

# College of Arts and Sciences

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The College of Arts and Sciences is a distinctive learning community that forms the vital center of the University of Dayton. In the finest tradition of liberal education, the College is committed to excellence in the discovery, integration, dissemination and application of knowledge. Academic programs provide instruction in critical thinking and expression, social and cultural criticism, computation, scientific reasoning, the creative and performing arts, historical analysis, and religious and moral awareness. The College of Arts and Sciences takes as its mission the Marianist principle of educating the whole person and enabling all members of our learning community to fulfill their potential.

The faculty of the College of Arts and Sciences demonstrate connected learning and scholarship by integrating teaching, research and service. They engage students from across the University in this process through traditional and innovative approaches to learning. The faculty understand that the principles of liberal education emerge not only from the classroom, studio, and laboratory, but also from the many resources the students have within their reach: advisement, mentoring; campus ministry; social and professional clubs and societies; campus media and publications; fine arts events; and membership on departmental and campus-wide committees where students gain experience in working with others and contribute to the wider University community. Taken together, these dimensions of liberal education form the basis for lifelong intellectual, professional, and personal growth.

The College of Arts and Sciences affirms its commitment to the Catholic and Marianist tradition. In humanities and social science programs, in the physical and life sciences, and in the creative and performing arts, the College strives to ensure that its graduates are distinguished by their discernment and intellectual rigor, their broad base of learning, and their sense of moral responsibility. And through their participation in a vital learning community, the College ensures the graduates will be distinguished by their appreciation and respect for diversity, their commitment to service, and their ability to affect positively individual lives and the common good.

## Academic Programs

For detailed information on specific majors and minors, please visit the links below.

The major is defined as a block of courses totaling at least 24 semester hours of upper-level work in a single discipline. Transfer students are required to take a minimum of 12 upper-level semester hours in the major at the University of Dayton. Some departments may have additional requirements for transfer students. These additional requirements are defined specifically in the departmental listings.

Single-discipline and interdisciplinary minors are defined in the departmental listings. Transfer students must take a minimum of six upper-level semester hours in the minor at the University of Dayton. Some departments may have additional requirements for transfer students. These additional requirements are defined specifically in the departmental listings.

### The Bachelor of Arts is offered in:

- American Studies (p. 108)
- Art History (p. 112)
- Chemistry (p. 136)
- Communication (p. 145)
- Criminal Justice Studies (p. 156)
- Economics (p. 160)
- English (p. 163)
- French (p. 181)
- German (p. 182)
- History (p. 192)
- Human Rights Studies (p. 246)
- International Studies (p. 198)
- Languages (p. 181)
- Mathematics (p. 203)
- Music (p. 212)
- Philosophy\* (p. 234)
- Political Science (p. 245)
- Psychology (p. 258)
- Religious Studies (p. 263)
- Sociology\* (p. 270)
- Spanish (p. 182)
- Theatre (p. 277)
- Visual Arts (p. 113)
- Women's and Gender Studies (p. 280)

\* Major programs offered in India in conjunction with the Marianists.

### The Bachelor of Science is offered in:

- Applied Mathematical Economics (p. 204)
- Biochemistry (p. 138)
- Biology (p. 128)
- Chemistry (p. 137)
- Computer Information Systems (p. 151)
- Computer Science (p. 152)
- Environmental Biology (p. 130)
- Environmental Geology (p. 175)
- Geology (p. 177)
- Mathematics (p. 203)
- Medicinal-Pharmaceutical Chemistry (p. 140)
- Physical Science (p. 240)
- Physics (p. 240)
- Physics-Computer Science (p. 241)
- Pre dentistry (p. 254)
- Pre medicine (p. 255)
- Psychology (p. 259)

### Other programs leading to the bachelor's degree:

- Art Education (B.F.A.) (p. 111)

- Fine Arts (B.F.A.) (p. 111)
- General Studies (B.G.S.) (p. 174)
- Graphic Design (B.F.A.) (p. 113)
- Music Composition (B.M.) (p. 216)
- Music Education (B.M.) (p. 212)
- Music Performance (B.M.) (p. 219)
- Music Therapy (B.M.) (p. 220)
- Photography (B.F.A.) (p. 111)

### Established Interdisciplinary Majors

American Studies (p. 108), Criminal Justice Studies (p. 156), International Studies (p. 198), Premedicine (p. 255), Pre dentistry (p. 254) and Women's and Gender Studies (p. 280) are present examples of established interdisciplinary majors. Such programs are established by interdisciplinary committees and administered by the program directors.

### Individually Designed Interdisciplinary Majors

Students demonstrating extraordinary interest, special skills or needs, and sound academic status may initiate individually designed majors. Students carry the responsibility to find a faculty mentor or advisor for such majors. All University and College requirements for the Bachelor of Arts or Bachelor of Science degree must be fulfilled. The degree received will be a Bachelor of Arts or Science in Interdisciplinary Studies. Candidacy for the Bachelor of Arts or Science in Interdisciplinary Studies must be declared no later than the last semester of the junior year. Long-range plans for such majors must be submitted to the appropriate chairpersons and the dean for final approval. Plans may be altered with appropriate supporting rationale and the approval of the chairperson and dean.

## Degree Requirements

1. To be awarded the bachelor's degree by the College of Arts and Sciences, it is necessary to complete all the requirements listed for one of the academic programs offered by the College.
2. A maximum of four semester hours of general activities courses, a maximum of two semester hours of physical education activities courses, a maximum of ten semester hours of MIL courses, and a maximum of six hours of applied courses may be counted in the semester hours required for the degree. In addition, a maximum of one semester hour from ASI 150, VAR 100, or an equivalent course may be counted in the semester hours required for the degree.
3. The final 30 semester hours must be earned at the University of Dayton. Furthermore, a minimum of 12 semester hours of course work at the 300 and 400 level in the major must be completed at the University.
4. The standard grade point average of at least 2.0 must be achieved in the major field, in the minor field, and in the total program. In the Bachelor of Fine Arts and Bachelor of Music Programs, a 2.0 cumulative grade point average is required in the nonprofessional courses as well as in the professional courses.
5. The College of Arts and Sciences' Competencies of Composition, Oral Communication, and Mathematics, are required for all bachelor degrees within the College.

### Composition Competencies

The College of Arts and Sciences' composition competency requirement is satisfied by completing ENG 100 (or ENG 100A and ENG 100B) and ENG 200, or ENG 200H, or ASI 120 with a grade of C- or higher.

Students admitted to the University Honors program and students with sufficiently high verbal scores on the SAT and ACT are placed in ENG 200H. ENG 200H is a one-semester course which satisfies the University's Common Academic Program requirement in composition. Students who are placed in ENG 200H do not receive credit for ENG 100 but are free to take elective course work in place of the waived First-Year Humanities Commons composition.

All incoming first-year students are placed in ENG 100 unless:

- they are designated as Honors - placed in ENG 200H
- they are placed in ENG 200H (receive EM credit for ENG 100). For a score of 5 they receive EM credit for ENG 100 and ENG 200.
- they have an SAT (VB) score of 750 or above, or ACT (EN) of 35 or above - exempt from taking English composition
- they have an SAT (VB) score below 450, or ACT (EN) below 17 - placed in ENG 100A and ENG 100B
- they are in the CORE program (ASI 120 counts as ENG 200H)

### Oral Communication Competencies

The College of Arts and Sciences' oral communication competency requirements are satisfied by completing the University's Common Academic Program requirement of CMM 100 Principles of Oral Communication, and with a grade of C- or higher.

### Mathematics Competencies

In order to graduate, students are required to satisfy the Common Academic Program Mathematics requirement. The College of Arts and Sciences requires a grade of C- or better, or earn EM credit based on AP examinations for MTH 168 Analytic Geom & Calc or MTH 207 Intro to Statistics, or earn appropriate transfer credit, for any one of the Common Academic Program mathematics courses. (MTH 205 does satisfy the Common Academic Program Mathematics requirement, but is not applicable to the College of Arts and Sciences degree requirements.)

MTH 114	Contemporary Mathematics	3
MTH 129	Calculus for Business	3
MTH 137	Calculus I with Review	4
MTH 138	Calculus I with Review	4
MTH 148	Introductory Calculus I	3
MTH 149	Introductory Calculus II	3
MTH 168	Analytic Geometry & Calculus I	4
MTH 169	Analytic Geometry & Calculus II	4
MTH 207	Introduction to Statistics	3
MTH 218	Analytic Geometry & Calculus III	4

6. It is the responsibility of the student to complete his or her Graduation Application form.

## General Requirements for all Bachelor of Arts Programs

A minimum of 124 semester hours of approved coursework must be presented for the B.A. At least 48 semester hours must be completed at the 300-400 level. For limitations on credit and restrictions on courses, consult the chairperson or the dean. No more than 45 hours of the minimum 124 hours may be completed in a student's major discipline.

## Introduction to the University

In the first semester, students take a course that introduces them to the University and to their major field of study. Undeclared students take specific sections of this course.

## Major Concentration

Most major programs require between 30 and 45 semester hours. For department or program requirements, consult program schedules or the department chairperson or program director.

## Liberal Studies Curriculum

Every student will complete the Liberal Studies Curriculum. This Curriculum provides students with a breadth of study and experiences in the humanities, the creative and performing arts, the social sciences, and the natural sciences. It complements specialized study in a major and presupposes, builds upon and enhances the University's Common Academic Program (CAP). Where appropriate, credits in the Liberal Studies Curriculum may apply to other requirements but no more than six hours may be in the departmental major concentration. The Liberal Studies Curriculum includes:

### Philosophy and Religious Studies

Students complete 12 semester hours including a course in philosophy and a course in religious studies as part of the CAP First-Year Humanities Commons requirement, and two additional CAP Advanced Studies approved courses in philosophy and/or religious studies.

### History

Students complete 6 semester hours including a course as part of the CAP First-Year Humanities Commons and one additional CAP Advanced Studies approved course in historical study.

### Literature

Students complete 3 semester hours in literature selected from a list of approved courses.<sup>1</sup>

### Creative and Performing Arts

Students complete 3 semester hours in theory, appreciation or history of visual arts, music or theater selected from a list of approved courses; or complete 3 semester hours in production and performance selected from a list of approved courses.<sup>2</sup>

### L2 Proficiency:

(Proficiency in a language other than English) Students demonstrate basic practical communication in a language other than English in one of three ways:

1. Students may choose to demonstrate proficiency equivalent to the completion of the 201 level by examination (zero semester hours).  
or
2. Students may choose to demonstrate proficiency equivalent to the completion of the 141 level by examination, and one of the following four sub-options matching the language course at the 141 level (zero to three semester hours):
  - a. 201 level language course
  - b. Approved study abroad/intercultural experience
  - c. Approved service learning experience
  - d. Approved Contextual Course.<sup>3</sup>
 or
3. Students may choose to demonstrate proficiency by completion of a language course at the 141 level and any necessary prerequisites, and one of the following four sub-options matching the language course at the 141 level (four to eleven semester hours):

- a. 201 level language course
- b. Approved study abroad/intercultural experience
- c. Approved service learning experience
- d. Approved Contextual Course.<sup>3</sup>

No credit is awarded through the proficiency examination. The range of semester hours to complete the L2 requirement in Arabic, Chinese and Hindi is zero to twelve.

## Social Sciences

Students complete 12 semester hours including two courses at the introductory level from at least two different traditional disciplines:

ANT 150	Cultural Anthropology	3
ECO 203	Principles of Microeconomics	3
POL 101	Global Politics	3
or POL 201	The American Political System	
PSY 101	Introductory Psychology	3
SOC 101	Principles of Sociology	3
or SOC 204	Modern Social Problems	

One course at the 300-400 level in one of the disciplines in which an introductory course was taken, and one additional course from any of the traditional disciplines or from the list of courses approved for social science. (Students in the E-11 program may take two approved courses in the School of Education).

## Mathematics

Students complete 3 semester hours selected from courses in the Department of Mathematics (MTH 205 excluded).

## Natural Sciences

Students complete a sequence of 3 lecture courses with 2 accompanying laboratories in the Integrated Natural Science Sequence for a total of 11 semester hours. Students who wish to do more advanced study in science may complete 9 semester hours in science courses approved for majors in the departments of biology, chemistry, geology, and physics and 2 semester hours of accompanying laboratories in lieu of the Integrated Natural Science Sequence.

<sup>1</sup> Courses for Literature are as follows:

CLA 350	Classical Literature in Translation	3
ENG 151	Introduction to Literature	3
ENG 203	Major British Writers	3
ENG 204	Major American Writers	3
ENG 205	Major World Writers	3
ENG 210	Poetry	3
ENG 230	Topics in Literature	1-6
ENG 301	Survey of Early English Literature	3
ENG 302	Survey of Later British Literature	3
ENG 305	Survey of American Literature	3
ENG 306	Survey of Continental Literature	3
ENG 317	Contemporary Poetry	3
ENG 319	Contemporary Fiction	3
ENG 320	Contemporary Drama	3
ENG 321	Reading Popular Music	3
ENG 322	Masterpieces of World Literature	3
ENG 323	Literature of the Christian Tradition	3
ENG 324	The Novel	3



MUS 196	Group Piano I	1
MUS 201	Music In Concert	3
MUS 203	Sights & Sounds of Music	3
MUS 205	Music, Technology and Culture	3
MUS 295	Beginning Guitar Class II	1
MUS 301	Music History & Literature I	3
MUS 302	Music History & Literature II	3
MUS 303	Introduction to Musics of the World	3
MUS 304	The Practice of American Music	3
MUS 305	African-American Sacred Music	3
MUS 306	History of American Jazz	3
MUS 307	Development of American Popular Song	3
MUS 309	Opera History & Literature	3
MUS 310	Mozart's Operas	3
MUS 328	History of the American Musical	3
MUS 399	Performance Studies	1-2
MUS 491	University Orchestra	1
MUS 492	Symphonic Wind Ensemble	1
MUS 493	University Chorale	1
MUS 494	Dayton Jazz Ensemble	1
MUS 499	Performance Studies	4
THR 105	Introduction to Theatre	3
THR 203	Technical Production	3
THR 251	Beginning Tap Dance	2
THR 261	Beginning Jazz Dance	2-3
THR 271	Beginning Ballet	2-3
THR 300	Theatre Laboratory	1-3
THR 303	Scene Painting	3
THR 307	Light Design	3
THR 310	Acting I	3
THR 312	Acting for the Camera	3
THR 320	Movement & Voice for the Stage	3
THR 323	Acting II	3
THR 330	Set Design	3
THR 344	Acting/Directing for Musical Theatre	3
THR 351	Intermediate Tap Dance	2
THR 361	Intermediate Jazz Dance	2
THR 371	Intermediate Ballet	2
VAD 211	Fundamentals of Visual Communication Design	3
VAE 232	Integrating Visual Culture	3
VAF 104	Foundation Drawing	3
VAF 112	Foundation 2-D Design	3
VAF 117	Foundation 3-D Design	3
VAF 203	Drawing Through the Process	3
VAF 225	Painting for Non-Majors	3
VAF 226	Painting I	3
VAF 228	Watercolor I	3
VAF 232	Sculpture I	3
VAF 240	Ceramics I	3
VAF 242	Ceramics II: Wheel Throwing	3
VAF 253	Printmaking I	3
VAF 325	Figure Painting	3

VAH 101	Introduction to the Visual Arts	3
VAH 129	Foundations in Art History	3
VAH 201	Survey of Art I	3
VAH 202	Survey of Art II	3
VAH 203	Survey of Art III	3
VAH 310	History of Art and Activism	3
VAH 320	Latin American Art	3
VAH 330	Arts of Asia	3
VAH 350	Western Architecture	3
VAH 360	Art History & Feminism	3
VAH 370	Nineteenth Century Art I	3
VAH 382	History of Photography I	3
VAH 383	History of Graphic Desing	3
VAH 483	PostColonial and Global Art Histories	3
VAP 100	Darkroom Photography for Non-Majors	3
VAP 101	Foundation Photography	3
VAP 200	Digital Photography for Non-Majors	3
VAR 210	Visual Journal	3
VAR 220	Visual Resources	3

<sup>3</sup> Contextual courses may be General Education approved and used to satisfy Cluster and/or major or minor requirements. The contextual courses are as follows for each of the matching languages:

#### Arabic (ARA)

ANT 315	Language & Culture	3
CMS 316	Intercultural Communication	3
CMS 414	Global Communication	3
HST 333	The Making of the Modern Middle East	3
HST 334	History of the Palestinian-Israeli Conflict	3
HST 354	History of Women & Gender in the Middle East	3
HST 356	Comparative History of Women in the Third World	3
HST 493	Seminar in Middle Eastern History	3
PHL 351	Jewish, Christian, and Islamic Philosophy	3

#### Chinese (CHI)

ANT 315	Language & Culture	3
CMS 316	Intercultural Communication	3
CMS 414	Global Communication	3
ENG 341	Asian-American Literature	3
HST 330	History of East Asia to 1800	3
HST 332	History of Modern East Asia	3
PHL 355	Asian Philosophy	3

#### French (FRN)

ANT 315	Language & Culture	3
CMS 316	Intercultural Communication	3
CMS 414	Global Communication	3
ENG 353	Literature of the Renaissance	3
ENG 407	Medieval English Literature	3
HST 383	History of the Caribbean	3
POL 320	Comparative Politics: Western Europe	3
THR 425	History of Theatre II	3

#### German (GER)

ANT 315	Language & Culture	3
CMS 316	Intercultural Communication	3



CMS 414	Global Communication	3
POL 320	Comparative Politics: Western Europe	3
THR 425	History of Theatre II	3
<b>Hindi (HND)</b>		
ANT 315	Language & Culture	3
CMS 316	Intercultural Communication	3
CMS 414	Global Communication	3
HST 356	Comparative History of Women in the Third World	3
<b>Italian (ITA)</b>		
ANT 315	Language & Culture	3
CMS 316	Intercultural Communication	3
CMS 414	Global Communication	3
ENG 353	Literature of the Renaissance	3
VAH 450	Italian Renaissance Art	3
<b>Latin (LAT)</b>		
HST 220	Survey of Ancient History	3
HST 303	History of the Roman Republic & Empire	3
PHL 351	Jewish, Christian, and Islamic Philosophy	3
THR 425	History of Theatre II	3
<b>Russian (RUS)</b>		
ANT 315	Language & Culture	3
CMS 316	Intercultural Communication	3
CMS 414	Global Communication	3
HST 326	Russia, The Soviet Union & Beyond 1860-Present	3
POL 321	Comparative Politics: Russia & the New States	3
<b>Spanish (SPN)</b>		
ANT 315	Language & Culture	3
ANT 352	Cultures of Latin America	3
ANT 368	Immigration & Immigrants	3
CMS 316	Intercultural Communication	3
CMS 414	Global Communication	3
ENG 360	US Latina/Latino Literature	3
HST 357	Latin America in the Twentieth Century	3
HST 358	Social & Cultural History of Latin America	3
HST 382	History of Mexico	3
HST 383	History of the Caribbean	3
HST 384	Economic History of Latin America	3
PHL 379	Latin American Philosophy	3
SOC 368	Immigration & Immigrants	3
VAH 320	Latin American Art	3

## General Requirements for all Bachelor of Science Programs

A minimum of 120 semester hours of approved coursework must be presented for the B.S. For limitations on credit and restrictions on courses, consult the chairperson or the dean. For departmental or program requirements, consult program schedules or the department chairperson or program director.

