellbeing
  sites.allegheny.edu/spiritual-religious-personal-wellbeing/
- Student Accessibility and Support Services
  https://allegheny.edu/academics/student-success/accessibility-and-support-services/
- Student Leadership & Engagement
  sites.allegheny.edu/student-life/student-leadership/
- Student Life
  sites.allegheny.edu/student-life/
- URSCA (Undergraduate Research, Scholarship, and Creative Activities)
  sites.allegheny.edu/undergraduate-research-scholarship-creative-activities/

Academic Links

- Academic Calendar *(expanded calendar located below semester calendar)*
  sites.allegheny.edu/registrar/academic-calendars/
- Academic Divisions - Majors/Minors Fall 2025 (chart) (see below)
- Adding/Dropping/Waitlisting Classes
  https://catalog.allegheny.edu/content.php?catoid=54&navoid=2165#adding-and-dropping-courses
- AP Credit
  sites.allegheny.edu/registrar/ap-policy/
- Areas of Study (see below)
- Change of Academic Bulletin
  sites.allegheny.edu/registrar/registrar-forms/
- Declaring a Major/Minor
  sites.allegheny.edu/registrar/registrar-forms/
  Final Exam Schedule (located under semester, beside expanded calendar)
- site.allegheny.edu/registrar/academic-calendars/
- Major/Minor Combinations 25/26 (table) (see below)
- Progress (formerly Degree Audit)
  sites.allegheny.edu/registrar/degree-audit/
- Registrar Forms Online
  sites.allegheny.edu/registrar/registrar-forms/
- Registration Schedule
  sites.allegheny.edu/registrar/registration-schedule/
- Transfer Credit
  sites.allegheny.edu/registrar/transfer/

Areas of Study

The academic programs of the College are classified in areas of study as follows: Interdisciplinary Studies; Language, Literature, and Culture; Mathematics and Natural Sciences; Social and Behavioral Science; Values and Societies; and Visual and Performing Arts. Programs in each area use similar or overlapping methodologies and approaches to learning and creating knowledge.

Interdisciplinary Studies

- Black Studies (Minor)
- Community and Justice Studies (Major and Minor)
- Data Studies (Major and Minor)
- Education Studies (Minor)
- Energy and Society (Minor)
- Environmental Science and Sustainability (Major)
- Global Health Studies (Major and Minor)
- Healthcare Management (Major)
- Informatics (Major and Minor)
- International Studies (Major)
- Jewish Studies (Minor)

- Latin American and Caribbean Studies (Minor)
- Middle East and North African Studies (Minor)
- Public Humanities (Major and Minor)
- Women's, Gender & Sexuality Studies (Major and Minor)

Languages, Literature, and Culture

- Arabic (Minor)
- English--Emphasis on Creative Writing (Major)
- English--Emphasis on Literature (Major)
- English (Minor)
- Environmental Writing (Minor)
- French (Minor)
- German (Minor)
- Journalism and Documentary Storytelling (Minor)
- Spanish (Major and Minor)
- Writing (Minor)

Mathematics and Natural Sciences

- Astronomy (Minor)
- Biochemistry (Major)
- Biology (Major and Minor)
- Chemistry (Major and Minor)
- Computer Science (Major and Minor)
- Engineering Physics (Major)
- Mathematics (Major and Minor)
- Neuroscience (Major)
- Physics (Major and Minor)
- Software Engineering (Major and MInor)

Social and Behavioral Science

- Business (Major)
- Economics (Major and Minor)
- Political Science (Major and Minor)
- Psychology (Major and Minor)

Values and Societies

- Communication and Media (Major and Minor)
- History (Major and Minor)
- Philosophy (Major and Minor)
- Religion in American Life (Minor)

Visual and Performing Arts

- Art, Science, and Innovation (Major and Minor)
- Dance and Movement Studies (Minor)

- Filmmaking (Minor)
- Industrial Design (Major)
- Music (Minor)
- Studio Art (Major and Minor)
- Theatre (Major and Minor)

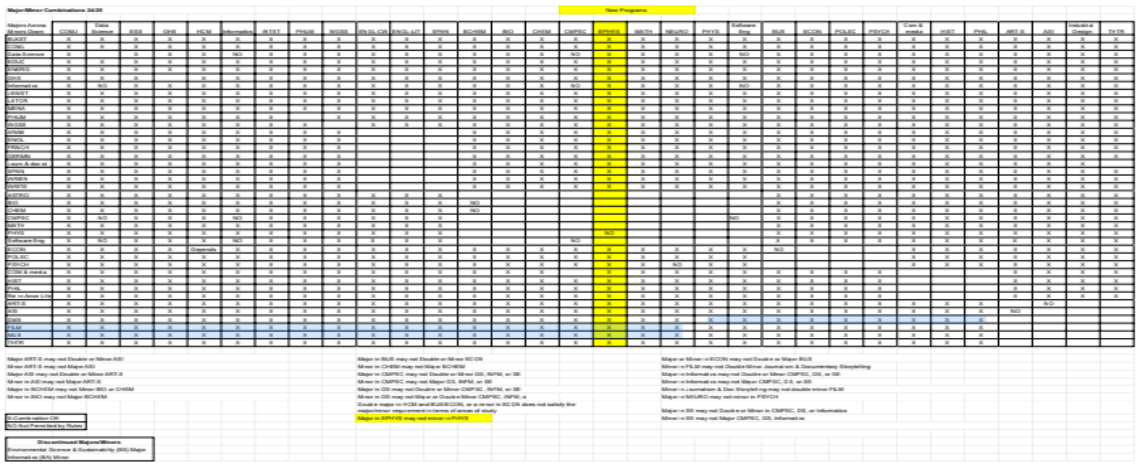
Academic Divisions - Majors/Minors Fall 2025 Chart

Interdisciplinary Studies	**Languages, Literature, & Culture**	**Mathematics & Natural Sciences**	**Social & Behavioral Science**	**Vaules & Societies**	**Visual & Performing Arts**
Majors	**Majors**	**Majors**	**Majors**	**Majors**	**Majors**
Community & Justice Studies (BA)	English–Emphasis in Creative Writing (BA)	Biochemistry (BS)	Business (BA)	Communication & Media (BA)	Art, Science, & Innovation (BA)
Data Science (BS)	English-Emphasis in Literature (BA)	Biology (BS)	Economics (BA)	History (BA)	Industrial Design (BA)
Environmental Science & Sustainability (BA)	Spanish (BA)	Chemistry (BS)	Political Science (BA)	Philosophy (BA)	Studio Art (BA)
Global Health Studies (BA)		Computer Science (BS)	Psychology (BA or BS)		Theatre (BA)
Healthcare Management (BS)		Engineering Physics (BS)			
Informatics (BS)		Mathematics (BS)			
International Studies (BA)		Neuroscience (BS)			
Public Humanities (BA)		Physics (BS)			
Women's, Gender & Sexuality Studies (BA)		Software Engineering (BS)			
Minor	**Minor**	**Minor**	**Minor**	**Minor**	**Minor**
Black Studies	Arabic	Astronomy	Economics	Communication & Media	Art, Science, & Innovation
Community & Justice Studies	English	Biology	Political Science	History	Dance & Movement Studies

Data Science	Environmental Writing	Chemistry	Psychology	Philosophy	Filmmaking
Education Studies	French	Computer Science		Religion in American Life	Music
Energy & Society	German	Mathematics			Studio Art
Global Health Studies	Journalism & Documentary Storytelling	Physics			Theatre
Informatics	Spanish	Software Engineering			
Jewish Studies	Writing				
Latin American & Caribbean Studies					
Middle East & North African Studies					
Public Humanities					
Women's, Gender & Sexuality Studies					
New Fall 2025		**New Microcredentials**			
		Accounting	Game Design	Software Performance Engineering	
Deleted		Artificial Intelligence Engineering	German Language & Culture	Tax Fundamentals	
Environmental Science & Sustainability (BS Major)		Core Skills for Mental Health Professions	Investing		
Informatics (BA Major)		Cybersecurity Risk Analysis	Multilingual Mindset		
Curatorial Studies Microcredential		Embedded Systems Engineering	Psychological Research Design & Analysis		
		Finance	Site Reliability Engineering		

Major/Minor Combinations 25/26

Major/Minor Combinations 25/26



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Navigating Advising Situations

- Advising Resources (page in the Faculty Resources site)
  https://sites.allegheny.edu/faculty-resources/advising-resources/
- Honor Code
  https://allegheny.edu/academics/student-success/honor-program/
- Student Leaves and Withdrawals
  https://sites.allegheny.edu/maytum-center-student-success/leave-of-absence-and-withdrawals/
- Student Consulting/Tutoring
  https://allegheny.edu/academics/student-success/tutoring/
- Writing and Speaking Consultants
  https://sites.allegheny.edu/maytum-center-student-success/writing-speech/

Program Guidelines and Requirements

Advising@Allegheny Course Sequence

Updated August 4, 2025

This sequence consists of two courses, LS 120 (Advising@Allegheny I) and LS 121 (Advising@Allegheny II), that first year students take in the fall and spring of their first year, respectively. Each course meets on Fridays, 11:00-11:50am, and all sections cover the same content from week to week, although the delivery varies by instructor. Students also complete the same assignments in all sections and final grades are assigned using a common system. The course content and structure is managed by the Advising Leadership Team, led by one of the Associate Provosts and the Dean for the Student Experience, and is delivered via a Canvas blueprint course. Each semester, feedback is gathered from students and instructors and adjustments are made based on this feedback.

The courses are taught by faculty, staff, and administrators, and these instructors serve as the academic advisors, called Exploratory Advisors (EAs), for each student in their class until the student declares their major(s). The Exploratory Advisors' primary role is to support their students during the transition to college life and help them to develop effective habits and skills and build a network of support at Allegheny. EAs meet initially with each of their students during the spring or early summer before the student matriculates to gather information about the student's interests and academic background. This information is used during First Year Course Registration (FYCR) to assign each student a schedule for the fall.

Advising@Allegheny Program Outcomes

Students who successfully complete the LS 120/121 sequence will be able to:

- (PLO1) Articulate educational and early career goals through the iterative formation of an educational plan that integrates curricular and co-curricular experiences
- (PLO2) Use campus resources to support achievement of educational goals
- (PLO3) Assume responsibility for meeting academic requirements
- (PLO4) Recognize how engagement with multiple ways of knowing contributes to a liberal arts education
- (PLO5) Develop a support system that includes peers, faculty, staff, and/or community members as advisors.

LS 120 Course Information

LS 120 Advising@Allegheny I (1 credit)

A learning experience to get the most out of an Allegheny College education. Students will learn how to navigate College as a system, articulate their reasons for attending College and how that informs their path forward, and to build relationships across campus that will benefit them. Students will also explore the habits critical to academic, professional, and personal success, including time management and the importance of personal responsibility in learning. This course is designed for students in their first semester at Allegheny College. Must be taken Credit/No Credit.

Course Learning Outcomes: Students who successfully complete LS 120 will be able to:

- (CLO1) Develop skills and habits that support academic and professional success
- (CLO2) Identify campus resources through engagement in academic, career, and/or professional development programs
- (CLO3) Identify mechanisms to develop support networks within an advising ecosystem.

Fall 2025 Course Outline

	Topic	Details	CLOs
1	Campus Systems	Gator Hub, Canvas, Gmail, Google Drive	CLO2, CLO3
2	Revisiting the Honor Code	Using AI responsibly	CLO1
3	College Study Strategies	Strategies for note-taking, studying, time and task management, and reading	CLO1
4	Blue & Gold Alumni Sessions	Meeting with an alum to find out about their experiences at Allegheny and after graduation	CLO2
5	Academic Resources	See this table	CLO2
6	Using The Library	Using AggreGator and databases, services offered by library staff	CLO2
7	Engaging on Campus and Beyond	Using resources to address common first year student concerns and situations	CLO2
8	Career & Professional Development	Addressing common career myths, setting up a Handshake profile	CLO2
9	Academic Planning	The structure of the Allegheny curriculum, how to select spring courses	CLO1
10	Preparing for the End of the Semester	Identify remaining deadlines and make a plan through finals week	CLO1, CLO2
11	Fall Individual Advising Meetings	Preregistration meetings	CLO3
12	Making the Most of Summer	NACE Career Readiness Competencies, how summer work can support goals	CLO2
13	Wrapping Up the Semester	Preview LS 121	CLO1, CLO2, CLO3

LS 121 Course Information

LS 121 Advising@Allegheny II (1 credit)

A learning experience to continue working on getting the most out of an Allegheny College education. Students will think about the intersection of the professional and the academic and to organize their goals

into a coherent plan for success. Students will also explore ways to critically assess their academic strengths and weaknesses and to learn from their experiences. Students will continue to explore the habits critical to academic, professional, and personal success. This course is designed for students in their second semester at Allegheny College. Must be taken Credit/No Credit.

Course Learning Outcomes: Students who successfully complete LS 121 will be able to:

- (CLO1) Articulate the value of Allegheny's educational frameworks
- (CLO2) Articulate an educational plan that advances academic goals
- (CLO3) Demonstrate use of campus resources through engagement in academic, career, and/or professional development programs
- (CLO4) Identify mechanisms to develop support networks within an advising ecosystem.

Spring 2026 Course Outline (Tentative)

1	Reflect, Plan, and Explore	CLO2
2	Developing Support Networks	CLO4
3	Graduation Requirements	CLO1, CLO2
4	NACE Career Readiness Competencies	CLO1, CLO3
5	Teamwork and Leadership	CLO3
6	Framing Your Resume	CLO1, CLO3
7	Resume Workshop	CLO1, CLO3
8	Exploring Majors and Minors	CLO1, CLO2
9	Major/Minor Fair	CLO1, CLO2
10	Preparing for Registration	CLO1, CLO2
11	Spring Individual Advising Meetings	CLO4
12	Four Year Planning	CLO1, CLO2
13	Looking Back and Looking Ahead	CLO1, CLO2

LS 202 Course Information
LS 202 Transfer Advising@Allegheny (1 credit)
A learning experience to get the most out of an Allegheny College education. Students will learn how to navigate College as a system, build relationships across campus that will benefit them, and identify resources that will bolster their academic, professional, and personal success. Students will also develop an educational plan in light of their unique path as a transfer student. This course is designed for transfer students in their first semester at Allegheny College. This will be taught as a seven-week course. Must be taken Credit/No Credit.

Course Learning Outcomes: Students who successfully complete LS 202 will be able to:

- (CLO1) Identify campus resources through engagement in academic, career, and/or professional development programs
- (CLO2) Articulate an educational plan that advances academic goals

Course Outline

	Topics	CLO
1	Campus Systems and Resources	CLO1
2	Revisiting the Honor Code	CLO1
3	Using The Library	CLO1
4	Blue & Gold Alumni Sessions	CLO1
5	Academic Planning	CLO1, CLO2
6	Engaging on Campus and Beyond	CLO1

American Sign Language (ASL) Sequence

World Languages and Cultures General Information
Academic Bulletin
Area of Study: Languages, Literature, and Culture
Programs: Courses Only
Department: World Languages and Cultures

No minor available, but internship opportunities may be available on request.

	Fall	Spring
Sophomore-Senior Year	WLC 100	WLC 200

Arabic

Arabic
World Languages and Cultures General Information
Academic Bulletin

Area of Study: Languages, Literature, and Culture
Programs: Minor
Department: World Languages and Cultures

Arabic Minor

The Minor requires completing a total of 24 semester hours of coursework, including 16 semester hours of coursework in the Arabic language, one 100-level culture course taught in English, and one course at the 300 level. *See also the Middle East and North Africa Studies Minor in the "Interdivisional Minor Program" section.*

Here is an example schedule for a student who minors in Arabic beginning in Arabic 110

	1st Semester	2nd Semester	Either Semester
First-Year	SWS 105 Arabic 110	Arabic 120	*Most students should take SWS 105 in the Fall* Arabic 130 (may be taken at at any time in the student's Allegheny career; is designed as in introduction
Sophomore	Arabic 215	Arabic 225	
Junior			A 300-level culture course (in English, and maya be taken at any time in the student's Alleghenycareer, a course related to the MENA region encouraged but not required); study abroad in Jordan or Morocco also encouraged
Senior			

Art, Science, and Innovation

Art. Science, and Innovation
Academic Bulletin

Area of Study: Visual and Performing Arts
Programs: Major and Minor
Major/Minor Exclusions:
A student majoring in Art, Science, and Innovation may not double major or minor in Studio Art.
A student minoring in Art, Science, and Innovation may not major in Studio Art.

Suggested Schedule for Art, Science, and Innovation majors:

4-Year Plan	1st Semester	2nd Semester	Either Semester
First Year	SWS 105 Science 1	Science 2	*Most students should take SWS 105 in the Fall* ART 187 Begin science sequence Take elective from Core B (Theoretical Approaches)
Sophomore	Science 3	ART 250 Science 4	ART 287 or 387 Begin Art Practices module Continue science sequence
Junior		ART 580 (Junior Seminar)	ART 287 or 387 Complete Art Practices module
Senior			ART 620 (Senior Project)

Comments:

1. There is a significant science component to this major (4 courses) that should be started early in the student's program, because science classes are often hierarchical and strictly sequenced. The science module is intended to be highly customizable by the student. See the example Pathways below, but students should consult with a major advisor as soon as possible to consider meaningful choices.
2. ART 580 Junior Seminar is now offered both Fall and Spring semesters. It is recommended that students plan to take ART 580 in the spring of their junior year, but it is possible to do the Junior

Seminar / Senior Project sequence in the Fall and Spring of the senior year. Prerequisite is two studio art classes and an Art History course.

Sample Pathways in ASI

In selecting Science Electives, students might consider the examples of the following pathways through a focus area. Students should consult with their advisors to create a group of courses most relevant to their interests.

Optics -Different from the OpArt movement, an optics pathway would guide the understanding of the physics behind perception.

- MATH 140 - Calculus I with Precalculus, Part I
- PHYS 102 - Fundamentals of Physics II (prereq: MATH 140)
- PHYS 350 - Physical Optics
- PSYCH 150 - Sensation & Perception

Generative Art - Generative art is produced by developing an autonomous system that independently determines its own features.

- CMPSC 101 - Data Structures
- CMPSC 301 - Data Science (prereq: CMPSC 101 or CMPSC 102)
- CMPSC 303 - Artificial Intelligence (prereq: CMPSC 101 or CMPSC 102)
- CMPSC 304 - Robotic Agents (prereq: CMPSC 101 or CMPSC 102)

Mathematical Art - Art is often based in geometry and mathematical principles. In 3 courses, students establish the foundation of mathematical concepts

- MATH 151 - Calculus I
- MATH 152 - Calculus II (prereq: MATH 151)
- MATH 205 - Foundations of Mathematics (prereq: MATH 152)
- Option: MATH 320 Linear Algebra (prereq: MATH 205), which can provide an approach toward the basics of computer animation, or MATH 350 Geometry (prereq: MATH 205).

Bio Art - Bioart is concerned with the ethics of established and emerging biological science principles and how they are culturally understood and used.

- CHEM 120 - Chemical Concepts I
- BIO 220 - Organismal Physiology and Ecology
- BIO 221 - Genetics, Development and Evolution
- FSBIO 201 - Investigative Approaches in Biology

Integrated Sustainability - Evolving out of environmental art, Integrated Sustainability is an example of a solutions-based art practice geared towards finding practical applications for environmental challenges that engage with the imagination of the public.

- ENVSC 110 - Introduction to Environmental Science
- ENVSC 250 - Environmental Education
- ENVSC 352 - Environmental Justice
- ENVSC 380 - Climate Energy Policy (pereq: ENVSC 110)

Visualization/Augmented Reality/Virtual Reality - Artists working with AR/VR and visualization are established leaders in the computer science field working on developing new potential uses and aesthetics for the technology, from public engagement of data, to wellness applications for VR and AR.

- CMPSC 100 - Computational Expression
- CMPSC 101 - Data Structures
- CMPSC 301 - Data Science (prereq: CMPSC 101 or CMPSC 102) OR PSYCH 150 - Sensation & Perception
- CMPSC 303 - Artificial Intelligence (prereq: CMPSC 101 ir /cnosc 192)

Computer Art - Artists working within computer art work as web developers, graphic designers, UX/UI (User Experience/ User Interface) designers, and technologists.

- CMPSC 100 - Computational Expression
- CMPSC 101 - Data Structures
- CMPSC 102 - Discrete Structures
- CMPSC 302 - Web Design (prereq:CMPSC 104)

Art, Science, and Innovation: Transfer Guidelines

Suggested pathway for **Art, Science, and Innovation** majors who transfer and expect to complete in 3 years. Ideally, these students will already have completed two of their required four science courses and have taken a course in studio art.

3-Year Plan	**1st Semester**	**2nd Semester**	**Either Semester**
Sophomore	ART 187 Science 3	ART 250 Science 4	Take 2nd course in Art Practices module. Continue science sequence
Junior		ART 580, Jr Seminar	ART 287 or 387 Take elective from Core B (Theoretical Approaches)
Senior			ART 287 or 387 ART 620, Senior Project

Issues to Consider:

1. ASI is an interdisciplinary program. Although it is situated primarily in the Art Department, many requirements are fulfilled by courses in other departments. Students must meet the expectations of each separate department when transferring those disciplinary courses to count in an ASI major or minor.
2. A 3-credit transfer course with a similar description and course content will be accepted to fulfill a 4-credit requirement in the Art Department. However, the transfer student must still overall meet the minimum number of credit hours required, which might necessitate taking or transferring elective courses in Art.
3. Art Appreciation or similar courses will transfer as elective credits in Art but cannot be used to fulfill any requirement of a major or minor in the Art Department, including ASI.
4. Pathways through the ASI program are highly individualized according to the student's future plans. Please consult with an ASI advisor to determine which options are best.
5. Students are most likely to transfer the courses below:

In order to fulfill the	**...the course must cover**
A. Introductory	
ART 187, Electronic and Intermedia Art	Introduction to 2-D design concepts using digital technology (Adobe Creative Suite or similar), with time-based/ video manipulation desirable.
ART 250, Contemporary Strategies in Art	Aspects of art made in the later 20th and 21st centuries, in either survey or seminar format.
B. Theoretical Approaches	
	Please examine the criteria for equivalent courses in communication theory, philosophy, environmental justice, women's studies, sexuality, and gender studies.
C. Art Practices	

Art	Any introductory course in an art medium might be transferred (Drawing, Ceramics, Painting, Photography, or Sculpture). A student may enroll in the 200-level Intermediate classes in a medium for which they are transferring coursework at an introductory level. Upon request, a student might fulfill this requirement with a transfer course in a medium not offered at Allegheny College, for example, lithography. Approval requires examination of the syllabus and portfolio of work made for the class.
ART 480, Professional Practices	A portfolio course that includes creation of a personal website, grant writing, and consideration of career options.
Media Production	See transfer requirements in Film and Digital Storytelling, Theatre production, or Multimedia journalism.
D. Science Electives	
	See transfer requirements in Biology, Chemistry, Computer Science, Environmental Science and Sustainability, Geology, Mathematics, Neuroscience, Psychology, or Physics.

Astronomy

Astronomy
Academic Bulletin

Area of Study: Mathematics and Natural Sciences
Programs: Minor
Department: Physics

Astronomy Minors:

Students planning on minoring in Astronomy must take a minimum of 22 credits.
Requirements: MATH 141 or MATH 151, PHYS 101 or PHYS 110, PHYS 121 (or, with permission of department, PHYS 021), PHYS 320, PHYS 420, and one of the following courses or course sequences: CHEM 120 and CHEM 122, GEO 110, PHIL 230, PHYS 102 or any higher-level Physics course. Physics 101 and 110 are offered fall semester every year and Physics 102 and 120 are offered spring semester every year. It is strongly recommended that Physics minors complete Physics 110 and 120 by the end of the sophomore year, or 101 and 102 by the end of the first-semester junior year. Transfer credit is accepted for PHYS 101 and 102 if the course transferred is an introductory course with Calculus as a prerequisite or corequisite.

Biochemistry

Biochemistry
Academic Bulletin

Area of Study: Mathematics and Natural Sciences
Program: Major
Major/Minor Exclusions: A student majoring in Biochemistry may not minor in Biology or Chemistry

General Principles to consider in advising a student for Biochemistry:

The Biochemistry major is a highly hierarchical major and requires 61 credits (17 or 18 courses) to complete. This means that students interested in a Biochemistry major will need to begin the foundational Mathematics and Natural Sciences courses early in their career. The General Chemistry, Introductory Biology and Introductory Mathematics sequences are all pre-requisites to intermediate and advanced courses in the major and, as such, should be completed by the end of fall semester in a student's sophomore year.

Students who come in with weaker academic backgrounds should be cognizant of the need to complete prerequisites in a timely manner so that they do not end up with schedules in their junior and senior year that are unrealistic or impossible to schedule due to time constraints and conflicting course times.

In general, a student who does not feel ready to take more than one Natural Science course a semester is not likely to be able to handle three or four such courses in their Junior and Senior years. A 17 course major equates to an average of just over two courses each of eight semesters. **Thus, advising a student to take only one NS course a semester during the first and second year makes it difficult for them to complete the Biochemistry major in four years.** Some students may need to consider taking summer courses for transfer, or planning for an extra semester or year to complete the major. This is especially true if a student takes only one NS course each of their first 2-3 semesters or if they start the courses for the major later than the sophomore year. Students should be made aware of this reality if they are advised to limit their NS courses to one per semester in the first three to four semesters.

If a student expresses an interest in a Junior Year abroad experience, it is very important that they speak with a member of the Biochemistry program faculty for guidance during their first year or early in their sophomore year. Depending on the experience they wish to pursue, it may be important for them to consider taking their Jr. Seminar in the sophomore year. In addition, any courses they hope to transfer from the Jr. Year abroad experience to count towards the Major will need to be carefully selected with the guidance of a Biochemistry faculty member.

Finally, any student considering a Biochemistry major is strongly encouraged to meet with a member of the Biochemistry faculty prior to scheduling classes for their Sophomore or Junior year.

Typical four-year road map

For students starting in Math 140

Year	Fall	Spring
1	MATH 140 BIO 220 or 221 SWS 105 *Most students should take SWS 105 in the Fall* Elective	MATH 141 BIO 221 or 220 Elective
2	CHEM 120 PHYS 110 MATH 152 Elective	BIO 250 or CHEM 284/285 (the later is fall semester only; switch with MATH 152 if taking the chem courses) CHEM 122 Elective Elective
3	CHEM 584 or BIO 580 CHEM 231 Elective Elective	CHEM 253 BIO 305 Chem Elective Elective
4	CHEM 242 BCHEM 600 Elective Elective	BIO Elective BCHEM 610 Elective Elective

For students starting in MATH 151

Year	Fall	Spring
1	MATH 151 CHEM 120 SWS 105 Elective	MATH 152 CHEM 122 BIO 220 or 221 SWS 205

2	CHEM 231 PHYS 110 BIO 220 or 221 Elective	CHEM 253 BIO 250 or CHEM 284/285 (the later is fall semester only; switch with BIO 220/221 if taking the chem courses) Elective Elective
3	CHEM 584 or BIO 580 CHEM 242 Elective Elective	BIO 305 BIO Elective Elective Elective
4	CHEM 242 BCHEM 600 Elective Elective	CHEM Elective BCHEM 610 Elective Elective

Timing of Courses

Most courses are taught each year and some are taught each semester as indicated in the following table. Staffing may necessitate changes to this schedule so Self-Service should be consulted for actual courses taught each semester

FALL	**SPRING**
CHEM 120: Chemical Concepts 1	
	CHEM 122: Chemical Concepts 2
PHYS 110: Concepts in Physics 1	PHYS 120: Concepts in Physics 2
PHYS 101: Introductory Physics 1	PHYS 102: Introductory Physics 2
BIO 220: Organismal Physiology and Ecology	
BIO 221: Genetics, Development and Evolution	

MATH 151 (or 140, 141): Calculus 1	
MATH 152: Calculus 2	
CHEM 231: Organic Chem 1	
CHEM 284/285	
BIO 250: Investigative Approaches in Biology	
CHEM 242: Physical Chemistry	
CHEM 253: Biochemistry	
BIO 305: Molecular Biology (usually offered 3 of 4 semesters)	
CHEM 43X, 45X, 46X: Special Topics (at least one per year, semester varies)	
CHEM 354: Metabolism	CHEM 362: Analytical Chemistry (alternating years)
BIO 310, 320, 325, and 360 (at least one each semester	
CHEM 584 (typically fall) and BIO 580 (select sections): Junior Seminar (at least one each semester)	

Important Considerations

- Placement into MATH 151 is a pre-requisite for starting CHEM 120 in the first semester. Although students do NOT need to co-enroll in math and chemistry, co-enrollment is HIGHLY recommended so that pre-requisite courses can be finished in a timely manner.
- When scheduling constraints necessitate it, PHYS 110 may be replaced by PHYS 101.
- In planning, students should pay attention to pre-requisites for core and upper-level courses.

- Major Advisor Selection: Students should ask a biochemistry faculty member, if they are familiar with them. Alternatively, a student could also ask the chair regarding biochemistry faculty availability.
- Junior Seminar: The Junior Seminar is taken Junior year, either Fall or Spring Semester. Junior Seminar assignments occur at the beginning of 4th semester (Sophomore Year Spring). A survey is filled out, and by March all declared Biochem Majors will be assigned to a JR Seminar. If students do not submit the survey, they will be randomly assigned to open sections. Please note: Students may or may not be assigned to their 1st choice.
- Students hoping to do a senior project with a Biology faculty member should enroll in a Biology Jr. Seminar course and those hoping to work with a Chemistry faculty member should enroll in the Chemistry Jr. Seminar.
- Senior Comp: Biochemistry Senior Comp sequencing is a 2 Semester Comp taken Fall and Spring. Senior Comp assignments occur at the beginning of the 6th semester (Junior Year Spring). A survey is filled out, and by March all declared Biochem Majors will be assigned to a Comp advisor. If students do not submit the survey, they will be randomly assigned to open sections. **Please note: Students may or may not be assigned to their 1st choice. Students are also** not permitted **to comp with a non-Biochemistry faculty.**
- Any student considering a Biochemistry major is strongly encouraged to meet with a member of the Biochemistry faculty prior to scheduling classes for their Sophomore or Junior year.

Biology

Biology
Academic Bulletin

Area of Study: Mathematics and Natural Sciences
Program: Major and Minor
Major/Minor Exclusions: A student minoring in Biology may not major in Biochemistry

When advising a student interested in the **Biology Major**, please note:

- Establishing an advisor: Students may ask any faculty member in the department. The department maintains a list with the number of advisees for each faculty member (*updated each semester), so if a faculty member does not have space for additional advisees, they can consult the list to suggest other faculty who may have capacity.
- Junior Seminar: Biology offers junior seminars both semesters, so students may take it in either fall or spring of their junior year. Students submit a preference form in the spring of their sophomore year and are then assigned to a junior seminar section based on information in the preference form.
- Senior Comp: Biology requires a two semester comp, fall and spring.

The **MAJOR** in Biology has six components:

- **Three introductory biology courses** (BIO 219 [Marine Biology] OR BIO 220 [Organismal Physiology and Ecology]; BIO 221 [Genetics, Development and Evolution]; and BIO 250 [Investigative Approaches in Biology]).
- **Three 300-level biology courses**, one in each of the three main areas of biology (Cellular/Molecular Biology, Organismal Biology/Physiology, and Population Biology/Ecology/Evolution).
- A **Junior Seminar** (BIO 580). Students submit a preference form in the spring of their sophomore year and are then assigned to a junior seminar section based on information in the preference form.
- A two-semester, six credit **Senior Project and Seminar** (BIO 600 and 610).
- **Required foundation courses in Mathematics and Chemistry**: MATH 151 (or 140 and141), CHEM 120 &122, and one semester of Organic Chemistry (CHEM 231).
- Two additional 4-credit courses chosen from **Biostatistics** (BIO 385), **Chemistry** (CHEM 200 or higher, except 231), **Computer Science** (100-level or higher), **Mathematics** (MATH 152 or higher), **and/or Physics** (PHYS 101 or higher). These courses should be chosen to complement career goals or specific curricular interests. Courses numbered 190 do not qualify. Any course cross-listed as Biology does not qualify.

The **MINOR** in Biology has three components:

- **Three introductory biology courses** (BIO 219/220, 221, and BIO 250)
- **Two 300-level biology courses**, at least **one** of which must be a laboratory course

- **Required foundation courses in Chemistry:** CHEM 120 & 122

The introductory Biology sequence does not require CHEM 120 as a prerequisite. However, completion of the major and minor **do** require successful completion of chemistry and math courses. Students may start Biology coursework prior to or concurrent with chemistry or math courses.

Students may complete BIO 220 and BIO 221 in any order. BIO 219 (Marine Biology) also may substitute for BIO 220 for interested students. However, BIO 219 is only offered in spring semester AND is not appropriate for students interested in post-graduate health professions.

Introductory students interested in majoring in Biology have (at least) four potential paths in the first semester.

1. **Chemistry and Math**
2. **Biology and Math**
3. **Biology and Chemistry**
4. **Biology, Chemistry, and Math**

The example pathways shown below have significant flexibility, within these general guidelines:

- Students who enroll in MATH 140 or CHEM 120 in their first semester and have difficulty in those courses should consider taking an "X" and enrolling in the CHEM 119 (Module B) course in the 2nd half of the semester.
- **CHEM 231 is offered ONLY in the fall semester. CHEM 120 is the only prerequisite for CHEM 231. CHEM 122 is offered only in spring semester but is not required for CHEM 231.**
- BIO 3XX upper-level courses can be distributed across semesters in any fashion once the introductory series (BIO 219/220, BIO 221, BIO 250) has been completed. Some BIO 3XX courses require completion of Chemistry prerequisites.

Notes for students interested in health professions

- These students should complete BIO 220, not BIO 219.
- Although placement in Mathematics 152 or higher satisfies the MATH 151 requirement for the Biology major, health professions students may need to take additional courses in Mathematics. See the Pre-Health Guidelines for further details.
- The three introductory Biology courses, MATH 151 (or 140 and 141), and CHEM 120 and 122 ideally should be completed by the end of the sophomore year. CHEM 231 should be completed sophomore or junior year. **Students and their advisors should be aware that CHEM 231 is only offered in the fall semester.**
- Students should complete CHEM 332 and 234 (Organic Chemistry II and lab), CHEM 253 (Biochemistry), and PHYS 101 and 102 (or PHYS 110 and 120).
    - PHYS 101: fall semesters only
    - PHYS 102: spring semester
    - PHYS 110: fall semester only
    - PHYS 120: spring semester only

- CHEM 332 & 234: spring semester only

Prerequisites for the Biology Major and Minor:

1. Placement into MATH 151, transfer or AP credit for MATH 151, completion of MATH 140 with a C or better, or completion of CHEM 119 with a C or better are required to enroll in CHEM 120.
2. Completion of CHEM 120 with a C or better is required to enroll in CHEM 231.
3. BIO 219/220 OR BIO 221 are prerequisites for BIO 250.
4. BIO 219/220, 221, **AND** BIO 250 are prerequisites for BIO 300-level courses.
5. BIO 219/220, 221, **AND** a grade of C or higher in BIO 250 are prerequisites for BIO 580.
6. BIO 580 is a prerequisite for BIO 600. BIO 600 is a prerequisite for BIO 610.

Pathway 1. Chemistry and Math
This pathway is recommended for students who place into MATH 151.

	Placed into MATH 151	
Year	Fall	Spring
1	SWS 105 *Most students should take SWS 105 in the Fall* MATH 151 CHEM 120[1,2]	BIO 219, 220, or 221 CHEM 122
2	BIO 220 or 221 or BIO 250 CHEM 231[3]	BIO 219, 220, 221, or BIO 250 Cognate
3	BIO 580[4] BIO 3XX Cognate	BIO 580[4] BIO 3XX
4	BIO 600 BIO 3XX	BIO 610

Pathway 2. Biology and Math
This pathway is most applicable for students with biology interests but a MATH 140 placement (as they cannot immediately start with CHEM 120 in the first semester, but can begin with biology coursework).

Students who place into MATH 151 also can proceed via this pathway.

	Placed into MATH 140		Placed into MATH 151	
Year	Fall	Spring	Fall	Spring
1	SWS 105 *Most students should take SWS 105 in the Fall* MATH 140 BIO 220 or 221	MATH 141 CHEM 120[1,2] BIO 219, 220, or 221	SWS 105 *Most students should take SWS 105 in the Fall* MATH 151 BIO 220 or 221	BIO 219, 200, or 221 CHEM 120[1,2]
2	CHEM 231 [3] BIO 250	BIO 3XX CHEM 122 Cognate	CHEM 231 [3] BIO 250	BIO 3XX CHEM 122 Cognate
3	BIO 3XX BIO 580[4]	BIO 580[4] BIO 3XX Cognate	BIO 580[4] BIO 3XX	BIO 580[4] BIO 3XX Cognate
4	BIO 600	BIO 610	BIO 600	BIO 610

Pathway 3. Biology and Chemistry
This pathway is only available to students placing into MATH 151 (as students with a MATH 140 placement cannot immediately start CHEM 120 in the first semester), but delays completion of MATH courses.

	Placed into MATH 151	
Year	Fall	Spring
1	SWS 105 *Most students should take SWS 105 in the Fall* BIO 220 or 221 CHEM 120[1,2]	BIO 219, 220, or 221

		CHEM 122 MATH 151
2	BIO 250 CHEM 231[3]	Cognate BIO 3XX
3	BIO 580[4] BIO 3XX Cognate	BIO 580[4] BIO 3XX
4	BIO 600	BIO 610

Pathway 4. Biology, Chemistry, and Math

This pathway is most appropriate for students with a very strong interest and demonstrated record of achievement in science and math courses (*e.g.,* placement into MATH 151 and/or transfer credit for two or more of the required courses).

Year	Fall	Spring
1	SWS 105 *Most students should take SWS 105 in the Fall* MATH 151 CHEM 120[1,2] BIO 200 or 221	BIO 219, 220, or 221 CHEM 122
2	BIO 250 CHEM 231[3]	BIO 3XX Cognate
3	BIO 580[4] BIO 3XX Cognate	BIO 580[4] BIO 3XX
4	BIO 600	BIO 610

[1] Placement into MATH 151, transfer or AP credit for MATH 151, completion of MATH 140 with a C or better, or completion of CHEM 119 with a C or better is required to enroll in CHEM 120.

[2] Prerequisite for CHEM 231.

[3] Only offered in Fall. Required for Biology major.
[4] Can be taken either semester of junior year.

Timing of Courses

Most courses are taught each year and some are taught each semester as indicated in the following table. Staffing may necessitte changes to this schedule so Self-Service should be consulted for specific courses taught each semester

Fall	Spring
CHEM 120, Chemical Concepts 1	
	CHEM 122, Chemical Concepts 2
PHYS 110, Concepts in Physics I	PHYS 120, Concepts in Physics 2
PHYS 101, Introductory Physics 1	PHYS 102, Introductory Physics 2
BIO 220, Organismal Physiology and Ecology	
	BIO 219, Marine Biology
BIO 221, Genetics, Development and Evolution	
MATH 151, Calculus 1	
MATH 152, Calculus 2	
CHEM 231, Organic Chemistry 1	CHEM 332, Organic Chemistry 2 CHEM 234, Organic Chemistry 2 Lab
BIO 250, Investigative Approaches in Biology	

CHEM 253, Biochemistry
BIO 3XX (at least three available each semester)
BIO 580, Junior Seminar (at least two each semester)

Important Considerations:

- Placement into MATH 151 is a prerequisite for starting in Chemistry 120 in the first semester.
- Any student considering a Biochemistry Major is strongly encouraged to meet with a member of the Biochemistry faculty prior to scheduling classes for their sophomore or junior year.

Black Studies

Black Studies
Academic Bulletin

Area of Study: Interdisciplinary Studies
Program: Minor

Black Studies (BLKST) is a 20-credit minor that requires the following and can best be constructed in consultation with the Black Studies Coordinator, Professor Alyssa Ribeiro:

Take all of the following required courses (12 credits)

- BLKST 100, *Introduction to Black Studies*
- BLKST 255/HIST 255, *African-American History to 1865* **OR** BLKST 257/HIST 257, *African-American History since 1865* (students can sign up under BLKST OR HIST)
- BLKST 300, *Critical Race Theory* OR BLKST 305, *Black Feminist Thought*

Choose two classes from the following list of electives (8 credits)

- BLKST 174/RELST 174 (students can sign up under BLKST **OR** RELST)
- BLKST 255
- BLKST 236/ENGL 236 (students can sign up under BLKST **OR** ENGL)
- BLKST 355/COMJ 355 (students can sign up under BLKST **OR** COMJ)
- BLKST 374/RELST 374 (students can sign up under BLKST **OR** RELST)
- COMJ 460
- ENVSC 352
- HIST 261, 269, 324, 345, 347, 563, 571, 572
- PHIL 210, 215, 275
- POLSC 303, 344, 482
- PSYCH 451
- RELST 146
- WGSS 210, 275, 310, 410

Additional courses may be approved on a semester-by-semester basis to count as electives toward the minor, please consult Professor Ribeiro with any questions.

Black Studies is an Interdisciplinary Studies minor and so may be combined with any other program on campus as a major.

If a student has questions, please refer them to:
Professor Alyssa Ribeiro
Arter Hall 214
814-332-4319
aribeiro@allegheny.edu (email preferred)

Business

Business
Academic Bulletin

Area of Study: Social and Behavioral Science
Program: Major
Major/Minor Exclusion: A student majoring in Business may not Double Major or Minor in Economics.

The Business major consists of a core of seven required courses (Introductory Microeconomics and Macroeconomics, either Microeconomic or Macroeconomic Theory, Statistics, Accounting, Intro to Business Management, and Applied Business Analysis), two elective courses (one at the 200 level and one and the 400 level), two interdisciplinary courses (one in Business Communications and one in Business Ethics/Reasoning), a seminar (taken 2nd semester junior or first semester senior year) and the senior project (taken the semester after the seminar).

The recommended schedule for most students is to take Introductory Microeconomics (ECON 100) and Introductory Macroeconomics (ECON 101) during their first year, followed by Economic Theory (ECON 200 or 201), Statistics (ECON 202), Accounting (ECON 285), and Intro to Business Management (ECON 240) beginning their sophomore year.

When advising a student interested in Business, please note:

- For historical reasons, almost all of the courses in the Department of Business and Economics are listed under the ECON tag. The only exceptions are BUS 529 and 530 (Business Internships), BUS 590 (Independent Study) and BUS 620 (Senior Project).
- The order in which ECON 100 and 101 are taken does not matter. The same is true for ECON 200 and 201.
- MATH 140 or 151 is a prerequisite to ECON 200, 201, and 202 and should be taken First year.
- Courses numbered 011 or 010 do not count towards the major or minor.
- ECON 190 and 226-286 are sophomore-level electives and can be taken without ECON 200-203.
- There is no minor in Business.
- Students cannot double major in Business and Economics.
- Major Advisor: Students can approach faculty directly about being their advisor. Students in search of advisors often approach the B&E department chair, who is happy to direct students to faculty who are most appropriate.
- Junior Seminar (students register for an open section) and Senior Comp: All Business majors take an ECON 570-580 level seminar in their first semester senior year or second semester junior year. They complete their senior projects following next semester. Most students do their senior project under the supervision of their seminar instructor. Since the junior seminar leads into the senior project, students are not permitted to take the seminar and senior project at the same time. Students planning on graduating in January should take the seminar the previous spring and the senior project in the fall semester.
- When choosing between the Economics and Business majors, students should consider the following:

- There is a lot of overlap between the two majors, so for most students, there is no bad choice. Generations of Allegheny alumni have gone into every field of business after majoring in Economics, English, Philosophy, Political Science, etc.
- The Economics major requires more of the core Economics courses. The Business major requires fewer core Economics courses, but more courses overall.
    - The Economics major requires 12 courses plus the math prerequisite. The Business major requires 13 courses plus the math prerequisite.
    - Business majors are only required to take one of the theory courses (ECON 200 or 201) and only the first Statistics course (ECON 202 but not ECON 203). Students who are interested in developing stronger quantitative skills, for example students who want to go into the fields of economics, finance, or data analytics, should consider majoring in economics.
    - The Business major requires more Business classes, such as Accounting, Intro to Business Management, Applied Business Analysis, Business Ethics, and Business Communication. Business majors are introduced to concepts in business-related fields, such as Human Resource Management, Accounting, and Marketing. Students who are interested in studying a broad set of business-related topics should consider majoring in business.

Sample Schedule for a **Business Major placing into MATH 151:**

	1st Semester	2nd Semester
First-Year	SWS 105 *Most students should take SWS 105 in the Fall* ECON 101 MATH 151	ECON 100
Sophomore	ECON 200 ECON 240	ECON 202 ECON 285
Junior	ECON 440 ECON 200-level Elective	ECON 400-level Elective Communications Elective
Senior	ECON 570-580 Ethics/Reasoning Elective	BUS 620

Sample Schedule for a **Business Major placing into MATH 151 and studying abroad:**

	1st Semester	2nd Semester
First-Year	SWS 105 *Most students should take SWS 105 in the Fall* ECON 100 MATH 151	ECON 101
Sophomore	ECON 200 ECON 240	ECON 202 ECON 285
Junior	Study Abroad. Transfer back one 200-level business elective plus three non-business classes.	ECON 440 Communications Elective
Senior	ECON 570-580 ECON 400-level Elective	BUS 620 Ethics/Reasoning Elective

Sample Schedule for a **Business Major starting late and placing into Math 140:**

	1st Semester	2nd Semester
First-Year	SWS 105 *Most students should take SWS 105 in the Fall*	
Sophomore	ECON 100 ECON 285 MATH 140	ECON 101 ECON 240 ECON 200
Junior	ECON 203 ECON 200-level Elective	ECON 440 Ethics/Reasoning Elective
Senior	ECON 400-level Elective ECON 570-580	BUS 620 Communications Elective

Information for Transfer Students

Suggested pathway of a **Business Major** for a transfer student planning to finish in 3 years. Students are expected to be transferring MATH 140 or 141, ECON 100, 101, and 285. See sample above for **Business Major starting late and placing into MATH 140** for another sample schedule.

	1st Semester	**2nd Semester**
Sophomore	ECON 200 or 201 ECON 202 ECON 226 ECON 200-level elective	ECON 240 PHIL 140 ENGL 114
Junior	Study Abroad. Transfer back one ECON 200-level and one ECON 400-level elective plus two non-economics classes	ECON 440
Senior	ECON 580	BUS 620

Suggested pathway of a **Business Major** for a transfer student planning to finish in 2 years. Students are expected to be transferring MATH 140 or 141, ECON 100, 101, 200 or 201, and 285 and one or more electives in Business or Economics.

	1st Semester	**2nd Semester**
Junior	ECON 240 PHIL 140	ECON 400-level elective ENGL 110
Senior	ECON 440 ECON 580	BUS 620

Chemistry

Chemistry
Academic Bulletin

Area of Study: Mathematics and Natural Sciences
Program: Major and Minor
Major/Minor Exclusions: A student minoring in Chemistry may not major in Biochemistry

General Principles to consider in advising a student for Chemistry:

Chemistry is a hierarchical major, so the key strategy for early advising is getting your advisee into CHEM 120 as soon as possible. Since the prerequisite for CHEM 120 is placement into MATH 151, a student's first-year schedule is often determined by the mathematics background. Below are some recommended first- and second-year schedules based on various scenarios.

Typical timeline
Assumptions: No AP CHEM transfer credit; placement into MATH 151.

Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring
CHEM 120	CHEM 122	CHEM 231	CHEM 332
MATH 151	MATH 152	CHEM 284/285 (2 cred)	CHEM 386 (3 cred)
minor or elective	minor or elective	PHYS 110	CHEM 222
SWS 105, minor, or elect	SWS 105, minor, or elect	SWS 205, minor, or elect	SWS 205, minor, or elect

Accelerated timeline I
Assumptions: AP CHEM exam score of 4 (transfer credit for CHEM 120); placement into MATH 151.

Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring
CHEM 284/285 (2 cred)	CHEM 122	CHEM 231	CHEM 332
MATH 151	MATH 152	PHYS 110	CHEM 386 (3 cred)
minor or elective	minor or elective	minor or elective	CHEM 222
SWS 105, minor, or elect	SWS 105, minor, or elect	SWS 205, minor or elect	SWS 205, minor or elect

Accelerated timeline II
Assumptions: AP CHEM exam score of 5 (transfer credit for CHEM 122); placement into MATH 151.

Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring
CHEM 231	CHEM 332	CHEM 242	CHEM 222
CHEM 284/285 (2 cred)	CHEM 386 (3 cred)	PHYS 110	CHEM 345
minor or elective	MATH 152	minor or elective	minor or elective
SWS 105, minor, or elect	SWS 105, minor, or elect	SWS 205, minor or elect	SWS 205, minor or elect

Delayed timeline
Assumptions: Placement into MATH 140. No CHEM transfer credit.

Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring
CHEM 119 (2 cred)	CHEM 120	CHEM 231	CHEM 332
MATH 140	MATH 141	CHEM 284/285 (2 cred)	CHEM 386 (3 cred)
minor or elective	minor or elective	PHYS 110	CHEM 122

SWS 105, minor, or elect	SWS 105, minor, or elect	MATH 152	SWS 205

Please note: All of these schedules involve more than one course in the Natural Sciences each semester. This is a necessary paradigm for a Chemistry major, and following these suggested schedules will make your advisee's life much more manageable in subsequent semesters.

Course offerings by semester (may change occasionally from sabbatics)

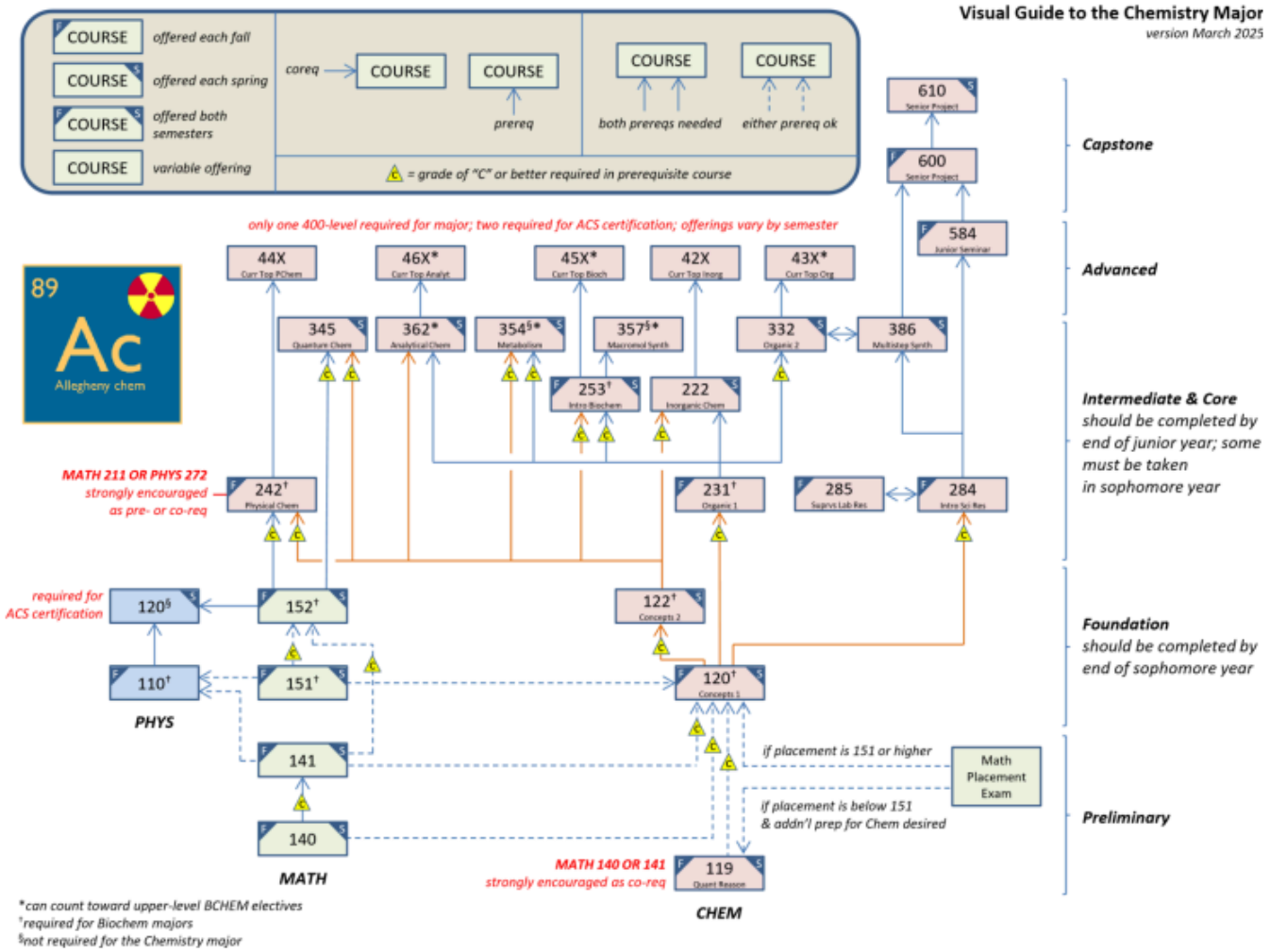
Course	Fall	Spring
CHEM 120	X	X
CHEM 122		X
CHEM 222		X
CHEM 231	X	
CHEM 242	X	
CHEM 253	X	X
CHEM 284/285	X	
CHEM 332		X
CHEM 345		X[1]
CHEM 362		X[1]
CHEM 386		X
CHEM 400-level	X[2]	X[2]
CHEM 584	X	
CHEM 600	X	
CHEM 610		X

[1]Offered in alternate years
[2]Topics rotate

Final thoughts. Please encourage your advisees interested in Chemistry and/or Biochemistry to contact someone in the Chemistry Department for guidance. We are happy to have conversations with students about academic planning.

Should your advisee be interested in both a Chemistry major and a semester abroad, please make sure they contact the Chair in the first year. Depending upon the particular semester abroad program, it may be necessary to take the Junior Seminar in the sophomore year, along with other considerations. The Chemistry Department is very supportive of international academic experience, but it requires careful planning early on.

A visual map of the Chemistry curriculum is included on the following page.


Visual Guide to the Chemistry Major
version March 2025
COURSE offered each fall
COURSE offered each spring
COURSE offered both semesters
COURSE variable offering
coreq
prereq
both prereqs needed
either prereq ok
C = grade of "C" or better required in prerequisite course
only one 400-level required for major; two required for ACS certification; offerings vary by semester
89 Ac Allegheny chem
MATH 211 OR PHYS 272 strongly encouraged as pre- or co-req
required for ACS certification
PHYS
MATH
CHEM
if placement is 151 or higher
if placement is below 151 & addn'l prep for Chem desired
Math Placement Exam
MATH 140 OR 141 strongly encouraged as co-req
Capstone
Advanced
Intermediate & Core should be completed by end of junior year; some must be taken in sophomore year
Foundation should be completed by end of sophomore year
Preliminary
*can count toward upper-level BCHEM electives
†required for Biochem majors
§not required for the Chemistry major

Communication and Media

Communication and Media
Academic Bulletin

Area of Study: Values & Societies
Programs: Major and Minor

Major suggested timeline (46 credits):

	Fall Semester	Spring Semester	Either Semester
Year 1 (8 credits)	COMM 125 or COMM 145	COMM 125 or COMM 145	*take 1 each semester*
Year 2 (12 credits)	200-level elective COMM 241	200-level elective	
Year 3 (12-16 credits)	200-level elective COMM 241	300-level elective COMM 581	
Year 4 (10-14 credits)	COMM 600 (2 cr) 300-level elective	COMM 610	300-level elective (year 3 or 4)

Junior Seminar & Senior Project Sequence: Students take the Jr. Seminar the spring semester of Year 3, at the end of which a Sr. Project advisor is assigned. Students work individually with their Sr. Project advisor during Year 4, crafting a proposal plus a major section in the fall and completing it in the spring.

200-level COMM Electives (3 courses for the Major or 2 courses for the Minor)

COMM 235, Advanced Public Speaking	COMM 256, Power, Politics & Communication
COMM 241, Media and Cultural Criticism	COMM 261, The Business of Media
COMM 251, Gender & Popular Culture	COMM 281, Integrated Marketing Communiction

300-level COMM Electives (3 courses for the Major or 2 courses for the Minor)

COMM 301, Advertising & Brand Storytelling	COMM 351, Media & Inequality
COMM 320, Media & Global Cultures	COMM 360, Communication Civic Engagement
COMM 331, Disease, Disability, & Difference in Popular Culture	COMM 376, Ethnographic Methods in Media & Cultural Studies
COMM 342, Digital Media & Technology	

Minor suggested timeline:

	Fall Semester	Spring Semester	Either Semester
Year 1 (4 credits)			COMM 125 or COMM 145
Year 2 (3 credits)	200-level elective	200-level elective	
Year 3 (4-8 credits)	300-level elective		Department elective
Year 4 (4-8 credits)	300-level elective		

Students interested in declaring a major in *Communication & Media* should speak directly wit a faculty member to be their advisor or speak with the Department Chair of Communication, Media, and Performace. Students interested in declaring a minor should speak with the Department Chair.

Community and Justice Studies

Community and Justice Studies
Academic Bulletin

Area of Study: Interdisciplinary Studies
Programs: Major and Minor

If a student expresses an interest in social justice, community service, activism, civic engagement, please bring the COMJ Program to their attention.

COMJ MAJOR NOTES

- 44 credits are required to complete the Major.
- The following courses are required for the Major:
    - COMJ 160 Foundations of Community and Justice Studies (4 credits)
    - COMJ 280: Power, Society and Social Change (4 credits) (usually offered Fall Semester only)
    - COMJ 460: Community Organizing and Civic Professionalism (4 credits)(usually offered Spring Semester only)
    - COMJ 560: COMJ Junior Seminar (4 credits)(usually offered Spring Semester only)
    - COMJ 620: COMJ Senior Comprehensive Project (4 credits)
- In addition to the core COMJ courses above, students must take one in each of the following categories:
    - Ethics (4 credits)
    - Place: a course grounded in our community (4 credits)
    - Political Participation and Democracy (4 credits)
- Finally, COMJ students take 3 courses within a self-designed theme. (12 credits)
- **Academic Advisor:** Students shold visit the COMJ website and request a meeting with a faculty member in COMJ. They can ask that faculty member if they would be able and willing to serve as their advisor.
- **Junior Seminar:** Students should plan to take their Junior Seminar in the Spring of their junior year. Students may register for an open section.
- **Senior Comp:** COMJ's Senior Comp is a one semester comp that can be taken in either the Fall or Spring of the senior year.

Suggested Schedule for **COMJ Majors** (for specific courses required for the Major, please see the *Academic Bulletin*):

	1st Semester (Fall)	2nd Semester (Spring)

First Year	SWS 105 *Most students should take SWS 105 in the Fall* COMJ 160 or Political Participation and Democracy elective (COMM 145 is a good one) or Ethics elective (PHIL 140 is a good one)	COMJ 160 or Political Participation and Democracy elective (COMM145 is a good one) or Ethics elective (PHIL 140 is a good one)
Sophomore	COMJ 280 Continue working on electives	COMJ 460 Continue working on Electives Identify COMJ theme
Junior	COMJ 280 Theme coursework Finish electives	COMJ 460 COMJ 560 Theme coursework Finish Electives
Senior	COMJ 620 Complete Theme coursework	COMJ 620

COMJ MINOR NOTES

24 credits are required to complete the Minor. The following courses are required for the Minor:

- COMJ 160 Foundations of Community and Justice Studies (4 credits)
- COMJ 280: Power, Society and Social Change (4 credits) (usually offered Fall Semester only)
- COMJ 460: Community Organizing and Civic Professionalism (4 credits)(usually offered Spring Semester only)
- COMJ Theme: Students take three courses (12 credits) in a self-designed theme; one of these courses should be a COMJ elective (e.g., COMJ 350 Black Meadville; COMJ 310 Multicultural Education)

Suggested Schedule for **COMJ Minor** (for specific courses required for the Minor, please see the *Academic Bulletin*):

	1st Semester (Fall)	2nd Semester (Spring)

First Year	SWS 105 *Most students should take SWS 105 in the Fall* COMJ 160	COMJ 160
Sophomore	COMJ 280	COMJ 460
Junior	COMJ 280 Theme coursework	COMJ 460 Theme coursework
Senior	Complete theme coursework	COMJ 460 Complete theme coursework

Information for Transfer Students

COMJ major in 3 years

- Ideally, a transfer student considering a COMJ major with one year of experience elsewhere will be able to transfer in courses that count for the Political Participation elective and/or the Ethics Requirement.

	Fall Semester	**Spring Semester**
Second Year	● COMJ 160	● COMJ 160 (if not already taken) ● Work on Political Participation, Ethics, and/or Place requirements ● Work with advisor to identify COMJ theme courses ● Work with advisor to identify service/organizing experience
Third Year	● COMJ 270 ● Work on theme courses ● Work on/finish Political Participation, Ethics, and Place requirements	● COMJ 560, Junior Seminar ● COMJ 460, Community Organizing ● Work on theme courses ● Finish Political Participation, Ethics, and Place requirements

Fourth Year	● COMJ 620 ● Continue working on/finish theme courses	● COMJ 620 (if not already taken) ● Continue working on/finish theme courses

Computer Science

Computer Science
Academic Bulletin

Area of Study: Mathematics and Natural Sciences
Programs: Major and Minor
Department: Department of Computer and Information Science
Exclusions:
A student majoring in Computer Science may not double major or minor in Data Science, Informatics or Software Engineering.
A student minoring in Computer Science may not major in Data Science, Informatics or Software Engineering.

Description
A program focusing on computational theory and the rich interplay between computer hardware and software. Students use scientific and design-centric approaches to solve computational problems and to create and evaluate realistic computer-based systems.

Careers

- Computer Scientist
- Hardware Engineer
- Computer Engineer
- Product Designer
- Systems Architect
- Systems Manager

Graduate Programs

- Computer Science
- Computer Engineering
- Product Design

Cooperative Programs

Our students have the opportunity to participate in one of the cooperative opportunities, including the Carnegie Mellon's (CMU's) Accelerated Master's Program in Information Systems Management or in Information Security Policy & Management, one of the 3-2 engineering programs and Health Informatics program at Chatham, and 4-1 program in Business Data Analytics with CMU's Tepper School of Business. Participation in such academic programs will likely require more careful planning of the student's program of study at Allegheny College, and students should work with their academic advisor to carefully craft their academic plan. More information about these programs is available at https://www.cis.allegheny.edu/teaching/cmu/

Finding an Academic Advisor

Students can approach any CIS faculty member to serve as their academic advisor.

Laptop Use in CIS Courses
All students are expected to use their own laptops during class and lab sessions in CIS courses. This setup reflects real-world practice and supports flexible classroom use.

To ensure your laptop meets course requirements, please review the department's approved laptop guidelines here: https://www.cs.allegheny.edu/resources/laptops

Students enrolled in any CIS course (regardless of major/minor status) may request a loaner laptop at any time during the semester using the Laptop Loan Request Form at the same link. A configured laptop will be prepared and made available for pick-up at the library.

Introductory Courses (CMPSC 100, 101, and 102)
All three introductory courses are required for a computer science major. CMPSC 100 and 101 are offered every semester. CMPSC 102 is offered once a year, every spring semester. Students with prior programming experience, specifically in Python, may reach out to the Chair (jjumadinova@allegheny.edu) to discuss the possibility of bypassing CMPSC 100 and enrolling in CMPSC 101..

Core Courses (CMPSC 200, CMPSC 202, CMPSC 204)
CMPSC 200, Computer Organization, and CMPSC 204, Theoretical Machines, are taught every fall semester. CMPSC 202 is offered every spring semester. All 200-level core courses have two 100-level CIS courses as a prerequisite and are thus not ideal courses for incoming students unless they have taken prior courses in Computer Science, but may be suitable for transfer students.

Junior Seminar and Senior Project courses
Junior Seminar, CMPSC 580, is always offered in the spring semester. Students must receive the instructor's permission to take the course before they can register for it on Self-Service. This course must be completed before students acn take the Senior Comprehensive Project course in their major. The first and second reader selection process for the Senior Comprehensive Project occurs in CMPSC 580. Students who plan to study away during the Spring semester of their Junior year should take CMPSC 580 in the spring semester of their Sophomore year.

Comprehensive Senior Project in all CIS majors is a two-semester project with CMPSC 600 course taken in the Fall semester and CMPSC 610 course taken in the Spring semester. In rare circumstances, faculty will consider an exception to the semesters in which these courses are taken, but no exception can be made to it being a two-semester project. Students who are double majoring should consider completing a joint, single comprehensive senior project by registering for DOUBL 600 and 610. Students completing a double project will work with their first reader to ensure their proposed project satisfies all requirements of their major in the CIS department.

Important Notes About the Major in Computer Science

- The major in Computer Science requires the successful completion of at least 48 semester hours in Computer Science. To graduate with a major in Computer Science, a student must have an earned GPA of at least 2.0 in the required Computer Science and other courses presented for the major. For the Computer Science major, at most one of CMPSC 100, 101 or 102 may be presented for the major on a Credit/No Credit grade basis.
- Students who are interested in Mathematics and/or planning to attend graduate school in Computer Science are strongly encouraged to take Math 151 early in their academic career. In consultation with their academic adviser, students who major in Computer Science may incorporate Mathematics courses into their study through the following substitutions:
    - Math 205 as a substitute for CMPSC 102
    - Math 320, Math 330, Math 345, or Math 370 as a substitute for one of the required specialization courses.

Additional, regularly updated, details about the Computer Science major are always available at: https://www.cs.allegheny.edu/teaching/bulletin/

Suggested Schedule for a Major in Computer Science

We do not recommend taking more than two CMPSC courses with a lab (with the exception of the Junior seminar and a Senior Project) in one semester.

	Fall Academic Semester	Spring Academic Semester
First Year	CMPSC 100	CMPSC 101 CMPSC 102 (spring only)
Sophomore	Two of the following: CMPSC 200 (fall only) CMPSC 204 (fall only) CMPSC Elective	Two of the following: CMPSC 202 CMPSC 406 (spring only) CMPSC Elective
Junior	Remaining course from CMPSC 200, CMPSC 204, or Elective	Remaining course from CMPSC 202, CMPSC 406, or Elective CMPSC 580 (spring only)
Senior	CMPSC 600	CMPSC 610

Students who declare a Computer Science major are encouraged to regularly meet with their academic adviser to verify that they are making suitable progress towards the completion of their degree requirements.

Minors in Computer Science

The minor in Computer Science requires the completion of at least 24 semester hours of coursework in Computer Science including:

- CMPSC 100 - Computational Expression AND
- CMPSC 102 - Discrete Structures

A minor must also include two courses from the Core (CMPSC 200, CMPSC 202, CMPSC 204, CMPSC 406) and two courses from Electives (CMPSC 300, CMPSC 304, CMPSC 400, CMPSC 403). Please remember that at most one of CMPSC 100 or 102 may be presented for the minor on a Credit/No Credit grade basis.

Information for Transfer Students

A maximum of 16 transfer credits may be counted toward the major. A maximum of 8 transfer credits may be counted toward the minor.