Major Concentration (with at least 24 semester hours at 300-400 level).	30-60
Breadth Requirement (See Distribution Table below.)	44-50

Program Requirements and General Electives: Electives should be approved by the chairperson or dean since some restrictions exist. 10-40

Common Academic Program (CAP): These courses may also be counted for other requirements where applicable including Major Concentration, Breadth Requirement, Program Requirements and General Electives 43-61

### Distribution Table for Breadth Requirements

Courses taken to fulfill the breadth requirement should be external to the major concentration. Students electing courses in any department should be aware that some introductory or background knowledge may be expected of them even when no specific prerequisite course is listed.

Natural Sciences: Selected from Biology, Chemistry, Geology, and Physics courses with accompanying laboratories. (Includes 7 hours CAP Natural Science.) 8

Mathematics, Computer Science: At least 3 semester hours must be in Mathematics, the course(s) to be determined by placement and major program. (Includes 3 hours of CAP Mathematics and College of Arts and Sciences Mathematics Competency.) 6

Social and Behavioral Sciences: Anthropology, Economics, Political Science, Psychology, Sociology. Up to 3 of the 6 semester hours of social and behavioral sciences may, with the approval of the chairperson of the major department or the director of the program, be taken in applied social and professional studies: Criminal Justice Studies, Education, Management, Marketing, Military Science, Social Work, and appropriate courses in ASI, AMS, and CMS. (Includes 3 hours CAP Social Science.) 6

Humanities: American Studies, Communication, English, History, Humanities Studies, Languages, Music, Philosophy, Religious Studies, Visual Arts, and, with the approval of the chairperson of the major department or director of the program, appropriate courses in ASI. (The CAP First-Year Humanities Commons, Second-Year Writing, and Oral Communication courses do not fulfill this requirement.) 9

Philosophy and Religious Studies 12

College of Arts and Sciences' Composition and Oral Communication Competencies: Each student should demonstrate competence in composition, and oral communication. This competence may be demonstrated through coursework, or advanced standing. Please refer to the Catalog section: College of Arts and Sciences – Degree Requirements. 3-9

## Internship Program

The Internship Program is an educational work experience with an outside agency, in which a full-time student registers for on-the-job work performed without direct supervision by academic personnel. Such work can be performed in a variety of areas; however, the general purpose of all internships is to serve as transition between the world of study and the world of work.

Normally, a departmental internship director or another designated faculty member will make all contacts with prospective agencies for placing students as interns. While students themselves may initiate contacts at possible sites, all sites must be ruled acceptable by the director before an internship may begin.

In order to accomplish the general purpose of an internship, the student must adhere to the following requirements:

- To be eligible for an internship, a student must be in good standing at the University of Dayton and have successfully completed course work in areas appropriate to the internship sought.
- An intern may receive no more than six semester hours of credit in any semester for internship.
- No more than twelve semester hours of work experience credit in any kind of internship or work experience program can be accepted toward a baccalaureate degree.
- The student intern will submit a daily log and a written report to the internship director at the conclusion of the internship.

Other procedures and requirements in addition to those mandated by the College may be imposed by departments for individual programs to meet the specific nature of a given internship.

Interested students should see the internship directors in their respective departments for further details.

## L2 Entrance Requirement

Any student admitted to the College of Arts and Sciences must have had two years of high school study of a language other than English (L2) or make up the deficit at the University. The deficit may be made up by successful completion of one of the following courses or the equivalent:

ARA 141	Basic Proficiency in Arabic II	4
CHI 141	Basic Proficiency in Mandarin Chinese II	4
FRN 141	Basic Proficiency in French II	4
GER 141	Basic Proficiency in German II	4
ITA 141	Basic Proficiency in Italian	4
LAT 141	Basic Proficiency in Latin II	4
RUS 141	Basic Proficiency in Russian II	4
SPN 141	Basic Proficiency in Spanish II	4

### Proficiency in L2

The College of Arts and Sciences strongly encourages its students to acquire the highest level of L2 proficiency. Students may show proficiency by demonstration of basic practical communicative competence in a language other than English. Proficiency for modern languages includes the following four skills:

- **Speaking:** Ability to handle successfully a limited number of interactive, task-oriented, and social situations. Can ask and answer questions, initiate and respond to simple statements, and maintain face-to-face conversation, although with hesitancy and linguistic inaccuracies. Speech is generally understood by native speakers used to interacting with language learners.
- **Writing:** Ability to write simple messages and descriptions on familiar topics, to provide biographical information, and to express interests and preferences by recombining learned vocabulary and structures. Some effort may be required from native speakers to understand the written messages.
- **Listening:** Comprehension of main idea and some supporting detail in passages of up to 250 words of everyday speech on familiar topics in a context that provides significant support for the message.
- **Reading:** Comprehension of main idea and supporting detail in contextualized written passages of up to 600 words in which a generally familiar, everyday topic is discussed.

Students entering the University have the opportunity to demonstrate the defined levels of proficiency by passing a University placement/proficiency examination. Any student who has not achieved proficiency

as determined by this examination upon entry can choose from the following options to reach proficiency:

- course work at the University of Dayton
- course work elsewhere
- an individual study program
- study abroad
- an immersion experience

The Department of Languages offers the following possible sequences of language courses:

- **Basic Proficiency**  
For students who have never studied the language previously or who demonstrate no functional ability: 101-141 (8 sem. hrs.) in Arabic, Chinese, French, German, Italian, Latin, Russian and Spanish.
- **Accelerated sequence**  
For students with previous language study or experience who demonstrate some functional ability on the placement/proficiency examination: 131-141 (6 sem. hrs.) available in French, German, Latin and Spanish.
- **Capstone course (201)**  
For students with significant language study or experience: (4 sem. hrs.) available in all languages.

Students choosing to complete the Liberal Studies Curriculum using Latin as their language will be required to demonstrate proficiency in reading and translation only.

Students whose first language is not English demonstrate L2 proficiency by satisfying the University Common Academic Program requirements in composition and oral communication. Students whose first language is not English are not permitted to complete courses in their primary language except by permission of the Chair of the Department of Global Languages and Cultures.

## Summary of Requirements for the B.A.

<b>Major</b>	30-45
<b>Liberal Studies Curriculum</b> <sup>1</sup>	
Philosophy and Religious Studies	12
History	6
Literature	3
Creative and Performing Arts	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Social Sciences	12
Mathematics	3
Natural Sciences	11
English Composition and Oral Communication	3-9
Introduction to the University	0-1
Electives to total 124 hours	

<sup>1</sup> For specifics of the requirement, please refer to the Catalog section: College of Arts and Sciences - General Requirements for all Bachelor of Arts Programs.

# Teacher Licensure for Students in Bachelor of Arts and Bachelor of Science

B.A. or B.S. and B.S.E.

Students earning a Bachelor of Arts or Bachelor of Science Degree in the College of Arts and Sciences who also wish to complete the requirements for a teaching license in the state of Ohio may do this by also completing the requirements for the Bachelor of Science in Education and Health Sciences Degree. The dual degree option requires students to complete all course and academic requirements, including specific minimum grade point average requirements, in both academic units. Some overlap of degree requirements may exist and students are encouraged to meet with an advisor to obtain a clear understanding of the total academic work needed for the dual degree option. For a full description of the requirements for the teacher licensure programs in the Department of Teacher Education section.

## Programs of Study

To learn more about the available programs in the College of Arts and Sciences, explore the departments:

- Africana Studies (p. 106)
- Air Force Aerospace Studies ROTC (p. 107)
- American Studies (p. 108)
- Art and Design (p. 111)
- Arts Administration (p. 126)
- Biology (p. 127)
- Chemistry (p. 136)
- Communication (p. 145)
- Computer Science (p. 150)
- Criminal Justice Studies (p. 156)
- Economics (p. 160)
- English (p. 163)
- Family Development (p. 173)
- Film Studies (p. 173)
- General Studies (p. 174)
- Geology (p. 175)
- Global Languages and Cultures (p. 181)
- History (p. 192)
- International Studies (p. 198)
- Marianist Social Transformation (p. 202)
- Mathematics (p. 203)
- Military Science ROTC (p. 210)
- Music (p. 212)
- Philosophy (p. 234)
- Physics (p. 239)
- Political Science (p. 245)
- Prelaw (p. 252)
- Premedicine/ Predentistry (p. 253)
- Psychology (p. 258)
- Religious Studies (p. 263)
- Sociology, Anthropology, and Social Work (p. 269)

- Sustainability, Energy, and Environment (p. 275)
- Theatre (p. 277)
- Women's and Gender Studies (p. 280)

## Africana Studies

The Africana studies minor offers an interdisciplinary approach to the study of the peoples of Africa and African descendants in the Americas, Africa, and throughout the diaspora. Through its courses, the minor encourages service at the local, national, and international level. The minor prepares distinctive graduates to develop and use analytical skills and approaches to understand historical and contemporary issues associated with the experience of Africans and African descendants. The minor is interdisciplinary and structured to incorporate teaching and research methodologies and materials from disciplines in the College of Arts and Sciences and other schools throughout the University.

The Africana studies minor requires 15 semester hours. It must include one approved "Special Topics" or "Independent Study" course from an appropriate discipline and 12 semester hours in upper division courses (300-level or above) from a minimum of three different disciplines.

### Africana Studies Committee

Julius A. Amin (History), Coordinator  
 Cox (Music), Kebede (Philosophy)

## Minor in Africana Studies (AFS)

### Africana Studies

Select four courses from at least three different disciplines:	12
EDT 340 Educating Diverse Student Populations in Inclusive Settings	
ENG 335 African American Literature	
HST 336 History of Africa to the Nineteenth Century	
HST 337 History of Africa - 19th Century to the Present	
HST 383 History of the Caribbean	
HST 385 The Atlantic World, 1492-1800	
HST 398 African American History before 1877	
HST 399 History of Blacks in the United States Since 1900	
HST 488 Seminar in African History	
MUS 305 African-American Sacred Music	
MUS 306 History of American Jazz	
MUS 390 Ensembles	
PHL 363 African Philosophy	
PHL 364 Race, Gender and Philosophy	
REL 329 African-American Religion	
SOC 328 Racial & Ethnic Relations	
Select one special topics course from:	3
MUS 360 Special Topics in Music	
REL 492 Special Topics	
VAH 490 Special Problems	
Special topics or independent studies course approved by committee	
<hr/> Total Hours	<hr/> 15



## Air Force Aerospace Studies, ROTC (AES)

As a University of Dayton (UD) student, you have the opportunity to become an Air Force officer through a cooperative agreement with Wright State University's (WSU) Department of Aerospace Studies. WSU is the home of Detachment 643 and the host site for local colleges and universities to provide the Air Force Reserve Officer Training Corps (ROTC) program to full-time students pursuing a baccalaureate degree. Although you'll register for ROTC through UD, all courses are typically taught at WSU.

The Air Force ROTC program is designed to produce Air Force officers who will be successful leaders and managers. All officers will be placed in positions of responsibility, facing challenging and rewarding career opportunities while using the most advanced technology in the world.

The Air Force ROTC program is organized in two portions: the General Military Course (GMC), typically taken during freshman and sophomore years, and the Professional Officer Course (POC), usually taken during junior and senior years or during the last two years prior to graduation. At a minimum, officers will need to complete the POC portion of the program.

- The GMC is a no-obligation introduction to the Air Force. The course covers the development and history of air power and the organization of the contemporary United States Air Force.
- The POC curriculum covers communicative skills, Air Force management and leadership, American defense policy, and regional world studies.

Although the program is open to all majors, selection to the POC is very competitive and depends on your performance. All Air Force ROTC students have the opportunity to apply for scholarships that pay partial or full tuition, books, and charges, plus a monthly stipend (stipend amount depends on your progress in the program). These scholarships are available on a competitive basis to students who demonstrate academic and leadership potential. Scholarships with the greatest availability are in the areas of engineering, mathematics, computer science, and physics. High school students should apply for a scholarship no later than December 1st of their senior year. Apply at <http://www.afrotc.com/>. In-college students will apply for scholarships through their Air Force ROTC instructor. If you are a freshman or sophomore seeking a challenge or wish to give Air Force ROTC a trial run, sign up for the Aerospace Studies 121 course.

All other students should contact:

The Department of Aerospace Studies  
 Wright State University  
 Dayton, Ohio 45435  
 Phone: 937-775-2730  
 Email: [afrotc@wright.edu](mailto:afrotc@wright.edu)  
 Website: <http://www.wright.edu/academics/prog/rotc/>  
 or  
 The University of Dayton Admission Office  
 Phone: 1-937-229-1000  
 E-mail: [info@udayton.edu](mailto:info@udayton.edu)

## Courses

### **AES 120. General Military Course (GMC), Leadership Laboratory. 0 Hours**

Applied Air Force Reserve Officer Training Corps (AFROTC) training. This lab provides an opportunity for students to apply Air Force procedures, techniques, and knowledge. Students will learn the Air Force organizational structure as well as customs and courtesies. GMC cadets will also develop their followership and teamwork skills in a cadet led, cadre supervised Lab environment. Requires participation in two weekly physical training sessions. Taken concurrently with 100-level AES courses. (Pass/Fail).

### **AES 121. Foundations of the United States Air Force I. 1 Hour**

This is a survey course designed to introduce students to the United States Air Force and provide an overview of the basic characteristics, missions, and organization of the Air Force. Corequisite(s): AES 120.

### **AES 122. Foundations of the United States Air Force II. 1 Hour**

This is a continuation of AES 121. It is a survey course designed to introduce students to the United States Air Force and provide an overview of the basic characteristics, missions, and organization of the Air Force. Corequisite(s): AES 120.

### **AES 130. General Military Course Leadership Lab. 0 Hours**

Applied Air Force Reserve Officer Training Corps (AFROTC) training. This lab provides an opportunity for students to apply Air Force procedures, techniques, and knowledge. Students will learn the Air Force organizational structure as well as customs and courtesies. GMC cadets will also develop their followership and teamwork skills in a cadet led, cadre supervised Lab environment. Requires participation in two weekly physical training sessions. Taken concurrently with 100-level AES courses. (Pass/Fail). Prerequisite(s): AES 120.

### **AES 220. Field Training Preparation (FTP) Leadership Laboratory. 0 Hours**

Applied Air Force Reserve Officer Training Corps (AFROTC) training. This lab further develops skills and concepts introduced in the General Military Course Leadership Laboratory. Students are prepared mentally and physically for the demanding requirements of upcoming Field Training summer program. Training is cadet led where students will display their ability to apply Air Force concepts and procedures. Requires participation in two weekly physical training sessions. Taken concurrently with 200-level AES courses. (Pass/Fail).

### **AES 221. Evolution of USAF Air and Space Power I. 1 Hour**

This course features topics on Air Force heritage and leaders; introduction to air and space power through examination of distinctive capabilities and functions; and continued application of communication skills. Its purpose is to instill an appreciation of the development and employment of air and space power and to motivate sophomore students to transition from AFROTC cadet to Air Force ROTC officer candidate. Corequisite(s): AES 220.

### **AES 222. Evolution of USAF Air and Space Power II. 1 Hour**

This course is a continuation of AES 221 and features topics on Air Force heritage and leaders; introduction to air and space power through examination of distinctive capabilities and functions; and continued application of communication skills. Its purpose is to instill an appreciation of the development and employment of air and space power and to motivate sophomore students to transition from AFROTC cadet to Air Force ROTC officer candidate. Corequisite(s): AES 220.