Three Year Computer Science Academic Plan

<table>
<tr><td colspan="3">Transferring after one year</td></tr>
<tr><td colspan="3">We expect students transferring to Allegheny after attending one year at another institution may have one introductory course; in some cases, they may also be transferring in a second or third introductory course and/or a Core or Elective course. We do not recommend taking more than two computer science courses with a lab (with the exception of the Junior Seminar and Senior Project) in one semester.</td></tr>
<tr><td></td><td>MAJORS</td><td>MINORS</td></tr>
<tr><td>Year 1 at Allegheny</td><td>● Complete remaining CMPSC 100-level introductory courses if necessary (majors need 3; CMPSC 100, 101, and 102
● Take 1-2 Core course(s)
● Take 1 Elective course</td><td>● Complete CMPSC 100-level introductory courses if necessary (minors need 2: CMPSC 100 and CMPSC 102
Take 1 additional Core or Elective course</td></tr>
</table>

Year 2 at Allegheny	• Take 2-3 **Core** courses • Take 1-2 **Elective** courses (majors need 2) • Enroll in **CMPSC 580**, Junior Seminar (spring semester only)	• Take 1-2 **Core** courses (minors need 2) • Take 1-2 **Elective** courses (minors need 2)
Year 3 at Allegheny	• Complete remaining **Core** or **Elective** courses if necessary • Take **CMPSC 600** in the fall semester • Take **CMPSC 610** in the spring semester • Take any remaining CMPSC courses to reach major requirement of **48 credits**.	• Complete remaining **Core** or **Elective** courses if necessary • Take any remaining CMPSC courses to reach minor requirement of **24 credits**

Two Year Computer Science Academic Plan

Transferring after two years		
We expect students transferring to Allegheny after attending two years at another institution may have at least two introductory courses and may also be transferring in a Core or Elective course. We do not recommend taking more than two computer science courses with a lab (with the exception of the Junior Seminar and Senior Project) in one semester		
	MAJORS	**MINORS**

Year 1 at Allegheny	• Complete remaining *CMPSC 100-level* introductory courses if necessary in the first semester (majors need 3: CMPSC 100, 101, and 102) • Take 2-3 **Core** courses • Optionally, take 1 **Elective** course • Enroll in **CMPSC 580**, Junior Seminar (spring semester only)	• Complete **CMPSC 100-level** introductory courses if necessary (minors need 2: CMPSC 100 and CMPSC 102) • Take 1-2 **Core** courses (minors need 2) • Optionally, take 1 **Elective** course (minors need 2)
Year 2 at Allegheny	• Take 1-2 **Core** courses • Take 1-2 **Elective** courses (majors need 2) • Take **CMPSC 600** in the fall semester • Take **CMPSC 610** in the spring semester • Take any remaining CMPSC courses to reach major requirement of **48 credits**	• Take 1-2 **Elective** courses (minors need 2) • Take any remaining **Core** courses if necessary • Take any remaining CMPSC courses to reach minor requirement of **24 credits**

Issues to consider for transfer credits:

- It is common for the similar sounding CMPSC courses to have varying degrees of "depth" across different institutions as evident by the varying or lack of prerequisites and topics covered. Transfer credit is accepted only for courses at approximately the same level of topic "depth" as the Allegheny College courses.
- All CMPSC courses use version control software (Git), continuous integration (GitHub Actions) and some courses beyond CMPSC 100 use a container-based system (Docker). Transfer students unfamiliar with these technologies should reach out to the Chair of the department to be placed in a short tutoring program with the department's Technical Leaders.
- All CMPSC introductory courses at Allegheny College are taught in Python programming language. Transfer students unfamiliar with Python should reach out to the Chair of the department to receive adequate support.

Cooperative Programs (3+ programs)

Contact: Roslyn Perry, Registrar/Associate Dean of Records rperry@allegheny.edu

Cooperative programs (sometimes called 3-3, 3-2, or 3-1 programs) with other educational institutions enable Allegheny students to acquire a solid liberal arts background while accelerating their progress toward professional training and certification. Allegheny has formal agreements with several institutions to offer cooperative programs in Health Professions, Engineering, Public Policy and Management, and Psychology. Most of these require the successful completion of 98 semester credit hours at Allegheny before beginning course work at the cooperating institution. Students who want to participate in cooperative programs must complete Allegheny's Graduation Requirements, including the minor outside the division of the major and the courses identified for an approved major; however, students who begin the cooperative program after three years of study at Allegheny are exempted from the requirement to complete a Senior Project. There are additional specific departmental course requirements for cooperative programs, and students should consult with the appropriate program liaison person about them when planning their course of study.

Satisfactory completion of the stated Allegheny requirements and the cooperating institution's requirements earns the student the bachelor's degree from Allegheny and the specified degree or certification from the cooperating institution.

Please contact Roslyn Perry (rperry@allegheny.edu) to set up a meeting to discuss cooperative program details.

Engineering

- Case Institute of Technology at Case Western Reserve University
- University of Pittsburgh School of Engineering
- Washington University School of Engineering

Health Professions

- Nursing (3+3, 3+4) with the Frances Payne Bolton School of Nursing of Case Western Reserve University
- Occupational Therapy (3+2) with Chatham University
- Physical Therapy (4+2) with Chatham University
- Physician Assistant Studies (3+2) with Chatham University
- Medicine (3+4, 4+4) with the Lake Erie College of Osteopathic Medicine (LECOM)
- Pharmacy (3+3, 3+4) with the Lake Erie College of Osteopathic Medicine (LECOM)
- Dentistry (4+4) with the Lake Erie College of Osteopathic Medicine (LECOM)

Policy, Technology, Analytics, and Management

- Heinz College of Information Technology Systems and Public Policy at Carnegie Mellon University

    - Master of Science in Public Policy and Management (MSPPM)
    - Master of Science in Health Care Analytics and Information Technology (MSHCAIAT)
    - Master of Arts Management (MAM)
    - Master of Entertainment Industry Management (MEIM)
    - Master of Information Systems Management (MISM)
    - Master of Science in Information Security Policy & Management (MSISPM)

Psychology

- Master of Science in Counseling Psychology (MSCP) (3+2) at Chatham University

Dance and Movement Studies

Dance and Movement Studies
Academic Bulletin

Area of Study: Visual & Performing Arts
Program: Minor

Minor suggested timeline (26 credits):

	Fall Semester	Spring Semester	Either Semester
First Year (6 credits)	DMS Practice Elective (2cr)	DMS Practice Elective (2cr)	DMS 100 (2cr) (DMS 380 can be taken as early as first semester. It is suggested for those students that are open to explore new ways of moving.)
Second Year (10 credits)	DMS 380[1]	DMS 470[2] or Interdisciplinary Elective	DMS Practice Elective (2cr)
Third Year (6 credits)	DMS Practice Elective (2cr)	DMS 470[2] or Interdisciplinary Elective	
Final Year (4 credits)	DMS Practice Elective (2cr)	DMS Practice Elective (2cr)	

[1]DMS 380 is scheduled to be offered every Fall. Many students take DMS 381 and DMS 382 in subsequent Fall semesters, beyond the minimum minor requirements
[2]DMS 470 is scheduled every other year.

DMS Practice Electives (12 credits, with at least 1 course from each column)
100- and 200-level courses earn 2 credits each, 300-level courses earn 1 credit each (except as noted)

Performance Dance Forms	Somatic Practices	Social Dance

DMS 101, 201, 301 Modern Dance	DMS 110, 210, 310 Yoga	DMS 107 Intro to Ballroom Dance
DMS 102, 202, 302 Ballet	DMS 114, 214, 314 (2credits) Asian Martial Arts	DMS 207 Ballroom: Latin/Rhythm
DMS 104, 204, 304 Jazz Dance	DMs 121, 122 Meditation	DMS 208 Ballroom: Smooth
DMS 105, 205, 305 Tap Dance		DMS 307 (2 credits) Ballroom III-Advanced

Interdisciplinary Electives (choose 1 course)

FILM 171, Filmmaking 1	INTDS 312, Neuroscience of Dance and Movement
THTR 150, Acting 1: Fundamentals	MUSIC 188, Fundamental Materials of Music
THTR 162, Costume Production (2 credits)	PSYCH 160, Life Span Developmental Psychology
THTR 163, Lighting Production (2 credits)	PSYCH 178, Positive Psychology

Students interested in declaring a minor in *Dance & Movement Studies* should speak with Betsy Gutschman (DMS faculty) or the Department Chair of Communicaiton, Media, and Performance.

Data Science

Data Science
Academic Bulletin

Area of Study: Interdisciplinary Studies
Programs: Major and Minor
Department: Department of Computer and Informaiton Science
Major/Minor Exclusions:
A student majoring in Data Science may not double major or minor in Computer Science, Informatics or Software Engineering.
A student minoring in Data Science may not major in Computer Science, Informatics or Software Engineering.

Description
A program focused on the integrated principles and methods used to analyze complex big data for decision-making, prediction, modeling, and data management. Students also explore the social and human contexts, along with the ethical implications of how data are collected, analyzed, and used across diverse fields.

Careers

- Data Scientist
- Data Analyst
- Data Engineer
- Technology Analyst
- Database Analyst
- Database Administrator

Graduate Programs and Certificates

- Data Science
- Data Analytics
- Data Engineering and Database Administration
- Certificates in related fields

Cooperative Programs

Our students have the opportunity to participate in one of the cooperative opportunities, including Carnegie Mellon's (CMU's) Accelerated Master's Program in Information Systems Management or in Information Security Policy & Management, one of the 3-2 engineering programs and Health Informatics program at Chatham, and 4-1 program in Business Data Analytics with CMU's Tepper School of Business. Participation in such academic programs will likely require more careful planning of the student's program of study at Allegheny College, and students should work with their academic advisor to

carefully craft their academic plan. More information about these programs is available at https://www.cis.allegheny.edu/teaching/cmu/

Finding an Academic Advisor

Students can approach any CIS faculty member to serve as their academic advisor.

Laptop Use in CIS Courses
All students are expected to use their own laptops during class and lab sessions in CIS courses. This setup reflects real-world practice and supports flexible classroom use.

To ensure your laptop meets course requirements, please review the department's approved laptop guidelines here: https://www.cs.allegheny.edu/resources/laptops

Students enrolled in any CIS course (regardless of major/minor status) may request a loaner laptop at any time during the semester using the Laptop Loan Request Form at the same link. A configured laptop will be prepared and made available for pick-up at the library.

Introductory Courses (CMPSC 100, 101, and 105)
All three introductory courses are required for a data science major. CMPSC 100 and CMPSC 101 are offered every semester. CMPSC 105 is offered once a year, every Spring semester. Students with prior programming experience, specifically in Python, may reach out to the Chair (jjumadinova@allegheny.edu) to discuss the possibility of bypassing CMPSC 100 and enrolling in CMPSC 101.

Core Courses
A number of Core courses offered through various departments are available every semester. While some of them do not have prerequisites, others do have prerequisites. The courses with prerequisites are unlikely to be suitable for incoming first-year students but could be appropriate for some incoming transfer students.

Junior Seminar and Senior Project courses

Junior Seminar, CMPSC 580, is always offered in the spring semester. Students must receive the instructor's permission to take the course before they can register for it directly on Self-Service. This course must be completed before students take the Senior Comprehensive Project course in their major. The first and second reader selection process for the Senior Comprehensive Project occurs in CMPSC 580. Students who plan to study away during the Spring semester of their Junior year should take CMPSC 580 in the spring semester of their Sophomore year.

Comprehensive Senior Project in all CIS majors is a two-semester project with DS 600 course taken in the Fall semester and DS 610 course taken in the Spring semester. In rare circumstances, faculty will consider an exception to the semesters in which these courses are taken, but no exception can be made to it being a two-semester project. Students who are double majoring should consider completing a joint, single

comprehensive senior project by registering for DOUBL 600 and 610. Students completing a double project will work with their first reader to ensure their proposed project satisfies all requirements of their major in the CIS department

Important Notes About the Major in Data Science

- The major in Data Science requires the successful completion of at least 48 semester hours. To graduate with a major in Data Science, a student must have an earned GPA of at least 2.0 in the required courses presented for the major. For the Data Science major, at most one of CMPSC 100, 101 or 105 may be presented for the major on a Credit/No Credit grade basis.
- With approval from an academic advisor, students may substitute a Junior Seminar in another department for CMPSC 580.

Additional, regularly updated, details about the Data Science major are always available at: https://www.cs.allegheny.edu/teaching/bulletin/

Suggested Schedule for a Major in Data Science

We do not recommend taking more than two CMPSC courses with a lab (with an exception of the Junior seminar) in one semester.

	Fall Academic Semester	Spring Academic Semester
First Year	CMPSC 100	CMPSC 101 CMPSC 105 (spring only)
Sophomore	CMPSC 301 (fall only) 1 additional **Core** course	CMPSC 405 (spring only) 1 additional **Core** course
Junior	Remaining **Core** course **Elective**	CMPSC 580
Senior	DS 600	DS 610

Students who declare a Data Science major are encouraged to regularly meet with their academic adviser to verify that they are making suitable progress towards the completion of their degree requirements.

Minors in Data Science

The minor in Data Science requires the completion of at least 24 semester hours of coursework including:

- CMPSC 100 - Computational Expression AND
- CMPSC 105 - Data Exploration AND
- CMPSC 301 - Data Science

A minor must also include one course from the Ethics Core, one course from Effective Communication Core, and one course from Statistics Core. Please remember that at most one of CMPSC 100 or 105 may be presented for the minor on a Credit/No Credit grade basis.

Information for Transfer Students

A maximum of 16 transfer credits may be counted toward the major. A maximum of 8 transfer credits may be counted toward the minor.

Three Year Data Science Academic Plan

<table>
<tr><td colspan="3">Transferring after one year</td></tr>
<tr><td colspan="3">We expect students transferring to Allegheny after attending one year at another institution may have one introductory course, in some cases, they may also be transferring in a second or third introductory course and/or a Core or Elective course. We do not recommend taking more than two CMPSC courses with a lab (with an exception of the Junior Seminar and Senior Project) in one semester.</td></tr>
<tr><td></td><td>MAJOR</td><td>MINOR</td></tr>
<tr><td>Year 1 at Allegheny</td><td>● Complete remaining CMPSC 100-level introductory courses if necessary (majors need 3: CMPSC 100, 101, and 105)
● Take 2-3 Core course(s)</td><td>● Complete CMPSC 100-level introductory course if necessary (minors need 2: CMPSC 100 and CMPSC 105)
● Take 1-2 Core courses</td></tr>
<tr><td>Year 2 at Allegheny</td><td>● Take 2-3 Core courses
● Optionally take 1 Elective course
● Enroll in CMPSC 580, Junior Seminar (spring semester only)</td><td>● Take 2-3 Core courses</td></tr>
</table>

Year 3 at Allegheny	• Complete remaining **Core** or **Elective** courses if necessary • Take **DS 600** in the fall semester • Take **DS 610** in the spring semester • Take any remaining courses to reach major requirement of **48 credits.**	• Complete remaining courses if necessary • Take any remaining courses to reach minor requirement of **24 credits**

Two Year Data Science Academic Plan

Transferring after two years		
We expect students transferring to Allegheny after attending two years at another institution may have at least two introductory courses and may also be transferring in a Core or Elective course. We do not recommend taking more than two CMPSC courses with a lab (with the exception of the Junior Seminar and Senior Project) in one semester.		
	MAJORS	**Minors**
Year 1 at Allegheny	• Complete remaining *CMPSC 100-level* introductory courses if necessary in the first semester (majors need 3: CMPSC 100, 101, and 105) • Take 2-4 **Core** courses • Enroll in **CMPSC 580**, Junior Seminar (spring semester only)	• Complete **CMPSC 100-level** introductory courses if necessary (minors need 2: CMPSC 100 and CMPSC 105) • Take 1-2 **Core** courses (minors need 2) • Optionally, take 1 **Elective** course (minors need 2)
Year 2 at Allegheny	• Take 1-3 **Core** courses • Take 1 **Elective** course • Take **DS 600** in the fall semester • Take **DS 610** in the spring semester • Take any remaining courses to reach major requirement of **48 credits**	• Take 1-2 **Elective** courses (minors need 2) • Take any remaining **Core** courses if necessary • Take any remaining CMPSC courses to reach minor requirement of **24 credits**

Issues to consider for transfer credits:

- It is common for the similar sounding CMPSC courses to have varying degrees of "depth" across different institutions as evident by the varying or lack of prerequisites and topics covered. Transfer credit is accepted only for courses at approximately the same level of topic "depth" as the Allegheny College courses.
- All CMPSC courses use version control software (Git), continuous integration (GitHub Actions) and some courses beyond CMPSC 100 use a container-based system (Docker). Transfer students unfamiliar with these technologies should reach out to the Chair of the department to be placed in a short tutoring program with the department's Technical Leaders.
- All CMPSC introductory courses at Allegheny College are taught in Python programming languages. Transfer students unfamiliar with Python should reach out to the Chair of the department to receive adequate support.

Economics

Economics
Academic Bulletin

Area of Study: Social and Behavioral Science
Programs: Major and Minor
Major/Minor Exclusions:
A student majoring in Economics may not double major in Business.
A student minoring in Economics may not major in Business.

The Economics major consists of a core of six required courses (two each in Macroeconomics, Microeconomics, and Statistics), four elective courses (two at the 200 level and two and the 400 level), a seminar (taken 2nd semester junior or first semester senior year) and the senior project (taken the semester after the seminar).

The recommended schedule for most students is to take Introductory Microeconomics (ECON 100) and Introductory Macroeconomics (ECON 101) during their first year and Microeconomic Theory (ECON 200), Macroeconomic Theory (ECON 201) and Statistics (ECON 202 and 203) beginning their sophomore year. It is recommended that this group of six core courses is completed by the end of the first semester junior year.

When advising a student interested in Economics, please note:

- The order in which ECON 100 and 101 are taken does not matter. The same is true for ECON 200 and 201.
- MATH 140 or 151 is a prerequisite to ECON 200, 201, and 202 and should be taken First year.
- Courses numbered 011 or 010 do not count towards the major or minor.
- ECON 190 and 226-286 are sophomore-level electives and can be taken without ECON 200-203.
- Students cannot double major in Business and Economics.
- Major Advisor: Students can approach faculty directly about being their advisor. Students in search of advisors often approach the B&E department chair, who is happy to direct students to faculty who are most appropriate.
- Junior Seminar and Senior Comp: All Economics majors take an ECON 570-580 level seminar in their first semester senior year or second semester junior year. They complete their senior projects the following semester. Most students do their senior projects under the supervision of their seminar advisor. Since the junior seminar leads into the senior project, students are not permitted to take the seminar and the senior project at the same time. Students planning on graduating in January should take the seminar the previous spring and the senior project in the fall semester.
- When choosing between the Economics and Business majors, students should consider the following:
    - There is a lot of overlap between the two majors, so for most students, there is no bad choice. Generations of Allegheny alumni have gone into every field of business after majoring in Economics, English, Philosophy, Political Science, etc.

- The Economics major requires more of the core Economics courses. The Business major requires fewer core Economics courses, but more courses overall.
    - The Economics major requires 12 courses plus the math prerequisite. The Business major requires 13 courses plus the math prerequisite.
    - Business majors are only required to take one of the theory courses (ECON 200 or 201) and only the first Statistics course (ECON 202 but not ECON 203). Students who are interested in developing stronger quantitative skills, for example students who want to go into the fields of economics, finance, or data analytics, should consider majoring in economics.
    - The Business major requires more Business classes, such as Accounting, Introductory and Advanced Business Economics, Business Ethics, and Business Communication. Business majors are introduced to concepts in business-related fields, such as Human Resource Management, Accounting, and Marketing. Students who are interested in studying a broad set of business-related topics should consider majoring in business.

Sample Schedule for an **Economics Major placing into MATH 151:**

	1st Semester	2nd Semester
First-Year	SWS 105 *Most students should take SWS 105 in the Fall* ECON 101 MATH 151	ECON 100
Sophomore	ECON 200 ECON 200-level Elective	ECON 202 ECON 200-level Elective
Junior	ECON 201 ECON 203	ECON 400-level Elective
Senior	ECON 570-580 ECON 400-level Elective	ECON 620

Sample Schedule for an **Economics Major placing into MATH 151 and studying abroad:**

	1st Semester	2nd Semester

First-Year	SWS 105 *Most students should take SWS 105 in the Fall* ECON 100 MATH 151	ECON 101
Sophomore	ECON 200 ECON 202 ECON 200-level Elective	ECON 201 ECON 203
Junior	Study Abroad. Transfer back one 200-level economics elective plus three non-economic classes.	ECON 400-level Elective
Senior	ECON 570-580 ECON 400-level Elective	ECON 620

Sample Schedule for an **Economics Major starting late and placing into MATH 140:**

	1st Semester	2nd Semester
First-Year	SWS 105 *Most students should take SWS 105 in the Fall*	
Sophomore	ECON 100 ECON 101 MATH 140	ECON 200 ECON 200-level Elective ECON 200-level Elective
Junior	ECON 201 ECON 202	ECON 203 ECON 400-level Elective
Senior	ECON 400-level Elective ECON 570-580	ECON 620

Minor

Successful completion of at least 24 semester hours: Introductory Microeconomics, Introductory Macroeconomics, Microeconomic Theory or Macroeconomic Theory, and three additional courses numbered 190 or higher.

Information for Transfer Students

Suggested pathway of an **Economics Major** for a transfer student planning to finish in 3 years. Students are expected to be transferring MATH 140 or 151, ECON 100 and 101. See sample above for **Economics Major starting late and placing into MATH 140** for another sample schedule.

	1st Semester	**2nd Semester**
Sophomore	ECON 200 ECON 202 ECON 200-level elective	ECON 201 ECON 203 ECON 200-level elective
Junior	ECON 400-level elective	ECON 400-level elective
Senior	ECON 570-580, Senior Seminar	ECON 620, Senior Project

Suggested pathway of an **Economics Major** for a transfer student planning to finish in 2 years. Students are expected to be transferring MATH 140 or 151, ECON 100, 101, 200, 201, and about two ECON 200-level electives.

	1st Semester	**2nd Semester**
Junior	ECON 202 ECON 400-level elective	ECON 203 ECON 200-level Elective
Senior	ECON 400-level elective ECON 570-580, Senior Seminar	ECON 620, Senior Project

Education Studies

Education Studies
Academic Bulletin

Area of Study: Interdisciplinary Studies
Program: Minor

Education Studies is an Interdisciplinary Studies minor designed to prepare students interested in the field of Education. As an interdisciplinary studies minor, Education Studies may be combined with any other Major program in the curriculum.

When advising these students, please note:
Education Studies is a 24-credit minor that requires the following:

- EDUC 100: Introduction to Education Studies
- A Culture & Education, Practice, or Policy ("CEPP") course (check the 2025-2026 *Academic Bulletin* for the list)
- EDUC 543 and 544: Internship Seminar (2 credits each; designed to be taken in consecutive semesters: EDUC 543 in the fall and EDUC 544 in the spring. Both courses must be taken. Students **must** obtain clearance by the end of the semester prior to the start of EDUC 543.
- Three Electives (12 credits) from the following list. Note that one must be at the 300-level:
    - EDUC 215: Foundations of Special Education*
    - EDUC 216: Teaching English Language Learners*
    - EDUC 230: Teaching Health and Wellness*
    - EDUC/COMJ 310: Multicultural Education*
    - EDUC 325: Education Methods and Design*
    - EDUC 330: Advanced Topics in Education Studies*
    - ENGL 350: Children's Literature*
    - ENVSC 250: Environmental Education
    - MATH 135: Elementary School Mathematics
    - PSYCH 106: Educational Psychology
    - THTR 290: Theatre for Young Audiences

(Courses marked with an asterisk have a prerequisite)

Please note:

- *EDUC 100 is not a prerequisite for ENGL 350, ENVSC 250, MATH 135, and PSYCH 106*
- A student's choice of electives will be shaped by his/her post-graduate plans (that is, whether the student is pursuing early childhood education, elementary education, secondary education, or education policy).
- **NOTE: we have reserved seats in EDUC 100 (in both sections) for incoming first-year students.**

Suggested Schedule for the Education Studies Minor:

	1st Semester (Fall)	2nd Semester (Spring)	Notes
First Year	EDUC 100 or CE/P/P Requirement	EDUC 100 or Elective	EDUC 100 may also be taken in the sophomore year
Sophomore	Elective	Elective	
Junior	EDUC 543	EDUC 544	Take in consecutive semesters (can also be taken in senior year)
Senior	300-level Elective		300-level elective may be taken at any time after completion of EDUC 100

Important: Teacher Preparation Programs (4-1)

Allegheny students interested in pursuing a career in education can earn teacher certification and a Master's degree at one of Allegheny's partner institutions University of Pittsburgh, or Xavier University (Cincinnati, OH), or at any of a number of 1-year masters/certification programs across the country. (Previous graduates have attended the University of Michigan, UPenn, Ohio State, and The University of Chicago, to name a few.) In preparation for these programs, students complete four years at Allegheny with a major and a minor in academic disciplines and then complete their teacher preparation at the graduate level at one of these graduate programs. Applicants to the programs must maintain a minimum overall grade point average while at Allegheny and meet the admission requirements of each graduate school. **Thus, a student may need to complete additional coursework while at Allegheny to fulfill those admission requirements.** Students who are interested in any of these programs should contact Jennifer Franz, Education Studies Program Coordinator, early in their academic careers for information about graduate institution requirements. For additional advising in Education Studies, students should also contact Prof. Franz.

Energy and Society

Energy and Society
Academic Bulletin

Area of Study: Interdisciplinary Studies
Program: Minor
Now housed in Environmental Science & Sustainability

The Energy and Society minor is an Interdisciplinary Studies minor. Students may choose any major to satisfy the college requirement that the major and minor be in different divisions.

Students who are interested in the following topics may be good candidates in pursuing an Energy and Society minor:

- Natural resources (energy, water, metals, etc.)
- Sustainability
- Climate change
- Domestic and international political systems
- Economics of energy resources (fossil fuels, nuclear, and renewables)
- Community, ethics, and social justice
- Global health and well-being

The Energy and Society minor consists of 20 credit hours with three required courses and a minimum of eight elective credit hours. It is recommended that students begin by taking ENERG 105: Introduction to Energy and Society. ENERG 105 provides a broad overview of society's energy systems and allows a student to get a feel for the field of energy, and has distribution tags of Quantitative Reasoning (QR) and Social Behavior and Institutions (SB).

For future course planning purposes, it should be noted that two of the foundation courses for the minor (ENERG 105 and ENVSC 385) will be offered only one time per academic year. The required capstone course, either ENERG 480 or ENERG 485, will be offered on an alternate year basis. ENVSC 385, ENERG 480, and ENERG 485 have laboratory sections associated with them, so please have students plan their schedules to accommodate those lab sections.

Elective courses related to the minor are in areas of Ethics and Social Justice, Communication, Economic Systems, and Political Systems. Students may use a credit-bearing internship to fulfill up to 4 credit hours of their 8 credit hour elective requirement.

Engineering Guidelines

Engineering
Academic Bulletin

Advising for the Dual Degree Cooperative (3-2) Engineering Program
Allegheny College does not offer an Engineering Major or degree. However, through cooperative arrangements with other universities students may obtain a Bachelor's degree in engineering and a Bachelor's degree in their Allegheny Major; hence the title, Dual Degree, also referred to as a "3-2" program. Students who participate in this program will complete their first three years at Allegheny (though in some cases students may elect to spend four years at Allegheny). After their junior (or senior) year, they enter the engineering program of one of the cooperating schools. Once they have completed the requirements of the engineering school, which typically takes two years, they will receive Bachelor's degrees from Allegheny and from the engineering school. (Neither degree is granted until the requirements of both Allegheny and the cooperating university have been met.)

Cooperating Schools

- University of Pittsburgh
- Case-Western University (Cleveland)
- Washington University (St. Louis)

Requirements
Allegheny Requirements
During their time at Allegheny students must complete the College's graduation requirements, this includes completing a major, a minor, distributive, and FS requirements. Students who leave Allegheny and enter the engineering program after the junior year are exempted from the Senior Project requirement. Students who stay for their senior year are still required to complete the Senior Project.
Engineering School Requirements
To meet the engineering school requirements students must take specific math and science courses and maintain a specified grade point average (overall and in the required courses) that varies from school to school. While the required courses vary slightly among the cooperating universities and may also depend upon what field of engineering the student chooses to pursue, they all include 3-5 math courses, depending on first-year placement; 2 physics courses (PHYS 110 & 120 or PHYS 101 & 102); a chemistry course (CHEM 120); and a computer programming course (CMPSC 100 or PHYS 280). For more specific requirements students need to consult with the Cooperative Engineering Coordinator.

Advising for entering first-year students interested in engineering:
Incoming first-year students interested in engineering should enroll in either Math 140, 141, 151, or 152, depending on placement, in the fall of their first year. If they placed in Math 141 or higher, they should also take PHYS 110 or 101 their first semester. If they placed into Math 140 they might consider also taking CMPSC 100.

FAQ for Engineering
What courses should students in the dual degree program take their first year?

As students need to complete the cooperating school's requirements during their first three years (unless they opt to stay for four years at Allegheny) it is important that they begin taking the required courses as soon as possible. This means that it is essential that students interested in the program enroll in the math class recommended by the placement exam, either Math 140, 141, 151, or 152 in the fall semester of their first year. Students placing in Math 141 or higher should also enroll in PHYS 110 in the fall. Second semester students should continue to the next math and physics courses. CHEM 120 is also required, but that does not need to be taken the first year. Any questions regarding course selection should be directed to the Cooperative Engineering Coordinator.

Can students declare a "Pre-Engineering" Major?

No, this is not an option at Allegheny. Students must declare and complete an approved Allegheny Major during their three (or four) years here.

What is the best Major for the dual degree program?

The cooperating schools do not require a particular major, only that you complete the required courses and attain the specified GPA. However, given the overlap between the program requirements and departmental major requirements, it is generally easier to complete certain majors. In particular, students considering civil, mechanical, aeronautical, or electrical engineering should consider majoring in either physics or mathematics. Those interested in chemical engineering should consider chemistry as a major.

When does a student have to commit to the dual degree program?

Students begin formal application to the program during the fall or spring of their junior or senior year, but there is no actual commitment until the student enrolls in the cooperating school's engineering program. However, students interested in engineering should meet with the Cooperative Engineering Coordinator during their first semester and as needed after that.

Are there other options for students interested in engineering?

Yes, there are several. Within the cooperative programs there is an option to also apply for an accelerated Master's program which typically requires another year, beyond the two years usually required for the Bachelor's degree. Another option that Allegheny students regularly pursue is to bypass the Bachelor's in engineering degree and during their senior year apply directly from Allegheny to Master's in engineering programs at schools of their choice. Students who graduate from Allegheny with a BS in Math, Physics, or Chemistry and a strong academic record are regularly accepted into Master programs at a range of engineering schools. Consult with the Cooperative Engineering Coordinator for details.

Contact

Prof. Daniel R. Willey, Cooperative Engineering Coordinator
Carr 127
814-332-5368
dwilley@allegheny.edu

Engineering Physics (EPHYS)

Engineering Physics
Academic Bulletin

Area of Study: Mathematics and Natural Sciences
Program: Major
Major/Minor Exclusions: Engineering Physics majors may not minor in Physics

Information for Transfer Students indicated by ***Note for Transfer Students:**

There are two different sequences of introductory physics, each consisting of two courses*

	PHYS 110 and 120	PHYS 101 and 102
Series Begins	Fall Semester	Fall Semester
Taken by	Engineering Physics, Physics, Chemistry, and Biochemistry Majors	Some Pre-Health Students
Restrictions		

***Note for Transfer Students:** Introductory Physics courses that require Calculus as a prerequisite or co-requisite in their course descriptions can substitute PHYS*101 and PHYS*102.

Suggested Schedules for the **Engineering Physics Major starting in MATH 140***:

	1st Semester (Fall)	2nd Semester (Spring)	Either Semester
First Year	MATH 140	MATH 141	
Sophomore	PHYS 110 MATH 152	PHYS 120 PHYS 260** PHYS 201 EPHYS 205	

Junior Senior	PHYS 210 MATH 280 PHYS 330 or PHYS 350) (PHYS 330 is even years and PHYS 350 is odd years)	EPHYS 580 (2 credits) EPHYS 529 Internship (2 credits) PHYS 310 Upper level elective or PHYS 365 (PHYS 365 is offered even years)	
Senior	PHYS 600 PHYS 330 or PHYS 350) (PHYS 330 is even years and PHYS 350 is odd years)	EPHYS 610 PHYS 310 (offered odd years) Upper level elective or PHYS 365 (PHYS 365 is offered even years)	

***Notes for Transfer Students:**

- *Students who transfer into the sophomore year* can enter the first sequence at the Sophomore level if they have had the equivalent of MATH 141.
- *Students who transfer into the sophomore year* can enter the second sequence at the Sophomore level if they have had the equivalent of MATH 141 and PHYS 102.
- *Students who transfer into the Junior year* can enter either sequence at the Junior level if they have had the equivalent of PHYS 101 and PHYS 102 (an introductory sequence of physics courses). To satisfy major requirements, transfer students should work with a Physics advisor to determine a plan for taking PHYS 201, PHYS 260 and EPHYS 205, as well as a Natural Science course during the Junior or Senior year *unless such a course has been accepted for transfer credit.*

**As an equivalent to PHYS 260, the Physics Department will accept an introductory thermal physics course that includes statistical mechanics in its course description for transfer credit into the major.

***One 300-level course that has been accepted for transfer credit as a Physics equivalent may count towards the major.

Suggested Schedule for the **Engineering Physics Major placing in MATH 151*:**

	1st Semester (Fall)	2nd Semester (Spring)	Either Semester
First Year	PHYS 110 MATH 151	PHYS 120 MATH 152	

Sophomore	PHYS 210 MATH 211 MATH 280	PHYS 201 PHYS 260** MATH 270 EPHYS 205 Upper level elective or PHYS 365 (PHYS 365 offered even years)	
Junior Senior	PHYS 330 or PHYS 350 (PHYS 330 is even years and PHYS 350 is odd years) EPHYS 529 Internship (2 credits)	EPHYS 580 (2 credits) EPHYS 529 Internship (2 credits) PHYS 310 Upper level elective or PHYS 365 (PHYS 365 offered even years)	
Senior	EPHYS 600 PHYS 330 or PHYS 350 (PHYS 330 is even years and PHYS 350 is odd years)	EPHYS 610 Upper level elective or PHYS 365 (PHYS 365 offered even years)	

Suggested Schedule for the **Engineering Physics Major starting in MATH 152*:**

	1st Semester (Fall)	2nd Semester (Spring)	Either Semester
First Year	PHYS 110 MATH 152	PHYS 120 MATH 270	Sometimes MATH 211 is offered in the Spring. In that case students could take it the spring of the first year and MATH 280 Fall Sophomore year
Sophomore	PHYS 211 MATH 211 EPHYS 205	PHYS 201 EPHYS 205 PHYS 260** Upper level elective or PHYS 365 (PHYS 365 offered even years)	

Junior Senior	PHYS 330 or PHYS 350 (PHYS 330 is even years and PHYS 350 is odd years) MATH 280 EPHYS 529 Internship (2 credits)	PHYS 310 EPHYS 580 (2 credits) Upper level elective or PHYS 365 (PHYS 365 offered even years)	
Senior	EPHYS 600 PHYS 330 or PHYS 350 (PHYS 330 is even years and PHYS 350 is odd years)	EPHYS 610 Upper level elective or PHYS 365 (PHYS 365 offered even years)	

One-semester 4 credit comps are available with departmental permission. Please talk to an advisor and EPHYS 580 faculty if you are planning this route.

Students interested in declaring a major in *Engineering Physics* should speak directly with a faculty member to be their advisor.

English

English
Academic Bulletin

Area of Study: Languages, Literature, and Culture
Programs:

- English--Emphasis in Creative Writing: Major
- English--Emphasis in Literature: Major
- English: Minor
- Environmental Writing: Minor
- Writing: Minor

When advising a student interested in English, please note:

Continuing in AY 25-26 all 100-level English courses will be themed courses, the 111-118 "Literature and" courses first introduced in FA 2019; the non-themed ENGL 110 will *not* be offered. These courses are a prerequisite for all creative writing courses above the 200-level and all literature courses at and above the 200-level.

- The 100-level courses, which are curricularly, analogous, are titled as follows/
    - 111: Literature and the Arts
    - 112: Literature and the Body
    - 113: Literature and Social Justice
    - 114: Literature and Business
    - 115: Literature and Sexuality
    - 116: Literature and the Environment
    - 117: Literature and Science
    - 118: Literature and the Mind
- All 100-level courses are focused on introductory college-level analysis of literature in at least three different genres (including, for instance, poetry, fiction, nonfiction, and drama).
- Each course in this series is oriented around learning and practicing the "close reading" skills of textual analysis and intensive literary study.
- The title of each course in the series is intended to reflect the thematic focus of the section. The titles do not presume the need for any particular disciplinary background as a prerequisite for each course, nor do they signal that these courses will address non-literary disciplinary knowledge. That's to say, "Literature and Business" will be the close study of literature that relates to business — broadly defined — but that knowledge of business is unnecessary for the class, and the class will not convey any disciplinary content of business.
- The classes are not sequential; 110 is not a prerequisite for any other course at this level.
- Any of these 100-level classes fills the prerequisite for upper level courses in English..
- Our original intention in offering this series was twofold: A) To offer more discrete themes to signal to students not-typically inclined to see literature as related to their prospective fields of study how, indeed, literature intersects with many categories of knowledge; B) To demonstrate

the potential value in students taking more than one general introductory course in literature. A student who so chooses could take more than one course in the 100-level.

- Our intention behind removing ENGL 110 and teaching solely "Literature And" 100-level courses is also twofold: A) To eliminate confusion about the difference between 110 and these other courses as well as the sense that the 110 is the "preferred" course, and B) to allow us to offer a broader array of "Literature And" courses.

OVERALL NOTES IN ENGLISH

- In addition to the 100-level courses, first-year students interested in English, especially English literary studies, may take English 230, 231, 232, 235, or 236 as early as their first semester at Allegheny. **100-level English is NOT a prerequisite for these courses.**
- Students may also begin the major by taking a studies course (230, 231, 232, 235, 236)
- 300-level courses may be appropriate for a sophomore if they had at least 2 previous English courses.
- **Emphasis: The department offers two emphases, Literature and Creative Writing.** Each emphasis requires a common core of literature courses, along with other specific requirements. If one of your first year advisees wishes to begin one of these avenues, then they should begin with 100-level English or one of the studies courses (230-236). Prospective majors may begin study in an exploratory fashion, without deciding on one of the two emphases at first, since introductory classes overlap. Those who wish to pursue Creative Writing however are *strongly encouraged* to complete the 100-level pre-req in their first semester, so they are eligible to enroll in a writing workshop in their second semester.
- **For students interested in the Pitt. M.A.T. program: Children's Literature (English 350) is currently offered approximately once every 3 semesters.** Students who require this course for later admission to an education program should take 350 the first chance they get. The department cannot offer independent study versions of Children's Literature for students who might have missed a chance to take it as a class.
- **Faculty Advisor:** Students may ask any faculty member in the English Department to be their major advisor. Any faculty member can advise any student; the advisor's field of expertise does not need to "match" the student's major emphasis. That is, faculty with a literary studies specialization may advise creative writing students and faculty with a creative writing specialization may advise literary studies students. If students are unsure who to ask to be their advisor, they should schedule an appointment with the Department Chair to discuss how to proceed. In cases where a student's major advisor goes on sabbatical or takes a leave of absence, the Chair assigns the student a temporary advisor.
- **Junior Seminar:** In AY 25-26, only **one** junior seminar will be offered, in the fall of 2025. The department has surveyed students and is not aware of anyone requiring a junior seminar in the spring of 2026. However, anyone in this position may take a junior seminar offered alongside (in the same class with) ENGL 420 in SP 26, with permission of both the instructor and the Department Chair. Depending on enrollments, we may resume offering both fall and spring junior seminars in the future; students will be assigned to one semester or the other (taking into account such concerns as semesters abroad) and enrollment will be by permission only.

- **Senior Project:** The English senior project is a one-semester course that may be taken in either the fall or the spring of the senior year. Senior project requirements for the two English major emphases - ENGL 620, Senior Project in Literature and ENGL 624, Senior Project in Creative Writing - differ significantly.
    - Students with a literary studies emphasis produce a several chapter senior project of at least 35 pages involving text-based analysis and research.
    - Students with a creative writing emphasis produce an extended original creative work or collection of works within the genre of their choice: poetry (20-25 pages), fiction (50-70 pages), or creative nonfiction (50-70 pages).
        - Students with a creative writing emphasis are expected to complete their creative writing coursework prior to their senior project: at minimum, two 200-level workshop courses and two 300-level courses - ideally including the "Forms of" course in their chosen genre. They also must complete an advanced writing workshop in the genre of choice (ENGL 405, fiction; ENGL 406, poetry; ENGL 410, creative nonfiction) BEFORE they may enroll in a creative writing Senior Project - a requirement with **absolutely no exceptions**. *Of note, these advanced workshops are typically only offered in the fall semester.*
    - Enrollment in a senior project course requires signature consent from the senior project director. Students need to ask a faculty member to be their senior project director early in the semester prior to the semester in which they will be enrolled in the senior project course. Typically that faculty member is the person with the greatest expertise in the field in which the student is writing the comp, corresponding with either the genre of the creative writing comp or with the literary period and/or subject specialization of the literary studies comp. Students with a planned senior project that does not readily fall into one faculty member's field of study should consult with their major advisor and/or the Department Chair.
    - A proposal must be submitted to the student's senior project director (literary studies emphasis) or to all 3 creative writing faculty (creative writing emphasis) by the 10th Monday of the semester preceding the senior project.

- Options for students looking for help in writing:
    - *Work with a writing consultant*. If one of your advisees is particularly anxious about their writing skills or if you have concerns about the quality of the student's prose, please encourage them to sign up for a matched writing consultant through Academic Success. The consultant and the student will meet weekly to help strengthen the writer's writing over the course of the semester and to address any general areas in which the writer would like to improve
    - Students may also opt to meet one-to-one with trained student writing consultants at the Academic Success. Students can make an appointment online or drop in Sunday-Thursday 3-5 p.m. and 7-11 p.m.
    - *Take one of the 100-level English courses*. While not composition courses, these classes will help students get more closely attuned to the subtleties of language and will give them lots of practice writing.

Questions: Contact Alexis Hart Director of Writing and English Dept. Chair, at ext. 4875 or 2985 or email ahart@allegheny.edu.

Pathways for the English Major
Students may choose from one of two emphases in the English Major: Creative Writing or Literature. Each requires a total of 44 credits.

English--Emphasis in Creative Writing major. 4 year sample sequence.

	Fall	**Spring**
First Year	SWS 105 *Most students should take SWS 105 in the Fall* One of ENGL 110-118	One of ENGL 205, 206, 210 One of ENGL 230-236
Second Year	SWS 205 Second of ENGL 230-236	Second of ENGL 205, 206, 210 First ENGL 300-level Literature
Third Year	Second ENGL 300-level Literature Advanced Workshop	Junior Seminar
Fourth Year	Senior Project	ENGL Elective

English--Emphasis in Literature major. 4 year sample.

	Fall	**Spring**
First Year	SWS 105 *Most students should take SWS 105 in the Fall* One of ENGL 110-118	One of ENGL 230-236

Second Year	SWS 205 Second of ENGL 230-236	Third of ENGL 230-236 First ENGL 300-level Literature
Third Year	Second ENGL 300-level Literature ENGL 420	Junior Seminar
Fourth Year	First ENGL Elective Second ENGL Elective	Senior Project

The Department of English offers Minors in English, Writing, and Environmental Writing. Please see *Academic Bulletin* for specifics for each.

Information for Transfer Students

Transfer Scenarios

Note: the most likely classes to be accepted for direct transfer credit are 100-level English, 230, and 231.

English--Emphasis in Creative Writing Major. 3 year sample sequence.

	Fall Semester	**Spring Semester**
Second Year	One of ENGL 110-118 *transferred in or taken first semester* First of ENGL 230-236 *transferred in or taken first semester*	One of ENGL 205, 206, 210 Second of ENGL 230-236 First ENGL 300-level Literature
Third Year	Second of ENGL 205, 206, 210 Second ENGL 300-level Literature	Junior Seminar
Fourth Year	Advanced Workshop ENGL Elective	Senior Project

English--Emphasis in Literature Major. 3 year sample sequence.

	Fall Semester	**Spring Semester**
Second Year	One of ENGL 110-118 *transferred in or taken first semester* First of ENGL 230-236 *transferred in or taken first semester*	Second of ENGL 230-236 Third of ENGL 230-236 First ENGL 300-level Literature
Third Year	Second ENGL 300-level Literature ENGL 420	Junior Seminar
Fourth Year	First ENGL Elective Second ENGL Elective	Senior Project

Environmental Science & Sustainability

Environmental Science & Sustainability
Academic Bulletin

Area of Study: Interdisciplinary Studies
Program: Major (BA)

Overview

Students often say they are interested broadly in "the environment" or related topics: environmental science, environmental justice, wildlife, environmental communication or humanities, the outdoors, or sustainability. If that's the case, we strongly suggest that the student take *ENVSC 110 - Intro. to Environmental Science* during the first year, preferably the first semester. There are always spaces reserved for first year and transfer students in *ENVSC 110*. It is much harder to get into this course during the sophomore and junior years and it serves as a prerequisite for many of our upper-level courses.

The ESS department unites many disciplines, allowing students significant flexibility in shaping the major to their interests. However, these pathways often require thoughtful planning in the first two years given prerequisite sequences. This holds for ESS students interested in either natural science pathways (ecology, wildlife management, conservation biology, environmental engineering, agriculture, etc.) or those oriented toward environmental humanities, environmental social sciences, or other environmental focus areas (environmental policy, ecological economics, sustainable development, environmental justice, environmental writing, art and the environment, etc.). ESS majors therefore typically benefit from active planning with ESS professors. We strongly encourage students to meet with an ESS professor during their first semester, before registration in any semester, and to refer to the bulletin for lists of approved courses to meet curricular requirements.

Every ESS major designs a *thematic concentration* based on their interests (i.e., aquatic ecology, ecological economics, environmental justice, environmental writing, food and farming, forestry, sustainable energy). Their concentration is *a cluster of seven courses, of which at least four must be at an upper level, and at least one must have the ENVSC prefix*. Every ESS major also participates in community-based work as part of their ESS major. This work is integrated into the required courses.

When advising a student interested in Environmental Science & Sustainability, please note:

- Off-campus study (EL seminars and study-away) and internships are strongly recommended within the major. Most courses completed during these experiences count toward the major.
- Environmental Science & Sustainability majors develop a thematic concentration in consultation with an advisor in the department, a process that usually begins in the first year. If a student is already interested in a particular area, they should take foundational courses within appropriate departments as early as possible. If students are not yet invested in a particular concentration, please see the model concentrations below for inspiration and meet with an ESS advisor at your earliest convenience.
- The major leads to the Bachelor of Arts degree.

Environmental Science & Sustainability Pathways

		Natural science pathways *and* placed in **MATH 140**	**Natural science pathways** placed in **MATH 151**	**Environmental humanities, social sciences, Policy, et al. pathways**
First Year	*Fall*	ENVSC 110 CHEM 119 or MATH 140	ENVSC 110 CHEM 120	ENVSC 110 Foundational course in area of interest
	Spring	ENVSC 110 *and/or* CHEM 120 *and/or* ENVSC 210	ENVSC 110 *and/or* BIO 220 *and/or* *ENVSC 210*	ENVSC 210 *and/or* Course in area of interest *and/or* Quantitative Skills course
Second Year	*Fall*	ENVSC 210 *and/or* ENVSC 270 work with advisor to identify ESS concentration and relevant courses: ● BIO 220/221 sequence ● CHEM 122 ● MATH 141 ● PHYS 101/102 or 110/120 sequence	ENVSC 210 *and/or* ENVSC 270 Work with advisor to identify ESS concentration and relevant courses: ● BIO 221 ● CHEM 122 ● MATH 151/152 sequence ● PHYS 110/120 sequence	ENVSC 210 *and/or* ENVSC 270 Work with advisor to identify ESS concentration
	Spring	ENVSC 210 *and/or* ENVSC 270 (if not already taken) Human and Cultural Connections course	ENVSC 210 *and/or* ENVSC 270 (if not already taken) Human and Cultural Connections course	ENVSC 210 *and/or* ENVSC 270 (if not already taken) Human and Cultural Connections course

Third Year	*Fall*	ENVSC 585 Human and cultural connections course (if not already taken) *and/or* continued work on concentration courses
	Spring	ENVSC 585 (if not already taken) Work on concentration courses
Fourth Year	*Fall*	ENVSC 600 Continue working on/finish concentration courses
	Spring	ENVSC 610 Continue working on/finish concentration courses

- Students declaring an ESS major should simpy ask a faculty member to be their advisor.
- Students should plan to complete ENVSC 585 in either semester of the junior year.
    - ESS will send out a survey to all rising juniors before fall registration of their junior year. In the survey we will ask when they plan to take their junior seminar, in the fall or spring semester of their junior year. If they are taking it in the fall, we will ask them to select the section that works best for their schedule. They will receive a follow-up survey at the end of the fall semester to register for the spring junior seminars.
- ESS requires a two semester Senior Project
    - ENVSC 600, Senior Project I taken in the fall of the senior year
    - ENVSC 610, Senior Project II taken in the spring of the senior year

Sample Concentrations in Environmental Science & Sustainability

What might a thematic concentration in ESS look like? Here are a few ideas to help students imagine the possibilities before an advising session. An ESS concentration is a cluster of seven courses, with at least four at the upper level. At least one course in the concentration must have the ENVSC prefix. The other concentration courses can come from any department. Please keep in mind a full concentration is a c**luster of seven courses**, of which at least four must be at an upper level, and at least one must have the ENVSC prefix. *The sample concentrations below are not fixed requirements*, but rather examples to help envision what your concentration might begin to look like.

Are you interested in...?	*Then your concentration might include these 4 courses* **+ 3 more of your choices:**
Energy Policy	ENERG 105 - Introduction to Energy & Society ENVSC 285 - Quantitative Sustainability ENVSC 380 - Climate and Energy Policy ENVSC 385 - Intro to Sustainable Energy
Environmental Advocacy	COMJ 160 - Foundations of Community and Justice Studies ENVSC 352 - Environmental Justice POLSC 348 - Participatory Democracy and Community Organizing WGSS 210 - Social Movements
Environmental Education	EDUC 100 - Introduction to Education Studies EDUC 310 - Multicultural Education ENVSC 250 - Environmental Education PSYCH 106 - Educational Psychology
Environmental GIS Analysis	ENVSC 305 - GIS I ENVSC 306 - GIS II ENVSC 355 - Field Ecology & Conservation ENVSC 375 - Applied Conservation GIS
Environmental Policy	ENVSC 350 - Ecological Economics ENVSC 352 - Environmental Justice ENVSC 380 - Climate and Energy Policy (crosslisted as POLSC 322) ENVSC 383 - U.S. Environmental Policy
Food and Farming	ECON 100 - Introduction to Microeconomics ENVSC 230 - Soil to Plate: World Food and Agriculture ENVSC 240 - Small-scale Production Agriculture ENVSC 372 - Judaism, Justice, and Food

Forest Ecology	ENVSC 332 - Forest Ecosystems and Management ENVSC 335 - Conservation Biology ENVSC 355 - Field Ecology & Conservation HIST 341 - American Environmental History
Wildlife Conservation	BIO 220 - Organismal Physiology/Ecology ENVSC 332 - Forest Ecosystems and Management ENVSC 335 - Conservation Biology ENVSC 355 - Field Ecology and Conservation

Information for Transfer Students

Environmental Science & Sustainability Transfer Pathways

		3 Year ESS Program	**2 Year ESS Program**
Second Year	*Fall*	ENVSC 110 ESS Human and Cultural Connections course ESS Quantitative Skills course	
	Spring	ENVSC 110 (if not already taken) ENVSC 270 *and/or* ENVSC 210 Work with advisor to identify ESS concentration	
Third Year	*Fall*	ENVSC 585 ESS Human and Cultural Connections course (if not already taken)	ENVSC 110 and ENVSC 270 ESS Human and Cultural Connections *and/or* Quantitative Skills course
	Spring	ENVSC 585 (if not already taken) Work on concentration courses	ENVSC 210 and ENVSC 585 Work on concentration courses

Fourth Year	*Fall*	ENVSC 600 Continue working on/finish ESS concentration courses
	Spring	ENVSC 610 Continue working on/finish ESS concentration courses

Filmmaking

Filmmaking
Academic Bulletin

Area of Study: Visual & Performing Arts
Program: Minor
Major/Minor Exclusions: A student cannot minor in both Filmmaking and Journalism & Documentary Storytelling

Minor suggested timeline (24 credits):

	Fall Semester	Spring Semester	Either Semester
Year 1 (4 credits)	FILM 171		
Year 2 (8 credits)	FILM 202[1]	FILM 300[2]	
Year 3 (8 credits)	Filmmaking elective	FILM 400[3]	
Year 4 (4 credits)			Filmmaking elective

[1]FILM 202 is scheduled to be offered every Fall
[2]FILM 300 is scheduled to be offered every Spring
[3]FILM 400 is scheduled to be offered every other spring, beginning Spring 2026

Filmmaking Electives (choose 2 courses)

FILM 350, Filmmaking Techniques	ART 171, Photography 1

FILM 375, Documentary Traditions	ART 187, Electronic and Intermedia Art
THTR 150, Acting 1: Fundamentals	ART 271, Photography 2
THTR 260, Production Design 1	ENGL 205, Writing Fiction
THTR 280, Directing 1	

Students interested in declaring a minor in Filmmaking should speak with Mike Keeley (Filmmaking faculty) or the Department Chair of Communication, Media, and Performance.

French

French
World Languages and Cultures General Information
Academic Bulletin

Area of Study: Languages, Literature, and Culture
Programs: Minor
Department: World Languages and Cultures

French Minor Requirements:
A minor in French requires completion of 20 semester credit hours in French, including FRNCH 305 and one other course numbered above 300. Students who test into the program at a higher level must complete 20 credits at the appropriate level for them.

Here is an example schedule for a student who minors in French beginning in French 110:

	1st Semester	2nd Semester	Either Semester
First-Year	SWS 105 French 110/106**	French 120	*Most students should take SWS 105 in the Fall*
Sophomore	French 215	French 225	
Junior	French 305		An additional 300-level French course; possible study abroad?
Senior			

****FRNCH 105 & 106** are 2-credit options for beginners in French. Students with no prior knowledge of French may take 105 as a low-risk way to "try it out," and if they want to finish the semester, they can register for 106 before the Module B Add deadline. Students who have had a bit of French may see "110 or 106" as their placement result; these students can begin French at mid-semester by registering for 106.

General Curricular Requirements

- **Students must have at least one major and at least one minor** (the "graduation major" and the "graduation minor"). The graduation major and minor must be in different areas of study of the College, unless one or both is interdivisional. A second major outside the area of study of the first major can replace the graduation minor.
    - Students matriculating in Fall 2016 or after may have at most two majors and two minors and may "double-count" courses between them without limit.
    - Students matriculating before Fall 2016 may not "double-count" courses between their graduation major and minor. Second or subsequent majors must have 20 unique semester credit hours. Second or subsequent minors must have 12 unique semester credit hours.

- Students must successfully complete **128 semester credit hours**, including transfer credits. Courses that earn a failing grade do not count towards this total.
    - Classes may be retaken for credit, but unless stipulated specifically in the course description, a course may only "count" once. Unless the course may be repeated for credit, the most recent grade earned is the grade counted, regardless of what it is.
    - If a student has transfer credit for a particular course (i.e., Math 151) and they take the same course at Allegheny, they will lose the earlier credit.

- Students must complete all of the following course requirements for graduation:
    - **SWS 105 and SWS 205** (<u>do not</u> count towards any major or minor).
    - **Junior seminar** (course numbered 550-589)
    - **Distribution requirement:**
        - (*Students entering Fall 2016 and after*) Four credits in each of the eight categories (CL, HE, IP, ME, PD, QR, SB, SP). Courses may double-count for two requirements. The Distribution Requirements satisfied by a course are listed in the course description in the *Academic Bulletin*. Courses used to satisfy Distribution Requirements *must* be taken for a letter grade.
        - (*Students entering before Fall 2016*) Eight credits in each of the three divisions (Humanities, Social Science, and Natural Science), including four credits of Natural Science lab. Courses used to satisfy Divisional Distribution Requirements may be taken CR/NC.
    - **Senior project:** Students must complete a senior project in each major. Students with more than one major may write separate senior projects or a combined senior project.

- **Students must earn a 2.0 cumulative GPA and a 2.0 in each major or minor presented.** Grades of C-, D+, and D "count," but the overall GPA in each case must be at least 2.0. In most cases, all classes presented for a major or minor must be taken for a grade; exceptions are listed in the requirements for each major and minor published in the *Academic Bulletin*.

- **Only 16 credits taken on a CR/NC basis can count towards graduation,** and students may take no more than 4 credits per semester on a CR/NC basis. Courses taken CR/NC due to the COVID-19 in Spring 2020 will not count against this total.

    - *New CR/NC Deadlines for first time and transfer students in their first year at Allegheny (effective Fall 2024)*
        - *First time and transfer students in their first year of study at Allegheny College who wish to take a* **14-week** *course on the Credit/No Credit basis must obtain their advisor's approval and submit the appropriate request to the Registrar's Office by the first day of the tenth week of the semester. Students who wish to do so in a* **7-week** *course have through the first four weeks of the class.*
- **64 credits must be taken in academic residence, including the final 16.** Courses taken "in academic residence" are those undertaken through registration at Allegheny College and supervised by Allegheny faculty, regardless of the physical location of the student.

- **Students who elect a 3-2 program are exempt from the senior project and need complete only 98 credits before entering the program.** Some majors exempt 3-2 students from additional requirements; consult the department for details. Departments and programs may have their own regulations and practices (e.g., whether they exempt failed courses from GPA calculations or how many hours of transfer credit they accept and for what).

- **Students are subject to all graduation requirements in place at the time they first matriculated, including all major, minor, distribution, and any other requirements for the degree,** so please consult the appropriate *Academic Bulletin* for further information.
    - With some exceptions, students who matriculated after the Fall 2016 semester have the option of graduating either under the requirements in effect when they first matriculated at Allegheny or those specified in a subsequent *Academic Bulletin*. Students may not select an *Academic Bulletin* previous to the term in which they first matriculated.
    - Students who wish to adopt a new set of graduation requirements will be subject to all major, minor, distribution, and any other requirements of their new Bulletin and must complete a form in the Office of the Registrar at least one semester prior to graduation. These changes may not be made during the Spring semester for an August or September graduate, but may be made during the summer for a January graduate.
    - In no case may a student qualify for graduation by meeting various requirements set forth in two different *Academic Bulletins*. In particular, students may not use self-designed majors or minors to circumvent this rule.

- **Requirements for Transfer Students**
- Transfer students must complete all of the graduation requirements listed above, with the following exceptions:
- Transfer students do not need to complete SWS 200 **if** they have received transfer credit for equivalent coursework.
- For transfer students, departments may make exceptions to policies regarding the number of credits or courses in the major or minor that must be taken on a letter-grade basis.

German

German
World Languages and Cultures General Informaiton
Academic Bulletin

Area of Study: Languages, Literature, and Culture
Programs: Minor
Department: World Languages and Cultures

German Minor Requirements:
A minor in German requires completion of 20 semester credit hours in German, including at least eight credit hours on the 300-level. Students who test into the program at a higher level must complete 20 credits at the appropriate level for them.

Here is an example for a student who minors in German beginning in German 110:

	1st Semester	2nd Semester	Either Semester
First-Year	SWS 105 German 110	German 120	*Most students should take SWS 105 in the Fall*
Sophomore	German 250	300-level German coursework	
Junior			300-level German coursework; possible study abroad?
Senior			

Global Health Studies

Global Health Studies
Academic Bulletin

Area of Study: Interdisciplinary Studies
Programs: Major (BA) and Minor

Guidance for summer entrance advisors

What is GHS?

The Department of Global Health Studies promotes an interdisciplinary understanding of structural and environmental determinants of local and global health issues, emphasizing the connections between health, economics, cultures, and politics.

Global Health draws its courses from a wide range of campus programs.

Who might be interested in GHS?

Students interested in health, climate justice, global equity, war and refugees, disease, medicine, public health, health advocacy, and health education.

Students who explore both GHS and are interested in medical or clinical careers should also connect with the Health Professions Advisor.

GHS curricular requirements

- GHS 110 (Introduction to Global Health Studies)
- Fundamental Science elective: GHS 223 (Peoples and Poisons), GHS 225 (Foundations of Human Nutrition), GHS 228 (Global Health Data Visualization), or some course outside GHS, such as BIO 220, BIO 221, ENVSC 110

Courses related to Ethics/Politics:

- COMJ 160 Foundations of Community & Justice Studies
- COMM 256 Politics and Communication
- PHIL 140 Ethics and Community
- POLSC 140 Political Theory
- POLSC 248 Human Rights
- POLSC 280 The Tragedy of Citizenship

Courses related to Power/Economics:

- POLSC 120 Comparative Gov/Politics
- POLSC 130 World Politics

- POLSC 242 Immigration and Citizenship

Courses related to Culture:

- HIST 277 American History of the Body
- PHIL 205 Literature, Film, and Medicine
- WGSS 100 Women's Gender & Sexuality Studies
- WGSS 211 Queer Lives
- WGSS 275 Bodies in American Culture

Language: A modern language course numbered 120 or above, or pre-requisite courses needed to reach the 120 level.

> **Language Placement:** *Students cannot place out of the language requirement. For example, an entering student who tests at the 200-level would take a course at the 200-level following placement test or consultation with the chair of World Languages and Cultures. Reach out to the Chair of Global Health Studies for specific questions related to this requirement.*
>
> **Transfer courses:** *Many courses transfer in at 3-credits. Students may need an additional credit to fulfill the total credits for the major.*

Suggested Schedule for **GHS Majors** (for specific courses required for the Major, please see the *Academc Bulletin*)

	1st Semester (Fall)	2nd Semester (Spring)
First Year	GHS 110 Modern Language Course GHS Dimension Course or Fundamental Science Course SWS 105	GHS 110 GHS Dimension Course or Fundamental Science Course
Sophomore	GHS 210 GHS 200-300 level ccourse GHS Dimension Course	GHS Methods Course GHS 200-300 level course GHS Dimension Course

Junior	GHS Methods Course Upper-level Dimension Course	GHS 575 Jr. Seminar
Senior	GHS 600 (2cr) Any remaining GHS Dimension Course(s)	GHS 610 Any remaining GHS Dimension Course(s)

GHS Minor Notes

Suggested Schedule for **GHS Minor** (for specific courses required for the Minor, please see the *Academic Bulletin*):

	1st Semester (Fall)	2nd Semester (Spring)
First Year	GHS 110 GHS Dimensions Course	GHS 110 GHS Dimensions Course
Sophomore	GHS Dimensions Course	GHS Dimensions Course
Junior	Upper-level GHS Dimensions Course	Upper-level GHS Dimensions Course
Senior	Capstone or Upper-level Dimensions Course	Capstone or Any Remaining Dimensions Course(s)

Additional Notes:

- **Academic Advisor:** Students shoujld first consult the GHS Chair before declaring their major. The program funnels students to academic advisors in order to maintain balance among its faculty.
- **Junior Seminar and Senior Comp:** Ideally, students should complete their required methods courses by Junior Spring Year in order to apply these methods most effectively to the Senior Project proposal (created in the Junior Seminar) and to the Senior Project.

Description of Global Health Studies Major

Required Core Courses (recommended year for taking these courses)

- **GHS 110: Introduction to Global Health** (First year, no later than second year)
- **GHS 210: Approaches in Global Health**
- **Two methods classes.** Choose from:
    - **GHS 321: Epidemiology** (Spring second year, or junior year)
    - **GHS 350: Cultures and Health** (Fall of junior year)
    - **GHS 352: Ethnographic Methods** (Spring second year or spring junior year)
- **GHS 575: Global Health Challenges | Junior Seminar** (Spring junior year)
- **GHS 600: (2 cr) 1st semester Global Health Studies senior project** (First semester senior year)
- **GHS 610 (4 cr) 2nd semester Global Health Studies senior project** (Second semester senior year)

Fundamental Science Courses

Take one elective (recommend taking first or second year):

- BIO 220: Organismal Physiology and Ecology
- BIO 221: Genetics, Development, and Evolution
- ENVSCS 110: Introduction to Environmental Science
- GHS 223: People & Poisons: Foundations of Public Health Toxicology (* counrs either as Foundational Science or Science and the Environment elective)
- GHS 225: Foundations of Human Nutrition (*Counts either as Foundational Science or Science and the Environment elective)
- GHS 228: Global Health Data and Visualization (*Counts either as Foundatonal Science or Science and the Environment elective)

Dimensions of Global Health Courses

In addition to the Core Courses and Fundamental Science Course, GHS majors must take a minimum of one elective course from each of four primary dimensions of global health: Science and the Environment; Ethics and Social Responsibility; Power and Economics; and Cultures and Society. These elective courses should preferably be completed by the end of the junior year. If a student has a particular focal interest, suggest that they take courses in that area first.

> **Note 1 re: Dimensions:** *At least eight credits of work taken to satisfy the "Dimensions of Global Health" requirements above must be at the 300 or 400 level.*
>
> **Note 2 re: Dimensions and transfer courses:** *Many courses transfer in at 3-credits. Students do not need to complete four credits in each dimension, just a minimum of one course. Additional credits to fulfill the total credits for the major can be from another elective in any dimension or general Global Health Studies credits.*

Science and the Environment:

Take one elective course (Prerequisites are noted in parentheses):

- BIO 310: Microbiology (BIO 220, BIO 221, and BIO 250 are prereqs)

- BIO 350: Immunology (BIO 220, BIO 221, and BIO 250 are prereqs)
- ENVSC 305: Environmental Spatial Analysis (ENVSC 110 prereq)
- ENVSC 385: Introduction to Sustainable Energy (ENVSC 110 prereq)
- GHS 223: Peoples and Poisons (*Counts either as Foundational Science or Science and the Environment elective)
- GHS 225: Foundations of Human Nutrition (*Counts either as Foundational Science or Science and the Environment elecive)
- GHS 228: Global Health Data Visualization (*Counts either as Foundational Science or Science and the Environment elective)
- GHS 322: Climate and Health
- GHS 324: Environmental Health
- GHS 425: Global Health Transitions
- PSYCH 172: Health Psychology

Ethics and Social Responsibility

Take one elective course (pre-requisite courses noted in parentheses):

- COMM 256: Politics and Communication
- COMM 360: Communication and Civic Engagement (prereq COMRT 120 or COMM 145)
- COMJ 160: Foundations of Community and Justice Studies (cannot be taken by seniors)
- GHS 235: Global Health Ethics
- PHIL 140 Ethics and Community (not open to seniors)
- PHIL 210: Oppression and Liberation
- PHIL 310: Global Justice (PHIL 140 or 210 prereq, or instructor permission)
- PHIL 385: Medical Ethics (not open to first-year students)
- POLSC 140: Political Theory
- POLSC 248: Human Rights
- POLSC 280: The Tragedy of Citizenship
- POLSC 348: Participatory Democracy
- WGSS 310: Gendered Violence (WGSS 100, prereq)

Power and Economics

Take one elective course (pre-requisite courses noted in parentheses):

- ECON 231: Environmental Economics and Policy (ECON 100 prereq)
- ECON 235: Health Economics (ECON 100 and/or ECON 101 prereq)
- ECON 238: Poverty, Inequality, and Efficiency (ECON 100 and/or ECON 101 prereq)
- ECON 251: International Economics (ECON 100 and/or ECON 101 prereq)
- ECON 256: Economic Development (ECON 100 and/or ECON 101 prereq)
- ENVSC 352: Environmental Justice (Junior/senior status)
- GHS 345: Economics of Food and Agriculture
- GHS 440: Global Health and Nutrition
- POLSC 120 Comparative Gov/Politics

- POLSC 130 World Politics
- POLSC 242 Immigration and Citizenship
- WGSS 340: Sex and Health
- WGSS 400: Transnational Feminisms (WGSS 100, and WGSS 210 or 211, prereqs)
- WGSS 410: Global Women's Health (WGSS 100, prereq)

Cultures and Societies

Take one elective course (pre-requisite courses noted in parentheses):

- COMM 331: Bodies and Health in Public Communication (COMM 120, 145, or FSCOM 201 or permission of the instructor prereq)
- GHS 354: Medical Anthropology and Perspectives of Health in Asia-Pacific
- HIST 277: American History of the Body
- HIST 380: Disease and Medicine in Modern History (one HIST course prereq)
- LS 530: Community Health Care: Internship in Community Health (LS 230 prereq)
- PHIL 230: Science in its Cultural Setting (one course in PHIL or Natural Science, prereq)
- WGSS 100: Introduction to Women's, Gender, and Sexuality Studies
- WGSS 211: Queer Lives
- WGSS 275: Bodies in American Culture
- WGSS 310: Gendered Violence (WGSS 100, prereq)

Required Elective: Students also must take an additional four credits from the "Dimensions of Global Health" categories above: **'Science and the Environment,' 'Ethics and Social Responsibility,' 'Power and Economics,' and 'Cultures and Societies.'**

Languages: Students must successfully complete at least one modern language course numbered 120 or above.

Fulfillment of this requirement involves the completion of one course in a foreign language at the level of 120 or above. Students cannot place out of this requirement. For example, an entering student who tests at the 200-level would take a course at the 200-level following placement test or consultation with the chair of World Languages and Cultures.

> **Language Placement:** *Students cannot place out of the language requirement. For example, an entering student who tests at the 200-level would take a course at the 200-level following placement test or consultation with the chair of World Languages and Cultures. Reach out to the Chair of Global Health Studies for specific questions related to this requirement.*
>
> **Language during Study Away:** *Students who study away in a region whose primary language is not taught at Allegheny may substitute an introductory 3-4cr language class from an accredited higher education institution (ex: Hungarian | Hungary, Afrikaans | South Africa, Swahili | Tanzania, Tagalog | Philippines)*

Experiential Learning

Students are strongly encouraged to complete at least one Global Health Studies-related learning experience (e.g. GL seminars, semester away programs, and research or internship opportunities) that goes beyond clinical observation or shadowing. They should consult with their advisor, a GHS steering committee member, or the program chair for guidance about suitable experiential learning opportunities.