**AES 230. Field Training Preparation (FTP) Leadership Lab. 0 Hours**  
 Applied Air Force Reserve Officer Training Corps (AFROTC) training. This lab further develops skills and concepts introduced in the General Military Course Leadership Laboratory. Students are prepared mentally and physically for the demanding requirements of upcoming Field Training summer program. Training is cadet led where students will display their ability to apply Air Force concepts and procedures. Requires participation in two weekly physical training sessions. Taken concurrently with 200-level AES courses. (Pass/Fail). Prerequisite(s): AES 220.

**AES 270. Extended GMC Leadership Laboratory I. 0 Hours**  
 Extended GMC Leadership Laboratory – For cadets who have met the requirements of GMC but have not yet completed Field Training.

**AES 280. Extended GMC Leadership Lab II. 0 Hours**  
 Extended GMC Leadership Laboratory – For cadets who have met the requirements of GMC but have not yet completed Field Training. Prerequisite(s): AES 270.

**AES 322. Air Force Leadership Studies I. 3 Hours**  
 Air Force Leadership Studies.

**AES 330. Intermediate Cadet Leadership (ICL) Laboratory: Applied Air Force ROTC Training. 0 Hours**  
 The ICL lab builds the foundation of leadership skills required as an Air Force Officer. Cadets apply leadership/management concepts learned in Field Training and previous aerospace studies classes and labs to assist in training the General Military Course cadets. Requires participation in two weekly physical training sessions. Taken concurrently with 300-level AES courses. (Pass/Fail).

**AES 331. United States Air Force Leadership Studies I. 3 Hours**  
 This course teaches cadets advanced skills and knowledge in management and leadership. Special emphasis is placed on enhancing leadership skills. Cadets have an opportunity to try out these leadership and management techniques in a supervised environment as juniors and seniors. Prerequisite(s): AES 330.

**AES 332. United States Air Force Leadership Studies II. 3 Hours**  
 Air Force Leadership Studies.

**AES 340. Intermediate Cadet Leadership (ICL) Leadership Lab. 0 Hours**  
 The ICL lab builds the foundation of leadership skills required as an Air Force Officer. Cadets apply leadership/management concepts learned in Field Training and previous aerospace studies classes and labs to assist in training the General Military Course cadets. Requires participation in two weekly physical training sessions. Taken concurrently with 300-level AES courses. (Pass/Fail). Prerequisite(s): AES 330.

**AES 430. Senior Cadet Leadership (SCL) Laboratory: Applied Air Force ROTC Training. 0 Hours**  
 This lab prepares students for progression into active duty life. As in the Intermediate Cadet Leadership Lab, students take leadership roles in execution of leadership labs for the cadet wing. Students hone leadership fundamentals learned in previous courses and labs to a level commensurate to entry into the active duty Air Force. Requires participation in two weekly physical training sessions. Taken concurrently with 400-level AES courses. (Pass/Fail).

**AES 431. National Security Affairs/Preparation for Active Duty I. 3 Hours**  
 This course is designed to give college seniors the foundation to understand their role as military officers in American society. It is an overview of the complex social and political issues facing the military profession and requires a measure of sophistication commensurate with the senior college level. Corequisite(s): AES 430.

**AES 432. National Security Affairs/Preparation for Active Duty II. 3 Hours**  
 This course is a continuation of AES 431 and is designed to give college seniors the foundation to understand their role as military officers in American society. It is an overview of the complex social and political issues facing the military profession and requires a measure of sophistication commensurate with the senior college level. Corequisite(s): AES 430.

**AES 440. Senior Cadet Leadership (SCL) Applied Air Force Training. 0 Hours**  
 Applied Air Force Training.

**AES 470. Extended POC Leadership Laboratory I. 0 Hours**  
 POC Leadership Laboratory – For cadets who have met all requirements for Air Force ROTC but have not yet completed their baccalaureate degree.

**AES 480. Extended POC Leadership Lab II. 0 Hours**  
 POC Leadership Laboratory – For cadets who have met all requirements for Air Force ROTC but have not yet completed their baccalaureate degree.

## American Studies

- Bachelor of Arts, American Studies

In this interdisciplinary program, students take courses in their choice of 11 fields, thereby learning the skills of integrating, coordinating, and making connections. The program, one of over 300 nationwide, is most appropriate for those whose interests encompass several traditional majors.

### American Studies Committee

Donald L. Pair (Office of the Dean), Interim Program Director

## Bachelor of Arts, American Studies (AMS) minimum 124 hours

### Common Academic Program (CAP)

*credit hours will vary depending on courses selected	
First-Year Humanities Commons <sup>1</sup>	12
HST 103	West and the World
REL 103	Introduction to Religious and Theological Studies
PHL 103	Intro To Philosophy
ENG 100	Writing Seminar I <sup>2</sup>
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200	Writing Seminar II
Oral Communication	3
CMM 100	Principles of Oral Communication
Mathematics	3
Social Science	3
SSC 200	Social Science Integrated
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	

Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

<sup>1</sup> Completed with ASI 110 and ASI 120.

<sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.

<sup>3</sup> Completed with ENG 200H or ASI 120.

<sup>4</sup> Must include two different disciplines and accompanying lab.

#### Liberal Studies Curriculum

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

#### Major Requirements 48

AMS 300	American Cultures (Satisfies CAP Inquiry)	3
AMS 301	Interpretations of American Culture	3
AMS 400	Interdisciplinary Research (Satisfies CAP Major Capstone)	3

#### First Area Courses:

Select five courses from either group A, B, or C	15
Select three supporting courses from the elected discipline	9

#### Second Area Courses:

Select three courses from one of the two remaining groups	9
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#### Third Area Courses:

Select two courses from the remaining group	6
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#### Groups:

##### Group A

(May include CAP Arts)

ENG 305	Survey of American Literature
ENG 317	Contemporary Poetry <sup>1</sup>
ENG 319	Contemporary Fiction <sup>1</sup>
ENG 320	Studies in Drama <sup>1</sup>
ENG 325	Science Fiction
ENG 327	Studies in Popular Fiction
ENG 329	Short Story <sup>1</sup>
ENG 331	Studies in Film <sup>1</sup>
ENG 332	Studies in Literature & Film <sup>1</sup>
ENG 335	African American Literature
ENG 337	Studies in Folklore
ENG 339	American Indian Literature
ENG 380	Studies in Literature <sup>1</sup>
ENG 383	Tragic Dilemma <sup>1</sup>
ENG 451	American Romanticism
ENG 453	American Realism & Naturalism

ENG 455	20th Century American Literature
ENG 468	Introduction to Linguistics
ENG 490	Research Seminar-Literature <sup>1</sup>
MUS 304	The Practice of American Music
MUS 305	African-American Sacred Music
MUS 306	History of American Jazz
MUS 307	Development of American Popular Song
MUS 327	Music in Film
MUS 328	History of the American Musical
MUS 404	Twentieth-Century Music <sup>1</sup>
VAH 370	Nineteenth Century Art I
VAH 480	Modernisms in Art
VAH 482	History of Photography II
VAH 483	PostColonial and Global Art Histories
VAH 490	Special Problems <sup>1</sup>

#### Group B

(May include CAP Advanced Study in History, Philosophy and Religious Studies)

HST 342	Environmental History of the Americas
HST 344	History of Science, Technology & the Modern Corporation
HST 346	History of American Aviation
HST 347	Sex, Race & Science
HST 351	American Gender & Women's History
HST 352	History of the American Family
HST 355	American Urban History
HST 360	U.S. Legal & Constitutional History I
HST 361	U.S. Legal & Constitutional History II
HST 365	American Films as History
HST 369	Civil War & Reconstruction
HST 370	Economic & Business History of the United States
HST 372	History of Religion in America
HST 373	American Military History
HST 374	Ireland & America
HST 375	History of US Foreign Relations Since 1750
HST 376	Social & Cultural History of the United States
HST 377	Contemporary American History
HST 378	Immigration History
HST 380	Native American History
HST 385	The Atlantic World, 1492-1800
HST 391	American Architectural History & Preservation
HST 398	African American History before 1877
HST 399	History of Blacks in the United States Since 1900
HST 490	Seminar in Historiography
HST 495	Internship
HST 499	Topics in History <sup>1</sup>
PHL 307	Philosophy & Women
PHL 310	Social Philosophy
PHL 311	Philosophy of Religion
PHL 314	Philosophy of Law
PHL 317	Ethics & Modern War
PHL 318	Family Ethics

PHL 320	Philosophy of Art
PHL 323	Philosophy & Literature
PHL 331	Science, Objectivity & Values
PHL 332	Technology & Values
PHL 340	Special Problems in Philosophy <sup>1</sup>
PHL 361	Philosophies of Change in U.S. History
REL 326	Protestant Christianity
REL 327	United States Religious Experience
REL 328	United States Catholic Experience
REL 364	Current Moral Issues
REL 367	Christian Ethics & Health Care Issues
REL 372	Religion & Film
REL 373	Religion & Literature
REL 375	Religion & Science
REL 376	Theology & the Social Sciences
REL 485	Lay Ministry
<b>Group C</b>	
(May include CAP Components)	
ANT 315	Language & Culture
ANT 335	Urban Anthropology
ANT 449	Anthropological Field Work
ECO 346	Intermediate Microeconomic Analysis
ECO 347	Intermediate Macroeconomic Analysis
ECO 390	Antitrust Economics
ECO 435	Economics of the Environment
ECO 441	Econometrics
ECO 442	Money & Banking
ECO 445	Public Finance
ECO 460	Economic Development & Growth
ECO 461	International Economics
ECO 471	Labor Economics
ECO 485	Urban & Regional Economics
POL 301	The American Judicial Process
POL 303	State & Local Government
POL 310	Political Parties, Campaigns & Elections
POL 311	Public Opinion & Political Behavior
POL 313	The American Presidency
POL 314	Interest Group Politics
POL 316	American Political Thought
POL 335	United States National Security Policy
POL 350	Legislative Politics
POL 360	Urban Politics & Policy
POL 408	American Foreign Policy
POL 411	Constitutional Law
POL 413	The Politics of Bureaucracy & Regulation
POL 450	Civil Liberties
PSY 334	Industrial Psychology
PSY 341	Social Psychology
PSY 351	Child Psychology
PSY 361	Personality
PSY 363	Abnormal Psychology
PSY 443	Psychology of Women

PSY 461	Current Implications of Drug Dependency
PSY 462	Human Sexuality
PSY 471	History of Psychology
SOC 321	The Sociology of Work & Occupations
SOC 328	Racial & Ethnic Relations
SOC 337	Political Sociology
SOC 339	Social Inequality
SOC 341	Self & Society
SOC 343	Mass Communication in Modern Society
SOC 351	Urban Sociology
SOC 352	Community
SOC 435	Economy & Society

<sup>1</sup> This course can be counted only when the material is appropriate to American Studies. Consult the program director.

### Breadth

ASI 150	Introduction to the University Experience	1
Total Hours to total at least		124

### First Year

Fall	Hours Spring	Hours
ASI 150	1 ENG 100	3
REL 103	3 Language 141	4
Language 101	4 SCI 190	3
PSY 101	3 SCI 190L	1
MTH 114	3 HST 103	3
CMM 100	3 PHL 103	3
	<b>17</b>	<b>17</b>

### Second Year

Fall	Hours Spring	Hours
AMS 300	3 ENG 200	3
SCI 210 or 220	3 PSY 300 or 400 level	3
SCI 210L or 220L	1 SCI 230 or 240	3
Language contextual course	3 AMS 301	3
Arts	3 Literature	3
Social Science Intro	3	
	<b>16</b>	<b>15</b>

### Third Year

Fall	Hours Spring	Hours
Option 1 - A1	3 Option 1 - A4	3
Option 1 - A2	3 Option 1 - A5	3
Adv PHL or REL	3 Inquiry	3
SSC 200 (CAP Social Science)	3 Adv PHL or REL	3
Option 1 - A3	3 Adv HST	3
	<b>15</b>	<b>15</b>

### Fourth Year

Fall	Hours Spring	Hours
Option 1 - B1	3 AMS 400	3
Option 1 - B2	3 Practical Ethical Action	3
Option 1 - C1	4 Diversity and Social Justice	3
Integrative	3 Option 1 - B3	3

Faith Tradition	3 Option 1 -C2	3
	16	15

Total credit hours: 126

## Courses

### AMS 300. American Cultures. 3 Hours

Study of American artifacts to discern how they indicate the periods in the life of the civilization and how like artifacts can be used to determine the stages of development of various peoples. (Will not satisfy humanities breadth requirement.).

### AMS 301. Interpretations of American Culture. 3 Hours

Critical study of various interpretations of American culture through more than a hundred years.

### AMS 400. Interdisciplinary Research. 3 Hours

Study of the principles of interdisciplinary scholarship; what can and probably cannot be accomplished by it; successful interdisciplinary accomplishments. Students will complete interdisciplinary projects.

### AMS 477. Honors Thesis Project. 3 Hours

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for 3 semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

### AMS 478. Honors Thesis Project. 3 Hours

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for 3 semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

## Art and Design

Majors:

- Bachelor of Arts, Art History
- Bachelor of Arts, Visual Arts
- Bachelor of Fine Arts, Art Education
- Bachelor of Fine Arts, Fine Arts
- Bachelor of Fine Arts, Graphic Design
- Bachelor of Fine Arts, Photography

Minors:

- Art History
- Fine Arts
- Graphic Design
- Photography
- Visual Arts

The Department of Art and Design provides quality education in the areas of art education, art history, fine art studio, photography, visual arts, and graphic design. The Department cultivates high standards for creativity, craft, conceptual understanding, critical analysis, historical

scholarship, and pedagogy. Central to these pursuits are the artistic practice and scholarly research of faculty, the dedication of support staff to the department's educational objectives, and engaged teaching, learning, and scholarship. The Department of Art and Design is a thriving learning community grounded in the Marianist tradition of educating the whole person. It is fully integrated with the College and the University and contributes significantly to our institutional commitment to excellence.

The department offers the following degrees:

### Bachelor of Arts Degree (B.A.)

The Bachelor of Arts (B.A.) is intended for those interested in a broad liberal arts education as an overarching part of their chosen major (Art History, Visual Arts). Approximately 40 percent of the degree requirements are taken in the creation and study of visual arts particular to the chosen major. With this degree option it is possible for students to earn a minor, or even a second major, in another university offered discipline. The B.A. degree combines the major specific curriculum with visual arts foundation courses, and the College of Arts and Sciences and University general education requirements referred to as the Common Academic Program (CAP).

### Bachelor of Fine Arts Degree (B.F.A.)

The Bachelor of Fine Arts Degree (B.F.A.) is an intensive "professional" program of study specifically tailored to prepare students to enter the field of their chosen major (Art Education, Fine Arts, Photography, Graphic Design) or to continue their studies in graduate school. Approximately 65 percent of the degree requirements are in the creation and study of the visual arts particular to the chosen major. The B.F.A. degree combines the major specific curriculum with visual arts foundation courses, and the College of Arts and Sciences and University general education requirements referred to as the Common Academic Program (CAP).

### Majors include:

#### Bachelor of Arts (B.A.) with a Major in:

- Art History
- Visual Arts

#### Bachelor of Fine Arts (B.F.A.) with Teacher Licensure:

- Art Education

#### Bachelor of Fine Arts (B.F.A.) with a Major in:

- Fine Arts
- Graphic Design
- Photography

### Program Descriptions:

#### Art History (HOA)

Art history is the study of art and architecture produced within specific cultural contexts as a manifestation of human creativity and as a valuable form of historical documentation. Students learn to appreciate the fundamental and varied roles that the visual arts have played and continue to play in the lives of people around the globe. Toward this end, students learn how images and objects, identified as art, embody, but also condition and control social, religious, cultural, economic, political, and gender dynamics.

#### Visual Arts (VAR)

The Bachelor of Arts (B.A.) with a major in Visual Arts is a flexible program that emphasizes a broad liberal arts education with supportive studies in art, design, and art history. This degree offers students a breadth of exploration of all areas making up the Department of Visual Arts. Studio and art history requirements



constitute 35 to 40 percent of the Visual Arts B.A. degree. To take advantage of the diverse academic environment that is the University of Dayton, students are encouraged to earn a minor or a second major within another discipline. Students may not obtain a dual-degree in Visual Arts and the following: Fine Arts (ART), Graphic Design (GDN), or Photography (PHO). It is permitted to double major in Visual Arts and Art History. In this case, the maximum of 12 semester hours of VAH courses allowed in the Visual Arts major may double count.

### Art Education (FAE)

The Bachelor of Fine Arts with Teacher Licensure, a B.F.A. (E11A) program, offers students expertise in studio practice, art history, aesthetics, and critical analysis of art. Field experience in the Dayton area allows students to transform theoretical knowledge into classroom practice. Graduates are well prepared for teaching positions in public or private schools, prekindergarten through grade 12, as well as for master's degree programs.

### Fine Arts (ART)

The Bachelor of Fine Arts (B.F.A.) with a major in Fine Arts is a professional degree program that provides an intensive, in depth exploration of selected fine art media. Students choose an emphasis in ceramics, drawing, illustration, painting, printmaking, or sculpture.