We encourage students to prepare for their experiences by partaking in a pre-departure seminar, and encourage all students to reflect on their experiences in a seminar upon their return.

- GHS 510: Global Health Fieldwork (2cr)
- GHS 515: Global Health Practice (2cr)

Description of Global Health Studies Minor

Because this minor is Interdisciplinary Studies, students may complete any major to satisfy the college requirement that the major and minor be in different areas of study.

Required Introductory Core Course

- GHS 110 Introduction to Global Health Studies

Required Elective Courses in Global Health Dimensions

Take one elective course from each of the four "Dimensions of Global Health." See list of approved electives for each Global Health Dimension in the GHS Major description.

- **Science and the Environment**
- **Ethics and Social Responsibility**
- **Power and Economics**
- **Cultures and Societies**

Required Capstone Synthesis Course

- *A capstone course is defined as any course, GHS 420-475.*

  Capstone courses: *Given the high demand for the minor capstone classes, additional courses may be designated as a "capstone" course during a given semester, so there are typically two or more capstone electives available each semester. These additional capstone courses are in addition to courses with GHS 420-475 designation. Students should consult with the Chair of GHS for a list of approved GHS courses, including capstones, distributed before each registration period.*

Graduate Education Preferred and Priority Admissions Agreements

Business

- Palumbo-Donahue School of Business at Duquesne University in Pittsburgh preferred admissions agreement
    - MBA - Sustainable Business Practices (MBA-SBP)
    - Professional MBA (PMBA)
    - Master of Science in Management (MSM)
    - Master of Science in Analytics and Information Management (MS AIM) (STEM)
    - Master of Science in Supply Chain Management (MS SCM) (STEM)
- William E. Simon Graduate School of Business Administration at the University of Rochester preferred admission agreement

Business Analysis

- Tepper School of Business, Carnegie Mellon University priority admission agreement
    - Master of Science in Business Analytics (CMU-MSBA)

Healthcare Informatics

- School of Health Sciences at Chatham University preferred admissions agreement
    - Master of Science in Healthcare Informatics (CH-MHI)

Health Professions

- Jefferson Medical College Affiliation
    - Under the Physicians Shortage Area Program (PSAP), certain Allegheny students who intend to practice in underserved rural areas may qualify for preferential admission to Jefferson Medical College in Philadelphia. Qualifying students have rural or small-town backgrounds or family ties and intend to practice in non-metropolitan areas, preferable in Pennsylvania. Allegheny is one of six Pennsylvania colleges and universityes whose students are afforded special consideration as PSAP applicants.
- Lak Erie College of Osteopathic Medicine (LECOM) Affiliation
    - Early assurance programs are offered with LECOm in medicine, dentistry and pharmacy for students meeting criteria. The MCAT may be waived if certain academic criteria are met. Applicants must: interview at LECOM; have completed the pre-requisite courses; and have the support of the Health Professions Advisory Committee. Qualified candidates should meet with the Health Professions Advisor for further informaiton.
- Philadelphia College of Osteopathic Medicine (PCOM) Affiliation
    - Each year up to three students are offered admittance to PCOM provided they meet certain criteria. These criteria include completion of course requirements listed in the PCOM catalog, an overall GPA of at least 3.25, a mimimum of fiftieth presentile scores in each section of the MCAT, and support of the Health Professions Advisory Committee.

Nursing

- University of Pittsburgh, School of Nursing preferred admission agreement
    - Accelerated 2nd Degree Bachelor of Science in Nursing (ABSN) program

Psychology

- Chatham University guaranteed acceptance agreement
    - Master of Science in Counseling Psychology (MSCP)
    - Doctor of Psychology in Counseling Psychology (PsyD)

Sustainability

- Falk School of Sustainability and Environment at Chatham University preferred admissions agreement
    - Master of Sustainability (MSUS)
    - Master of Food Studies (MAFS)

Sustainability Management

- American University, Kogod School of Business preferred admission agreement
    - Master of Science sustainability Management (MS Sustainability Management)

Teacher Preparation

- Partner Institutions
    - Teacher Certification and Master of Arts in Teaching (MAT)
        - Columbia University Teachers College
        - Univrsity of Pittsburgh
    - MEd
        - University of Pittsburgh
        - Xavier University

Healthcare Management

Healthcare Management
https://allegheny.edu/academics/programs/healthcare-management/
Academic Bulletin

Healthcare Management involves the study of the entire ecosystem of the healthcare industry, which includes service providers, insurers, manufacturers, non-profit institutions, and government actors.

Area of Study: Interdisciplinary Studies
Program: Major
Major/Minor Exclusions:
A double major in Healthcare Management and Business/Economics, or a minor in Economics, does not satisfy the major/minor requirement in terms of areas of study. A double major in Healthcare Management and Global Health Studies, or a minor in Global Health Studies, does satisfy the major/minor requirement.

Students interested in Healthcare Management (HCM) are required to complete seven core Management courses (ECON 100, ECON 235, ECON 240, ECON 286, ECON 440, HCM 140, and HCM 435), alongside one Global Health Studies course (GHS 321, GHS 324, or GHS 345), one Ethics course (GHS 235, PHIL 205, PHIL 285, or PHIL 385), one Statistics course (BIO 385 or ECON 202), and one Fundamentals of Health course (BIO 175, BIO 210, PSYCH 162, PSYCH 170, or PSYCH 172).

The major also requires a Junior Seminar (ECON 579, ECON 584, ECON 588, GHS 575, or HCM 580) taken in the 2nd semester of the junior or first semester of the senior year, and a Senior Project (HCM 620) taken the semester after the seminar.

When advising a student interested in Healthcare Management, please note:

- ECON 100 is a prerequisite for both ECON 235 and ECON 240, and is recommended to be completed during the first year.
- HCM 140 is a prerequisite to GHS 235, GHS 321, and GHS 575, and an excellent foundation for many other courses, so it is advised to be taken during the first year.
- Either ECON 202 or BIO 385 is a prerequisite for ECON 440.
- A double major in HCM and Business/Economics, or a minor in Economics, does not satisfy the major/minor requirement in terms of areas of study. A double major in HCM and GHS, or a minor in GHS, does satisfy the major/minor requirement.
- Academic Advisor: Students should first consult the HCM advisor before declaring their major.
- Junior Seminar and Senior Comp: Students should plan to take their seminar either spring of junior year or the fall of senior year[1]. They should plan to complete their senior project during the following semester. The junior seminar prepares students for their senior project. It is advised to take these in consecutive semesters to ensure a cohesive learning experience. Students planning on graduating in January should take the seminar the previous spring and the senior project in the fall semester.

- Internships and Experiential Learning: Students are encouraged to pursue internships and other practical experiences related to healthcare management. These opportunities provide invaluable real-world insights and professional networking.
- Students interested in completing their MS in Healthcare Administration should be in touch with a member of the HCM faculty during the first year (third semester at the latest). Options for a 3+1 and 3+1 BS/MS are available to students. Note: the MS program will officially begin during the summer of 2027. Students matriculating in Fall 2024 will be eligible to complete the 3+1 program.

[1]At least one of those semesters is offered each semester.

NOTE: For Students interested in the Health Professions

Advisors and students should be aware that completing the Healthcare Management major does NOT fulfill the requirements needed for the MCAT or other pre-health profession entrance exams or graduate programs. For example, most pre-health fields require a year of biology, general chemistry, organic chemistry, physics (with the appropriate labs), and English. Students interested in majoring in Healthcare Management, who are also interested in a career in the health professions, should consider choosing a minor (such as BIO or CHEM) that contains many of the pre-health requirements. Students should consult with the Health Professions Advisory. See the following link for more information on the pre-health requirements: http://sites.allegheny.edu/health/

NOTE: For Students interested in the Master of Public Health (MPH)

The Healthcare Management major will prepare students for graduate work in the field of public health. Students interested in pursuing a Master of Public Health (MPH) in health/healthcare policy, management, administration, or another field are advised to minor or double-major in Global Health Studies or Biology.

Students interested in working in the field of public health or pursuing an MPH are highly encouraged to take Epidemiology (GHS or Bio 321), Biostatistics (Bio 385), and Environmental Health (GHS 324).

Advisors and students should be aware that completing the Healthcare Management major does NOT fulfill the requirements necessary for applying to an MPH program. The majority of MPH programs require at least one course in Biology/the life sciences. Biostatistics (Bio 385) does not meet this requirement. To meet this requirement, students are encouraged to take BIO 321 – Epidemiology, BIO 175 - Medical Terminology, or BIO 210 - Human Anatomy & Physiology.

While many MPH programs have rolling admissions deadlines, it is highly recommended that students submit all of their application materials in November of the year before they plan to begin their MPH program (before the Thanksgiving holiday) to maximize the amount of financial aid they are eligible for.

Sample Schedule for a **Healthcare Management Major** (for specific courses required for the Major, see the *Academic Bulletin*)

First Year	ECON 100 - Intro to Micro HCM 140 - Intro to Healthcare Systems ECON 286 - Fund of Managerial Accounting
Sophomore	ECON 235 - Health Economics Statistics Course (BIO 385 or ECON 202) Ethics Course (GHS 235 or PHIL 205 or PHIL 285 or PHIL 385)[2] Fundamentals of Health Course (BIO 175 or BIO 210 or PSYCH 162 or PSYCH 170 or PSYCH 172)[3]
Junior	ECON 240 - Intro to Business Management Global Health Studies Course (GHS 321 or GHS 324 or GHS 345)[4] ECON 440 - Applied Business Analysis Junior Seminar (ECON 579 or ECON 584 or ECON 588 or GHS 575 or HCM 580)
Senior	HCM 435 - Health Management HCM 620 - Senior Project

[2]None in Fall 2025. PHIL 385 - Medical Ethics will be offered in Spring 2026.
[3]Available Fall 2025 options: BIO 210 - Human Anatomy & Physiology and PSYCH 170 - Adult Psychopathology
[4]None in Fall 2025. Students should plan to take one of these courses in Spring 2026.

Information for Transfer Students (Second Year)

Suggested pathway of a **Healthcare Management Major** for a transfer student or a student who will declare HCM in Fall 2024, planning to finish in 3 years.

Sophomore	ECON 100 - Intro to Micro HCM 140 - Intro to Healthcare Systems ECON 286 - Fund of Managerial Accounting Statistics Course (BIO 385 or ECON 202) Ethics Course (GHS 235 or PHIL 205 or PHIL 285 or PHIL 385)

Junior	ECON 235 - Health Economics ECON 240 - Intro to Business Management Global Health Studies Course (GHS 321 or GHS 324 or GHS 345) Fundamentals of Health Course (BIO 175 or BIO 210 or PSYCH 162 or PSYCH 170 or PSYCH 172) Junior Seminar (ECON 579 or ECON 584 or ECON 588 or GHS 575 or HCM 580)
Senior	ECON 440 - Applied Business Analysis HCM 435 - Health Management HCM 620 - Senior Project

Declaring the HCM Major for 2023-24 Matriculants

If you matriculated during the 2023–24 academic year and wish to declare a Healthcare Management major, please note the following important information:

The HCM major does not officially appear in the College Bulletin until the 2024–25 academic year. Therefore, you must first change your Bulletin year to 2024–25 before declaring the HCM major.

To do this:

1. Change your Bulletin Year by completing this form: https://docs.google.com/forms/d/e/1FAIpQLSfwVLpx0Cj8IO8G7INq8GAsA-z0ijC_vZtXbfKrZmbBMrjiSQ/viewform
2. Declare your major using the 2024 Bulletin by completing this form: https://docs.google.com/forms/d/e/1FAIpQLSdX44mOoXeO_gvyoODW-FtnUZc_TdMxos_Wd0xoxDuwW9RdWA/viewform

History

History
Academic Bulletin

Area of Study: Values and Societies
Programs: Major and Minor
Department: History and Philosophy

When advising a student interested in History, please note:

- All History 100 and 200-level courses **require no previous history background and are appropriate for freshmen and sophomores.**
- Students are **strongly** encouraged to take two courses at the lower level (100 or 200-level courses) before enrolling in a 300-level course. Most 300-level courses are restricted to SO/JR/SR.
- All 500-level courses are signature courses and include prerequisite recommendations, which are listed in the *Academic Bulletin* and on Self-Service.
- Most 100-level and 200-level courses are offered every year. 300-level courses are offered every other year. One 500-level Junior Seminar is offered each semester.

Requirements for the Major in History:

46 total credits:

1. **One course (4 credit hours) in European History**
    - To be chosen from History 101, 103, 109, 110, 153, 155, 220, 310, 312, 313, 320, 321, and 380.
2. **One course (4 credit hours) in American History**
    - To be chosen from History 162, 163, 255 (or BLKST 255), 257 (or BLKST 257), 261, 269, 270, 273, 324, 326, 339, 341, 345, and 347.
3. **Two courses (8 credit hours) in non-Western History**
    - To be chosen from History 113, 116, 117, 123, 124, 165, 167, 272, 353, 355, 358, 360, 365, and 366.
4. **Substitution for FSHIS 201 (4 credit hours)**
    - This course is no longer taught. Substitutions for the Methods course will be made with program approval.
5. **Junior Seminar (4 credit hours)**
    - To be chosen from History 551, 558, 560, 563, 571, 572, 573, 577, and 587.
    - Students may complete the Junior Seminar in either the fall or spring of the Junior year.
    - Students may register for any open section of the Junior Seminar
6. **Senior Project (6 credit hours)**
    - The Senior Comp is a two semester project. HIST 600 is a two-credit course usually taken in the fall of the Senior Year. HIST 610 is a four-credit course usually completed in the spring of the Senior Year.

    - Senior Project advisors are assigned by the department in consultation with students.
    - Senior Project advisors are assigned based on comp topic and areas of faculty expertise. The comp advisor is separate from the academic advisor..
7. **A minimum of at least four courses (16 credit hours) that, excluding Junior Seminar and Senior Project, must be numbered 300 or above**

A maximum of two transferred courses (8 credits) taken at institutions of higher learning or at secondary institutions through the AP or IB programs may normally be counted toward the major. AP and IB courses may NOT be counted towards the major's European, American, and non-Western requirements. Exceptions must be approved by the Program Coordinator.

Suggested Course Sequence for a **Major in History**:

	1st Semester	**2nd Semester**	**Either Semester**
First Year	SWS 105 One 100 or 200-level HIST course.	One 100 or 200-level HIST course.	*Most students should take SWS 105 in the Fall* An additional 100 or 200-level HIST course. Courses should cover a range of geographic areas.
Sophomore	HIST 3XX	HIST 3XX	*Students may take SWS 205 in the Fall or Spring* Approved substitution for FSHIS 201/Methods An additional 100, 200, or 300-level HIST course.
Junior	HIST 3XX	HIST 3XX	HIST 5xx (Junior Seminar) An additional 100, 200, or 300-level HIST course if needed to complete 46 credits.
Senior	HIST 600 (Senior Project I)	HIST 610 (Senior Project II)	An additional 100, 200, or 300-level HIST course if needed to complete 46 credits.

Requirements for the Minor in History:

Six courses (24 credits) including:

- One course each in European, American, and non-Western History (12 credits).
- Two courses (8 credits) at or above the 300 level.
- One Junior Seminar (4 credits)

AP and IB courses MAY NOT be counted toward the minor.

Suggested course sequence for a **Minor in History:**

Minors typically take 3 entry-level (100- or 200-level) courses, 2 advanced (300-level) courses, and the Junior Seminar.

- First Year or Sophomore courses:
    - 1-2 entry-level (100- or 200-level) courses.
- Sophomore or Junior courses:
    - 1-2 entry-level (100- or 200-level) courses.
    - 1-2 advanced (300-level) courses in different geographical areas.
- Junior or Senior courses:
    - 0-1 advanced (300-level) courses.
    - Junior Seminar on historical research methodology.

Information for Transfer Students

Suggested pathway for a **History Major planning to finish in 3 years:**
Note: Students are expected to be transferring two courses (8 credits) in History at the 100 or 200-level. The most common courses transferred for direct credit are HIST 162 (History of the United States to 1865) and HIST 163 (History of the United States from 1865-present).

	1st Semester	**2nd Semester**	**Either Semester**
Sophomore	One 100 or 200-level HIST course.	HIST 3XX	FSHIS 201/Methods An additional 100 or 200, or 300-level HIST course.* Courses should cover a range of geographical areas.
Junior	HIST 3XX	HIST 3XX	HIST 5XX (Junior Seminar) An additional 100 or 200, or 300-level HIST course.

Senior	HIST 600 (Senior Project I)	HIST 610 (Senior Project II)	An additional 100, 200, or 300-level HIST course if needed to complete 46 credits.

*The major includes 4 courses taken at the 300-level or above. Students should adjust their additional HIST courses accordingly.

Advice for transfer courses for History major or minor:

Students interested in pursuing a major or minor in History are advised to take up to four entry-level (100- or 200-level) courses that cover a range of geographic areas (American, European, other areas) and periods. Students may also wish to take courses that would transfer at the advanced (300-) level. For these, we are looking at the syllabus to identify courses that develop and advance the approaches and coverage of lower-level courses by including substantial attention to independent student research and historical methodology. In other words, advanced courses typically have prerequisites, longer writing assignments, and explicit readings and class meetings on research and historical methodology.

Industrial Design

Industrial Design
Academic Bulletin

Area of Study: Visual and Performing Arts
Programs: Major

Suggested Schedule for **Industrial Design** majors:

4-Year Plan	**1st Semester**	**2nd Semester**	**Either Semester**
First Year	SWS 105		*Most students should take SWS 105 in the Fall* ART 142 ART 165 or 162 ART 151
Sophomore	ART 242 or 243	ART 242 or 243	Begin Speculative Design, Interaction Design, or Sustainable Design track requirements
Junior		ART 580 (Junior Seminar)	Continue Speculative Design, Interaction Design, or Sustainable Design track requirements
Senior	ART 600 (Sr, Project) Complete Speculative Design, Interaction Design, or Sustainable Design track requirements	ART 610 (Sr. Project)	

Comments:

1. There is a significant science component to this major (6 courses) that should be started early in the student's program, because track-specific classes are often hierarchical and strictly sequenced. See the track-specific pathways below.

Speculative Design Track (SPxD)

- ART 115 - Art History & the Birth of the Museum OR COMM 120 - Introduction to Media Culture
- ART 187 - Introduction to Electronic Art
- ART 287 - Art and Science at the Intersection of Culture OR ART 262 - Ceramics II OR ART 265 - Sculpture II
- ART 250 - Contemporary Strategies in Art OR HIST 170 - Public History
- ART 342- Design Form) OR ART 388 - Art/Science Special Topics

Interaction Design Track (IdX)

- CMPSC 100 - Computational Expression
- CMPSC 101 - Data Structures
- CMPSC 102 - Data Abstraction
- CMPSC 203 - Software Engineering
- CMPSC (406) 303 - Internet of Things OR CMPSC (303) 310 - Artificial Intelligence OR CMPSC (304) 311 - Robotics
- *Parentheses indicate course numbers being revised by Computer Science

Sustainable Design Track (SdX)

- ENVSC 110 - Intro to Environmental Science
- ENVSC 210 - Environmental Research Methods
- ENVSC 285 - Quantitative Sustainability
- ENVSC 352 - Environmental Justice OR ENVSC 427 - Culture, Power, Environment
- ENVSC 380 - Climate and Energy Policy

Informatics

Informatics
Academic Bulletin

Area of Study: Interdisciplinary Studies
Programs: Major and Minor
Department: Department of Computer and Information Science
Major/Minor Exclusions:
A student majoring in Informatics may not double major or minor in Computer Science, Data Science or Software Engineering.
A student minoring in Data Science may not major in Computer Science, Data Science or Software Engineering.

Description
A program emphasizing critical and interdisciplinary approaches to information and technology. Students develop ethical and technical frameworks to address culturally relevant problems, enriching public understanding of the relationship between information and culture.

Careers

- Campaign Strategist
- Information Architect
- Digital Librarian
- Health Information Technologist
- Geospatial Analyst

Graduate Programs

- MIS (Management Information Systems)
- MPH (Master of Public Health)
- MLIS (Master of Library and Information Science)
- MS (Master of Science)

Cooperative Programs

Our students have the opportunity to participate in one of the cooperative opportunities, including Carnegie Mellon's (CMU's) Accelerated Master's Program in Information Systems Management or in Information Security Policy & Management, one of the 3-2 engineering programs and Health Informatics program at Chatham, and 4-1 program in Business Data Analytics with CMU's Tepper School of Business. Participation in such academic programs will likely require more careful planning of the student's program of study at Allegheny College, and students should work with their academic advisor to carefully craft their academic plan. More information about these programs is available at https://www.cis.allegheny.edu/teaching/cmu/

Finding an Academic Advisor

Students can approach any CIS faculty member to serve as their academic advisor.

Laptop Use in CIS Courses
All students are expected to use their own laptops during class and lab sessions in CIS courses. This setup reflects real-world practice and supports flexible classroom use.

To ensure your laptop meets course requirements, please review the department's approved laptop guidelines here: https://www.cs.allegheny.edu/resources/laptops

Students enrolled in any CIS course (regardless of major/minor status) may request a loaner laptop at any time during the semester using the Laptop Loan Request Form at the same link. A configured laptop will be prepared and made available for pick-up at the library.

Introductory Courses (CMPSC 100, 101, and 105)
All three introductory courses are required for a data science major. CMPSC 100 and CMPSC 101 are offered every semester. CMPSC 105 is offered every spring semester. Students with prior programming experience, specifically in Python, may reach out to the chair (jjumandinova@allegheny.edu) to discuss the possibility of bypassing CMPSC 100 and enrolling in CMPSC 101.

Core Courses
A number of Core courses offered through various departments are available every semester. While some of them do not have prereequisites, others do have prerequisites. The courses with prerequisites are unlikely to be suitable for incoming first-year students, but may be appropriate for some incoming transfer students.

Applications Modules
Students should consult with an advisor about their interests, questions, and goals as they design their module coursework. In their first year, students should consider taking introductory courses related to their module(s) of interest.

Junior Seminar and Senior Project courses

Junior Seminar, CMPSC 580, is always offered in the spring semester. Students must receive the instructor's permission to take the course before they can register for it directly on Self-Service. This course must be completed before students take the Senior Comprehensive Project course in their major. The first and second reader selection process for the Senior Comprehensive Project occurs in CMPSC 580. Students who plan to study away during the Spring semester of their Junior year should take CMPSC 580 in the spring semester of their Sophomore year.

Comprehensive Senior Project in all CIS majors is a two-semester project with INFM 600 course taken in the Fall semester and INFM 610 course taken in the Spring semester. In rare circumstances, faculty will consider an exception to the semesters in which these courses are taken, but no exception can be made to it being a two-semester project. Students who are double majoring should consider completing a joint, single comprehensive senior project by registering for DOUBL 600 and 610. Students completing a

double project will work with their first reader to ensure their proposed project satisfies all requirements of their major in the CIS department.

Important Notes About the Major in Informatics

- The major in Informatics requires the successful completion of at least 48 semester hours. To graduate with a major in Informatics, a student must have an earned GPA of at least 2.0 in the required courses presented for the major. For the Informatics major, at most one of CMPSC 100, 101 or 105 may be presented for the major on a Credit/No Credit grade basis.
- With approval from an academic advisor, students may substitute a Junior Seminar in another department for CMPSC 580.

Additional, regularly updated, details about the Informatics major are always available at: https://www.cs.allegheny.edu/teaching/bulletin/

Suggested Schedule for a Major in Informatics

We do not recommend taking more than two CMPSC courses with a lab (with an exception of the Junior seminar) in one semester.

	Fall Academic Semester	Spring Academic Semester
First Year	CMPSC 100	CMPSC 101 CMPSC 105 (spring only)
Sophomore	2 **Core** courses	1 **Core** course 1 **Applications Module** course
Junior	Remaining **Core** course 1 **Applications Module** course	CMPSC 580
Senior	INFM 600	INFM 610

Students who declare an Informatics major are encouraged to regularly meet with their academic adviser to verify that they are making suitable progress towards the completion of their degree requirements.

Minors in Informatics

The minor in Informatics requires the completion of at least 24 semester hours of coursework including:

- CMPSC 100 - Computational Expression AND
- CMPSC 101 - Data Structures

A minor must also take two Core courses (CMPSC 350 and COMM 342) and two courses from one Applications Module. Please remember that at most one of CMPSC 100 or 101 may be presented for the minor on a Credit/No Credit grade basis.

Information for Transfer Students

A maximum of 16 transfer credits may be counted toward the major. A maximum of 8 transfer credits may be counted toward the minor.

Three Year Informatics Academic Plan

<table>
<tr><td colspan="3">Transferring after one year</td></tr>
<tr><td colspan="3">We expect students transferring to Allegheny after attending one year at another institution may have one introductory course; in some cases, they may also be transferring in a second or third introductory course and/or a Core or Elective course. We do not recommend taking more than two CMPSC courses with a lab (with the exception of the Junior Seminar and Senior Project) in one semester.</td></tr>
<tr><td></td><td>MAJORS</td><td>MINORS</td></tr>
<tr><td>Year 1 at Allegheny</td><td>● Complete remaining CMPSC 100-level introductory courses if necessary (majors need 3: CMPSC 100, 101, and 105)
● Take 2 Core course(s)
● Optionally, take 1 Applications Module course</td><td>● Complete CMPSC 100-level introductory course if necessary (minors need 2: CMPSC 100 and CMPSC 101)
● Take 1-2 Core courses</td></tr>
<tr><td>Year 2 at Allegheny</td><td>● Take 2 Core courses
● Take 1 Applications Module course
● Enroll in CMPSC 580, Junior Seminar (spring semester only)</td><td>● Complete remaining Core courses if necessary
● Take 2 Applications Module courses</td></tr>
</table>

Year 3 at Allegheny	• Complete remaining **Applications Module** course if necessary • Take **INFM 600** in the fall semester • Take **INFM 610** in the spring semester • Take any remaining courses to reach major requirement of **48 credits**	• Complete remaining courses if necessary • Take any remaining courses to reach minor requirement of 24 credits

Two Year Informatics Academic Plan

Transferring after two years		
We expect students transferring to Allegheny after attending two years at another institution may have at least two introductory courses and may also be transferring in a Core or Elective course. We do not recommend taking more than two CMPSC courses with a lab (with an exception of the Junior Seminar and Senior Project) in one semester.		
	MAJORS	**Minors**
Year 1 at Allegheny	• Complete remaining *CMPSC 100-level* introductory courses if necessary in the first semester (majors need 3: CMPSC 100, 101, and 105) • Take 2-3 **Core** courses • Enroll in **CMPSC 580**, Junior Seminar (spring semester only)	• Complete **CMPSC 100-level i**introductory course if necessary (minors need 2: CMPSC 100 and CMPSC 101) • Take 1-2 **Core** courses (minors need 2) • Optionally, take 1 **Applications Module** course (minors need 2)

Year 2 at Allegheny	• Complete remaining 1-2 **Core** courses • Take 2 **Applications Module** courses • Take **INFM 600** in the fall semester • Take **INFM 610** in the spring semester • Take any remaining courses to reach major requirement of **48 credits**	• Take 1-2 **Applications Module** courses (minors need 2) • Take any remaining **Core** courses if necessary • Take any remaining CMPSC courses to reach minor requirement of **24 credits**

Issues to consider for transfer credits:

- It is common for the similar sounding CMPSC courses to have varying degrees of "depth" across different institutions as evident by the varying or lack of prerequisites and topics covered. Transfer credit is accepted only for courses at approximately the same level of topic "depth" as the Allegheny College courses.
- All CMPSC courses use version control software (Git), continuous integration (GitHub Actions) and some courses beyond CMPSC 100 use a container-based system (Docker). Transfer students unfamiliar with these technologies should reach out to the Chair of the department to be placed in a short tutoring program with the department's Technical Leaders.
- All CMPSC introductory courses at Allegheny College are taught in Python programming languages. Transfer students unfamiliar with Python should reach out to the Chair of the department to receive adequate support.

International Studies

International Studies
Academic Bulletin

Area of Study: Interdisciplinary Studies
Program: Major

Pathways to the International Studies (IS) Major

For all students majoring in International Studies:

- Every IS major completes "Introduction to International Studies" (INTST 110) as well as general coursework from the departments of Business and Economics, History, Political Science, and World Languages and Cultures.
- Every IS major chooses a regional focus from East Asia (**please consult with Chair if interested in this regional focus)***, Europe, Latin America, Middle East and North Africa. Majors can also self-design a regional focus (e.g. West Africa).
- Every IS major gains proficiency in a second language and studies abroad (courses taken abroad most often count toward the regional focus coursework in the major).
- IS counts AP credits toward the major if they fit to requirements in the major.

IS major in 4 years

	Fall	Spring
First Year	SWS 105 *Most students should take SWS 105 in the Fall* INTST 110 *and* POLSC 120 or 130 *or* ECON 100 or 101 Language course (via placement or beginning level entrance)	INTST 110 *and* POLSC 120 or 130 *or* ECON 100 or 101 Language course (if not taken in fall semester, via placement or beginning level entrance)

Second Year *Declare the IS major to begin working with a major advisor *Identify study abroad options with the help of the Global Education Office	Continue work on General Coursework; Economic Theory and Applications, Political Theory Introductory-level regionally-focused history course Language course	Continue work on General Coursework; Economic Theory and Applications, Political Theory Introductory-level regionally-focused history course Language course -->Feb. 20 deadline for fall study abroad
Third Year	**Semester Abroad OR** Historical Interpretation course IS-approved Junior/Senior Seminar Language course -->Sept. 20 deadline for spring study abroad	In this academic year, one semester will typically be on campus, and one will be abroad so the courses listed in the fall are valid for spring for students who studied abroad in the fall. And students who were on campus in the fall will typically be studying abroad in the spring.
Fourth Year	INTST 600 (pre-senior project) Any unfinished regional focus coursework IS-approved Junior/Senior Seminar if not taken in Junior year	INTST 610 (senior project)

- Advisor Selection: Students are encouraged to choos an advisor from among the IS Affiliated faculty list, and further encouraged to choose an advisor who is working in their regional area of focus or the chair of the program. Sometimes students choose as advisor the professor they took INTST 110 with (the intro class to the major).
- IS students take the Junior Seminar either in the junior year, or first semester of the senior year: this depends on study abroad semester.
    - Students register for an open Junior Seminar sectoin: every semester we have IS-identified junior seminars across contributing departments.
- IS students take a 2 semster Senior Project in the Fall and Spring. It is also sometimes spring and spring, depending on study abroad.

Information for Transfer Students

IS major in 3 years

- A transfer student may be able to transfer in "Introduction to International Studies" (INTST 110). This course introduces interdisciplinary study of regions of the world with particular emphasis on colonization and colonialism, Post WWII international institutions, regional alliances, and current thinking on international development and the environment/sustainability.
- Ideally, a transfer student considering an IS major with one year of experience elsewhere will be able to transfer in introductory coursework in Political Theory and/or Economic Theory and Applications and/or language courses and/or an introductory regionally-focused history course.
- Students transferring to Allegheny College are strongly encouraged to begin working with the IS Program Chair and/or an IS major advisor as soon as they know they will be coming to Allegheny College.

*Our language options are limited for the East Asia region. Students interested in East Asia as a focus region should contact the Chair upon matriculation.

Jewish Studies

Jewish Studies
Academic Bulletin

Area of Study: Interdisciplinary Studies
Program: Minor
Department: History & Philosophy
Program Contact: Professor Adrienne Krone

The minor requires 20 credits and a GPA of at least 2.0 in the minor. Courses not on the list, including those taken during study abroad, may be counted toward the minor with prior approval of the minor coordinators. At least two courses in the minor must be at the 300 level or above.

Foundation Course: RELST 147, *Judaism*

Jewish Religion/Judaism: Take **two** courses.

- ENVSC/RELST 372, *Judaism, Justice, and Food*
- RELST 229, *The Hebrew Bible*
- RELST 341, *Jewish Ethics*
- RELST 360, *Religion and Ecology*

Jewish Ethnic/Cultural/Historic Relations: Take **two** courses.

- HIST 110, *Europe in the Age of Dictatorship and Democracy, 1914-Present*
- HIST 124, *A History of the Modern Middle East, 1839-Present*
- HIST 313, *A History of the Third Reich and the Holocaust*
- PHIL 210, *Oppression and Liberation*
- POLSC 232, *Government and Politics of the Middle East*
- POLSC 354, *War and Peace in the Middle East*
- POLSC 355, *The Arab--Israeli Conflict*
- RELST 180, *Religion in American Life*
- RELST 288, *Jewish Meadville*
- WGSS 210, *Social Movements in Women's, Gender, and Sexuality Studies*

Suggested course sequence for a **Minor in Jewish Studies:**

Minors typically take 2 entry-level (100- or 200-level) courses and 3 advanced (300-level) courses.

- First Year or Sophomore courses:
    - 1-2 entry-level (100- or 200-level) courses including RELST 147
- Sophomore or Junior courses:
    - 1-2 entry-level (100- or 200-level) courses.
    - 1-2 advanced (300-level) courses.
- Junior or Senior courses:

- 0-1 advanced (300-level) courses.

Journalism & Documentary Storytelling

Journalism & Documentary Storytelling
Academic Bulletin

Area of Study: Languages, Literature, & Culture
Program: Minor
Major/Minor Exclusion: A student cannot minor in both Journalism & Documentary Storytelling and Filmmaking

Minor suggested timeline (24 credits):

	Fall Semester	Spring Semester	Either Semester
Year 1 (4-8 credits)	JOURN 100 or FILM 171	FILM 171 or JOURN 100	
Year 2 (4-8 credits)			JDS elective
Year 3 (4-8 credits)	FILM 375[1]	FILM 400[2]	JOURN 310[3]
Year 4 (4-8 credits)			

[1]FILM 375 is scheduled to be offered every Fall
[2]FILM 400 is scheduled to be offered every other Spring, beginning Spring 2026
[3]JOURN 310 is scheduled to be offered every Spring

Journalism & Documentary Storytelling Electives (take a total of 4 credits)

JOURN 501 + 502 Internship0 with the Campus (2 cr each)	ART 171, Photography 1
FILM 300, Filmmaking 2	COMM 256, Power, Politics & Communication
FILM 350, Filmmaking Techniques	COMM 261, The Business of Media

ENGL 210, Creative Nonfiction	POLSC 318, Politics and the Media

Students interested in declaring a minor in Journalism & Documentary Storytelling should speak with Mike Keeley (Journalism & Documentary Storytelling faculty) or the Department Chair of Communication, Media, and Performance.

Latin American and Caribbean Studies

Latin American and Caribbean Studies
Academic Bulletin

Area of Study: Interdisciplinary Studies
Program: Minor
Now housed in International Studies

Program Faculty: Professor Alkyam (Program Coordinator), Caballero, Conners, Haywood, Hernandez, Herrera, Mattiace, Riess

See also the Latin America track in the "International Studies" major.

An interdivisional minor examining the religion, politics, history, and language of Latin America and the Caribbean (LACS). The minor includes coursework in History, Political Science, and Spanish. Through this minor, students will acquire an understanding of LAC culture, history, society, and contemporary politics and the ability to critically analyze various issues related to the region. A minimum of 24 credits are required to fulfill the requirements for the minor. When appropriate, Special Topics, FS 201 courses in relevant subjects, and courses taken while abroad may be substituted to bring the total credits to at least 24. All substitutions for required courses must be approved by the minor coordinator, and students must discuss any potential course substitutions prior to enrolling in the course. Because the LACS minor is interdisciplinary, students who complete any major can take LACS as a minor.

The Latin American and Caribbean Studies Minor:

A minor in Latin American and Caribbean Studies requires 24 credits: 12 credits in Spanish coursework dependent upon placement exam results, and 12 credits from below coursework:

Select from the list below (a minimum of two departments must be represented, and at least two courses must be at or above the 300-level):

- HIST 116, Colonial Latin America
- HIST 117, Modern Latin American History (offered Fall 2023)
- HIST 365, Conquest! Latin America 1492-1600
- HIST 366, Dictators and Development in Latin America
- HIST 577, Inventing Mexico: Nationalism and National Identity in a Global Context
- POLSC 235, Government and Politics of Latin America
- POLSC 242, Immigration and Citizenship
- POLSC 261, U.S.-Latin American Relations

Mathematics

Mathematics
Academic Bulletin

Area of Study: Mathematics and Natural Sciences
Programs: Major and Minor

A Guide to First Year Advising in Mathematics

In general, students who will need a Mathematics course, or who are interested in Mathematics, should be encouraged to take a Mathematics course in the fall.

Mathematics Placement Assessment Policy for 2025

- All entering first-year and transfer students are required to take the Mathematics Placement Assessment if they are planning on enrolling in a Mathematics course, with the exception of students who have already received Allegheny transfer credit for PRERQ*MAT.
- All other first-year students (including those students who took an AP Calculus Exam in Spring 2025) and transfer students should take the Mathematics Placement Assessment. A student's placement score is a measure of their current preparation for Allegheny's calculus courses.

Students who took an AP Calculus Exam in Spring 2025

- Unless Allegheny has received the official results for the AP Calculus Exams, students should be enrolled in MATH 100, MATH 140 or MATH 151 based on their placement score.
- However, once the official results for the AP Calculus Exams have been received, students with AP Calculus credit should be moved to the appropriate calculus course as described in the following table.

AP Exam	AP Score	Credit Received	Recommended Starting Course
Calculus AB	3 or below	None	Determined by placement score
	4 or 5	MATH 151	MATH 152
Calculus BC	2 or below	None	Determined by placement score

	3 with AB subscore of 3 or below	None	Determined by placement score
	3 with AB subscore of 4 or 5	MATH 151	MATH 152
	4 or 5	MATH 151 and MATH 270	MATH 152

Students with transfer credit (regardless of placement score, if they took the Mathematics Placement Assessment):

- Unless Allegheny has already processed incoming transfer credit, these students should be enrolled in MATH 100, MATH 140 or MATH 151 based on their Mathematics Placement score.
- However once incoming transfer credit has been processed, students with transfer credit should be moved to the appropriate calculus course as described in the following table.

Transfer Credit	Recommended Placement
MATH 100	MATH 140 or MATH 151 (depending on placement score)
PRERQ*MAT	MATH 151 (regardless of placement score)
MATH 140	MATH 141
MATH 141	MATH 152
MATH 151	MATH 152
MATH 152	Consult Mathematics Department Chair
MATH 270	MATH 152, or consult Mathematics Department Chair

Pathways to the Mathematics Major:

For all students majoring in Mathematics:

- Ideally, a Mathematics major should begin in MATH 151 or above. Students who do not place in MATH 151 should begin in MATH 140.
- MATH 205 is a prerequisite for most upper-level courses and should be taken as soon as possible, in the second year.
- The course MATH 211 is offered every fall and some springs. The course MATH 205 is offered every spring and some falls. The courses MATH 280, MATH 325, and MATH 340 are offered every fall. The courses MATH 320 and MATH 585 are offered every spring. The course MATH 270 is usually offered once per year, but with no set rotation.
- Most of the other 200-, 300-, and 400-level electives are offered once every two years; the exceptions are MATH 345, which is offered every fall, and MATH 346, which is offered every spring.

Suggested Sequence of Required Courses for the Mathematics Major placing in Math 151:

	1st Semester (Fall)	2nd Semester (Spring)
First Year	MATH 151	MATH 152
Sophomore	MATH 211 MATH 270 or MATH 280	MATH 205 MATH 320
Junior	MATH 325 or MATH 340 Elective	MATH 585 Elective
Senior	MATH 325 or MATH 340 Elective	MATH 620

Suggested Sequence of Required Courses for the Mathematics Major placing in MATH 140:

	1st Semester (Fall)	2nd Semester (Spring)
First Year	MATH 140	MATH 141

Sophomore	MATH 152	MATH 211 MATH 205
Junior	MATH 270 or MATH 280 MATH 340	MATH 320 MATH 585 Elective
Senior	MATH 325 Elective	MATH 620 Elective

- Establishing an advisor: Simply ask a professor.
- Junior Seminar: Should be taken in the Spring of the Junior Year.
- Senior Project: One semester project taken either Fall or Spring semester of the senior year.

Pathways to the Mathematics Minor:

For all students minoring in Mathematics:

- The Mathematics minor requires 20 semester credit hours of Mathematics courses numbered above MATH 151. At least 4 semester credit hours must include a Mathematics course numbered 300 or above.

Suggested Sequence of Courses for the Mathematics Minor placing in Math 151:

	1st Semester	**2nd Semester**
First Year	MATH 151	MATH 152
Second Year	MATH 211	MATH 320 or Elective
Third or Fourth Year	MATH 345 ore Elective	Elective

Suggested Sequence of Courses for the Mathematics Minor placing in Math 140:

	1st Semester	**2nd Semester**

First Year	MATH 140	MATH 141
Second Year	MATH 152	MATH 211
Third Year	MATH 345 or Elective	MATH 320 or Elective
Fourth Year		Elective

Information for Transfer Students

Suggested Sequence of Required Courses for the Mathematics Major for Transfer Students with credit in MATH 151 and MATH 270, and wanting to finish in three years:

- Ideally, a transfer student considering a Mathematics major with one year of experience elsewhere will already have transfer credit for at least two courses in calculus, typically MATH 151 and MATH 270.

	Fall	**Spring**
Second Year	MATH 152	MATH 205 MATH 211
Third Year	MATH 340	MATH 320 MATH 585 MATH Elective
Fourth Year	MATH 325 MATH Elective	MATH 620 MATH Elective

Suggested Sequence of Required Courses for the Mathematics Major for Transfer Students with credit in MATH 151, MATH 270, and MATH 211 and wanting to finish in two years:

- Ideally, a transfer student considering a Mathematics major with two years of experience elsewhere will already have transfer credit for three courses in calculus, typically MATH 151, MATH 270, and MATH 211, as well as transfer credit for either MATH 280 or MATH 320. For these students, MATH 270 serves as a substitution for MATH 152, making MATH 280 required.

	Fall	Spring
Third Year	MATH 205 MATH 280 (if not transferred) *or* MATH Elective	MATH 320 (if not transferred) MATH 585 MATH Elective
Fourth Year	MATH 325 MATH 340	MATH 620 MATH Elective MATH Elective (if needed)

Additional Notes:

- **Academic Advisor:** Simply ask a professor.
- **Junior Seminar:** Students should plan to take the Junior Seminar in the Spring semester of the junior year.
- **Senior Project:** Mathematics Senior Project is a one semester project taken either Fall or Spring semester of the senior year.

Microcredentials

Microcredentials are digital badges that contain data regarding skills, competencies and strengths within a field of study, or through a course stream comprised of existing Allegheny courses. Microcredential badges are used on hiring and application portals to help job and graduate school applicants rise through the algorithmically-parsed applicant pool by meaningfully tying skills, competencies and strengths gained while studying at Allegheny to needs designated as important to organizations.

A Microcredential is defined by at least 12 credits that, taken together, develop a set of well-defined skills, competencies and strengths. Courses used to fulfill a Microcredential must be completed with a C or better. Up to one transfer course may be used to fulfill the requirements for any given Micro-credential.

Microcredentials are issued twice per year, typically falling on the first business day after February 1st for microcredentials earned in the fall semester, and June 1st for microcredentials earned in the spring semester.

2 Dimensional Design

2D Design equips students with the foundational knowledge to produce a portfolio of works in 2D, whether digitally or in traditional media such as drawing and painting. Students who earn this microcredential will be able to effectively utilize the tools and techniques of varying 2D media toward the production of a body of work.
Start Date: 24/FA
Affiliated Department: Art

3 Dimensional Design

3D Design equips students with the foundational knowledge to produce a portfolio of works in 3D, whether in sculpture, ceramics, or emerging media areas such additive manufacturing. Students who earn this microcredential will be able to effectively utilize the tools and techniques of varying 3D media toward the production of a body of work.
Start Date: 24/FA
Affiliated Department: Art

Accounting

The accounting microcredential provides foundational knowledge of accounting processes and methodologies. Students develop an understanding of accounting principles such as recording transactions, presenting financial information, and analyzing costs.
Start Date: 25/FA
Affiliated Department: Business & Economics

AI-Driven Content Creation

AI-Driven Content creation equips students with contemporary strategies and tools for creating images, video, and text such as prompt engineering and large language model (LLM) model fine-tuning. Students completing this microcredential will be able to generate intentional and consistent results in response to a wide variety of purposes, including artistic and industrial applications.
Start Date: 24/FA
Affiliated Department: Computer & Information Science

Art History Fundamentals

Students who complete the Art History microcredential demonstrate basic fluency in the language of art history and visual analysis. Students understand major movements in Art History, particularly in the twentieth and twenty-first centuries, and they learn about how artworks reflect, impact, and participate in cultural power dynamics related to race, gender, sexuality, and nationality, among others. Students must take 3 of the 4 listed courses.
Start Date: 24/FA
Affiliated Department: Art

Artificial Intelligence Engineering

The Artificial Intelligence Engineering microcredential equips students with the skills to integrate machine learning techniques into new software for autonomously solving real-world problems beyond standard benchmarks. Through the coursework, students will critically evaluate how the convergence of modern tools and new applications can proceed ethically and sustainably.
Start Date: 25/FA
Affiliated Department: Computer & Information Science

Content Creation

Content Creation will develop students' skills in producing images, video, and sound-based content and instructing them on effective deployment through web development and/or contemporary marketing practices.
Start Date: 23/FA
Affiliated Department: Computer & Informaiton Science

Core Skills for Mental Health Professions

Provides foundational knowledge and introductory skills in clinical assessment, diagnosis, and therapeutic interventions for mental health conditions affecting adults and/or children. This microcredential is designed as an educational stepping stone to build essential skills for roles supporting licensed mental health professionals or preparing for further training in mental health fields. It is not intended to qualify participants for clinical practice or independent therapy provision but offers a solid foundation for pursuing careers in clinical psychology, counseling, or related mental health services.
Start Date: 25/FA
Affiliated Department: Psychology

Cybersecurity Risk Analysis

Cybersecurity Risk Analysis introduces the knowledge and skills that students need to design, implement, and deploy secure software systems. Students who complete this microcredential will have the demonstrated ability to identify and resolve cybersecurity risks through the analysis of a system's design and implementation.
Start Date: 24/FA
Affiliated Department: Computer & Information Science

Data Analysis

Data Analysis introduces the knowledge and skills that students need to effectively make decisions using varied data sources. Students who complete this micro-credential will have the ability to use the Python and R programming languages to create data visualizations, perform statistical analyses, and train machine learning models that yield actionable insights and support decision-making.
Start Date: 23/FA
Affiliated Department: Computer & information Science

Data-driven Health Informatics

Data-driven Health Informatics microcredential provides foundational knowledge and skills in finding, understanding, organizing, visualizing, and extracting information from health-related data. Students who complete this micro-credential will be able to explore publicly available health and genetic data, and use open-source web tools, Python programming, and Stata software package to learn insights from this data
Start Date: 24/FA
Affiliated Department: Computer & Information Science

Editing and Publishing

This microcredential emphasizes public-facing writing, editing, and ethical publication. The courses have been selected to offer students opportunities to consider the practical skills of copy-editing, publication production, and marketing, while simultaneously learning to give and receive useful and editorial feedback.
Start Date: 24/FA
Affiliated Department: English

Embedded Systems Engineering

Embedded Systems Engineering microcredential equips students with the skills to develop and optimize software for hardware systems. Students who complete this microcredential will have the demonstrated ability to design efficient, high-performance embedded applications while utilizing memory management, parallel processing, and secure communication.
Start Date: 25/FA
Affiliated Department: Computer & Information Science

Filmmaking & Media Production

Filmmaking & Media Production equips students with strategies, and techniques to best utilize contemporary tools in the field. Students completing this microcredential will be able to produce technically advanced films that effectively leverage technique toward expressing an underlying conceptual or narrative objective.
Start Date: 24/FA
Affiliated Department: COmmunication, Media, & Performance

Finance

Finance equips students with the tools and methodologies employed by finance professionals. Upon completing this microcredential, students will understand the role of financial markets in the economy, how interest rates are determined, how risk affects the price and expected return of a financial asset, and will be able to analyze investment decisions.
Start Date: 25/FA
Affiliated Department: Business & Economics

Foundations of Industrial Design

Foundations of Industrial Design equips students with the foundational knowledge to produce a portfolio of Industrial Design studies prompted by problems generated through the study of commonplace objects and their use cases. Students who earn this microcredential will be able to effectively utilize the tools and techniques of the field of Industrial Design toward the production of a cohesive portfolio of design objects.
Start Date: 24/FA
Affiliated Department: Art

Game Design

The Game Design microcredential allows students to develop crucial skills for conceptualizing, designing, and building video games. Skills include electronic art, game logic, and web-based interactive interfaces. In addition, students learn how to think conceptually in areas like digital space, story, and level design. These skills apply in the fast-growing gaming industry as well as other engineering and design contexts.
Start Date: 24/FA
Affiliated Department: Computer & Information Science

German Language and Culture

Through the German Language and Culture micro-credential, students acquire basic skills in reading, speaking, and writing the language together with essential cultural knowledge about the geography, regional culture, art, economy, politics, and values of German-speaking countries. In addition, students acquire an intercultural awareness and understanding of how linguistic and cultural differences shape communication and cognition.
Start Date: 25/FA
Affiliated Department: World Languages & Cultures

Health Anatomy

The Health Anatomy microcredential involves a three-course series that covers terminology and anatomy & physiology. This series may fulfill admissions requirements for graduate programs in nursing, physician's assistant, physical therapy, or other allied health professions.
Start Date: 24/FA
Affiliated Department: Biology

Investing

Investing equips students with the tools and methodologies employed to value assets. Upon completing this microcredential, students will understand how risk and interest rates influence the pricing of financial assets, and will be able to generate reports on firms, including equity recommendations.employed to value assets. Upon completing this microcredential, students will understand how risk and interest rates influence the pricing of financial assets, and will be able to generate reports on firms, including equity recommendation
Start Date: 25/FA
Affiliated Department: Business & Economics

The Multilingual Mindset

The Multilingual Mindset Microcredential is awarded to students who study two languages besides English at an intermediate (200-level) or higher. This level of study develops situational language skills, cultural awareness, and effective communication in multiple languages. Students gain critical listening and problem-solving skills through language comparisons and cultural exploration, and the credential recognizes students' adaptability to work in teams and communicate in multiple linguistic and cultural settings.
Start Date: 25/FA
Affiliated Department: World Languages & Cultures

Product Development in the Internet of Things

Product Development in the Internet of Things provides students hands-on experience with creating smart devices using the principles of human-computer interaction (HCI), and user-centered design (UCD). Students will develop and prototype physical devices incorporating industry grade software and hardware such as the Raspberry Pi, Teensy, or ESP32 platforms to design reproducible, manufacturable, technical solutions which respond to and/or supplement human needs.
Start Date: 24/FA
Affiliated Department: Computer & Information Science

Programming with Web Technologies

Programming with Web Technologies teaches students how to develop accessible, aesthetically pleasing, and well-organized websites and web applications. In addition to attaining the knowledge and skills needed to benchmark, maintain, and enhance websites, students who complete this microcredential will be able to design the user experiences and interfaces for compelling and dynamic web projects.

Start Date: 23/FA
Affiliated Department: Computer & Information Science

Psychological Research Design and Analysis

This microcredential equips students with the ability to design methodologically sound psychological research studies, applying principles of effective research design and ethical considerations. Students will develop proficiency in collecting and analyzing data using statistical methods and gain hands-on experience with statistical software such as JASP. They will learn to interpret statistical results accurately and draw valid conclusions, strengthening their analytical and critical thinking skills. Additionally, students will refine their ability to communicate research findings clearly, both in writing and verbally, preparing them to present complex data in accessible ways for academic and applied settings.
Start Date: 25/FA
Affiliated Department: Psychology

Site Reliability Engineering

Site Reliability Engineering develops students' ability to manage large software systems with a focus on maintaining system reliability. Students who complete this microcredential will be able to develop and use intelligent monitoring tools to anticipate and address technical instability to prevent system failures.
Start Date: 25/FA
Affiliated Department: Computer & Information Science

Software Development

Software Development introduces the knowledge and skills that students need to engineer, release, and maintain software implemented in the Python programming language. Students who complete this microcredential will have the demonstrated ability to make high-quality contributions to both the source code and technical documentation in software projects stored in GitHub repositories.
Start Date: 23/FA
Affiliated Department: Computer & Information Science

Software Performance Engineering

Software Performance Engineering introduces the knowledge and skills that students need to design, implement, and deploy correct and efficient software. Students who complete this microcredential will have the demonstrated ability to conduct experiments that characterize a software system's performance, pinpoint and resolve software performance bottlenecks, and optimize a system performance without compromising its correctness.
Start Date: 25/FA
Affiliated Department: Computer & Information Science

Tax Fundamentals

The tax fundamentals microcredential provides a working knowledge of accounting fundamentals, tax law, and tax preparation. Students receive training and hands-on preparation experience by preparing individual tax returns and reviewing those returns over two semesters of the Volunteer Income Tax

Assistance Internship. The first time the students take the internship, they are certified as Preparers, and the second time they are certified as Preparers/Reviewers.
Start Date: 25/FA
Affiliated Department: Business & Economics

Middle East and North African Studies

Middle East and North African Studies
Academic Bulletin

Area of Study: Interdisciplinary Studies
Program: Minor
Now housed in International Studies

Program Faculty: Professor Alkyam (Program Coordinator), Hilal, Kirschner, Krone, B. Miller, Onyeiwu, A. Yusuf

See also the Middle East and Northern Africa track in the "International Studies" major.

The minor in Middle East and North Africa ("MENA") Studies is an interdivisional program examining the history, politics, religion, culture, and economics of the region. Through this minor, students will gain an in-depth understanding of the MENA region and the contexts through which we understand it. One of these courses must be at or above the 300 level, and students must have at least a 2.0 GPA in the minor. Students petitioning to include classes not listed below must provide a course syllabus. The minor requires a minimum of 24 semester credit hours, and no more than 12 credits of foreign language study may be included in the 24-credit minimum. When appropriate, other courses – for example, courses taken during study abroad – may be substituted for any of the requirements. All substitutions of alternatives for required courses must be approved by the minor coordinator, and students are strongly encouraged to discuss any potential course substitutions prior to enrolling in the course.

When advising students, please note:

- Students should take an introductory survey and start the Arabic language sequence as soon as possible (ideally, in their first 3 semesters).

Music

Music
Academic Bulletin

Area of Study: Visual and Performing Arts
Program: Minor (28 credits)

Suggested timeline for students interested in pursuing a Music minor:

	Fall Semester	**Spring Semester**
Year 1 or 2 (8-10 credits)	MUSIC*188, Fundamental Materials of Music Ensemble (1cr) and/or Individual Instruction (1-2cr)[o]	MUSIC*123, Listen Up! Ensemble (1cr) and/or Individual Instruction (1-2 cr)[o]
Year 2 or 3 (8-10 credits)	Intermediate elective Music & Culture (MUSIC*221-226) -or- MUSIC*214 (2cr), Improvisational Workshop Ensemble (1cr) and/or Individual Instruction (1-2cr)[o]	Intermediate elective Materials & Methods (MUSIC*211 or 216) -or- MUSIC*214 (2cr), Improvisational Workshop Ensemble (1cr) and/or Individual Instruction (1-2cr)[o]
Year 3 or 4 (6-8 credits)	Advanced coursework (discuss with Music faculty) Ensemble (1cr), Individual Instruction (1-2cr), and/or Recital (2-3cr)[o]	Ensemble (1cr), Individual Instruction (1-2cr), and/or Recital (2-3cr)[o]

[o]Students are encouraged to perform each semester in ensemble/s (MUSIC*110-119 + 126) or a chamber group (MUSIC*120) of their choosing.
Students may also pursue individual instruction in vocal or instrumental performance (MUSIC*230-275, MUSIC*330-375, or MUSIC*430-475).
Advanced performance students may choose to give a public recital with approval from the faculty.
Students should consult with Music faculty to determine the appropriate ensemble and/or level of individual instruction.

Recommended academic courses for first-year students with **Music experience (AY25-26)**

- FALL 2025
    - MUSIC 188 - Fundamentals of Music
      read & use music notation & develop broad performance skills
      Signature Course: contact Mike Dolan (mdolan)

- SPRING 2026
    - MUSIC 123 - Listen Up!
      explore music styles & genres to discuss and compare sounds & forms
    - MUSIC 226 - World Music & Cultures
      explore global music making as part of cultural life

Ensemble courses, offered every semester except as noted

- *Courses below are repeatable for 1 credit each semester*
    - *Placement auditions occur at the beginning of each semester*

Course #	Title	Faculty contact	Day/Time
MUSIC*110	Civic Orchestra	Mike Dolan (mdolan)	M 7:00-9:30pm
MUSIC*112	Symphonic Band	Carl Miller (cmiller)	MWTh 12:30-1:20pm
MUSIC*114	Jazz Ensemble	Rob Roth (rroth)	T 12:30-1:20pm Th 7:20-8:50pm
MUSIC*115	College Choir	FA: Kevin Dill (kdill) SP: James Niblock (jniblock)	TWTh 6:00-6:50pm
MUSIC*116	Soprano-Alto Chorale	FA: Molly Moyer (mmoyer) SP: James Niblock (jniblock)	MW 12:30-1:20pm
MUSIC*119	Tenor-Bass Chorus	FA: Kevin Dill (kdill) SP: James Niblock (jniblock)	TTh 12:30-1:20pm

MUSIC*126	Gamelan Ensemble	SP only: Hannah Standiford (hstandiford)	T 7:00-9:30pm

Recommended academic course for first-year students with little or no **Music experience**

- FALL 2025: MUSIC 121 - Discovering Music
  develop capacity to appreciate, create, and listen to music

- SPRING 2026: MUSIC 226 - World Music & Cultures
  explore global music making as part of cultural life

Recommended performance courses for students with little or no **Music experience**

- *1 credit each, offered every semester, repeatable once for credit*

Course #	Title	Faculty contact
MUSIC*150	Applied Music: Class Piano	Haley Beverburg (hbeverburg)
MUSIC*155	Applied Music: Class Voice	Sonya Eagles-Dill (seaglesdill)
MUSIC*160	Applied Music: Class Guitar	Jim Froman (jfroman)
MUSIC*161	Applied Music: Orchestral Strings	Christina Dolanc (cdolanc)

Recommended courses for continuing students interested in a Music minor (AY25-26)
Students interested in declaring a minor in Music should speak directly with a faculty member.

- FALL 2025
  - MUSIC 188 - Fundamentals of Music
    read & use music notation & develop broad performance skills
    Signature Course: contact Mike Dolan (mdolan)

- SPRING 2026
  - MUSIC 123 - Listen Up!
    explore music styles & genres to discuss and compare sounds & forms
  - MUSIC 214 - Improvisation Workshop (2 credits - repeatable once)
    applied exploration of scales, modes, & chord progressions through jazz, rock, & blues

- MUSIC 226 - World Music & Cultures
  explore global music making as part of cultural life

Neuroscience

Neuroscience
Academic Bulletin

Area of Study: Mathematics and Natural Sciences
Program: Major
Major/Minor Exclusions: A student majoring in Neuroscience may not minor in Psychology.

When advising a student interested in Neuroscience, please note:

The Major in Neuroscience has four principle components:

- **Core Courses:** BIO 220, 221, CHEM 120, 122, NEURO 110, 120, and research methods/statistics (either BIO 385 or PSYCH 206 and 207).
    - *BIO 220 and 221 no longer have a prerequisite (previously CHEM 120) and can be taken in either order.*
- Electives: complete **three 4-credit courses** selected from three areas, **Cellular and Molecular Neuroscience, Behavioral and Cognitive Neuroscience, and Neuroscience Connections**. These courses must include at least one from the Cellular and Molecular list and one from the Behavioral and Cognitive list. At least two of these 4 credit classes must be numbered 300 or above. (See *Academic Bulletin* for specific courses).
- **Academic Advisors:** Students can approach any NEURO faculty member about being their academic advisor. If a student does not know whom they should approach, or if the person they do ask is not accepting additional advisees, the student should discuss options with the chair of the neuro program.
- **Junior Seminar** from a list of BIO and PSYCH Junior Seminars (See *Academic Bulletin* for specific courses). The Junior Seminar can be taken either semester of the Junior year. Students complete online preference forms for PSYCH or BIO Junior Seminars that count for Neuroscience during the spring semester of sophomore year and are matched to sections based upon interests and availability of seats.
- Two-semester, six credit **Senior Project** (NEURO 600 and 610). Determination of Senior Project first readers is similar to that of Junior Seminar sections as students complete online preference forms for PSYCH or Bio faculty readers during the spring semester of their junior years and matched up based on interests and availablility.

Major/Minor Advising Considerations:

- There is **no Minor** in Neuroscience.
- Students majoring in Neuroscience may **not minor** in Psychology.
- If a student decides to double major in Neuroscience and Psychology there must be a minimum of 20 credits completed in Psychology that are not counted in any way toward the Neuroscience Major.

Prerequisites to note:

- NEURO 110 does not have any formal prerequisites. *Success in this course does, however, require an openness to, if not an understanding of, quantitative approaches and chemical and biological perspectives. A student's placement into MATH 151 or score of 4 or 5 in AP BIO are particularly good indicators that they would be prepared for NEURO 110 upon arrival at Allegheny.*
- Students who place into MATH 151 may take CHEM 120
- Students who place into MATH 140 should consider enrolling in CHEM 119 in the 1st year Fall semester. Upon successful completion of either Math 140 or CHEM 119 (C or better), the student may register for CHEM 120 in Spring semester.
- BIO 220 or BIO 221 prerequisite for some of the advanced Bio courses in the **Cellular and Molecular Neuroscience Area**.
- PSYCH 150, 152, 154, or 172 may serve as a prerequisite for the advanced PSYCH courses in the **Behavioral and Cognitive Area**.
- Mathematics is not required for a Neuroscience Major, but calculus is a pre- or corequisite for some Biology and Chemistry courses required for the Neuroscience Major. Also note that calculus is required for students interested in the Health Professions.
- PSYCH 150, 152, 154/5, and 172 are **Neuroscience Electives** that have **no prerequisites**.

Additional Advising Notes:

- BIO 250 is a prerequisite for most 300-level biology courses.
- CHEM 231, 232, 234, and Physics 101, 102 (or 110 and 120), are recommended for some Graduate Programs in Neuroscience and are on the required list for the Health Professions.
- Please note PHYS 110, CHEM 231, and PHYS 101 are offered **only in Fall** semesters while PHYS 102 and Physics PHYS 120 are offered **only in Spring** semesters.

Potential Schedules for **Neuroscience Majors** (Note from the current chair: each of the two potential schedules provided can be, and have been, substantially modified by successful Neuroscience Majors):

Potential schedule for those **starting in MATH 151**:

	1st Semester (Fall)	2nd Semester (Spring)	Either Semester
First Year	SWS 105 CHEM 120 MATH 151 NEURO 110 OR PSYCH 150, 152, or 154/155	NEURO 120 CHEM 122 PSYCH 150, 152, or 154/155	*Most students should take SWS 105 in the Fall*

Sophomore	BIO 220/221 [CHEM 231*] PSYCH 206 or BIO 385	BIO 220/221 PSYCH 207 or BIO 385	SWS 205 [BIO 250**]
Junior	Neuroscience Electives	Neuroscience Electives	Junior Seminar (The specific semester and section should be arranged second semester of sophomore year)
Senior	NEURO 600	NEURO 610	

Potential schedule for those **starting in MATH 140:**

	1st Semester (Fall)	2nd Semester (Spring)	Either Semester
First Year	SWS 105 MATH 140 CHEM 119 PSYCH 150	NEURO 110 CHEM 120 MATH 141	*Most students should take SWS 105 in the Fall*
Sophomore	BIO 220/221 NEURO 110 PSYCH 206 or BIO 385	BIO 220/221 CHEM 122 PSYCH 207 or BIO 385	SWS 205 [BIO 250**]
Junior	[CHEM 231*] Neuroscience Electives	Neuroscience Electives	Junior Seminar (The specific semester and section should be arranged second semester of sophomore year)
Senior	NEURO 600	NEURO 610	

*CHEM 231 is required for all health professions and some other graduate programs.
**BIO 250 is a prerequisite for most 300-level biology courses.

Information for Transfer Students

For all students majoring in Neuroscience:

- There are no prerequisites for starting the required Foundations of Neuroscience course sequence (Neuro 110 and Neuro 120), although it should be noted that Neuro 110 is not recommended for first semester, first year students who are uncomfortable with the natural sciences.
- There are specific prerequisites for required core courses in Chemistry and attention must be paid to these in schedule planning.
    - Placement into Math 151, transfer or AP credit for Math 151, completion of Math 140 with a C or better, or completion of Chem 119 with a C or better is required to enroll in Chem 120.
    - Chem 120 is a prerequisite for Chem 122.
    - Chem 120 is a prerequisite for Chem 231 (which is only offered in fall semesters). CHEM 231 is not required for the Neuroscience major, bit is required for all Health Professions and some other graduage programs.
    - Bio 220, Bio 221, and BIO 250 are requirements for upper level Bio classes in the Neuroscience curriculum.
- Several Psychology courses that serve as electives in the Neuroscience major do not have prerequisites (Psych 150, Psych 152, Psych 154/5, and Psych 172).
- For the Statistics requirement for the major
    - Math 141 or 151 is a prerequisite for the Bio 385 option.
    - There is no prerequisite for starting the alternative Psych 206-Psych 207 sequence.
- Neuroscience majors complete at least 3 electives selected from three areas. At least two of these 3 classes must be numbered 300 or above and thus most have some prerequisite in Psych, Bio, or Neuro.

Two potential Four Year pathways for **Neuroscience Majors** are presented below.

Transfer students could fit into these based on their completion of prerequisites via transfer credits, with the place in the sequence of Chem and Bio classes perhaps the most important variable. (It takes four semesters to complete the Bio and Chem courses if no additional work is required to start Chem 120, five if a prerequisite for Chem 120 remains.)

Note: each of the two potential pathways shown here can be, and have been, substantially modified by successful Neuroscience Majors:

Potential four year pathway for those meeting CHEM 120 prerequisites

	1st Semester (Fall)	**2nd Semester (Spring)**	**Either Semester**

First Year	SWS 200 CHEM 120 MATH 151 NEURO 110 OR PSYCH 150, 152, or 154/155	NEURO 110/120 CHEM 122 PSYCH 150, 152, or 154/155	
Sophomore	BIO 220/221 [CHEM 231*] PSYCH 206 or BIO 385	BIO 220/221 PSYCH 207 or BIO 385	[BIO 250**]
Junior	Neuroscience electives	Neuroscience electives	Junior Seminar (The specific semester and section should be arranged second semester of *sophomore year*)
Senior	NEURO 600	NEURO 610	

Potential four year pathway for those needing MATH 140 to take CHEM 120:

	1st Semester (Fall)	**2nd Semester (Spring)**	**Either Semester**
First Year	SWS 200 MATH 140 CHEM 119 PSYCH 150	NEURO 110 CHEM 120 MATH 141	
Sophomore	BIO 220/221 PSYCH 206 or BIO 385 NEURO 110	BIO 220221 CHEM 122 PSYCH 207 or BIO 385	[BIO 250**]
Junior	[CHEM 231*] Neuroscience electives	Neuroscience electives	Junior Seminar (The specific semester and section should be arranged second semester of *sophomore year*)

Senior	NEURO 600	NEURO 610	

*CHEM 231 is required for all Health Professions and some other graduate programs.
**BIO 250 is a prerequisite for most 300-level biology courses.

Additional Major/Minor Advising Considerations:

- There is **no minor** in Neuroscience.
- Students majoring in Neuroscience **may not** minor in Psychology.
- If a student decides to double major in Neuroscience and Psychology there must be a minimum of 20 credits completed in Psychology that are not counted in any way toward the Neuroscience Major.

Philosophy

Philosophy
Academic Bulletin

Area of Study: Values and Societies
Programs: Major and Minor
Department: History & Philosophy
Program Contact: Prof. Irem Kurtsal

When advising a student interested in Philosophy, please note:

- **Entering and other students can't go wrong with any 100 level course.**
- **200-level courses should be accessible to entering first year students with stronger than average writing and reading skills.**

When advising a student interested in a Major in Philosophy, please note:

- **In the first year of study, Majors should plan to complete PHIL 165 (offered fall 2025) and at least one other 100-level course.** Adding PHIL 220 or one among PHIL 230 and 240 is recommended. (PHIL 240 is offered spring 2026)
- **By the end of the second year,** students should also complete PHIL 220, and should achieve a total of at least 20 credits in philosophy.

Offered Fall 2025:

- **PHIL 120 (Learning from Arguments)** A study of how we gain knowledge about a subject when we engage with arguments. Includes discussion of controversies such as whether we have free will; whether taxation, abortion, or eating animals is ethical; whether death is something to be feared. Distribution Requirements: ME, SB.
- **PHIL 140 (Ethics and Community)** emphasized the topic areas its title suggests. Distribution Requirements: CL, PD.
    - It also serves a role in the Business major, Community & Justice Studies Major, Education Studies Minor, Energy & Society Minor, Data Science Major and Minor, Global Health Studies Major.
- **PHIL 165 (The Examined Life)** An introduction to western philosophy through discussion of questions that have challenged thinkers from ancient Greece to the 21st century: questions about human knowledge, the relation of mind and body, the nature of reality, free will, the existence of God, social Justice, ethics, and the meaning of life. Distribution requirements: CL, HE.