### Graphic Design (GDN)

The Bachelor of Fine Arts (B.F.A.) with a major in Graphic Design is an intensive professional degree program designed to prepare students for careers in graphic and advertising design, electronic media, and related new technologies.

### Photography (PHO)

The Bachelor of Fine Arts (B.F.A.) with a major in Photography is a professional degree that provides an intensive, in depth exploration of photographic media.

### Art and Design Minors

- A Minor in Art History consists of 18 semester hours. (For majors in Visual Arts, only six semester hours of the minor may double count.)
- A Minor in Visual Arts consists of 20 semester hours. (Not open to majors in Art Education, Fine Arts, Graphic Design or Photography.)
- A Minor in Fine Arts consists of 21 semester hours. (Not open to majors in Visual Arts.)
- A Minor in Graphic Design consists of 24 semester hours. (Not open to majors in Visual Arts.)
- A Minor in Photography consists of 21 semester hours. (Not open to majors in Visual Art.)

Transfer students seeking an Art and Design minor must complete at least nine of the required semester hours in the Department of Art and Design while in residency at the University of Dayton.

### Art and Design Foundations

Visual arts foundation courses introduce students to fundamental principles, practices, materials, and vocabulary common to all visual arts disciplines. These courses provide a common background of skill development along with an understanding of primary concepts in the visual arts and a basis for critical evaluation. All foundation courses share the objective of preparing students to face the challenges of their specific disciplines.

### Foundations Scholarship Review

During their second year, all Art and Design majors are reviewed by the Art and Design faculty. Participation in the Foundations Scholarship Review is mandatory for all Visual Arts majors. Students must receive a satisfactory review rating before graduating with a visual arts degree. Also included in the review are first and third year students who have been awarded Art and Design Scholarships. The review process is a valuable learning experience for the student and it helps the faculty to recommend ways in which students may build upon their assets and overcome their liabilities. Monetary awards applied toward future tuition are available to a limited number of students whose performance in the review is judged by the faculty to be outstanding.

### Senior Capstone Courses

These courses, required in all majors, bring together the skills, education, ideas, and goals of senior students. They stress an integrated approach to learning and working and they focus on preparing students for their futures beyond the University. They provide a logical continuity that begins with the Art and Design Foundations courses, the Foundations Scholarship Review, and work within the major.

### Faculty

Judith Huacuja, Chairperson

Professors Emeriti: Niles, Wilkinson

Professors: Crum, Whitaker

Associate Professors: Clarke, Holscher Almazan, Huacuja, Jones, Kwon, Marcinowski, Matlack-Whitaker, Phelps, Wilbers

Assistant Professors: Bradshaw, Jennings, Sullivan, Smith

Lecturers: Jones, Kargl, Tsen

## Bachelor of Arts, Art History (HOA) minimum 124 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	

Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- Completed with ASI 110 and ASI 120.
- Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- Completed with ENG 200H or ASI 120.
- Must include two different disciplines and accompanying lab.

#### Liberal Studies Curriculum

L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

#### Major Requirements

VAH 129	Foundations in Art History (Satisfies CAP Arts)	3
VAH 201	Survey of Art I	3
VAH 202	Survey of Art II	3
VAH 203	Survey of Art III	3
VAH 483	PostColonial and Global Art Histories	3
VAH 485	Art History Seminar (Satisfies CAP Major Capstone)	3
VAF 104	Foundation Drawing	3
VAR 299	Second Year Review	0
Select one from:		3
VAF 112	Foundation 2-D Design	
VAF 117	Foundation 3-D Design	
VAP 101	Foundation Photography	
Select six VAH courses (300/400 level)		18
Select one major program elective <sup>1</sup>		3

#### Breadth

VAR 100	Visual Arts Foundation	1
Total Hours to total at least		124

- <sup>1</sup> Major program courses may be chosen, in consultation with an art history advisor, from among the following disciplines and courses: ANT 300, CMM 313, ENG 322, PHL 320, PSY 375 and REL 374. Alternatives to these courses may be elected with the approval of an art history advisor. Major program electives must be at the 300-400 level (except in the case of Fine Arts courses), and they may not be used to satisfy the liberal studies requirements

## Bachelor of Arts, Visual Arts (VAR) minimum 124 hours

#### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	

ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

- Completed with ASI 110 and ASI 120.
- Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- Completed with ENG 200H or ASI 120.
- Must include two different disciplines and accompanying lab.

#### Liberal Studies Curriculum

L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

#### Major Requirements

VAD 220	Design Processes I	3
VAF 104	Foundation Drawing	3
VAF 112	Foundation 2-D Design	3
VAF 117	Foundation 3-D Design	3
VAF 216	Design & Color	3
VAP 101	Foundation Photography	3
VAP 201	Photography II	3
or VAP 240	Digital Processes I	
VAR 299	Second Year Review	0
VAR 495	Senior Project Seminar (With VAR 496, Satisfies CAP Major Capstone)	1
VAR 496	Senior Project, Presentation and Paper	3
Select one course from: (Satisfies CAP Arts)		3
VAH 201	Survey of Art I	
VAH 202	Survey of Art II	
VAH 203	Survey of Art III	

Select one VAH course (300/400 level)	3
Select five Visual arts courses <sup>1</sup>	14

**Breadth**

VAR 100 Visual Arts Foundation	1
Total Hours to total at least	124

<sup>1</sup> Nine of the fourteen hours to be selected from at least two of the following: VAD, VAF, VAP, and VAR. Nine of the fourteen hours must be at the 300-400 level.

## Bachelor of Fine Arts, Art Education (FAE) minimum 134 hours

**Common Academic Program (CAP)**

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

<sup>1</sup> Completed with ASI 110 and ASI 120.

<sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.

<sup>3</sup> Completed with ENG 200H or ASI 120.

<sup>4</sup> Must include two different disciplines and accompanying lab.

**Major Requirements** <sup>1, 2</sup> 69

VAE 231 Introduction to Art Education	2
VAE 383 Foundation of Art Education	3
VAE 483 Teaching Visual Arts	3
VAF 104 Foundation Drawing	3
VAF 112 Foundation 2-D Design	3
VAF 117 Foundation 3-D Design	3

VAF 204 Drawing II	3
VAF 216 Design & Color	3
VAF 226 Painting I	3
VAF 232 Sculpture I	3
VAF 240 Ceramics I	3
or VAF 242 Ceramics II	
VAF 253 Printmaking I	3
or VAF 353 Printmaking II	
VAF 304 Drawing III	3
VAF 498 Senior/Professional Seminar- Fine Arts (With VAF 499, satisfies CAP Major Capstone)	3
VAF 499 Senior Thesis	1
VAP 101 Foundation Photography	3
VAR 299 Second Year Review	0
Select two courses from: (Satisfies CAP Arts)	6
VAH 201 Survey of Art I	
VAH 202 Survey of Art II	
VAH 203 Survey of Art III	
Select one course from:	3
VAH 470 Nineteenth Century Art I	
VAH 471 Nineteenth Century Art II	
VAH 480 Modernisms in Art	
VAH 483 PostColonial and Global Art Histories	
Select one VAH course	3
Select four VAR courses	12
<b>Education requirements:</b>	27
EDT 110 The Profession of Teaching & 110L and The Profession of Teaching Laboratory	3
EDT 207 Child and Adolescent in Education & 207L and Child and Adolescent in Education Laboratory	3
EDT 305 Philosophy and History of American Education (Satisfies CAP Practical Ethical Action, and Advanced Study in Philosophy)	3
EDT 340 Educating Diverse Student Populations in Inclusive Settings (Satisfies CAP Integrative, and Diversity and Social Justice)	3
EDT 340L Educating Diverse Student Populations in Inclusive Settings Laboratory	0
EDT 459 Critical Reading and Writing in the Content Area	3
EDT 477 Student Teaching- Art P-12	12
<b>Breadth</b>	
VAR 100 Visual Arts Foundation	1
Total Hours to total at least	134

<sup>1</sup> Students in the Art Education program are required to maintain a 2.5 cumulative grade point average overall, and a 2.5 cumulative grade point average in teacher education and visual arts courses.

<sup>2</sup> In order for the University of Dayton to approve the state of Ohio teaching license application, applicants must have on file passing scores on the state of Ohio licensure tests and have successfully passed the Foundation Review.

## Bachelor of Fine Arts, Fine Arts (ART) minimum 132 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- 1 Completed with ASI 110 and ASI 120.
- 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- 3 Completed with ENG 200H or ASI 120.
- 4 Must include two different disciplines and accompanying lab.

### Major Requirements 79

VAF 104 Foundation Drawing	3
VAF 112 Foundation 2-D Design	3
VAF 117 Foundation 3-D Design	3
VAF 203 Drawing Through the Process	3
VAF 204 Drawing II	3
VAF 216 Design & Color	3
VAF 226 Painting I	3
VAF 232 Sculpture I	3
VAF 240 Ceramics I	3
VAF 253 Printmaking I	3
VAF 326 Painting II	3
VAF 332 Sculpture II	3
VAF 242 Ceramics II	3
VAF 353 Printmaking II	3

VAF 498 Senior/Professional Seminar- Fine Arts (With VAF 499, satisfies CAP Major Capstone)	3
VAF 499 Senior Thesis	1
VAP 101 Foundation Photography	3
VAR 299 Second Year Review	0
VAF emphasis	12
Select two courses from: (Satisfies CAP Arts)	6
VAH 201 Survey of Art I	
VAH 202 Survey of Art II	
VAH 203 Survey of Art III	
Select one VAH courses (300/400 level) (May include CAP Components)	3
Select Visual arts courses	6
<b>Breadth</b>	
VAR 100 Visual Arts Foundation	1
Total Hours to total at least	132

## Bachelor of Fine Arts, Graphic Design (GDN) minimum 131 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- 1 Completed with ASI 110 and ASI 120.
- 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.

- <sup>3</sup> Completed with ENG 200H or ASI 120.
- <sup>4</sup> Must include two different disciplines and accompanying lab.

<b>Major Requirements</b>	<b>87</b>
VAD 220 Design Processes I	3
VAD 240 Form & Concept	3
VAD 245 Typography I	3
VAD 320 Design Processes II	3
VAD 345 Typography II	3
VAD 360 Web Design	3
VAD 411 Graphic Design I	3
VAD 412 Graphic Design II	3
VAD 415 Graphic Design III	3
VAD 498 Senior/Professional Seminar - Graphic Design (With VAD 499, satisfies CAP Major Capstone)	3
VAD 499 Portfolio and Paper - Graphic Design	3
VAF 104 Foundation Drawing	3
VAF 112 Foundation 2-D Design	3
VAF 117 Foundation 3-D Design	3
VAF 204 Drawing II	3
VAF 216 Design & Color	3
VAH 383 History of Graphic Design	3
VAP 101 Foundation Photography	3
VAR 299 Second Year Review	0
Select two courses from: (Satisfies CAP Arts)	6
VAH 201 Survey of Art I	
VAH 202 Survey of Art II	
VAH 203 Survey of Art III	
Select one fine arts course from:	3
VAF 226 Painting I	
VAF 253 Printmaking I	
VAF 240 Ceramics I	
VAF 242 Ceramics II	
VAF 232 Sculpture I	
VAF 370 Illustration I	
Select one VAH course (300/400 level) (May include CAP Advanced Historical Studies)	3
Select one VAP course	3
Select Visual Arts courses (May include CAP Components)	12
Select two marketing or two communication courses	6
<b>Breadth</b>	
VAR 100 Visual Arts Foundation	1
Total Hours to total at least	131

## Bachelor of Fine Arts, Photography (PHO) minimum 131 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	

ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- <sup>1</sup> Completed with ASI 110 and ASI 120.
- <sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- <sup>3</sup> Completed with ENG 200H or ASI 120.
- <sup>4</sup> Must include two different disciplines and accompanying lab.

<b>Major Requirements</b>	<b>72</b>
VAF 104 Foundation Drawing	3
VAF 112 Foundation 2-D Design	3
VAF 117 Foundation 3-D Design	3
VAF 204 Drawing II	3
VAF 216 Design & Color	3
VAH 382 History of Photography I (Satisfies CAP Advanced Historical Studies)	3
VAH 480 Modernisms in Art	3
VAH 482 History of Photography II	3
VAP 101 Foundation Photography (Satisfies CAP Arts)	3
VAP 201 Photography II	3
VAP 240 Digital Processes I	3
VAP 302 Color Photography I	3
VAP 410 Advanced Photography	3
VAP 498 Senior/Professional Seminar- Photography (With VAP 499, satisfies CAP Major Capstone)	3
VAP 499 Senior Seminar II	1
VAR 299 Second Year Review	0
Select two courses from:	6
VAP 320 Studio Practice I	
VAP 330 Alternative Photography I	
VAP 340 Digital Processes II	
Select two courses from:	6
VAH 201 Survey of Art I	



VAH 202	Survey of Art II	
VAH 203	Survey of Art III	
Select three VAP courses (300/400 level)		9
Select Visual Arts courses (May include CAP Components)		8

**Breadth**

VAR 100	Visual Arts Foundation	1
Total Hours to total at least		131

**Minor in Art History (HOA)****Art History**

Select two courses from:		6
VAH 201	Survey of Art I	
VAH 202	Survey of Art II	
VAH 203	Survey of Art III	
Select four VAH courses (300/400 level)		12
Total Hours		18

**Minor in Fine Arts (ART)****Fine Arts**

VAF 104	Foundation Drawing	3
VAF 112	Foundation 2-D Design	3
VAH 201	Survey of Art I	3
or VAH 202	Survey of Art II	
or VAH 203	Survey of Art III	
Select four VAF courses		12
Total Hours		21

**Minor in Graphic Design (GDN)****Graphic Design**

VAD 220	Design Processes I	3
VAD 240	Form & Concept	3
VAD 245	Typography I	3
VAD 320	Design Processes II	3
VAF 112	Foundation 2-D Design	3
VAF 216	Design & Color	3
VAH 383	History of Graphic Design	3
Select one course from:		3
VAD 318	Graphic Design for Three Dimensions	
VAD 345	Typography II	
VAD 360	Web Design	
VAD 395	Advertising Design	
VAD 411	Graphic Design I	
Total Hours		24

**Minor in Photography (PHO)****Photography**

VAH 382	History of Photography I	3
VAP 101	Foundation Photography	3
VAP 201	Photography II	3
VAP 240	Digital Processes I	3

Select three VAP courses (300/400 level)	9
Total Hours	21

**Minor in Visual Arts (VAR)****Visual Arts**

VAD 220	Design Processes I	3
VAF 104	Foundation Drawing	3
VAF 112	Foundation 2-D Design	3
VAH 201	Survey of Art I	3
or VAH 202	Survey of Art II	
or VAH 203	Survey of Art III	
VAP 101	Foundation Photography	3
Select two VAD, VAF, VAP and/or VAR courses		6
Total Hours		21

- Bachelor of Arts, Art History
- Bachelor of Arts, Visual Arts
- Bachelor of Fine Arts, Art Education
- Bachelor of Fine Arts, Fine Arts
- Bachelor of Fine Arts, Graphic Design
- Bachelor of Fine Arts, Photography

**Bachelor of Arts, Art History****First Year**

Fall	Hours Spring	Hours
VAR 100	1 ASI 120	8
ASI 110	7 VAH 201	3
VAH 129	3 VAF 112, 117, or VAP 101	3
VAH 104	3 CMM 100	3
CMM 100	3 or Social Science	
or Social Science		
	<b>17</b>	<b>17</b>

**Second Year**

Fall	Hours Spring	Hours
VAH 202	3 VAH 203	3
VAH 300/400 level	3 VAH 300/400 level	3
SSC 200 (satisfies CAP Social Science)	3 Social Science	3
INSS (CAP Natural Science)	4 Language	4
Language	4 INSS (CAP Natural Science)	4
	<b>17</b>	<b>17</b>

**Third Year**

Fall	Hours Spring	Hours
VAH 483	3 VAH 300/400	3
VAH 300/400 level	3 Major Program elective	3
VAR 299	0 MTH (CAP Mathematics)	3
Literature	3 Social Science	3
Language	3 CAP Integrative	3

INSS (CAP Inquiry)	3		
	<b>15</b>	<b>15</b>	
<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
VAH 300/400 level	3	VAH 485	3
VAH 300/400 level	3	Diversity and Social Justice	3
Advanced Historical Study	3	Adv PHL/REL (Practical Ethical Action / Faith Traditions)	3
Adv PHL/REL (Practical Ethical Action / Faith Traditions)	3	General Elective	3
		General Elective	2
	<b>12</b>	<b>14</b>	

Total credit hours: 124

## Bachelor of Arts, Visual Arts

<b>First Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
VAR 100	3	ENG 100 (CAP Writing Seminar)	3
VAF 104	3	HST 103, PHL 103, or REL 103 (CAP Humanities)	3
VAF 112	3	VAF 117	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3	VAF 216	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3	VAP 101	3
CMM 100 (CAP Communication)	3		
	<b>16</b>	<b>15</b>	
<b>Second Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
ENG 200 (CAP Writing Seminar)	3	VAH 201, 202, or 203 (CAP Arts)	3
VAD 220	3	VAP 201 or 240	3
VAR 299	0	Literature or general elective	3
Visual Arts elective	3	SSC 200 (CAP Social Science)	3
Literature or general elective	3	Language 141	4
Language 101	4		
	<b>16</b>	<b>16</b>	
<b>Third Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
VAH 300/400 level	3	Visual Arts elective	3
Visual Arts elective	3	MTH (CAP Mathematics)	3
Language 201 or contextual course	3	INSS (CAP Natural Science)	4
Social Science	3	Adv HST (CAP Integrative)	3