The Major in Philosophy requires completion of at least 42 semester credit hours as outlined below:

- Two introductory courses from among Philosophy 120, 130, 140 and 165. It is recommended, but not required, that these courses be taken before courses above the 100 level.
- Philosophy 220
- One of Philosophy 230 or 240 (this text is verbatim Bulletin text, but advisors should be alerted that 230 is not in the cards, 202 and 240 are both required at this time.)
- One of Philosophy 310, 340, 385
- Philosophy 580 (students arrange for 580 in junior or senior year while taking a 300-level course in consultation with the Program Coordinator)
- Philosophy 600 and 610 (students arrange these with their intended senior project advisor – or consult with Program Coordinator)
- Two elective courses in philosophy or cognate courses from another discipline. By consulting with faculty, students may use electives to create an emphasis in a specific area of philosophy.

A combined maximum of eight transfer credits and credits taken credit/no credit at Allegheny may be counted toward the major, including PHIL 600 (2 credits, C/NC); exceptions must be approved by the Program Coordinator. At graduation, Philosophy majors must have a GPA of at least 2.0 in required courses and further courses that satisfy the credit count up to the department requirement of 42 credits.

The Minor in Philosophy requires completion of at least 24 semester credit hours as outlined below:

- Two courses from among Philosophy 120, 130, 140, 165 and 220.
- Two among Philosophy 310, 340, 385, 580.
- Two electives to bring the total to 24 credits.

A combined maximum of six transfer credits and credits taken credit/no at Allegheny may be counted toward the minor. At graduation, Philosophy minors must have a GPA of at least 2.0 in required courses and further courses that satisfy the credit count up to the department requirement of 24 credits.

Philosophy majors/minors are required to have a GPA of at least 2.0 in the Major/Minor at graduation.

Information for Transfer Students

Pathways to the Philosophy Major

A combined maximum of eight transfer credits plus credits taken credit/no credit at Allegheny may be counted toward the major, including Allegheny's PHIL 600 (2 credits, C/NC); exceptions must be approved by the Program Coordinator.

A Philosophy major might be achieved on a 2 year schedule by a student who transfers in two (3-credit) introductory philosophy courses from earlier college experience and pursues the following schedule (for explanation of *non-numbered course requirements noted in the table*, see further below):

	Fall	Spring
Third Year	*Introductory-level or philosophy elective* PHIL 220, Epistemology PHIL 165 *(excused if student transfers in a course in history of philosophy, as determined by the Program Coordinator)* If student expresses an interest in PHIL 285 (Business and Professional Ethics), transfer students with Junior status may contact Irem Kurtsal for consideration, even if the course is full.	*Philosophy elective* *Philosophy elective* PHIL 230 or 240 (*excused if student transfers in a course in history of philosophy, as determined by the Program Coordinator)*
Fourth Year	PHIL 600, Senior Project Tutorial (2 credits) PHIL 580, Junior Seminar	PHIL 610, Senior Project PHIL 310, 340, or 385

(The schedule above is hypothetical: all required courses are offered each year, but their pattern of offering varies between spring and fall.)

More detail on the Philosophy major: The path to a Philosophy major might best be traced back from its endpoint (graduation!). It requires completion of **42 credits**.

In your Fourth (Senior) Year:

You must complete your **senior project**, a two semester sequence of your own independent work (PHIL 600 (2 credits), PHIL 610 (4 credits)), carried out under the supervision of a faculty member. **PHIL 610** is the course that completes your senior project. **PHIL 600** (2 credits) is the preparatory phase of that project and should be taken in the semester before PHIL 610. So, PHIL 600 may be taken as early as your Junior year spring semester, or in the fall semester of your Senior Year.

In your Third (Junior) or Fourth Year:

You should expect to take our highest-level course offerings: the **junior seminar (PHIL 580)** and an **applied seminar (PHIL 310, PHIL 340, PHIL 385)**. These may be taken either year, it is preferable, but not required that PHIL 580 precede PHIL 610.

In your Second (Sophomore) or Third Year (or, if not completed earlier, in your Senior Year):

You should expect to take **epistemology (PHIL 220)** and at least one **sciences and philosophy course** (PHIL 230, PHIL 240). The Program Coordinator may determine that a transfer student has completed

this requirement, or the **history requirement** (PHIL 165) if appropriate courses have been previously completed and transferred to Allegheny. Consult with the Program Coordinator for details.

And, for those who begin their college education at Allegheny, or transfer in after the first year:

In your First or Second Year:

You should expect to take **two** of our **introductory-level courses** (PHIL 120, PHIL 130, PHIL 140, PHIL 165). You may also take 200-level courses.

A Philosophy minor is easily completed in two years. A student should expect to take our highest-level course offerings: the **junior seminar (PHIL 580**, regularly offered in fall) and an **applied seminar (PHIL 310, 340 and 385)**. These may be taken either Junior or Senior year. The minor also requires 24 credits total, of which two courses should be from among PHIL 130, 140, 165 and 220. That two course requirement might be satisfied through transfer courses: for details, see the "Philosophy courses most often transferred" below.

Students transferring to Allegheny College who are considering a Major or Minor in Philosophy should feel free to ask questions of the Program Contact (Irem Kurtsal ikurtsal@allegheny.edu) to informally discuss courses that may transfer to satisfy specific requirements listed above.

Philosophy courses most often transferred

Issues to consider for transfer credits:

1. A 3-credit transfer course with a similar description and course content will be accepted to fulfill a 4-credit requirement in Philosophy. However, a student must still meet the minimum number of credit hours required for the major (or minor), which might necessitate taking or transferring elective courses in Philosophy.
2. Philosophy requires two introductory 100-level courses towards the Major, and up to two such courses may be counted towards the Minor. Students who transfer in a Philosophy course to Allegheny College are most likely to receive credit that will serve to fulfill the requirement for one of those introductory courses. This is necessarily so if the course transfers in as PHIL 120, 130, 140, or 165. It is very likely to be the case even when courses transfer as a generic number (PHIL*1TE or PHIL*2TE). It is safe to say that any introductory course in a standard area of philosophy such as logic, metaphysics, epistemology, or critical thinking will qualify as one of the numbers listed above. Explicit determination may be decided upon consultation with the Program Coordinator.
3. **History of Philosophy Courses:** A course focused upon history of philosophy that is discontinuous, jumping through time periods, is likely to transfer either as PHIL 165 or PHIL 1*TE equivalency. More formal history of philosophy courses will transfer as 2*TE and will also serve to fulfill the PHIL 165 requirement for the major (examples: Greek Philosophy, Medieval Philosophy, History of African Philosophy, 20th Century Continental Philosophy).
4. **Epistemology course: PHIL 220** Epistemology is likely to be a transfer-equivalent for any college-level course with the title "Epistemology", "Theory of Knowledge," "Knowledge," or

"Problems of Knowledge." A course with the title "Knowledge and [second subject area]" is unlikely to qualify as PHIL 220 and is likely to transfer as PHIL 1*TE equivalency.

5. **PHIL 285 Business and Management Ethics** is likely to be a transfer equivalent for another college-level course with the title "Business Ethics" or "Management Ethics" or a similar title, where the course has an upper-level (above introductory level) number within the numbering system that is used by the institution at which the course is taught. Introductory level courses are likely to transfer as Phil 1*TE equivalency.
6. **PHIL 385 Medical Ethics** is likely to be a transfer equivalent for a college-level course with the title "Medical Ethics" or "Biomedical Ethics" or a similar title, where the course has an upper-level (above introductory level) number within the numbering system that is used by the institution at which the course is taught. Introductory level medical ethics courses are likely to transfer as Phil 1*TE equivalency.
7. **Cognate courses:** Up to two courses that count towards a Major in Philosophy may be "cognate courses". A cognate course (from an area outside of the study of philosophy) will qualify as providing credits towards the Major if your Philosophy advisor at Allegheny College finds that the course you propose contributes to your philosophical work. This arises most frequently when a course contributes towards informing work that will be developed in the Senior Project. So, for example, a Women's, Gender and Sexuality Studies course may be a suitable cognate for a student whose work focuses upon social and political philosophy. Your academic advisor at Allegheny determines qualification for cognate courses following your arrival, and usually well into your study at Allegheny, so this will not affect decisions regarding qualifying transfer courses. But having a background in relevant courses may reduce the number of courses in Philosophy that will be required to complete the major.

Students transferring to Allegheny College who wish to consult on courses should feel free to ask questions of the Program Contact (Irem Kurtsal ikurtsal@allegheny.edu) to informally discuss courses that may transfer.

Physics

Physics
Academic Bulletin

Area of Study: Mathematics and Natural Sciences
Programs: Major and Minor

Information for Transfer Students indicated by ***Note for Transfer Students:**

There are two different sequences of introductory physics, each consisting of two courses*.

	PHYS 110 and 120	PHYS 101 and 102
Series Begins	Fall Semester	Fall Semester
Taken by	Physics, Chemistry, and Biochemistry Majors in the first or second year	Some Pre-Health Students

***Note for Transfer Students:** Introductory Physics courses that require Calculus as a prerequisite or corequisite in their course descriptions can substitute for PHYS*101 and PHYS*102

Suggested Schedules for the **Physics Major starting in MATH 100:**

Students placing into MATH 100 should speak to a Physics Faculty member to determine which classes are appropriate on a case by case basis.

Suggested Schedules for the **Physics Major starting in MATH 140*:**

	1st Semester (Fall)	2nd Semester (Spring)	Either Semester
First Year	SWS 105 MATH 140	MATH 141	*Most students should take SWS 105 in the Fall* 100-Level natural science course (CHEM 119+120, CS, Geology, Neuroscience)
Sophomore	PHYS 110 MATH 152	PHYS 120 PHYS 240	

		PHYS 260	
Junior Senior	PHYS 210 PHYS 3XX PHYS 280	PHYS 580 PHYS 201 PHYS 3XX or 4XX	PHYS 4XX MATH 211 (could also be taken senior year)
Senior	PHYS 600 PHYS 3XX	PHYS 610	PHYS 3XX or 4XX

***Notes for Transfer Students:**

1. *Students who transfer into the sophomore year* can enter the first sequence at the Sophomore level if they have had the equivalent of MATH 141.
2. *Students who transfer into the sophomore year* can enter the second sequence at the Sophomore level if they have had the equivalent of MATH 141 and PHYS 101 (an introductory physics course with Calculus as a prerequisite or corequisite).
3. *Students who transfer into the Junior year* can enter either sequence at the Junior level if they have had the equivalent of PHYS 101 and PHYS102 (an introductory sequence of physics courses with Calculus as a prerequisite or corequisite). To satisfy major requirements, transfer students should work with a Physics advisor to determine a plan for taking Physics 240 and 260, as well as a Natural Science course during the Junior or Senior year *unless such a course has been accepted for transfer credit*. The student must be sure to complete three 4-credit 300-level courses and two 2-credit courses during the Junior or Senior year.

**As an equivalent to PHYS 260, the Physics Department will accept an introductory thermal physics course that includes statistical mechanics in its course description for transfer credit into the major.

***One 300-level course that has been accepted for transfer credit as a Physics equivalent may count towards the Physics major.

Suggested Schedule for the **Physics Major placing in MATH 151*:**

	1st Semester (Fall)	2nd Semester (Spring)	Either Semester
First Year	SWS 105 PHYS 110 MATH 151	PHYS 120	*Most students should take SWS 105 in the Fall*

		MATH 152	
Sophomore	PHYS 210 MATH 280	PHYS 201 PHYS 260** PHYS 240 (2 credits)	100-level natural science course (CHEM 119+120, CS, Geology, Neuroscience, Biology)
Junior Senior	PHYS 3XX***	PHYS 580	MATH 211 PHYS 3XX or PHYS 4XX
Senior	PHYS 600	PHYS 610	PHYS 3XX or 4XX

***Notes for Transfer Students:**

1. *Students who transfer into the sophomore year* and have had an introductory physics course with Calculus with a prerequisite or corequisite can enter this sequence at the Sophomore level.
2. *Students who transfer into the Junior year* can enter this sequence at the Junior level if they have had an introductory physics course with Calculus as a prerequisite or corequisite, have had the equivalent to Math 211, and have had an introductory course in *Quantum Physics, Quantum Mechanics, Atomic Physics, or Atomic Physics*. To satisfy major requirements, transfer students should work with a Physics advisor to determine a plan for taking Physics 240 and 260, as well as a Natural Science course during the Junior or Senior year *unless such a course has been accepted for transfer credit*. The student must be sure to complete three 4-credit 300-level courses and two 2-credit 400-level courses during the Junior or Senior year.

**In place of Physics 260, the Physics Department will accept an introductory thermal physics course that includes statistical mechanics in its course description for transfer credit into the major.

***One 300-level course that has been accepted for transfer credit as a Physics equivalent may count towards the Physics major.

Suggested Schedule for the **Physics Major starting in MATH 152*:**

	1st Semester (Fall)	2nd Semester	Either Semester

First Year	SWS 105 MATH 152 PHYS 110	PHYS 120 MATH 211	*Most students should take SWS 105 in the Fall*
Sophomore	PHYS 210 MATH 280	PHYS 240 and/or 260** PHYS 3XX*** PHYS 201	100-level natural science course (CHEM 119+120, CS, Geology, Neuroscience, Biology)
Junior Senior	PHYS 3XX	PHYS 240 and/or PHYS 360** PHYS 580	PHYS 3XX and/or 4XX
Senior	PHYS 600	PHYS 610	PHYS 3XX and/or 4XX

***Notes for Transfer Students:**

1. *Students who transfer into the sophomore year* and have had an introductory physics course with Calculus with a prerequisite or corequisite can enter this sequence at the Sophomore level.
2. *Students who transfer into the Junior year* can enter this sequence at the Junior level if they have had an introductory physics course with Calculus as a prerequisite or corequisite, have had the equivalent to Math 211, and have had an introductory course in *Quantum Physics, Quantum Mechanics, Atomic Physics, or Atomic Physics*. To satisfy major requirements, transfer students should work with a Physics advisor to determine a plan for taking Physics 240 and 260, as well as a Natural Science course during the Junior or Senior year *unless such a course has been accepted for transfer credit*. The student must be sure to complete three 4-credit 300-level courses and two 2-credit 400-level courses during the Junior or Senior year.

**In place of Physics 260, the Physics Department will accept an introductory thermal physics course that includes statistical mechanics in its course description for transfer credit into the major.

***One 300-level course that has been accepted for transfer credit as a Physics equivalent may count towards the Physics major.

Additional Advising Notes:

- **A student can still major in physics after taking the Physics 101/102 sequence in place of Physics 110/120.**
- While a student may still complete the Physics Major in four years without taking any physics courses during their first year, scheduling is easier when starting with physics in the first year.

- It is very important that Pre-Health students complete Physics 101 and Physics 102 by Fall semester of the third year, so that they will have taken Physics 102 before the MCATs.
- Well-prepared students with AP credit in physics (with a grade of 4 or 5) may skip Physics 110 (or 101) but should consider starting with Physics 120 (or 102) in their first year.
- Well-prepared students with AP or other college credit in both physics and math should consult with a physics faculty member before registering for physics courses
- **Academic Advisor:** Students can ask any Physics faculty member.
- **Junior Seminar:** Students should plan to take the Junior Seminar in the spring semester of their junior year. Students register for an open section.
- **Senior Comp:** 2 Semester Comp recommended, Senior year Fall and Spring

Physics Minors:

Students planning on minoring in Physics must take a minimum of 20 credits in the Physics Department, including Physics 110, 120 (or 101, 102) and Physics 210. Four credits must be at the 300 or 400 level. A minimum of 8 credits must be taken at Allegheny. Physics 101 and 110 are offered fall semester every year, Physics 102 and 120 are offered spring semester every year.

It is strongly recommended that Physics minors complete Physics 110 and 120 by the end of the sophomore year, or 101 and 102 by the end of the first semester junior year. Transfer credit is accepted for PHYS 101 and 102 if the course transferred is an introductory course with Calculus as a prerequisite or corequisite. It is recommended that minors complete Physics 210 by the end of the fall semester senior year. Transfer credit is accepted for PHYS 210 if the course transferred includes an introduction to quantum mechanics and atomic physics (with a Calculus based introductory physics course as a prerequisite).

Astronomy Minor (see above)

Political Science

Political Science
Academic Bulletin

Area of Study: Social and Behavioral Science
Programs: Major and Minor

Professors Harward (Chair), Bloeser, Kirschner, Mattiace, Oliver, Wesoky, Williams

When advising a student interested in Political Science, please note:

- The introductory courses are POLSC 110, 120, 130, and 140
    - For the major, two introductory courses are required and three may count toward the major. First year students should begin by taking both introductory courses, ideally one in each semester of the first year. (Students are strongly encouraged to complete these by the end of the fourth semester.)
    - For a minor, one introductory course is required.
    - A 4 or a 5 score on AP exams in American or Comparative Government may substitute for one of the introductory courses.

All students (majors and minors) are required to take the Introduction to Research Design course, POLSC 289 (2 credits), ideally during the spring of their first year, but certainly by the end of their fourth semester.

- The Department is divided into four subfields: (Law and Policy, American Politics, Comparative Politics/International Relations, and Political Theory/Method). Majors are required to take at least one course in each of the four subfields (and at least three courses at the 300- or 400-level).
- 200-level courses are open to first year students. In general, introductory courses should be taken before 200-level courses.
    - Special topics courses will be assigned to categories by writing them in by hand and will "count" toward the subfield requirement.
- Students interested in...
    - international affairs are encouraged to include foreign language study and take the 120 and 130 introductory courses.
    - pre-law may consult the Pre-Legal Guidelines of the Advisor's Handbook or see Prof. Brian Harward.
- We encourage first year students to attend the many programs sponsored by the Center for Political Participation (CPP) and consider applying to the Law and Policy (L & P) program (includes a Global Affairs track, for those interested), run by the CPP.
- **Academic Advisor:** Students can ask any faculty member to serve as their advisor. It usually works best when they have taken courses with their prospective advisor.
- **Junior Seminar:** Students should plan to register for the Junior Seminar in the Fall or Spring semester of the junior year or the fall semester of the senior year. Students register for an open section.

- **Senior Comp:** All majors (including double majors) are required to take POLSC 600 (pre-comp) course prior to enrolling in POLSC 610 (the comp). POLSC 600 is offered both fall and spring semesters, but most students will take 600 in the fall and 610 in the spring of their senior year.

Please contact Professor Harward for more information about the major and minor in Political Science.

Suggested Schedule for Political Science Majors:

	1st Semester	**2nd Semester**
First Year	One intro class (POLSC 110, 120, 130, 140)	One intro class (POLSC 110, 120, 130, 140) and POLSC 289 (2 cr)

Information for Transfer Students

Transferring after one year		
We expect students transferring to Allegheny after attending one year at another institution may have one introductory course; in some cases, they may also be transferring in a 2nd introductory course and/or a 200-level course. We would expect all transfer students interested in POLSC to take POLSC 289 as soon as possible. Below you will find a roadmap of the Political Science major and minor requirements as you make progress towards your degree at Allegheny College		
	MAJOR	**MINOR**
Year 1 at Allegheny	● Complete remaining **POLSC 100-level** introductory courses (majors need 2 from POLSC 110, 120, 130, 140) ● Take **POLSC 289** (2 cr) ● Take 1-2 **POLSC 200-level** courses ● Some students enroll in a **POLSC 300/400-level** course, particularly in the **2nd semester**	● Complete **POLSC 100-level** introductory course if necessary (minors need 1 from POLSC 110, 120, 130, 140) ● Take **POLSC 289** (2 cr) ● Take 1-2 additional courses at the **POLSC 100/200-level**

Year 2 at Allegheny	• Take 1 **POLSC 200-level** course if desired • Take 2-3 **POLSC 300/400-level** courses (majors need 3)	• Take 1-2 **POLSC 300/400-level** courses (minors need 2) • Courses should cover 3 of the 4 subfields
Year 3 at Allegheny	• Complete required 3 courses at the **POLSC 300/400-level** • Enroll in **POLSC Junior Seminar** (580-587) in the Fall if necessary • Take **POLSC 600**, Senior Project Proposal in **Fall** • Complete **POLSC 610**, Senior Project in **Spring**; students enrolled in POLSC 600 as juniors will complete POLSC 610 in the Fall • Take any remaining POLSC courses to reach major requirement of **44 credits**	• Complete required 2 courses at the **POLSC 300/400-level** • Courses should cover 3 of the 4 subfields. Take any remaining POLSC curses to reach minor requirement of **22 credits**.

Transferring after two years		
We expect students transferring to Allegheny after attending two years at another institution may have at least two introductory courses and may also be transferring in a 200-level course. It is also possible to complete the major in two years with fewer transfer credits in Political Science		
	MAJOR	**MINOR**
Year 1 at Allegheny	• Complete remaining **POLSC 100-level** introductory courses (majors need 3 from POLSC 110, 120, 130, 140) in **1st** semester • Take **POLSC 289** • Take 1-3 **POLSC 200-level** courses • Take at least 1 **POLSC 300/400-level** course (majors need 3) • Enroll in **POLSC Junior Seminar** (580-587)	• Complete *POLSC 100-level* introductory course if necessary (minors need 1 from POLSC 110, 120, 130, 130) in **1st** semester • Take **POLSC 289** • Take 1-3 additional courses at the **POLSC 200-400 level** (**covering** 3 of the 4 subfields)

Year 2 at Allegheny	• Complete requirement to take 3 courses at the **POLSC 300/400-level** • Enroll in **POLSC Junior Seminar** (580-587) in Fall if it wasn't taken the prior year. Students who entered with fewer transfer credits in POLSC may wish to pursue this option. • Take **POLSC 600**, Senior Project Proposal in **Fall** (POLSC 500 required for all majors, including double majors) • Complete **POLSC 610** Senior Project in **Spring**; students enrolled in POLSC 600 as juniors will complete POLSC 610 n Fall • Take any remaining POLSC courses to reach major requirement of **44 credits**	• Take 1-2 **POLSC 300/400-level** courses (minors need 2) • Take any remaining POLSC courses to reach minor requirement of **22 credits**

Pre-Health Guidelines

Health Professions
Academic Bulletin

First-Year Course Registration Advice for Students Interested in the Health Professions

Students interested in health professions (human medicine, dentistry, veterinary medicine, nursing, PA, PT, OT, pharmacy, etc.) have many curricular options. Although there are certain courses students must take to prepare for the MCAT exam or to be considered for admission to health science post-graduate programs, pre-health students can major in any discipline, not just the natural sciences. Detailed information about pre-health programs and the support Allegheny provides for pre-health students can be found at http://sites.allegheny.edu/health. Students interested in pre-health professions should arrange to meet with the pre-health advisor in the Center for Academic Success early in their first year to discuss their specific interests.

If you are a pre-health student, you should enroll in courses that are intrinsically interesting to you while adhering to the following guidelines:

1. Math courses:

1. If you place into MATH 151 or higher, take MATH 151 or the higher level course into which you have placed.
2. If you place into MATH 140, and if you are interested in majoring in biochemistry, chemistry, mathematics, or physics, take MATH 140 in the Fall followed by MATH 141 in the Spring. You will then need to take MATH 152.
3. If you are not interested in one of the Majors mentioned above, then taking MATH 140 and 141 will be sufficient. You may, of course, continue, but you will not need to do so for your Major or to satisfy a medical school requirement

2. Introductory Chemistry:

1. If you place into MATH 151 or higher and are considering a Major in biology, biochemistry, neuroscience, or chemistry, take introductory chemistry in the fall (CHEM 120). If you are not interested in majoring in these areas and there are other fall courses that interest you more, you may defer CHEM 120 to the spring semester.
2. If you place into MATH 140, you will need to complete the course with a C or better to be allowed to take CHEM 120 in the second semester. You should be enrolled in MATH 141 when you take CHEM 120.

3. Biology: If you are planning to Major in Biology, you may begin taking biology classes as soon as you wish. If you plan to major in another discipline, then take the biology courses as your schedule allows.

4. English Literature: English literature is a requirement for medical professional schools, and we recommend that you complete it as soon as your schedule allows, and no later than the end of your

sophomore year. Many first and second year students find that a literature course (English 110, 111, 112, 113, 114, 115, 116, 117, or 118) provides welcome variety to their schedule, which is often heavily weighted in the sciences.

5. Psychology: The current MCAT includes a behavioral science section. Additionally, behavioral science courses are required for some professional school programs. Our students have found PSYCH 162 (Human Social Behavior) to be especially helpful in preparing for the MCAT. Other helpful courses for the MCAT include PSYCH 110 and PSYCH 172.

Sample First-Year Schedules for Pre-Health Students		
Pre-Health Students Beginning in MATH 140	**Fall of First-Year** LS 120 SWS 105 MATH 140 BIO 220 Elective*	**Spring of First Year** LS 121 MATH 141 CHEM 120 BIO 221 or Elective* Elective*
Pre-Health Students placing in MATH 151--Biochemistry, Chemistry, Math, Physics Majors	**Fall of First-Year** LS 120 SWS 105 MATH 151 CHEM 120 Elective*	**Spring of First-Year** LS 121 MATH 152 CHEM 122 BIO 220 or elective Elective
Pre-Health Students placing in MATH 151--Biology, Neuroscience Majors	**Fall of First-Year** LS 120 SWS 105 MATH 151 CHEM 120 Elective*	**Spring of First-Year** LS 121 CHEM 122 BIO 220 or NEURO 110 Elective* Elective*

Pre-Health Students placing in MATH 151--all other Majors	**Fall of First-Year** LS 120 SWS 105 MATH 151 Elective (or start CHEM 120) Elective (or start BIO 220)	**Spring of First-Year** LS 121 CHEM 120 (or CHEM 122 if CHEM 120 is taken 1st semester) BIO 220 Elective* Elective*

*Consider taking English 100-level literature course and/or PSYCH 100-level course.

Pre-Legal Guidelines

Pre-Legal Education
Academic Bulletin

When advising a student interested in Pre-Legal Education, please note the following:

- There is no "Pre-law Major" at Allegheny. Students should be encouraged to choose a Major that is challenging and interesting to them.
- If the student wants to practice e a certain kind of law, it's a good idea to factor that desire into the selection of a major or a minor. A student who wants to practice international law, for example, would be well-advised to develop fluency in at least one foreign language. A student interested in corporate law should have some familiarity with the world of business and economics. A student looking to practice law related to healthcare or technology, should know something about a relevant science.
- Internships and job shadowing can be arranged.
- The Pre-Law Club and Law & Policy program are great ways to explore legal and policy issues, to network with alumni, and to connect with like-minded peers. First-year students are encouraged to enroll in Law & Policy and to become a member of the Pre-Law Club.
- For more information contact the Pre-Law Advisor, K Peterson at kpeterso@allegheny.edu or visit the American Bar Association webpage: https://www.americanbar.org/groups/legal_education/resources/pre_law/3
- The following skills are considered critical for success. Selecting courses and activities to develop these skills should be encouraged.
    - Problem Solving
    - Critical Reading
    - Writing and Editing
    - Oral Communication and Listening
    - Research
    - Organization and Management
    - Public Service and Promotion of Justice
    - Relationship-building and Collaboration
    - Background Knowledge
    - Exposure to the Law

Pre-Professional Advising

Location: Pelletier
Phone: (814) 332-2845
Website

Pre-Health Professions Staff

Kirsten Peterson, Senior Assistant Dean, Academic Success kpeterso@allegheny.edu

Pre-Legal Professions Staff

Kirsten Peterson, Senior Assistant Dean, Academic Success kpeterso@allegheny.edu

Pre-Education Studies Staff

Jennifer Franz, Coordinator of Education Studies jfranz@allegheny.edu

Pre-Professional Advising supports pre-health, pre-law and pre-education students by providing them with the tools and experiences to help them succeed. In addition to individual advising, students have access to workshops, shadowing opportunities, field experience, assistance with preparing applications and test preparation.

Psychology

Psychology
Academic Bulletin

Area of Study: Social and Behavioral Science
Programs: Major (BA & BS) and Minor
Major/Minor Exclusion: A student minoring in Psychology may not major in Neuroscience.

When advising a student interested in Psychology, please note the following:

Entering students may take any 100-level course; however care should be exercised regarding enrollment in Psych 110, which can be a challenging course for first-semester, first-year students. Psych 110 is recommended for students who have demonstrated success in AP/IB/college-level courses (earning a 4 or 5 on AP exams, transfer credit for Science/Math). There are an increased number of seats being held for first-year students in the other 100-level courses and suggest that advisors steer students to those courses.

Psychology 110 is required for both the major and the minor. This course may be taken at any point in the students college career. It can benefit students who take the MCAT to take Psych 110 the semester prior to the MCAT.

In addition to PSYCH 110, students need to complete an additional 2 (for minors) or 3 (for majors) courses at the 100-level. Specifically, students need to complete at least one course each in the following three categories: 150s, 160s, 170s. Minors need to take one course each in two of these categories.

Psych 206 is required for minors and majors; Psych 207 is required for majors. It is best if the student begins the Statistics and Research Design sequence (206/207) in the Sophomore year. It is fine for students to take psych 110 the Sophomore year along with 206 or 207.

Three upper level courses (300 or 400) are required for majors, one of which must be designated as a Structures of Power and Privilege (SPP) course.

Students may begin independent studies (PSYCH 590) as early as their sophomore year. To explore available opportunities, students are encouraged to review faculty research areas on the Psychology Department website and directly contact professors whose work aligns with their interests.

Internships are usually taken Junior or Senior year. Psychology 540 is a corequisite for all psychology internships. The Internship Seminar "counts" as an upper-level course.

Academic Advisor: Students seeking an advisor may either contact a faculty member directly or reach out to the department chair. To ensure an equitable advising process, the department collects faculty availability through a standardized form. Please note that, in the interest of fairness and workload distribution, some faculty members may not be available to accept new advisees at one time.

Junior Seminar: A department-wide Junior Seminar information event is held every March. This is widely advertised and students should make every effort to attend. Following this event they receive a

Junior Seminar preference form that needs to be completed. The chair will make assignments to Junior Seminars based on the students' expressed preferences. The Junior Seminar instructor will then reach out and grant signature consent.

Senior Comp: Students can complete any of the options (2 semester comp Fall and Spring, 1 semester comp taken in senior year either fall or spring). In rare cases, we do "off-cycle" comps where students start in the Spring of their Junior year and finish in the Fall...e.g., if they wish to graduate early. A department-wide Senior Comprehensive Project information session is held every March. This event is widely advertised and students are expected to make every effort to attend. Following the session, students receive a Senior Comp preference form, which must be completed. The department chair will then assign students t Senior Comprehensive Projects based on the preference expressed. Assigned faculty members will subsequently reach out to grant signature consent for project enrollment.

Suggested Course Sequence for a **Major in Psychology**

	1st Semester	**2nd Semester**	**Either Semester**
First Year	SWS 105		*Most students should take SWS 105 in the Fall* Two 100-level courses Note that PSYCH 110 may not be appropriate for all first-year students; students should consider taking PSYCH 110 in the sophomore (or later) year
Sophomore	PSYCH 206	PSYCH 207	At least 1 core course PSYCH 110 (it is fine to take this at the same time as 206 or 207)
Junior			Complete core course requirement At least 1 advanced topics course Junior Seminar
Senior			Complete advanced topics requirement PSYCH 600/610 or 620

Required courses for a **Minor in Psychology**:

Minor Requirements: 20 credits, including
Psych 110 (some students might want to avoid this in the first semester; consider taking it in the

sophomore or later year)
Psych 206
One course from each of two Core Area categories (150s, 160s, 170s) NOTE: This is a good place to start the minor
One course from those numbered in the 300s or 400s
NOTE: For students who are transferring in one or more of these courses, please make sure they understand that if they receive 3 credits (instead of 4) per course, they still will need a total of 20 credits in Psychology to earn the minor.

Public Humanities

Public Humanities
Academic Bulletin

Area of Study: Interdisciplinary Studies
Programs: Major and Minor
Now housed in History & Philosophy
Coordinator: Profs. Brian Miller & Paula Burleigh

New program 2023-2024 Academic Bulletin

When advising a student interested in Public Humanities, please note:

- **Foundation Course:** PHUM 170, Introduction to Public Humanities (offered in fall semesters)
- **Major Advisor:** PHUM advisors are members of the steering committee. If a student has cultivated a relationship with a steering committee faculty, they may express an advisor preference, and every effort will be made to accommodate requests. Final advising decisions are made by the PHUM program directors in order to ensure equitable distribution of advising labor.
- **Junior Seminar:** PHUM 580, Junior Seminar is a spring offering ONLY.
    - Majors should plan to take it the junior year spring semester.
    - Minors may take it in the spring of their junior or senior year.
    - The junior seminar is a Signature course, students should notify program coordinators of their intent to enroll for permission.
- **Senior Project:** 2 semester comp (2 credits fall, 4 credits spring). Students should plan to take in the senior year.

Requirements for the Public Humanities Major
The Public Humanities Major requires a minimum of 44 credits. The Major consists of an 12-credit core; 4 credits of methods course work; 16 credits of course work in one of the following tracks: Space & Place, Museums & Collections, Advocacy & Social Justice, Memory Studies, and Public Writing; 2 credits of experiential learning (EXL, internship, or GL Study Away); Junior Seminar; and a 6 credit Senior Project.

Suggested Course Sequence for a **Major in Public Humanities:**

**** Have conversation with major advisor as soon as possible about potential track course selections to ensure a timely passage through the major desired track.**

	1st Semester	**2nd Semester**	**Either Semester**

First Year	PHUM 170, *Introduction to Public Humanities*	CORE course	One additional CORE course
Sophomore	METHODS course TRACK course (can be 200-level)	TRACK course (can be 200-level)	
Junior	TRACK course (300-level or above)	TRACK course (300-level or above) PHUM 580 (Junior Seminar)	2-credit EXL (can also be done sophomore year, and select EXL opportunities are available in the summer)
Senior	PHUM 600 (2 cr. senior project	PHUM 610 (4 cr. senior project)	

Requirements for the Minor in Public Humanities:

The Public Humanities Minor requires a minimum of 24 credits. The Minor consists of a 4 credit core; 4 credits of methods course work; 12 credits of course work in one of the following tracks: Space & Place, Museums & Collections, Advocacy & Social Justice, Memory Studies, and the Junior Seminar.

Suggested course sequence for a Minor in Public Humanities:

**** Have conversation with the program coordinator(s) as soon as possible about potential track course selections to ensure a timely passage through the minor desired track.**

	1st Semester	**2nd Semester**	**Either Semester**
Sophomore	PHUM 170, *Introduction to Public Humanities*	CORE course	
Junior	METHODS course TRACK course (can be 200-level)	TRACK course (can be 200-level) PHUM 580 (Junior Seminar)	Junior seminars are only taught in the spring semester.

Senior	TRACK course (can be 200-level)		For minors, the junior seminar can be taken in the second semester of the senior year. Junior seminars are only taught in the spring semester.

Suggested pathway for a Public Humanities Major planning to finish in 3 years:
Note: Students are expected to be transferring xxxxx. The most common courses transferred for direct credit are xxxx. [amend as needed]

Advice for transfer courses for Public Humanities major or minor:
A maximum of two transferred courses (8 credits) taken at institutions of higher learning or at secondary institutions through the AP or IB programs may normally be counted toward the major.

Religion in American Life

Religion in American Life
Academic Bulletin

Area of Study: Values and Societies
Program: Minor
Department: History & Philosophy
Program Contact: Prof. Adrienne Krone

The Religion in American Life Minor is a 20 credit minor. The minor program includes RELST 180 and at least one course in each of the following categories: Traditions, Ethics, and Culture.

Students interested would ideally start with RELST 180: Religion in American Life but all 100 and 200 level courses are appropriate for first year students.

Foundation:

- RELST 180: Religion in American Life

Traditions:

- RELST 146: Islam in America
- RELST 147: Judaism
- RELST/HIST 260: The History of American Christianities

Ethics:

- RELST 200: Christian Ethics
- RELST 341: Jewish Ethics
- RELST/ENVSC 372: Judaism, Justice, and Food

Culture:

- RELST 130: The New Testament
- RELST/BLKST 174: Black Faith and Thought
- RELST 229: The Hebrew Bible
- RELST: Jewish Meadville
- RELST 350: Paul the Apostle
- RELST/BLKST 374: Black Theology
- RELST 360: Religion and the Environment

Suggested course sequence for a **Minor in Religion and American Life**:

Minors typically take 2 entry-level (100- or 200-level) courses and 3 advanced (300-level) courses.

- First Year or Sophomore courses:
    - 1-2 entry-level (100- or 200-level) courses including RELST 180
- Sophomore or Junior courses:
    - 1-2 entry-level (100- or 200-level) courses.
    - 1-2 advanced (300-level) courses
- Junior or Senior courses:
    - 0-1 advanced (300-level) courses.

Software Engineering

Software Engineering
Academic Bulletin

Area of Study: Mathematics and Natural Sciences
Programs: Major and Minor
Department: Department of Computer and Informaiton Science
Major/Minor Exclusions:
A student majoring in Software Engineering may not double major or minor in Computer Science, Data Science, or Informatics.
A student minoring in Software Engineering may not major in Computer Science, Data Science, or Informatics.

Description
A program focused on the knowledge and skills needed by teams and individuals to develop and maintain large-scale software systems. Students apply engineering principles and industry-standard tools to design, implement, test, release, and improve software for real-world clients.

Careers

- Software Engineer
- Product Manager
- Web Developer
- DevOps Engineer
- Document Engineer

Graduate Programs and Certificates

- Software Engineering
- Software Testing
- Project Management
- DevOps / CI/CD
- Certificates in related fields

Cooperative Programs

Our students have the opportunity to participate in one of the cooperative opportunities, including Carnegie Mellon's (CMU's) Accelerated Master's Program in Information Systems Management or in Information Security Policy & Management, one of the 3-2 engineering programs and Health Informatics program at Chatham, and 4-1 program in Business Data Analytics with CMU's Tepper School of Business. Participation in such academic programs will likely require more careful planning of the student's program of study at Allegheny College, and students should work with their academic advisor to carefully craft their academic plan. More information about these programs is available at https://www.cis.allegheny.edu/teaching/cmu/

Finding an Academic Advisor

Students can approach any CIS faculty member to serve as their academic advisor.

Laptop Use in CIS Courses
All students are expected to use their own laptops during class and lab sessions in CIS courses. This setup reflects real-world practice and supports flexible classroom use.

To ensure your laptop meets course requirements, please review the department's approved laptop guidelines here: https://www.cs.allegheny.edu/resources/laptops

Students enrolled in any CIS course (regardless of major/minor status) may request a loaner laptop at any time during the semester using the Laptop Loan Request Form at the same link. A configured laptop will be prepared and made available for pick-up at the library.

Introductory Courses (CMPSC 100, 101, and 104)
All three introductory courses are required for a software engineering major, CMPSC 100 and CMPSC 101 are offered every semester. CMPSC 104 is offered every fall semester. Both CMPSC 100 and 104 are appropriate and recommended for first-year students. Students with prior programming experience, specifically in Python, may reach out to the Chair (jjumadinova@allegheny.edu) to discuss the possibility of bypassing CMPSC 100 and enrolling in CMPSC 101.

Core Courses (CMPSC 201, CMPSC 203, CMPSC 302, CMPSC 404)
CMPSC 201, Programming Languages and CMPSC 203, Software Engineering, are taught every fall semester. CMPSC 302 and CMPSC 404 are offered every spring semester. All core courses have one or more prerequisites and are thus not ideal courses for incoming students unless they have taken prior courses in Computer Science but they may be suitable for transfer students.

Junior Seminar and Senior Project courses

Junior Seminar, CMPSC 580, is always offered in the spring semester. Students must receive the instructor's permission to take the course before they can register for it on Self-Service. This course must be completed before students take the Senior Comprehensive Project course in their major. The first and second reader selection process for the Senior Comprehensive Project occurs in CMPSC 580. Students who plan to study away during the Spring semester of their Junior year should take CMPSC 580 in the spring semester of their Sophomore year.

Comprehensive Senior Project in all CIS majors is a two-semester project with SE 600 course taken in the Fall semester and SE 610 course taken in the Spring semester. In rare circumstances, faculty will consider an exception to the semesters in which these courses are taken, but no exception can be made to it being a two-semester project. Students who are double majoring should consider completing a joint, single comprehensive senior project by registering for DOUBL 600 and 610. Students completing a double project will work with their first reader to ensure their proposed project satisfies all requirements of their major in the CIS department.

Important Notes About the Major in Software Engineering

- The major in Software Engineering requires the successful completion of at least 48 semester hours in Computer Science. To graduate with a major in Software Engineering, a student must have an earned GPA of at least 2.0 in the required courses presented for the major. For the Software Engineering major, at most one of CMPSC 100, 101 or 104 may be presented for the major on a Credit/No Credit grade basis.

Additional, regularly updated, details about the Computer Science major are always available at: https://www.cs.allegheny.edu/teaching/bulletin/

Suggested Schedule for a Major in Software Engineering

We do not recommend taking more than two CMPSC courses with a lab (with an exception of the Junior seminar and a Senior Project) in one semester.

	Fall Academic Semester	Spring Academic Semester
First Year	CMPSC 100	CMPSC 101
Sophomore	CMPSC 104 CMPSC 201 or CMPSC 202	CMPSC 302 (spring only) CMPSC 201 or CMPSC 202
Junior	CMPSC 203 (fall only) 1 **Elective**	CMPSC 404 (spring only) Optionally, 1 **Elective** CMPSC 580 (spring only)
Senior	1 **Elective** (majors need 2) if needed SE 600	SE 610

Students who declare a Software Engineering major are encouraged to regularly meet with their academic adviser to verify that they are making suitable progress towards the completion of their degree requirements.

Minors in Software Engineering

The minor in Software Engineering requires the completion of at least 24 semester hours of coursework in Software Engineering including:

- CMPSC 100 - Computational Expression AND
- CMPSC 101 - Data Structures AND

- CMPSC 203 - Software Engineering

A minor must also take one additional course from the Core courses (CMPSC 201, CMPSC 302, CMPSC 404) and two courses from Electives (CMPSC 400, CMPSC 403, CMPSC 303, CMPSC 305). Please remember that at most one of CMPSC 100 or 101 may be presented for the minor on a Credit/No Credit grade basis.

Information for Transfer Students

A maximum of 16 transfer credits may be counted toward the major. A maximum of 8 transfer credits may be counted toward the minor.

Three Year Software Engineering Academic Plan

<table>
<tr><td colspan="3">Transferring after one year</td></tr>
<tr><td colspan="3">We expect students transferring to Allegheny after attending one year at another institution may have one introductory course; in some cases, they may also be transferring in a second or third introductory course and/or a Core or Elective course. We do not recommend taking more than two computer science courses with a lab (with an exception of the Junior Seminar and Senior Project) in one semester.</td></tr>
<tr><td></td><td>MAJORS</td><td>MINORS</td></tr>
<tr><td>Year 1 at Allegheny</td><td>● Complete remaining CMPSC 100-level introductory courses if necessary
(majors need 3: CMPSC 100, 101, and 104)
● Take 1-2 Core course(s)
● Take 1 Elective course</td><td>● Complete CMPSC 100-level introductory course if necessary
(minors need 2: CMPSC 100, and CMPSC 101)
● Take 1 additional Core or Elective course</td></tr>
<tr><td>Year 2 at Allegheny</td><td>● Take 2-3 Core courses
● Take 1-2 Elective courses (majors need 2)
● Enroll in CMPSC 580, Junior Seminar (spring semester only)</td><td>● Take 1-2 Core courses (minors need 2, including CMPSC 203)
● Take 1-2 Elective courses (minors need 2)</td></tr>
</table>

Year 3 at Allegheny	• Complete remaining **Core** or **Elective** courses if necessary • Take **SE 600** in the fall semester • Take **SE 610** in the spring semester • Take any remaining CMPSC courses to reach major requirement of **48 credits**	• Complete remaining **Core** or **Elective** courses if necessary • Take any remaining CMPSC courses to reach minor requirement of **24 credits**

Two Year Software Engineering Academic Plan

Transferring after two years		
We expect students transferring to Allegheny after attending two years at another institution may have at least two introductory courses and may also be transferring in a Core or Elective course. We do not recommend taking more than two computer science courses with a lab (with an exception of the Junior Seminar and Senior Project) in one semester.		
	MAJORS	**MINORS**
Year 1 at Allegheny	• Complete remaining C*MPSC 100-level* introductory courses if necessary in the first semester (majors need 3: CMPSC 100, 101, and 104) • Take 2-3 **Core** courses • Optionally, take 1 **Elective** course • Enroll in **CMPSC 580**, Junior Seminar (spring semester only)	• Complete **CMPSC 100-level** introductory course if necessary (minors need 2: CMPSC 100 and CMPSC 101 • Take 1-2 **Core** courses (minors need 2, one of them must be CMPSC 203) • Optionally, take 1 **Elective** course (minors need 2)

Year 2 at Allegheny	• Take 1-2 **Core** courses • Take 1-2 **Elective** courses (majors need 2) • Take **SE 600** in the fall semester • Take **SE 610** in the spring semester • Take any remaining CMPSC courses to reach major requirement of **48 credits**	• Take 1-2 **Elective** courses (minors need 2) • Take any remaining **Core** courses if necessary • Take any remaining CMPSC courses to reach minor requirement of **24 credits**

Issues to consider for transfer credits:

- It is common for the similar sounding CMPSC courses to have varying degrees of "depth" across different institutions as evident by the varying or lack of prerequisites and topics covered. Transfer credit is accepted only for courses at approximately the same level of topic "depth" as the Allegheny College courses.
- All CMPSC courses use version control software (Git), continuous integration (GitHub Actions) and some courses beyond CMPSC 100 use a container-based system (Docker). Transfer students unfamiliar with these technologies should reach out to the Chair of the department to be placed in a short tutoring program with the department's Technical Leaders.
- All CMPSC introductory courses at Allegheny College are taught in Python programming languages. Transfer students unfamiliar with Python should reach out to the Chair of the department to receive adequate support.

Spanish

Spanish
World Languages and Cultures General Information
Academic Bulletin

Area of Study: Languages, Literature, and Culture
Programs: Major and Minor
Department: World Languages and Cultures

- **Major Advisor:** Students may ask any World Languages and Cultures (Spanish) faculty member.
- **Junior Seminar:** Students should plan to take their Junior Seminar in their Senior Year Fall semester (for most students, this is when they have reached the necessary level. Some may be able to take it sooner.). There is generally only one section per semester.
- **Senior Comp:** A 2 Semester Comp Fall and Spring is required. For enrollment reasons, the Junior/Senior seminar is sometiems "stacked" with the 300-level course given in the same semester -- has occasionally happened in Spanish. In that situation, students cannot register for both the seminar and the 300-level course, so should plan their path through the major accordingly.

Here is an example schedule for **Spanish Majors placing in Spanish 110:**

	1st Semester	2nd Semester	Either Semester
First-Year	SWS 105 Spanish 110	Spanish 120	*Most students should take SWS 105 in the Fall*
Sophomore	Spanish 215 SWS 205	Spanish 230/220 or SWS 205	
Junior	Spanish 220/230 Spanish 225		300-level Spanish Courses
Senior	Spanish 600 (2 cr.) Spanish 580	Spanish 610	1 400-level Spanish

Here is an example schedule for **Spanish Majors placing in Spanish 215**:

	1st Semester	2nd Semester	Either Semester
First-year	SWS 105 Spanish 215	Spanish 220/230	*Most students should take SWS 105 in the Fall*
Sophomore	Spanish 225	Spanish 300-level	Spanish 220/230
Junior			2 courses 300-level 1 course 400-level
Senior	Spanish 600 (2 cr.) Spanish 580	Spanish 610 1 400-level Spanish	

Spanish Minor Requirements: A minor in Spanish requires the completion of a minimum 20 semester credit hours in Spanish, including Spanish 220, 230, and 225 and one course at the 300-level. Students who test into the program at a higher level must complete 20 credits at the appropriate level for them. If student places above this level have them contact the Spanish Section head to chart out their minor. *See also the Latin American and Caribbean Studies Minor listed in the "Interdivisional Minor Program" section.*

Here is an example schedule for a student who minors in Spanish beginning in Spanish 110:

	1st Semester	2d Semester	Either Semester
First-Year	SWS 105	Spanish 120	*Most students should take SWS 105 in the Fall*
Sophomore	Spanish 215	Spanish 220/230	
Junior	Spanish 220/230	Spanish 225	Possible study abroad?
Senior			300-level Spanish course

Speaking and Writing Seminars (SWS)

Philosophy

The SWS program represents a first opportunity to achieve the Institutional Learning Outcomes as specified in the Allegheny College catalogue:

Allegheny's educational program is designed so that its graduates are able to:

- Think critically and creatively;
- Communicate clearly and persuasively as speakers and writers;
- Invoke multiple ways of understanding to organize and evaluate evidence, and to interpret and make sense of their experiences and the experiences of others;
- Apply their knowledge and learning to engage in informed debate, and to analyze and solve problems.

The elements of Allegheny's curriculum work together to provide students with a cohesive program in which all four Institutional Learning Outcomes may be achieved. In particular, the SWSS program, the Junior Seminar, and Senior Project progressively develop students' abilities to read and listen critically, formulate their ideas, and become more effective writers and speakers.

The two courses in the SWS program,, typically taken in the first two years, connect with the upper-level Junior Seminar and Senior Project to form a continuum that moves from general to discipline-specific communication.The SWS courses prepare students to effectively communicate complex ideas and arguments to a variety of audiences in written and spoken form. All SWS courses emphasize attention to audience and the importance of understanding conventions of communication within a particular context.

To enhance the development of students' communication skills through the two SWS courses and to encourage consistency of expectations across sections of the same course, we present the following list of SWS Learning Outcomes.

SWS Program Learning Outcomes:

1. To demonstrate, as readers, writers, speakers, and listeners, an awareness of audience, purpose, occasion, and genre conventions and their effects on the creation and delivery of ideas.
2. To use the ideas of others to advance thinking.
3. To use iterative composing processes to discover and reconsider ideas and their expression.
4. To engage in reading, writing, speaking, and listening as acts of critical thinking

Learning Outcomes Specific to SWS 105

1. To craft effectively organized messages for specific purposes, occasions, and audiences.
2. To develop genre-appropriate strategies for revising and reorganizing based on feedback received.
3. To engage in reading and listening as acts of critical thinking.
4. To summarize, analyze, and create thesis-driven oral and written texts.

Students in SWS 105 can expect to complete at least two major assignments involving written communication, and two major assignments involving oral communication. Additional smaller assignments will, by section, vary in number and weight.

Learning Outcomes Specific to SWS 205

1. To engage in reading and listening to academic texts as acts of critical thinking.
2. To use a variety of research strategies to find, evaluate, and synthesize a range of sources when composing oral and written texts that respond to academic purposes, occasions, and audiences
3. To contribute to academic research through building on others' ideas and integrating one's own
4. To develop strategies for revising and reorganizing academic research based on feedback received.

Notes for Students Still Needing FS 102 or FS 201

- Students who need to take FS 102 should take SWS 105
- Students who need FS 201 should follow the chart below:

Program	Students should take...	Semester
Biology	FSBIO*201	Both
Chemistry/Biochemistry	FSCHE*201	Fall 2024
COMM & THTR Majors; COMM, THTR, DMS, FILM, JOURN minors	FSCOM*201	Both
English	Any FS 201	
Environmental Science & Sustainability Major	ENVSC*270	Both
GHS	GHS*210	Both
History	FSHIS*201	Fall 2024
Mathematics	Any FS 201	

MUSIC minor	Any FS 201	
Neuroscience	Any FS 201	
Philosophy	Any FS 201	
WGSS	Any FS 201	

Studio Art

Studio Art
Academic Bulletin

Area of Study: Visual and Performing Arts
Programs: Major and Minor
Major/Minor Exclusions:
A student majoring in Studio Art may not double major or minor in Art, Science, and Innovation.
A student minoring in Studio Art may not major in Art, Science, and Innovation.

Suggested Pathway for Studio Art Majors:

4-Year Plan	**1st Semester**	**2nd Semester**	**Either Semester**
First Year	SWS 105 ART 115 or 250		*Most students should take SWS 105 in the Fall* ART 151, 171, 182, or 187 ART 162 or 165
Sophomore		ART 250, 251, or 343	200-level course in preferred medium 100-level course in 3D or 2D
Junior		ART 580 (Junior Seminar)	300-level course in preferred medium Complete requirements: 100 level course in 2D or 3D In art history: ART 115, ART 343, or ART 250
Senior	ART 600 (Sr. Project) ART 480, 584, or internship	ART 610 (Sr. Project)	300-level course in medium

Comments:

1. It is now possible to take Introductory, Intermediate, and Advanced courses in ceramics, electronic art and intermedia, painting, photography, and sculpture. However, not all courses are offered every semester, so students should begin their media sequences as soon as possible if they want to be able to schedule a third, advanced course in the sequence by the time they are juniors or seniors.

2. Please note that seniors are not permitted to enroll in introductory level studio courses.
3. ART 580 Junior Seminar is offered both Fall and Spring semesters. It is recommended that majors plan to take ART 580 in the spring of their junior year. However, it is possible to do the Junior Seminar / Senior Project sequence in the Fall and Spring of the senior year. Prerequisite is two studio art classes and an Art History course.
4. **Arts Administration Pathway.** Students interested in careers in museums, galleries or public history could choose a Studio Art MINOR of ART 115, ART 171, ART 187, ART 250, ART 271, leading to the capstone of ART 584.

Studio Art: Transfer Guidelines

Suggested pathway of a **Studio Art** major for a transfer student planning to finish in 3 years. Ideally, the student will have completed at least two introductory courses in art including a 2D, 3D, and/or modern art history course.

3-Year Plan	**1st Semester**	**2nd Semester**	**Either Semester**
Sophomore		ART 250	200-level course in preferred medium 100-level required course in 3D or 2D (if not already taken)
Junior		ART 580, Jr Seminar	300-level course in preferred medium Complete art history requirement (ART 115, 343, or 250)
Senior	ART 480, 584, or Internship ART 600 (Sr. Project)		ART 610 (Sr. Project) Advanced course in medium

Issues to consider:

1. A 3-credit transfer course with a similar description and course content will be accepted to fulfill a 4-credit requirement in the Art Department. However, the transfer student must still overall meet the minimum number of credit hours required, which might necessitate taking or transferring elective courses in Art.
2. If a student wants to use a general design course to fulfill a departmental requirement, the Art Department will ask to see a syllabus and portfolio of work created to determine whether it works better as a 2-D or 3-D class. We will also take into consideration the student's plan for advanced work and needed requirements.
3. Art Appreciation or similar courses will transfer as elective credits in Art but cannot be used to fulfill any requirement of a major or minor in the Art Department.

In order to fulfill the	... the course must cover
I. Art History and Visual Criticism	
ART 115, Art History and the Birth of the Museum	This course has an emphasis on the modern history of the art museum that makes it appropriate for careers in museum studies or public history. The second half of a traditional art history survey (Renaissance/Baroque through modern) would be an acceptable transfer equivalent. Students receiving a 4 or 5 in AP Art History get credit for this course.
ART 250, Contemporary Strategies in Art	Aspects of art made in the later 20th and 21st centuries, in either survey or seminar format.
ART 343, Feminist Art Histories	Modern art through the specific lens of feminist theory.
II. Introduction to 2-Dimensional Studio Art	
	An introductory course in any of the 2-D mediums offered (drawing, painting, or photography). May also transfer a course in introductory 2-D Design, color theory, or other 2-D mediums as appropriate, such as printmaking or digital graphic media.
III. Introduction to 3-Dimensional Studio Art	
	An introductory course in any of the 3-D mediums offered (ceramics or sculpture). May also transfer a course in introductory 3-D Design, or another 3-D medium as appropriate, such as 3-D digital printing or woodworking.
IV. Advanced Work in Studio Art	

	A transfer student may enroll in the 200-level Intermediate class in a medium for which they are transferring coursework at an introductory level.
	A student may consider enrollment in a 300-level Advanced class if they are transferring a two-course sequence in that medium. In photography, experience in the darkroom is required in order to enroll in ART 371.
	Upon request, a student might fulfill this requirement with a transfer course in a medium not offered at Allegheny College, for example, Life Drawing. Approval requires examination of the syllabus and portfolio of work done for the class.
V. Experiential Learning	
ART 480, Professional Practices	A portfolio course that includes creation of a personal website, grant writing, and consideration of career options.
VI. and VII. Advanced coursework	
	The Art Department requires that ART 580, the Junior Seminar and ART 620, the Senior Project be taken at Allegheny College.

Theatre

Theatre
Academic Bulletin

Area of Study: Visual & Performing Arts
Programs: Major and Minor

Major suggested timeline (49 credits):

	Fall Semester	Spring Semester	Either Semester	
Year 1: acting interest (8 cr)	THTR 150		THTR 110	
Year 1: production interest (8-12 cr)	THTR 160 (mod A, 2 cr)* THTR 161 (mod B, 2 cr)*	THTR 163 (mod A, 2 cr)º THTR 162 (mod B, 2 cr)º	THTR 110	
Year 2: acting interest (12-16 cr)	THTR 160 (mod A, 2 cr)* THTR 161 (mod B, 2 cr)*	THTR 210 THTR 163 (mod A, 2 cr)º THTR 162 (mod B, 2 cr)º	THTR electives (x2) -and- Department elective -and- THTR 311 or THTR 312	
Year 2: production interest (12-16 cr)	THTR 150	THTR 210		
Year 3 (13-17 cr)	THTR 582, Jr. Seminar	THTR 310 THTR 600 (1 cr)		
Year 4 (8-12 cr)	THTR elective or THTR 610	THTR elective or THTR 610		

THTR 160-163: All majors **must*** take THTR 160 and **opt**º to take one of the other 3 courses, depending on their interest in Scenery (THTR 161), Costumes (THTR 162), or Lighting (THTR 163)

Junior Seminar & Senior Project Sequence: During Year 3 Majors take the Jr. Seminar (THTR 582) & Sr. Seminar (THTR 600), during which they develop their senior project proposals. The Senior Project (THTR 610) is a single semester in either Fall or Spring based on student preference.

THTR Electives (3 courses, usually during Years 2, 3, and 4)

THTR 181, Stage Management	THTR 311 or 312. Theatre History 1 or 2
THTR 250, Acting 2	THTR 350, Acting 3
THTR 260, Production Design 1	THTR 360, Production Design 2
THTR 280, Directing 1	THTR 380, Directing 2

Department Electives (4 credits): any THTR course not already taken above or choose from 1 column below

1 of the following courses:	*2 of the following courses:*
COMM 251, Gender & Popular Culture	DMS 101, 201, Modern
COMM 281, Integrated Marketing Comm.	DMS 102, 202, Ballet
FILM 171, Filmmaking 1	DMS 104, 204, Jazz
FILM 202, Film as a Narrative Art	DMS 105, 205, Tap

Students interested in declaring a major in *Theatre* should speak directly with a faculty member to be their advisor or speak with the Department Chair of Communication, Media, and Performance

Minor suggested timeline (24 credits):

	Fall Semester	Spring Semester	Either Semester

Year 1 (4 cr)			THTR 110
Year 2: acting interest (8 cr)	THTR 150	THTR 210	
Year 2: production interest (8 cr)	Department elective (4 credits) any THTR course not already taken above or choose from 1 column below	Department elective (4 credits): any THTR course not already taken above or choose from 1 column below	
Year 3 (4-8 cr)	THTR 311 (Fall) or THTR 312 (Spring		THTR elective
Year 4 (4-8 cr)	THTR 582 Jr. Sem		

Department Electives (4 credits): any THTR course not already taken above or choose from 1 column below

1 of the following courses:	*2 of the following courses:*
COMM 251, Gender & Popular Culture	DMS 101, 201, Modern
COMM 281, Integrated Marketing Comm.	DMS 102, 202, Ballet
FILM 171, Filmmaking 1	DMS 104, 204, Jazz
FILM 202, Film as a Narrative Art	DMS 105, 205, Tap

THTR 160-163: All minors **must*** take THTR 160 and **opt**° to take one of the other 3 courses, depending on their interest in Scenery (THTR 161), Costumes (THTR 162), or Lighting (THTR 163)

Students interested in declaring a minor should speak with the Department Chair of Communication, Media, and Performance or a member of the Theatre faculty.

Women's, Gender & Sexuality Studies

Women's, Gender & Sexuality Studies
Academic Bulletin

Area of Study: Interdisciplinary Studies
Programs: Major and Minor

When advising a student interested in Women's, Gender & Sexuality Studies (WGSS), please note the following:

- WGSS is an interdisciplinary major and minor and a named department administered by a chair. Currently, the chair is Barbara Shaw.
- **WGSS curricular revision:** details are provided below on how to advise students interested in the major/minor who (1) matriculated before fall of 2025 and (2) matriculated fall 2025+. When in doubt, consult the *Academic Bulletin* or contact the chair.
- **Sequencing:** Ideally, students move through the major/minor as detailed below. Because some students declare their major/minor as late as their junior year, the curricular revision eased prerequisites and the elective structure so they can move through the program. WGSS 580 (Junior Seminar), 600 (Senior Project I), and 610 (Senior Project II) have prerequisites (See Self Service for details).
- **Elective course offerings** for each semester are available as an e-poster. The chair sends affiliated faculty, LS advisors, and department chairs this information before registration. Students can also contact the chair or any member of the department for more information.
- **WGSS academic and senior project advisors:** tenure-track and tenured faculty serve in these roles.
    - Students are welcome to ask Profs. Bailey, Burleigh, Caballero, Oliver, Riess, or Shaw to serve as their WGSS academic advisor. The chair is available as needed to assist students in selecting their academic major advisor.
    - The chair advises minors as appropriate.
    - Senior project directors are assigned by the department after WGSS majors complete a worksheet in the junior seminar.
- **Double Senior Projects:** some WGSS majors are double majors and it is important to make sure that the WGSS senior project director is involved in every step from topic development to comp oral per departmental guidelines. For example, if a student takes DOUBL 600 in their other major department, the WGSS senior project director needs to play a central role in shaping the idea, literature, methods/theories, and proposal. If needed, the chair will step in to make sure that WGSS is represented in the DOUBL 600/610 process.

Majors in WGSS:

For students who matriculated before Fall 2025, a major in WGSS requires the completion of 40 semester credit hours. Here is the link to the major advising worksheet that details the following course requirements:

- WGSS 100, 210 or 211, 300 or BLKST 305, 400, 580, 600 and 610 + 16 credits selected from approved electives of three types: program, discipline-focused, and related.
    - Program electives carry the WGSS prefix and course number.
    - Discipline electives address WGSS within the context of a particular discipline.
    - Related electives provide substantive attention to the intersection of WGSS with race/ethnicity, sexuality, class formation or socioeconomic status, nationality, and/or religion.

For students who matriculated Fall 2025 and after, a major in WGSS requires the completion of 42 semester credit hours. Here is the link to the major advising worksheet that details the following course requirements.

- WGSS 100, 210 or 211, 270, 300 or BLKST 305, 580, 600, 610 + 16 credits selected from a single list of approved electives, noting that one of the electives can be at the 100-level and one must be a 300-level course.

Required classes are typically offered:

- **WGSS 100** (Intro): every semester.
- **WGSS 210** (Social Movements) or **WGSS 211** (Queer & Trans Lives): every year.
- **WGSS 270** (Transnational Feminisms - was WGSS 400): every 3-4 semesters. Starting fall 2025, WGSS 270 will substitute for WGSS 400.
- **WGSS 300** (Feminist-Queer Theory) or **BLKST 305** (Black Feminist Thought): every fall.
- **WGSS 580** (Junior Seminar): every spring. This course is *required for the major/minor*. It has two tracks: majors prepare for their senior project and minors complete a capstone project. WGSS majors should take it in the spring semester of their junior year; minors have more flexibility and are encouraged to take it in the spring of their junior or senior year.
- **WGSS 600** (Senior Project I): 2-credit class offered in the fall and students register for it with their project director. The course asks students to further develop their proposal, defend it, and submit a substantive piece of the comp to show progress beyond the proposal.
- **WGSS 610** (Senior Project II): 4-credit class offered in the spring and register for it with their project director to complete the comp.

Minors in WGSS:

For students who matriculated before Fall 2025: a minor requires the completion of 24 credit hours. Here is the link to the advising worksheet that details the following course requirements:

- WGSS 100, 210 or 211, 300 or BLKST 305, 580 + 8 credits selected from approved electives.

For students who matriculated Fall 2025 and after: a minor requires the completion of 20 credit hours. Here is the link to the advising worksheet that details the following course requirements:

- WGSS 100 or 211, 300 or BLKST 305, 580 + 8 credits selected from approved electives.

When required classes are typically offered

- **WGSS 100** (Intro) or **WGSS 211** (Queer & Trans Lives): every semester.
- **WGSS 300** (Feminist-Queer Theory) or **BLKST** 305 (Black Feminist Thought): every fall.
- **WGSS 580** (Junior Seminar): every spring. Minors complete a capstone project.

Students and academic advisors are encouraged to consult with the chair of WGSS at least once/year and as needed.

Information for Transfer Students
Transfer of credits chart

- The chair will consider any course that emphasizes women, gender, sexuality, social justice, intersectionality, and transnationality.
- Introductory courses in women's studies; gender studies; sexuality studies; women's, gender & sexuality studies; and relevant sociology courses have been approved regularly as counting in WGSS.
- Here are some guidelines to see what classes might transfer toward a WGSS major or minor.

In order to fulfill the ...	**... the course must cover ...**
WGSS 100: Introduction to Women's, Gender & Sexuality Studies	● An introduction to key concepts and connections in the field of women's, gender, and sexuality studies ● Focus on the connections between feminist and/or queer inquiry ● Intersectional and social justice approaches to gender, class, race, sexuality, ability, religion, and nationality
WGSS 300: Feminist and Queer Theory BLKST 305: Black Feminist Thought	● A focus on feminist and/or queer theories ● Intersectional and social justice approaches to gender, race, class, sexuality, ability, religion, and nationality ● Feminist theory that focuses on Africa-American, Diasporic, and Afro-Latina/x/e count toward BLKST 305

Elective(s)	● Electives in WGSS are flexible and offered in departments, majors, and minors in the U.S. and globally. ● If students completed courses focused on women/gender/sexuality in sociology, anthropology, American studies, ethnic studies, African-American/Diasporia/Black studies, indigenous/Native studies, policy/political science/government politics, the environment, literature/creative writing, history, communications & theatre, public health, psychology, art history, economics/business, technology and science, and performance studies, it's likely they will transfer in as an elective toward a WGSS major or minor

World Languages and Cultures

World Languages and Cultures
Academic Bulletin

Area of Study: Languages, Literature, and Culture
Programs:

- Arabic: Minor
- French: Minor
- German: Minor
- Spanish: Major and Minor

Discontinued Program:

- French Major (last in 2023-2024 Bulletin),
- Chinese Minor (last in 2021-2022 Bulletin)
- Latin Minor (last in 2018-2019 Bulletin)

When advising a student interested in World Languages and Cultures, please note:

- Students who have previous experience in a language that we teach at Allegheny must take the placement test and may consult with members of the department for help interpreting their results. They will begin our program in the course indicated by that progress; the paths through the programs that we lay out below will vary based on this and other factors.
- When a student is interested in continuing a language or beginning the study of a new one, the study should begin as early as possible in the student's college career.
- Students intending to major in International Studies or Global Health Studies should enroll in language study in the first year.
- Students learning a second language are encouraged to study abroad.
- Students pursuing a major should plan to take at least one course in the major each semester in the first two years, and two in the second two years.

In addition to the majors and minors described in detail below, WLC offers courses in

- **American Sign Language**: WLC 100 and 200. Contact the department for more information about these courses, which are generally not suitable for first-year students.
- **Latin**:
- **English for Speakers of Other Languages**: Listed under "WLC" rubric. These courses offer additional support for bilingual students or students for whom English is not their first language.

Questions may be directed to Barbara Riess, Chair of World Languages and Cultures (briess@allegheny.edu Ruter 107, 814-332-2323) or to the Section Heads for each language.

- Arabic: Reem Hilal (rhilal@allegheny.edu, Ruter 105, 814-332-3310)
- French: Briana Lewis (blewis@allegheny.edu, Ruter 102, 814-332-2322)

- German: Julia Ludewig (jludewig@allegheny.edu, Ruter 206, 814-332-2327)
- Latin: Judson Herrman (jherrman@allegheny.edu, Arter 202A, 814-332-4303)
- Spanish: Barbara Riess (briess@allegheny.edu, Ruter 107, 814-332-2323)

The Major available in World Languages and Cultures is Spanish