INSS (CAP Natural Science)	4	Social Science	3
	<b>16</b>	<b>16</b>	
<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
VAR 495	1	VAR 496	3
Visual Arts elective	3	Visual Arts elective	2
Adv PHL/REL (Practical Ethical Action / Faith Traditions)	3	Adv PHL/REL (Practical Ethical Action / Faith Traditions)	3
Social Science	3	Diversity and Social Justice	3
INSS (CAP Inquiry)	3	General elective	3
General elective	2		
	<b>15</b>	<b>14</b>	

Total credit hours: 124

## Bachelor of Fine Arts, Art Education

<b>First Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
VAR 100	3	EDT 110	3
VAF 104	3	EDT 110L	0
VAF 112	3	VAF 117	3
VAP 101	3	VAF 216	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3	CMM 100 (CAP Communication)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3	ENG 100 (CAP Writing Seminar)	3
		HST 103, PHL 103, or REL 103 (CAP Humanities)	3
	<b>16</b>	<b>18</b>	
<b>Second Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
VAF 204	3	VAF 226	3
VAH 201, 202, or 203 (Cap Arts)	3	VAF 253	3
VAF 232	3	EDT 207	3
VAE 231	2	EDT 207L	0
VAR 299	0	VAH 201, 202, or 203	3
ENG 200 (CAP Writing Seminar)	3	CAP Natural Science	3
SSC 200 (CAP Social Science)	3		
	<b>17</b>	<b>15</b>	
<b>Third Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
VAF 240	3	VAF 304	3
VAH 470 or 471	3	VAE 383	3
EDT 305 (CAP Practical Ethical Action, Adv.PHL)	3	VAH 470 or 471	3
MTH (CAP Mathematics)	3	EDT 340 (CAP Integrative, Diversity & Social Justice)	3
Visual Arts elective	6	EDT 340L	0

	CAP Natural Science (CAP Inquiry)	4	
		<b>18</b>	<b>16</b>
<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours</b>
VAF 498 (CAP Capstone)	3 EDT 477		12
VAF 483	3 VAF 499 (CAP Capstone)		1
EDT 459	3 Visual Arts elective		3
VAH 360, 382, or 480 (CAP Adv. History)	3		
REL (CAP Faith Traditions, Adv REL)	3		
Visual Arts electives	3		
	<b>18</b>		<b>16</b>

Total credit hours: 134

## Bachelor of Fine Arts, Fine Arts

<b>First Year</b>			
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours</b>
VAR 100	1 VAF 117		3
VAF 104	3 VAF 204		3
VAF 112	3 VAF 216		3
VAF 101	3 ENG 100 (CAP Writing Seminar)		3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)		3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3		
	<b>16</b>		<b>15</b>
<b>Second Year</b>			
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours</b>
VAH 201, 202, or 203 (CAP Arts)	3 VAF 226 or 232		3
VAF 203	3 VAF 253		3
VAF 226 or 232	3 VAF 326		3
VAR 299	0 VAH 201, 202, or 203		3
ENG 200 (CAP Writing Seminar)	3 CMM 100 (CAP Communication)		3
CAP Natural Science	4 SSC 200 (CAP Social Science)		3
	<b>16</b>		<b>18</b>
<b>Third Year</b>			
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours</b>
VAF 332 or 353	3 VAF 332 or 353		3
VAF 498 (CAP capstone)	3 VAH 300/400 elective		3
VAF Emphasis	3 VAF Emphasis		3
VAH 483	3 Visual Arts elective		3
MTH (CAP Mathematics)	3 CAP Natural Science		3
Adv History (CAP)	3		
	<b>18</b>		<b>15</b>

<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours</b>
VAF 499 (CAP Capstone)	1 VAF Emphasis		3
VAF Emphasis	3 Visual Arts elective		3
Visual Arts elective	3 Visual Arts elective		3
Faith Traditions (CAP)	3 Advanced REL (CAP)		3
Inquiry (CAP)	3 Adv PHL, Prac Ethical Action (CAP)		3
Integrative (CAP)	3 Diversity & Social Justice (CAP)		3
	<b>16</b>		<b>18</b>

Total credit hours: 132

## Bachelor of Fine Arts, Graphic Design

<b>First Year</b>			
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours</b>
VAR 100	1 VAF 117		3
VAF 104	3 VAF 204		3
VAF 112	3 VAF 216		3
VAF 101	3 ENG 100 (CAP Humanities)		3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)		3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3		
	<b>16</b>		<b>15</b>
<b>Second Year</b>			
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours</b>
VAD 220	3 VAD 245		3
VAD 240	3 VAF 226, 253, 240, 242, 232, or 370		3
VAH 201, 202, or 203 (CAP Arts)	3 VAH 201, 202, or 203		3
VAP 201, 240, 302, or 330	3 CMM 100 (CAP Communication)		3
VAR 299	0 SSC 200 (CAP Social Science)		3
ENG 200 (CAP Writing Seminar)	3 MTH (CAP Mathematics)		3
	<b>15</b>		<b>18</b>
<b>Third Year</b>			
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours</b>
VAD 320	3 VAD 360		3
VAD 345	3 VAD 411		3
VAH 383	3 VAH 300/400		3
Visual Arts Elective	3 MKT/CMM Elective		3
CAP Natural Science	4 Natural Science (CAP Nat Sci/ Inquiry)		3

	Adv PHL/ Practical Ethical Action (CAP)	3	
			3
			17
<b>16</b>		<b>18</b>	
<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	<b>Hours</b>
VAD 412	3 VAD 499 (CAP Capstone)	3	
VAD 498 (CAP Capstone)	3 VAD 415	3	
Visual Arts elective	3 Visual Arts elective	3	
MKT/CMM elective	3 Visual Arts elective	3	
Adv REL/ Faith Traditions (CAP)	3 Adv HST/ Integrative (CAP)	3	
Diversity & Social Justice (CAP)	3		
	<b>18</b>	<b>15</b>	

Total credit hours: 131

## Bachelor of Fine Arts, Photography

<b>First Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	<b>Hours</b>
VAR 100	1 VAF 117	3	
VAF 104	3 VAF 216	3	
VAF 112	3 VAP 201	3	
VAP 101	3 ENG 100 (CAP Humanities)	3	
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3	
HST 103, PHL 103, or REL 103 (CAP Humanities)	3		
	<b>16</b>	<b>15</b>	

<b>Second Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	<b>Hours</b>
VAH 201, 202, or 203 (CAP Arts)	3 VAP 302	3	
VAP 240	3 VAH 382 (CAP Adv History)	3	
Visual Arts elective	3 VAP 320, 330, or 340	3	
VAR 299	0 CAP Natural Science	3	
ENG 200 (CAP Writing Seminar)	3 SSC 200 (CAP Social Science)	3	
CAP Natural Science	4 CMM 100 (CAP Communication)	3	
	<b>16</b>	<b>18</b>	

<b>Third Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	<b>Hours</b>
VAH 201, 202, or 203	3 VAP 410	3	
VAP 320, 330, or 340	3 VAH 482	3	
Visual Arts elective	5 VAP elective 300/400 level	3	
MTH (CAP Mathematics)	3 Faith Traditions (CAP)	3	

	Integrative (CAP)	3	3 Practical Ethical Action (CAP)	3
				15
<b>17</b>		<b>15</b>		
<b>Fourth Year</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	<b>Hours</b>	<b>Hours</b>
VAP 498 (CAP Capstone)	3 VAP 499 (CAP Capstone)			1
VAH 480	3 VAP elective 300/400			3
VAP elective 300/400	3 Visual Arts elective			3
Adv PHL/REL (CAP)	3 Adv PHL/REL (CAP)			3
Inquiry (CAP)	3 Diversity & Social Justice (CAP)			3
General elective	3 General elective			3
	<b>18</b>	<b>16</b>		

Total credit hours: 131

## Art Design-Art Education Courses

### VAE 101. Early Childhood Art Education. 2 Hours

Acquaints students, especially those seeking Early Childhood Licensure, with the principles and concepts of art and with the various materials and techniques used in artistic expression. Open to all students. Studio fee.

### VAE 231. Introduction to Art Education. 2 Hours

An introduction to the pedagogical, philosophical, and psychological aspects of teaching the arts. Topics will include: technology, national and state standards, history, learners with special needs, reading in the arts, and professional associations. Prerequisite(s): EDT 110, EDT 110L. Corequisite(s): Field experience.

### VAE 232. Integrating Visual Culture. 3 Hours

Developing knowledge, skills, attitudes and pedagogical approaches to integrating visual culture theory and methodology into classrooms for early childhood, middle childhood and the adolescent learner.

### VAE 383. Foundation of Art Education. 3 Hours

Introduction to the philosophy, history, and theory of teaching art to prekindergarten through grade eight students with varied needs and abilities. Art education majors only or permission. Prerequisite(s): EDT 110, EDT 110L, EDT 207, EDT 207L; permission of instructor and department chairperson. Corequisite(s): Field experience.

### VAE 483. Teaching Visual Arts. 3 Hours

Study of curriculum, planning, theory, and practice for teaching visual arts to students grades seven through twelve. Art Education majors only. Prerequisite(s): EDT 110, EDT 110L, EDT 207, EDT 207L, EDT 208; VAE 231, VAE 383; permission of instructor and department chairperson. Corequisite(s): EDT 305, EDT 340, EDT 340L, EDT 459.

### VAE 483W. Elementary & Secondary School Art. 3 Hours

Workshop to give the student of elementary and secondary education new approaches to teaching studio arts, art criticism, art history, and aesthetics.

### VAE 490. Special Problems. 1-6 Hours

Course for advanced individual work in art education. Approval based on academic standing and permission of instructor. Repeatable up to fifteen semester hours. .

## Art Design-Art History Courses

### VAH 101. Introduction to the Visual Arts. 3 Hours

Thematically-based, non-chronological introduction that covers the fundamental and varied roles that the visual arts have played and continue to play in the human experience. Open to all students.

### VAH 129. Foundations in Art History. 3 Hours

An introduction to the conceptual and evaluative practices undertaken in the study of art history, with an introduction to contemporary and global art histories. Students engage in a semester-long investigation of the question "What is art?" by researching diverse artistic practices from a variety of cultures and historical eras. Emphasis is placed on critical engagement with art and the development of a comparative approach to understanding the various roles art plays in society. This course is open to all majors, especially honors students, and is a required course for art history majors.

### VAH 201. Survey of Art I. 3 Hours

Survey of Western art from pre-history through the late medieval period. Open to all students.

### VAH 202. Survey of Art II. 3 Hours

Survey of Western art from the late medieval period through the Baroque period.

### VAH 203. Survey of Art III. 3 Hours

Survey of Western art from the mid-eighteenth to twenty-first centuries.

### VAH 310. History of Art and Activism. 3 Hours

This interdisciplinary art history course examines socially engaged art practices that create public dialogue and effect social, cultural and political change. Through lectures, readings, discussion, images, film and guest artists, students engage in dialogue about modern and contemporary art focused on topics related to social justice. The course presents art works that address racial, ethnic and cultural identity, geopolitical diversity, structures that create marginalization, and artistic practices that seek to support human rights and social justice. This course specifically addresses social commentary and civic responsibility as important components of contemporary visual arts.

### VAH 320. Latin American Art. 3 Hours

Survey of Latin American art history from the 19th century to the present. Prerequisite(s): HST 103.

### VAH 330. Arts of Asia. 3 Hours

Survey of Asian art history from circa 1500 BC to the present. Open to all students.

### VAH 350. Western Architecture. 3 Hours

Introduction to the history, theory, and practice of Western architecture from pre-history through the contemporary period. Open to all students.

### VAH 360. Art History & Feminism. 3 Hours

Introduction to feminist approaches to art history and women artists from the medieval period to the present. Open to all students.

### VAH 370. Nineteenth Century Art I. 3 Hours

Introduction to American art and architecture from the colonial period to the present. Open to all students.

### VAH 382. History of Photography I. 3 Hours

History of the cultural, social, and aesthetic roles of photography from the camera obscura to 1945. Emphasis on the changing practice and perception of the medium. Open to all students.

### VAH 383. History of Graphic Design. 3 Hours

Study of the significant developments, movements, and figures in the history of graphic design with an emphasis on the twentieth century. Open to all students.

### VAH 450. Italian Renaissance Art. 3 Hours

Introduction to the painting, sculpture, architecture, and material culture of Italy between c. 1300 and c. 1550, with a particular emphasis on the religious, political, and social dimensions of the production, purposes, and reception of art and material culture in the Renaissance.

### VAH 460. Baroque Art. 3 Hours

Study of the major painters, sculptors, and architects of the seventeenth century. Prerequisite(s): VAH 202 or permission of instructor and department chairperson.

### VAH 470. Nineteenth Century Art I. 3 Hours

Study of the major artists and movements in European art from Neo-Classicism to the beginnings of Realism. Prerequisite(s): VAH 203 or permission of instructor and department chairperson.

### VAH 471. Nineteenth Century Art II. 3 Hours

Study of the major artists and movements in European art from Realism through Art Nouveau. Prerequisite(s): VAH 470 or permission of instructor and department chairperson.

### VAH 477. Honors Thesis Project. 3 Hours

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

### VAH 478. Honors Thesis Project. 3 Hours

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

### VAH 480. Twentieth Century Art I. 3 Hours

Study of the major movements and artists in the painting, sculpture, architecture, and other media from 1900 to 1945. Open to all students.

### VAH 482. History of Photography II. 3 Hours

The history of photography from 1945 to the present. Examines the medium as a potent force in modern and contemporary culture and as a constantly evolving form of art and tool of communication. Open to all students.

### VAH 483. PostColonial and Global Art Histories. 3 Hours

Study of the aesthetic philosophies and visual cultures from different regions of the world 1960 to the present. The course draws together perspectives on global cultures and diverse art histories in order to analyze broad social issues and postmodern cultural movements. Open to all students. Prerequisite(s): HST 103.

### VAH 485. Art History Seminar. 3 Hours

Seminar and capstone reading and research course concentrating on one art historical topic for detailed analysis. May be repeated as topics change. Prerequisite(s): Permission of instructor.



**VAH 490. Special Problems. 1-5 Hours**

Advanced, independent study with faculty direction in art history.  
Prerequisite(s): One art history course or permission of instructor and department chairperson.

**Art Design-Fine Arts Courses****VAF 104. Foundation Drawing. 3 Hours**

Introduction to the experience of two-dimensional visual form through the act of observational drawing. The focus is on learning fundamental drawing elements and principles and understanding these elements and principles through visible and consistent practice. Fundamental issues pertaining to the creation of images are understood through a process of selection and an arrangement of visual elements to create a drawing. Drawing materials include pencil, charcoal, conté crayon, and pen and ink.

**VAF 112. Foundation 2-D Design. 3 Hours**

Study of the underlying elements and principles of design as they are used in two-dimensional composition and the creation of illusionistic three-dimensional space.

**VAF 117. Foundation 3-D Design. 3 Hours**

Introduction to basic principles and practices of design in three dimensions. Emphasis on current theory and construction techniques using a variety of media and methods.

**VAF 203. Drawing Through the Process. 3 Hours**

An investigation and examination of the drawing process, of mark making, and experimental practices. An emphasis will be placed on contemporary, conceptual, and creative directions in drawing. Students are exposed to and challenged by a series of studio and research-based problems that test the limitations and hidden opportunities within established drawing habits and conventional practices.

**VAF 204. Drawing II. 3 Hours**

Emphasis on figure drawing with work from the nude model and the skeleton. Study of proportion, rendering volume, and developing expressive drawing skills in a variety of drawing media. Prerequisite(s): VAF 104.

**VAF 216. Design & Color. 3 Hours**

The study of color based on historical and contemporary color theories and the use of color in expressing and integrating design concepts. Prerequisite(s): VAF 112 or permission of department chairperson.

**VAF 225. Painting for Non-Majors. 3 Hours**

Introduction to the history, fundamental principles, materials, tools, and methods of painting, emphasizing the spatial and expressive qualities of color, composition, and pictorial design. Not open to majors or minors in the Department of Visual Arts.

**VAF 226. Painting I. 3 Hours**

Introduction to the history, fundamental principles, materials, tools, and methods of painting. Prerequisite(s): VAF 104, VAF 112 or by permission.

**VAF 228. Watercolor I. 3 Hours**

Principles and techniques of transparent watercolor. Emphasis on technical mastery. Prerequisite(s): (VAF 104, VAF 112, VAF 216) or permission of department chairperson.

**VAF 232. Sculpture I. 3 Hours**

Consideration of forms as a means of developing an understanding of mass, shape, and control of medium. The use of various materials such as wood, plaster, and clay, with emphasis on integrating material with personal expression.

**VAF 240. Ceramics I. 3 Hours**

Introduction to basic methods of working in clay using coil and slab techniques.

**VAF 242. Ceramics II: Wheel Throwing. 3 Hours**

Introduction to basic methods of working clay using the wheel.

**VAF 253. Printmaking I. 3 Hours**

Introduction to the traditional printmaking methods of woodcut and intaglio. Instruction in edition-printing techniques and curating of prints. Prerequisite(s): (VAF 104, VAF 112) or permission of department chairperson.

**VAF 304. Drawing III. 3 Hours**

Continuation of work done in VAF 204 with an emphasis on the development of finished figure drawings. Study of anatomy and the rendering of convincing volumes in space. Prerequisite(s): VAF 204.

**VAF 325. Figure Painting. 3 Hours**

Painting from the model with a variety of media. Traditional and contemporary approaches to the figure. Prerequisite(s): ((VAF 204 or VAF 304), VAF 226) or permission of department chairperson.

**VAF 326. Painting II. 3 Hours**

Painting with oils or acrylics; continuing study of the principles and techniques of painting, with emphasis on personal expression and experimentation. Prerequisite(s): (VAF 226 or VAF 228) or permission of department chairperson.

**VAF 328. Watercolor II. 3 Hours**

Continuing investigation of watercolor techniques, both traditional and experimental. Still life, figure, landscape, and abstraction. Prerequisite(s): VAF 228 or permission of department chairperson.

**VAF 332. Sculpture II. 3 Hours**

Continued exploration of three-dimensional concepts and materials, concentrating on wood, stone, and metal. Prerequisite(s): VAF 232 or permission of department chairperson.

**VAF 333. Sculpture III. 3 Hours**

Exploration of advanced sculptural skills, concepts, and processes. This course offers advanced investigation of sculpture as it relates to technical proficiency and the evolution of a personal aesthetic vision. Prerequisite(s): VAF 332 or permission of the Chair.

**VAF 342. Ceramics III. 3 Hours**

Expanded exploration of skills, concepts, and processes introduced in VAF 240 hand building or VAF 242 wheel thrown ceramic forms, with emphasis on building techniques, materials, glazing, and firing processes. Prerequisite(s): (VAF 240 or 242) or permission of instructor.

**VAF 353. Printmaking II. 3 Hours**

Advanced work in woodcut, monoprint and intaglio, including acrylic process and color etchings. Prerequisite(s): VAF 253.

**VAF 370. Illustration I. 3 Hours**

Attention to conceptual, visual, and technical development. Exploration of media and techniques employed by the illustrator in creating images for printed communication. Prerequisite(s): VAF 104, VAF 204.

**VAF 380. Illustration II. 3 Hours**

Interpretation and representation of concepts, products, or stories for magazines, books, newspapers, and advertising. Continued technical development with a variety of materials, media, and techniques. Prerequisite(s): VAF 370.

**VAF 404. Advanced Investigations in Drawing. 3 Hours**

Advanced studio course - focus on contemporary drawing practices. Further investigation and development of students' interests and material choices in developing a cohesive body of work. Emphasis on growth in personalized imagery reinforced by continued growth of technical skills and conceptual development. Prerequisite(s): VAF 304 or permission of Chairperson.

**VAF 426. Painting III. 3 Hours**

Directed advanced studio problems; contemporary issues in painting. Repeatable up to nine semester hours. Studio fee. Prerequisite(s): (VAF 325 or VAF 326) or permission of department chairperson.

**VAF 427. Advanced Investigations in Painting. 3 Hours**

Advanced studio focuses on contemporary painting practices and allows students to further investigate and develop their own interests and choices of materials as they work toward a cohesive body of work. Emphasis on growth in personalized imagery reinforced by continued growth of technical skills and conceptual development. Prerequisite(s): VAF 426 or by permission.

**VAF 433. Advanced Investigations in Sculpture. 3 Hours**

Advanced studio focuses on contemporary sculptural practices and allows students to further investigate and develop their own interests and choices of materials as they work toward a cohesive body of work. Emphasis on growth in personalized imagery reinforced by continued growth of technical skills and conceptual development. Prerequisite(s): VAF 432 or by permission.

**VAF 442. Advanced Investigations in Ceramics. 3 Hours**

Advanced studio course. Focus on contemporary ceramic practices; allows students to further investigate and develop their own interests and choices of materials and develop a cohesive body of work. Emphasis on growth in personalized imagery reinforced by continued growth of technical skills and conceptual development. Prerequisite(s): VAF 342 or permission of Chairperson.

**VAF 453. Printmaking III. 3 Hours**

Advanced work in printmaking processes with an emphasis on the production of multi-color editions. Prerequisite(s): VAF 353.

**VAF 459. Advanced Investigations in Printmaking. 3 Hours**

Advanced studio focuses on contemporary printmaking practices and allows students to further investigate and develop their own interests and choices of materials as they work toward a cohesive body of work. Emphasis on growth in personalized imagery reinforced by continued growth of technical skills and conceptual development. Prerequisite(s): VAF 253, VAF 353, VAF 453 or by permission of instructor.

**VAF 470. Illustration III. 3 Hours**

Focus on developing an individual point of view and illustration style. Prerequisite(s): VAF 380.

**VAF 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the departmental chairpersons. Prerequisite(s): Approval of University Honors Program.

**VAF 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**VAF 490. Special Problems. 1-5 Hours**

Course for advanced individual work in fine arts. Approval based on academic standing and permission of instructor. Repeatable up to fifteen semester hours.

**VAF 498. Senior/Professional Seminar- Fine Arts. 3 Hours**

Capstone course required of all B.A. and B.F.A. fine arts and art education (E11) majors, to be taken in the first semester of the senior year. Examination of aesthetic, cultural, ethical, and pragmatic issues in preparation for post-graduate experience. Prerequisite(s): Junior standing.

**VAF 499. Portfolio & Paper- Fine Arts. 1 Hour**

Completion and presentation of undergraduate portfolio and paper, to be reviewed by faculty and peers. Faculty approval of portfolio and paper is required for graduation. Prerequisite(s): VAF 498 or permission of department chairperson.

**Art Design-Graphic Design Courses****VAD 211. Fundamentals of Visual Communication Design. 3 Hours**

Course for non-majors in the basics of design for communication. Attention to page layout, typography, image, graphic style, and information delivery.

**VAD 220. Design Processes I. 3 Hours**

Introduction to the processes of graphic design, specifically computer applications, equipment, and concepts as related to print and electronic based graphic design. Additionally, students engage in a survey of materials, assembly strategies, and various vehicles for the designed message. Prerequisite(s): VAF 112.

**VAD 240. Form & Concept. 3 Hours**

Exploration of visual form as means to convey content and meaning. Students enlist principles from art and design foundation courses within the context of graphic design. Design methodologies are introduced and explored, while process and hand skills are stressed. Prerequisite(s): VAF 112, VAF 216.

**VAD 245. Typography I. 3 Hours**

Investigation of the history, tradition, discipline, and function of typography as related to visual and verbal communication. Technical, formal, and semantic aspects are explored. Structure, space, and sequence, critical to the typographic message, are stressed. Prerequisite(s): VAD 220, VAD 240.

**VAD 307. Drawing for Graphic Design. 2 Hours**

Exploration of materials, procedures, and drawing techniques for design presentations. Prerequisite(s): VAF 104.

**VAD 310. Computer Illustration. 3 Hours**

Exploration of the use of the computer as tool and medium for the creation and production of image and illustration for print and electronic graphic design. Prerequisite(s): VAD 220, VAD 240.

**VAD 318. Graphic Design for Three Dimensions. 3 Hours**

Application of graphic design principles to packaging, product, exhibition, and environmental design. Prerequisite(s): VAD 240, VAD 245; VAF 117.

**VAD 320. Design Processes II. 3 Hours**

Advanced exploration into the use of computer technology as means and medium for the implementation, production, and presentation of graphic design. Print design and production, as well as commercial printing pre-press are emphasized with additional attention given to production for electronic design vehicles. Prerequisite(s): VAD 220, VAD 240, VAD 245.

**VAD 345. Typography II. 3 Hours**

The advanced study of typographic design. Attention to the aesthetic and informational qualities of type in print and electronic communication. Prerequisite(s): VAD 245.

**VAD 351. Motion Design. 3 Hours**

Exploration of the generation and application of motion in visual communication. This course builds on graphic design form, methods, technique, and principles to generate dynamic messaging using type, sound, image, and animation. While the computer and appropriate applications are primary tools, hand generated methods for concept and storyboarding are stressed as well. Prerequisite(s): VAD 220, VAD 240, VAD 245, VAD 320.

**VAD 355. Interaction Design. 3 Hours**

Investigation of the use of interactivity as applied to the digital and analog landscape. Focus on the design of richly interactive interfaces for current and emerging media (computers, mobile, touch etc.). While some emphasis is on the development and implementation of design vehicles, decided attention is paid to concept and visual effectiveness. Prerequisite(s): VAD 220, VAD 240, VAD 245, VAD 320.

**VAD 360. Web Design. 3 Hours**

Investigation of the processes of web design, including concept, information architecture, navigation, interface, and standard languages and technologies for the delivery of content and information. Organization, aesthetics, and user experience are discussed and explored. Prerequisite(s): VAD 220, VAD 240, VAD 245, VAD 320.

**VAD 395. Advertising Design. 3 Hours**

Emphasis on print advertising, its creation and presentation. Concept development and attention to advertising layouts that carry motivating images and messages to consumers about products, services, or ideas.

**VAD 411. Graphic Design I. 3 Hours**

Development of methodologies utilized for the purpose of generating concepts and effective communication within the context of graphic design. Attention is given to pragmatic and semantic relationships between elements such as typography, image, space, and color. Prerequisite(s): VAD 220, VAD 240, VAD 245, VAD 320.

**VAD 412. Graphic Design II. 3 Hours**

Development of methodologies utilized for the purpose of generating concepts and effective communication within the context of graphic design. Attention is given to pragmatic and semantic relationships between elements such as typography, image, space, and color. Prerequisite(s): VAD 220, VAD 240, VAD 245, VAD 320, VAD 411.

**VAD 414. Trademark Design. 3 Hours**

Advanced study of marks, logos, and symbols as communication and identification elements. Emphasis on conceiving design marks of identity for small businesses, corporations, institutions, products, and/or services. Prerequisite(s): VAD 411.

**VAD 415. Graphic Design III. 3 Hours**

The study and design of identification and image systems for products, organizations, institutions, or corporations. Emphasis on continuity in the application of visual communication factors. Prerequisite(s): VAD 412 or permission of department chairperson.

**VAD 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**VAD 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved VAD 477; approval of University Honors Program.

**VAD 480. Graphic Design Internship. 1-3 Hours**

Opportunities for practical experience in professional working environments. Repeatable up to nine semester hours. Prerequisite(s): Permission of department chairperson.

**VAD 490. Special Problems. 1-3 Hours**

A course for advanced individual work in design. Approval based on academic standing and permission of instructor. Repeatable up to fifteen semester hours.

**VAD 498. Senior/Professional Seminar - Graphic Design. 3 Hours**

Capstone course required of all B.F.A. graphic design majors, to be taken in the fall term of the senior year. Examination of aesthetic, cultural, ethical, and pragmatic issues in preparation for post-graduate experience. Prerequisite(s): Senior standing or permission of department chairperson.

**VAD 499. Portfolio and Paper - Graphic Design. 3 Hours**

Completion and presentation of undergraduate portfolio and paper, to be reviewed by faculty, peers, and professionals in a public forum. Faculty approval of portfolio and paper is required for graduation. Prerequisite(s): VAD 498 or permission of department chairperson.

## Art Design-Photography Courses

**VAP 100. Darkroom Photography for Non-Majors. 3 Hours**

Emphasis on learning and exploring the visual language of lens-based photographic imagery through a series of technical and creative darkroom assignments. Black and white film and chemical processes will be utilized in the creation of photographs. Students gain an understanding of technical and creative control as well as conceptual practices associated with the medium. This course does not fulfill requirements within the Department of Visual Arts. Studio fee.

**VAP 101. Foundation Photography. 3 Hours**

An experiential project-based course utilizing black and white film based photography designed to challenge the student technically, critically, conceptually, and in the aesthetic problems unique to the photographic medium. Emphasis is placed on the development of individual expression, critical, creative and technical growth through the photographic medium.

**VAP 200. Digital Photography for Non-Majors. 3 Hours**

An emphasis on learning and exploring the visual language of lens-based digital photographic imagery through a series of technical and creative digital assignments. Using various types of digital capture devices, some examples are cell phones, consumer grade digital cameras and scanners. Macintosh computers, and Adobe Photoshop software will be utilized in the creation of photographs. Students gain an understanding of technical and creative control as well as conceptual practices associated with the digital photographic medium. Course does not fulfill Visual Arts degree requirements.

**VAP 201. Photography II. 3 Hours**

Variety of challenging projects develop increased technical competence, greater visual awareness, personal expression, and sustained creative growth. Prerequisite(s): VAP 101 or equivalent.

**VAP 240. Digital Processes I. 3 Hours**

Introduction to the practice, theory, aesthetics, and ethics of digital photography, including direct capture, scanning, enhancement, compositing, manipulation, and high-quality printing. Prerequisite(s): VAP 101 or permission of department chairperson.

**VAP 302. Color Photography I. 3 Hours**

Introduction to techniques and aesthetics of color photography. Students utilize color sensitive films, papers, and digital technologies in the exploration of color photography. Prerequisite(s): (VAP 101, VAP 240) or permission of department chairperson.

**VAP 320. Studio Practice I. 3 Hours**

Extensive use of large format camera, studio grip equipment, tungsten and electronic flash lighting techniques; still-life and portrait photography in a studio environment. Prerequisite(s): VAP 201.

**VAP 321. Studio Practice II. 3 Hours**

Emphasis on the production of a professional-quality portfolio which will demonstrate advanced knowledge of the studio and image production. Prerequisite(s): VAP 320.

**VAP 330. Alternative Photography I. 3 Hours**

Introduction to specialized image production utilizing silver and non-silver photographic processes. Emphasis on technical and aesthetic aspects of alternative photographic practice. Prerequisite(s): VAP 101.

**VAP 331. Alternative Photography II. 3 Hours**

Continuing work with alternative silver and non-silver processes. Emphasis on completion of an artist book or installation which demonstrates advanced technical command and aesthetic understanding of the processes employed. Prerequisite(s): VAP 330.

**VAP 340. Digital Processes II. 3 Hours**

Expands on the practice and theory of digital photography and computer imaging. Emphasis is placed on the creation of a cohesive portfolio of digital artwork through the exploration of advanced digital methodologies and concepts. The course will also focus on the different modes of dissemination relevant to digital images. Prerequisite(s): VAP 240.

**VAP 350. View Camera. 3 Hours**

Extensive experience with the view camera, examination of refined techniques, various applications, and concepts of large format photography. Prerequisite(s): VAP 201.

**VAP 402. Color Photography II. 3 Hours**

Continuation of color printing from negatives; completion of individual projects which will demonstrate an advanced understanding of the techniques and aesthetics peculiar to color photography. Prerequisite(s): VAP 302.

**VAP 410. Advanced Photography. 3 Hours**

Students with a substantial commitment to photography and with demonstrated technical skills work on individual projects and participate in group critiques and discussions. Prerequisite(s): VAH 382 or VAH 482; VAP 201, VAP 302.

**VAP 420. Photojournalism. 3 Hours**

Variety of ways of using photography as documentation, narrative, and propaganda. Editing of work, layout, and image-text relationships. Personal photographic essay required. Prerequisite(s): VAP 201.

**VAP 430. Professional Photographic Applications. 3 Hours**

Problem-solving associated with professional photography; may include commercial, editorial, industrial, architectural, and illustrative photographic work both in the studio and on location. Prerequisite(s): VAP 320 or permission of department chairperson.

**VAP 450. Photography Internship. 1-3 Hours**

Practical applications of photographic skills. Opportunities for advanced development and practical experience in professional working environments. Repeatable up to six semester hours for B.F.A. students. Prerequisite(s): Permission of department chairperson.

**VAP 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**VAP 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**VAP 490. Special Problems in Photography. 1-5 Hours**

Series of assignments to guide independent study in photography, formulated to meet individual needs of the student. Prerequisite(s): VAP 201; permission of department chairperson.

**VAP 498. Senior/Professional Seminar- Photography. 3 Hours**

Capstone course required of all B.A. and B.F.A. photography majors, to be taken in the first semester of the senior year. Examination of aesthetic, cultural, ethical, and pragmatic issues in preparation for post-graduate experience. Prerequisite(s): (VAP 410; senior standing) or permission of department chairperson.



**VAP 499. Senior Seminar II. 1 Hour**

Capstone course required for all BFA Photography majors. Students examine the aesthetic, cultural, ethical, and pragmatic issues involved in and relating to photography. Students complete a senior project and paper, and give a public presentation of their research to be reviewed by faculty and peers. Prerequisite(s): VAP 498 or permission of department chairperson.

## Art Design Courses

**VAR 100. Visual Arts Foundation. 1 Hour**

Defines and examines the process of beginning a program of education in the visual arts within the larger context of the College of Arts and Sciences and the University. Integrates pragmatic and conceptual issues critical to liberal learning for visual arts students.

**VAR 210. Visual Journal. 3 Hours**

Students document and interpret their experience of a given site through the creation of unique journals. They create, collect, edit, and juxtapose visual materials in combination with written commentary and reflections.

**VAR 220. Visual Resources. 3 Hours**

Students study a wide variety of visual elements, including many forms of visual communication as well as architecture, public spaces, and museums, in order to understand ways in which art and design play key roles in defining the unique cultural environment of a given site.

**VAR 299. Second Year Review. 0 Hours**

Requires successful completion of Visual Arts Second Year Review. Eligibility for the review is determined by the department and is based upon a student's progress within the major. Visual Arts Scholarship recipients complete this course during their second year in the major. The review is based upon prior Visual Arts coursework completed and in progress at the time of the review. Required for all Visual Arts majors.

**VAR 330. Comparative Visual Culture in Film. 3 Hours**

The course examines visual culture codes through a survey of global cinema. Students focus on the analysis and interpretation of visual culture through comparisons of western and non-western societies. Discussion topics may include race/ethnicity, gender/sexuality, age, disability and socioeconomic class issues. Students will examine the ways through which topics are depicted in film through visual language. The geographic regions and the main theme of cinema may vary each semester dependent upon the expertise each faculty member brings to class.

**VAR 345. Computer Modeling & Animation I. 3 Hours**

Introduction to history, theory, and practice of three-dimensional computer modeling and animation for video, computer, and print media. Visualization, Cartesian space, simple polygonal modeling, surface rendering, and animation techniques will be explored.

**VAR 350. Art and Social Practice. 3 Hours**

Exploration of varying modes of collaborative art production, for both artists and non-art students, towards the end of understanding and organizing for effective social change and/or inquiry within studio and community settings. Students organize, produce and exhibit an interdisciplinary group project developed utilizing a sociological lens in an off-campus or social media space.

**VAR 440. Computer Modeling & Animation II. 3 Hours**

Detailed study of spline-based modeling, surface rendering and mapping, editing complex animation sequences, motion control, and other topics. Prerequisite(s): VAR 345.

**VAR 445. Computer Modeling & Animation III. 3 Hours**

Individual projects in conceptualization and production of animated sequence from storyboard to final presentation. Prerequisite(s): VAR 440.

**VAR 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**VAR 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**VAR 490. Special Problems. 1-5 Hours**

Advanced, independent study with faculty direction in a visual arts subject or topic that is not covered in existing, discipline-specific courses. Permission.

**VAR 495. Senior Project Seminar. 1 Hour**

The first in a sequence of two capstone courses. To be taken in the first semester of the senior year. Required for all Bachelor of Arts with a major in Visual Arts degrees. Students select a faculty mentor committee and work with that committee to establish a capstone project topic, goals, outcomes, and timeline associated with the project. Prerequisite(s): Senior standing. VAR majors only or permission of department chairperson.

**VAR 496. Senior Project, Presentation and Paper. 3 Hours**

VAR496 is a 3 credit hour capstone course to be taken in the second semester of the senior year. Graduation requirement for B.A. visual arts majors. Students reflect upon their selected vocation in the visual arts by reviewing professional practices, standards and activities across several related disciplines. Students complete a senior project and paper, and give a public presentation of their research to be reviewed by faculty and peers. Faculty approval of project and paper is required for graduation. Prerequisite(s): VAR 495 or permission of department chairperson.

## Arts Administration

The minor in Arts Administration provides an introductory background to students with an interest in the management of non-profit arts and community organizations. Eligible students are declared majors or minors in music, theatre, and visual arts, or majors in business. The minor offers two tracks depending on the student's major. It provides Arts students with an introductory foundation in business and economics, and SBA students with further literature and practical study in the arts. Core courses explore special issues and challenges that the art community faces today. The minor integrates classroom study with real-world experiences with area arts organizations. The Arts Administration minor requires 19 semester hours, including seven semester hours of core interdisciplinary courses.

**Arts Administration Committee**

Sharon Gratto (Music), Coordinator



Judith Huacuja (Art and Design), Brian LaDuca (Art Street), Rebecca Wells (School of Business Administration)

## Minor in Arts Administration (AAD)

### Arts Administration - Track A (required for visual arts, music and theatre majors and minors)

AAD 301	Introduction to Arts Administration	3
AAD 498	Arts Administration Internship	1-3
ACC 200	Introduction to Accounting	3
ECO 203	Principles of Microeconomics	3
Select two courses from:		6
FIN 301	Introduction to Financial Management	
MGT 201	Legal Environment of Business	
MKT 300	Survey of Marketing	
OPS 300	Introduction to Operations & Supply Management	
Total Hours		16-18

### Arts Administration - Track B (required for business majors)

AAD 301	Introduction to Arts Administration	3
AAD 498	Arts Administration Internship	1-3
Select three courses from two areas:		9
<b>Music</b> <sup>1</sup>		
MUS 201	Music In Concert	
MUS 202	Professional Development Workshop	
MUS 302	Music History & Literature II	
MUS 303	Introduction to Musics of the World	
<b>Theatre/Dance</b>		
THR 105	Theatre Appreciation	
THR 415	History of the Theatre I	
THR 425	Theatre Theory & History	
<b>Visual Arts</b>		
VAH 101	Introduction to the Visual Arts	
VAH 201	Survey of Art I	
VAH 202	Survey of Art II	
VAH 203	Survey of Art III	
Select courses from performance or creative arts:		3
MUS 191	Voice Class	
MUS 195	Beginning Guitar Class I	
MUS 196	Group Piano I	
MUS 295	Beginning Guitar Class II	
MUS 296 & MUS 297	Functional Keyboard Skills I and Functional Keyboard Skills II	
MUS 390	Ensembles	
MUS 399	Performance Studies	
MUS 491	University Orchestra	
MUS 492	Symphonic Wind Ensemble	
MUS 493	University Chorale	
THR 100	Theatre Laboratory	
THR 201	Basic Dance for the Performing Artist	
THR 251	Beginning Tap Dance	
THR 261	Beginning Jazz Dance	
THR 271	Beginning Ballet	
THR 305	Theatre Stagecraft	

THR 307	Light Design	
THR 310	Acting for Everyone	
THR 312	Acting for the Camera	
THR 320	Voice & Movement	
THR 330	Set Design	
VAD 215	Computer Applications- Design	
VAD 218	Computer Applications- Illustration	
VAD 220	Design Processes I	
VAF 104	Foundation Drawing	
VAF 112	Foundation 2-D Design	
VAP 101	Foundation Photography	
Total Hours		16-18

<sup>1</sup> Other courses may be selected with approval.

## Courses

### AAD 301. Introduction to Arts Administration. 3 Hours

Interdisciplinary introduction to the fundamental principles and applications of managing a non-profit arts organization. Study of strategies and tools for effective arts management. Recommended for students with a background in the arts and/or business.

### AAD 498. Arts Administration Internship. 1-3 Hours

Arts administration work experience in an approved organization. Student must be in good academic standing. Students are limited to a maximum of three semester hours. Prerequisite(s): AAD 301; UDI 371; permission of program advisor.

## Biology

Majors:

- Bachelor of Science, Biology
- Bachelor of Science, Environmental Biology

Minor:

- Biology

The Bachelor of Science program in biology is designed to prepare a student for a career in the life sciences. Graduates of the program are competitive for entry into graduate programs in the biological sciences as well as professional schools, such as medical, dental, osteopathic, and veterinary science, as well as physician assistant (PA) and advanced nursing programs.

The department has two primary areas of focus:

1. Basic biomedical science
2. Environmental/ecological science

Biomedical science course offerings includes:

- Cell biology
- Developmental biology
- General and medical microbiology
- Genetics
- Immunology
- Mammalian physiology
- Molecular biology

Environmental/ecological science course offerings include:

- Community and restoration ecology
- Ecological physiology
- Ecology
- Entomology and analysis of biological data
- Environmental biology in the narrow sense
- Environmental microbiology
- Evolutionary biology
- Plant physiology
- Population biology

In addition, advanced undergraduates may enroll in graduate courses for undergraduate credit with the consent of the department chairperson. In line with the two areas of research interests, the department encourages students (in consultation with their advisors) to declare one of the two as an area of concentration of study no later than the end of their sophomore year. For the student more interested in a broad approach to biology, the department recommends a third option, the general biology option (any combination of upper-level biology courses that fulfills the program requirements).

The department offers a research mentorship program for upper-level students majoring in biology. The program allows a student to work closely with both faculty and graduate students in laboratory and/or field research. Participation in the program is based on the recommendation of a member of the faculty. The mentorship program is designed to provide a significant advantage for those students who intend to enter a graduate program.

The department also offers a combined five-year Bachelor and Master of Science (5Y B.S.-M.S.) degree in Biology. This accelerated program is designed for students who display strong potential for research in biology. It provides a liberal arts education, a broad background in biology, the development of expertise in a biological subfield, and a thorough introduction to research instrumentation and techniques. Graduates from the program are prepared for either direct entry into the job market or continuation toward the Ph.D. A detailed description of the five-year B.S.-M.S. program may be obtained from the departmental office.

A minor in biology consists of 20 semester hours.

## Faculty

Mark Nielsen, Chairperson

Distinguished Service Professor: Noland

Professors Emeriti: Chantell, Geiger, Ramsey, Rowe

Professors: Burky, Kearns, Krane, Robinson, Tsonis, P. Williams

Associate Professors: Friese, Hansen, Kango-Singh, McEwan, Nielsen, Singh, T. Williams, D. Wright, S. Wright

Assistant Professors: Pitychoutis, Sun

Lecturers: Carter, Dillon, Kavanaugh, Klco, Nickell

## Bachelor of Science, Biology (BIO) minimum 120 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	

Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

1 Completed with ASI 110 and ASI 120.

2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.

3 Completed with ENG 200H or ASI 120.

4 Must include two different disciplines and accompanying lab.

### Science Breadth Requirements

(Satisfies CAP Mathematics and CAP Natural Science)

CHM 123 & 123L	General Chemistry and General Chemistry Laboratory	4
CHM 124 & 124L	General Chemistry and General Chemistry Laboratory	4
CHM 313 & 313L	Organic Chemistry and Organic Chemistry Laboratory	4
CHM 314 & 314L	Organic Chemistry and Organic Chemistry Laboratory	4
PHY 201 & 201L	College Physics I and College Physics Laboratory I	4
PHY 202 & 202L	General Physics and General Physics Laboratory	4
Select one mathematics sequence from:		6-8
MTH 116 & MTH 148	Precalculus Math and Introductory Calculus I	
MTH 148 & MTH 149	Introductory Calculus I and Introductory Calculus II	
MTH 168 & MTH 169	Analytic Geometry & Calculus I and Analytic Geometry & Calculus II	

**Major Requirements** <sup>1, 6</sup> 44

BIO 151 & 151L	Concepts of Biology I: Cell & Molecular Biology and Concepts of Biology Laboratory I: Cell & Molecular Biology	4
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BIO 152 & 152L	Concepts of Biology II: Evolution & Ecology and Concepts of Biology Laboratory II: Evolution & Ecology	4
BIO 299	Biology Seminar	1
BIO 310	Ecology	3
BIO 312	General Genetics	3
BIO 420	Biology Capstone Seminar (Satisfies Cap Major Capstone)	1
Select two environmental/ecological courses from: <sup>2, 6</sup>		7
BIO 301	Evolution	
BIO 309 & 309L	Comparative Anatomy of the Vertebrates and Comparative Anatomy Laboratory	
BIO 310L	Ecology Laboratory	
BIO 311	Introductory Entomology	
BIO 312L	Genetics Laboratory	
BIO 314 & 314L	Plant Biology and Plant Biology Laboratory	
BIO 320 & 320L	Marine Biology and Marine Biology Laboratory	
BIO 340 & 340L	Culture, Biodiversity & Resources Management and Culture, Biodiversity & Resources Management Laboratory	
BIO 359	Sustainability & the Biosphere	
BIO 360 & 360L	Island Environmental Biology and Island Environmental Biology Laboratory	
BIO 370	Conservation Biology	
BIO 402 & 402L	Vertebrate Zoology and Vertebrate Zoology Laboratory	
BIO 407 & 407L	Plant Diversity & Ecology and Plant Diversity & Ecology Laboratory	
BIO 409 & 409L	Ecological Restoration and Ecological Restoration Laboratory	
BIO 411 & 411L	General Microbiology and General Microbiology Laboratory	
BIO 421	Biological Problems <sup>4</sup>	
BIO 435 & 435L	Microbial Ecology and Microbial Ecology Laboratory	
BIO 439	Analysis & Interpretation of Biological Data	
BIO 441	Environmental Plant Biology	
BIO 445	Evolution & Development	
BIO 450 & 450L	Comparative Animal Physiology and Comparative Animal Physiology Laboratory	
BIO 452 & 452L	Biology of Rivers & Lakes and Biology of Rivers & Lakes Laboratory	
BIO 459 & 459L	Environmental Ecology and Environmental Ecology Laboratory	
BIO 460	Introduction to Bioinformatics	
BIO 461 & 461L	Invertebrate Zoology and Invertebrate Zoology Laboratory	
BIO 465	Disease Ecology	
BIO 480 & 480L	Principles of Microscopy and Principles of Microscopy Laboratory	
BIO 489	Mycology	

Select two basic biomedical courses from: <sup>3, 6</sup> 7

BIO 301	Evolution	
BIO 309 & 309L	Comparative Anatomy of the Vertebrates and Comparative Anatomy Laboratory	
BIO 311	Introductory Entomology	
BIO 312L	Genetics Laboratory	
BIO 403 & 403L	Physiology I and Physiology Laboratory I	
BIO 404	Physiology II	
BIO 411 & 411L	General Microbiology and General Microbiology Laboratory	
BIO 412	Genetics Human Diseases	
BIO 415	Neurobiology	
BIO 421	Biological Problems <sup>4</sup>	
BIO 427	Immunology	
BIO 439	Analysis & Interpretation of Biological Data	
BIO 440 & 440L	Cell Biology and Cell Biology Laboratory	
BIO 442 & 442L	Developmental Biology and Developmental Biology Laboratory	
BIO 445	Evolution & Development	
BIO 460	Introduction to Bioinformatics	
BIO 461 & 461L	Invertebrate Zoology and Invertebrate Zoology Laboratory	
BIO 462	Molecular Biology	
BIO 465	Disease Ecology	
BIO 466	Biology of Infectious Disease	
BIO 470	Cancer Biology	
BIO 475 & 475L	Human Anatomy and Human Anatomy Laboratory	
BIO 480 & 480L	Principles of Microscopy and Principles of Microscopy Laboratory	
BIO 489	Mycology	
CHM 420	Biochemistry	

Select four electives, two with accompanying labs, from the group above. <sup>5, 6</sup> 14

#### Breadth <sup>7</sup>

ASI 150	Introduction to the University Experience	1
Social & Behavioral Sciences (includes CAP Social Science)		6
Total Hours to total at least		120

- 1 The Department of Biology supports national standards established by the National Institutes of Health for the responsible, humane treatment and housing of animals. The biology curriculum contains some laboratory courses in which dissection and vivisection are necessary and required in order to convey an understanding of certain biological concepts. All students are expected to participate in such laboratory exercises in the introductory biology sequence, BIO 151L and BIO 152L which involve dissection and/or vivisection. In other elective formal laboratory courses in which dissection and vivisection occur, it is expected that students will participate in all aspects of the laboratory. No alternatives to dissection or vivisection will be offered in these courses. It is ultimately the responsibility of students to make certain that they enroll in courses in which they are able to participate in all required exercises, and to obtain information from each instructor as to the specific laboratory course content and requirements. The Department of Biology maintains an updated list of laboratory courses in which dissection and/or vivisection is required in order to assist students in the selection of course work.
- 2 One with accompanying laboratory.
- 3 One with accompanying laboratory. BIO 462 strongly recommended as one of two courses.
- 4 By permission only. Qualifies as a laboratory elective for any category.
- 5 One of the following Non-BIO science courses may include: CHM 201, CHM 302, CHM 303, CHM 420, MTH 367, CPS 107, CPS 111, CPS 132, GEO 208, GEO 308, GEO 401, Other Non-BIO science courses may be included with the approval of the chairperson.
- 6 A minimum grade of C- is required.
- 7 HST 340, HST 341 or HST 342 are highly recommended.

## Bachelor of Science, Environmental Biology (EVB) minimum 120 hours

Environmental biology is a science specialization based upon the fundamentals of biology and ecology, applying interdisciplinary skills, knowledge, and principles to the environmental problems facing society today. Students entering this dynamic field could become directly involved in addressing some of the significant global problems related to human impact on the environment. In addition to the standard base of courses required of most biology majors, the curriculum also requires a challenging core of environmentally related science courses and course work drawn from a multidisciplinary elective pool that includes offerings in the humanities and social sciences.

Internship Program: Majors will participate in the EVB internship program (BIO 499, see course prerequisites), where they will have the unique opportunity to obtain valuable training and experience under the mentorship of established scientists and other environmental professionals.

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	

Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3
<sup>1</sup> Completed with ASI 110 and ASI 120. <sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement. <sup>3</sup> GEO 208, GEO 308, GEO 401, Other Completed with ENG 200H or ASI 120. <sup>4</sup> Must include two different disciplines and accompanying lab.	

### Science Breadth Requirements

(Satisfies CAP Mathematics and CAP Natural Science)		
CHM 123 & 123L	General Chemistry and General Chemistry Laboratory	4
CHM 124 & 124L	General Chemistry and General Chemistry Laboratory	4
CHM 313 & 313L	Organic Chemistry and Organic Chemistry Laboratory	4
CHM 314 & 314L	Organic Chemistry and Organic Chemistry Laboratory	4
GEO 115 & 115L	Physical Geology and Physical Geology Laboratory	4
GEO 116 & 116L	Geological History of the Earth and Geological History of the Earth Laboratory	4
MTH 367	Statistical Methods I <sup>2</sup>	3
PHY 201 & 201L	College Physics I and College Physics Laboratory I	4
PHY 202 & 202L	General Physics and General Physics Laboratory	4
Select one sequence from:		6-8
MTH 148 & MTH 149	Introductory Calculus I and Introductory Calculus II	
MTH 168 & MTH 169	Analytic Geometry & Calculus I and Analytic Geometry & Calculus II <sup>1</sup>	
Select one course from:		3-4
GEO 307	Geomorphology	
GEO 308	Problems & Decisions in Environmental Geology	
GEO 309	Surface & Groundwater Hydrology	
GEO 450	Applied Geographic Information Systems	

**Major Requirements**<sup>3</sup>

BIO 151 & 151L	Concepts of Biology I: Cell & Molecular Biology and Concepts of Biology Laboratory I: Cell & Molecular Biology	4
BIO 152 & 152L	Concepts of Biology II: Evolution & Ecology and Concepts of Biology Laboratory II: Evolution & Ecology	4
BIO 299	Biology Seminar	1
BIO 310 & 310L	Ecology and Ecology Laboratory	4
BIO 312	General Genetics	3
BIO 420	Capstone Seminar (Satisfies CAP Major Capstone)	1
BIO 459	Environmental Ecology	3
BIO 479L	Environmental Instrumentation Laboratory	2
BIO 499	Environmental Biology Internship	3
Select three field oriented courses from: <sup>3, 4</sup>		11
BIO 301	Evolution	
BIO 311	Introductory Entomology	
BIO 312L	Genetics Laboratory	
BIO 320 & 320L	Marine Biology and Marine Biology Laboratory	
BIO 340 & 340L	Culture, Biodiversity & Resources Management and Culture, Biodiversity & Resources Management Laboratory	
BIO 359	Sustainability & the Biosphere	
BIO 360 & 360L	Island Environmental Biology and Island Environmental Biology Laboratory	
BIO 370	Conservation Biology	
BIO 402 & 402L	Vertebrate Zoology and Vertebrate Zoology Laboratory	
BIO 407 & 407L	Plant Diversity & Ecology and Plant Diversity & Ecology Laboratory	
BIO 409 & 409L	Ecological Restoration and Ecological Restoration Laboratory	
BIO 421	Biological Problems <sup>6</sup>	
BIO 439	Analysis & Interpretation of Biological Data	
BIO 441	Environmental Plant Biology	
BIO 450 & 450L	Comparative Animal Physiology and Comparative Animal Physiology Laboratory	
BIO 452 & 452L	Biology of Rivers & Lakes and Biology of Rivers & Lakes Laboratory	
BIO 459L	Environmental Ecology Laboratory	
BIO 465	Disease Ecology	
BIO 489	Mycology	
Select three laboratory oriented courses from: <sup>3, 5</sup>		10
BIO 309 & 309L	Comparative Anatomy of the Vertebrates and Comparative Anatomy Laboratory	
BIO 311	Introductory Entomology	
BIO 312L	Genetics Laboratory	
BIO 314 & 314L	Plant Biology and Plant Biology Laboratory	
BIO 402 & 402L	Vertebrate Zoology and Vertebrate Zoology Laboratory	

BIO 403 & 403L	Physiology I and Physiology Laboratory I	
BIO 411 & 411L	General Microbiology and General Microbiology Laboratory	
BIO 415	Neurobiology	
BIO 421	Biological Problems <sup>6</sup>	
BIO 435 & 435L	Microbial Ecology and Microbial Ecology Laboratory	
BIO 439	Analysis & Interpretation of Biological Data	
BIO 440 & 440L	Cell Biology and Cell Biology Laboratory	
BIO 441	Environmental Plant Biology	
BIO 442 & 442L	Developmental Biology and Developmental Biology Laboratory	
BIO 445	Evolution & Development	
BIO 450 & 450L	Comparative Animal Physiology and Comparative Animal Physiology Laboratory	
BIO 460	Introduction to Bioinformatics	
BIO 461 & 461L	Invertebrate Zoology and Invertebrate Zoology Laboratory	
BIO 462	Molecular Biology	
BIO 465	Disease Ecology	
BIO 470	Cancer Biology	
BIO 475 & 475L	Human Anatomy and Human Anatomy Laboratory	
BIO 480 & 480L	Principles of Microscopy and Principles of Microscopy Laboratory	
BIO 489	Mycology	

**Breadth**

ASI 150	Introduction to the University Experience	1
Social and Behavioral Sciences (PSY 101 satisfies CAP Social Science)		6
ANT 150 or PSY 101	Cultural Anthropology or Introductory Psychology	
Elective		
Total Hours to total at least		120

- MTH 168 - MTH 169 by placement.
- Other appropriate statistics courses may be substituted with the approval of the department chairperson.
- A minimum grade of C- is required.
- At least two courses with accompanying laboratory. One non-BIO science course approved for science majors may be included in this section with permission. BIO 499 requires the permission of the EVB Program Director.
- At least one course with accompanying laboratory. One non-BIO science course approved for science majors may be included in this section with permission. BIO 499 requires the permission of the EVB Program Director.
- By permission only. Qualifies only as a laboratory elective.



## Minor in Biology (BIO)

### Biology

BIO 151 & 151L	Concepts of Biology I: Cell & Molecular Biology and Concepts of Biology Laboratory I: Cell & Molecular Biology	4
BIO 152 & 152L	Concepts of Biology II: Evolution & Ecology and Concepts of Biology Laboratory II: Evolution & Ecology	4
BIO 310	Ecology	3
BIO 312	General Genetics	3
Select two BIO courses (300/400 level)		6
Total Hours		20

- Bachelor of Science, Biology
- Bachelor of Science, Environmental Biology

## Biology

### First Year

Fall	Hours Spring	Hours
ASI 150	1 BIO 152 & 152L	4
BIO 151 & 151L (satisfies CAP natural science)	4 CHM 124 & 124L	4
CHM 123 & 123L (satisfies CAP natural science)	4 MTH 149	3
MTH 148 (satisfies CAP mathematics)	3 REL 103, PHL 103, or HST 103 (CAP humanities)	3
ENG 100 (CAP writing seminar)	3 REL 103, PHL 103, or HST 103	3
REL 103, PHL 103, or HST 103 (CAP humanities)	3	3
	<b>18</b>	<b>17</b>

### Second Year

Fall	Hours Spring	Hours
BIO 299	1 BIO 310	3
BIO 312	3 CHM 314 & 314L	4
CHM 313 & 313L	4 PHY 202 & 202L	4
PHY 201 & 201L	4 CMM 100 (CAP communication)	3
ENG 200 (CAP writing seminar)	3 SSC 200 (CAP Social Science)	3
	<b>15</b>	<b>17</b>

### Third Year

Fall	Hours Spring	Hours
BIO Elective Biomed	3 BIO 420	1
BIO Elective Env/Eco w/lab	4 BIO Elective Env/Eco	3
Adv HST	3 BIO Elective Biomed w/lab	4
Adv PHL/REL (PEA/FT)	3 Inquiry	3
Arts	3 Integrative Social Science	3
	<b>16</b>	<b>17</b>

### Fourth Year

Fall	Hours Spring	Hours
BIO Elective w/lab	4 BIO Elective w/lab	4
BIO Elective Diversity and Social Justice	3 BIO Elective General Elective (optional)	3
Adv PHL/REL (PEA/FT)	3 General Elective (optional)	3
General Elective (optional)	3 General Elective (optional)	3
	<b>16</b>	<b>16</b>

Total credit hours: 132

## Environmental Biology

### First Year

Fall	Hours Spring	Hours
ASI 150	1 BIO 152 & 152L	4
BIO 151 & 151L (satisfies CAP Natural Science)	4 CHM 124 & 124L	4
CHM 123L & 123L (satisfies CPA Natural Science)	2 MTH 149	3
MTH 148 (satisfies CAP Mathematics)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
ENG 100 (CAP Writing Seminar)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3	3
	<b>16</b>	<b>17</b>

### Second Year

Fall	Hours Spring	Hours
BIO 310 & 310L	4 BIO 299	1
CHM 313 & 313L	4 BIO 312	3
PHY 201 & 201L	4 CHM 314 & 314L	4
ANT 150 or PSY 101	3 PHY 202 & 202L	4
ENG 200 (CAP Writing Seminar)	3 CMM 100 (CAP Communication)	3
	SSC 200 (CAP Social Science)	3
	<b>18</b>	<b>18</b>

### Third Year

Fall	Hours Spring	Hours
BIO 459	3 BIO Lab-Oriented Elective w/Lab	4
BIO Field Elective w/Lab	4 BIO 420	1
GEO 115 & 115L	4 GEO 116 & 116L	4
MTH 367	3 Adv PHL/REL (PEA/FT)	3

Arts	3 Adv HST	3
	17	15
<b>Fourth Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
BIO 479L	2 BIO 499	3
BIO Field Elective w/Lab	4 BIO Field Elective	3
BIO Lab-Oriented Elective	3 BIO Lab-Oriented Elective	3
GEO 307, 308, 309, or 450	3-4 Diversity and Social Justice	3
Adv PHL/REL (PEA/FT)	3 Integrative	3
Inquiry	3	
	<b>18-19</b>	<b>15</b>

Total credit hours: 134-135

## Courses

### BIO 101. Life, Environment, and Society. 3 Hours

An introductory course covering the study of life in all its forms, understanding how life interacts with the environment and the role of biological inquiry in society. Emphasis will be placed on discussing topical issues relevant to evaluating the critical role of the life sciences in society today. Supporting laboratory strongly recommended, but optional. No prerequisite. For non-science majors only.

### BIO 101L. Life, Environment, and Society Laboratory. 1 Hour

A hands-on approach to the study of life, understanding how life interacts with the environment, and the role of biological inquiry in society. Lab activities will stress an experiential, inquiry-based approach to topics relevant in today's society in an effort to increase student's abilities to critically evaluate modern science media. Laboratory topics are designed to run parallel to lecture topics. Recommended that the laboratory be taken concurrently with BIO 101 lecture. One two-hour laboratory per week. For non-science majors. Corequisite(s): BIO 101.

### BIO 151. Concepts of Biology I: Cell & Molecular Biology. 3 Hours

Study of the molecular and cellular organization of organisms. Topics also include development and genetics. Core biology course.

### BIO 151L. Concepts of Biology Laboratory: Cell & Molecular Biology. 1 Hour

An introduction to biological laboratory procedures and instrumentation through a series of observational and experimental exercises at the cellular and molecular level. Core biology course. Corequisite(s): BIO 151.

### BIO 152. Concepts of Biology II: Evolution & Ecology. 3 Hours

Study of evolution and ecology. Topics include phylogeny, systematics, and conservation. Core biology course. BIO 151 recommended.

### BIO 152L. Concepts of Biology Laboratory II: Evolution & Ecology. 1 Hour

An introduction to biological laboratory exercises at the organismal and the system level through a series of observational and experimental exercises in evolution, ecology and behavioral ecology. Core biology course. Corequisite(s): BIO 152.

### BIO 299. Biology Seminar. 1 Hour

Introduction to biological journals and abstracting materials. Practice in reviewing, abstracting, and presenting biological information, and career development. Core biology course. Biology and environmental biology majors only. Prerequisite(s): BIO 152.

### BIO 301. Evolution. 3 Hours

Theory and evidence of organic evolution, with emphasis on microevolutionary change and population genetics. Prerequisite(s): BIO 152.

### BIO 309. Comparative Anatomy of the Vertebrates. 3 Hours

Study of changes that have occurred in the vertebrate body with the passage of time, and analysis of their significance. Prerequisite(s): BIO 152.

### BIO 309L. Comparative Anatomy Laboratory. 1 Hour

Dissection and study of the anatomical structure of representative vertebrate animals. One three-hour laboratory per week. Corequisite(s): BIO 309.

### BIO 310. Ecology. 3 Hours

Interrelationship of plants, animals, and micro-organisms with the physical-chemical environment: nutrient cycles, energy flow, ecosystems, and factors affecting distribution and abundance of organisms. Core biology course. Prerequisite(s): BIO 152.

### BIO 310L. Ecology Laboratory. 1 Hour

Measurement of population, community, and environmental variables in terrestrial and aquatic systems. The lab is field-based using local ecological resources. One three-hour laboratory per week and weekend field trips. Corequisite(s): BIO 310.

### BIO 311. Introductory Entomology. 3 Hours

Classification, physiology, ecology, and impact of insects on society. Prerequisite(s): BIO 152.

### BIO 312. General Genetics. 3 Hours

Study of the principles of variation and heredity covering both Mendelian and molecular genetics. Core biology course. Prerequisite(s): BIO 152.

### BIO 312L. Genetics Laboratory. 1 Hour

Exploration of heredity using molecular genetic methods. One three-hour laboratory per week. Corequisite(s): BIO 312.

### BIO 314. Plant Biology. 3 Hours

Consideration of structure, function, reproduction, and inheritance as applicable in the plant patterns of life. Emphasis on the vascular plants. Prerequisite(s): BIO 152.

### BIO 314L. Plant Biology Laboratory. 1 Hour

Emphasis on generalized structure and function of plants. One three-hour laboratory per week. Corequisite(s): BIO 314.

### BIO 320. Marine Biology. 2 Hours

Introduction to the diversity of marine life including the physical-chemical environment. Prerequisite(s): Permission of instructor. . Corequisite(s): BIO 320L.

### BIO 320L. Marine Biology Laboratory. 2 Hours

Examination of marine organisms and processes. Laboratory work conducted on UD campus and at off-campus field sites in the southern United States or Hawaii. Prerequisite(s): Permission of instructor. Corequisite(s): BIO 320.

### BIO 330. Animal Behavior. 3 Hours

An evolutionary approach to the study of animal behavior, emphasizing both proximate mechanisms and functional explanations of the survival value of behavior. Prerequisite(s): BIO 152.

### BIO 330L. Animal Behavior Laboratory. 1 Hour

Analysis of animal behavior using various animal models. One three-hour laboratory per week and occasional Saturday field trips. Corequisite(s): BIO 330.

**BIO 340. Culture, Biodiversity & Resources Management. 3 Hours**

Field lecture course addressing cultural impacts on biodiversity and conciliatory demands for resource management to preserve the integrity of unique global environments. An experiential study of culture, regional geological morphology and weather-patterns, economic development, the freshwater-marine continuum, resource utilization, environmental law and management on conservation of unique biological habitats and organisms. Prerequisite(s): Permission of instructor. Corequisite(s): BIO 340L.

**BIO 340L. Culture, Biodiversity & Resources Management Laboratory. 1 Hour**

Lab field course on culture, biodiversity and balanced resource management to preserve integrity of unique global environments and compromises with economic development. Assessment of biodiversity in diverse biomes (e.g. elevational and rainforest-desert gradients, watersheds, coral reef systems) will be assessed with experimental design, data collection and analysis. May fulfill only one laboratory requirement for the Biology major. Prerequisite(s): Permission of instructor. Corequisite(s): BIO 340.

**BIO 350. Applied Microbiology. 3 Hours**

Fundamentals of applied and environmental microbiology for environmental scientists and engineers. Introduction to microorganisms and their role in bioenvironmental engineering and industrial processes. No science credit for biology majors. Prerequisite(s): BIO 152; CHM 314.

**BIO 350L. Applied Microbiology Laboratory. 1 Hour**

An introductory laboratory to acquaint students with basic microbiology laboratory techniques as applied to environmental pollution and industrial fermentations. One three-hour laboratory per week. Corequisite(s): BIO 350.

**BIO 359. Sustainability & the Biosphere. 3 Hours**

Study of the principles of sustainability. All areas of sustainability will be covered with emphasis on ecological facets of sustainability. Discussion of loss of habitat and biodiversity in the context of sustaining natural resources for future generations. Prerequisite(s): BIO 152 or SCI 230.

**BIO 360. Island Environmental Biology. 3 Hours**

Field lecture course on environments of Pacific Islands. Study of volcanic geology, island morphology/weather-patterns, native culture, economic development, freshwater-marine continuum and water resource utilization on unique biological habitats. Prerequisite(s): Permission of instructor. Corequisite(s): BIO 360L.

**BIO 360L. Island Environmental Biology Laboratory. 1-2 Hours**

Lab field course on Pacific Islands. Ecology of elevational and rainforest-desert gradients, volcanic mountain streams, watersheds, and coral systems with experimental design, data collection and analysis. Prerequisite(s): Permission of instructor. Corequisite(s): BIO 360.

**BIO 370. Conservation Biology. 3 Hours**

An ecosystem approach to the study of and threat to local, regional, and global biodiversity. Application of ecological principles of conservation of species and habitats. Prerequisite(s): BIO 152.

**BIO 395. Global Environmental Biology. 3 Hours**

Presentation of the biological and ecological principles needed for the critical discussion and evaluation of current global issues related to human impact on the environment. Ecological data on the current extinction crisis and sustainable solutions will be addressed. No credit toward a biology major or minor. Prerequisite(s): BIO 101, BIO 151 or SCI 230.

**BIO 402. Vertebrate Zoology. 3 Hours**

The morphology, physiology, ecology, and distribution of representative vertebrate groups. Prerequisite(s): BIO 310 or BIO 312.

**BIO 402L. Vertebrate Zoology Laboratory. 1 Hour**

Laboratory focused on the diversity, systematics and ecology of vertebrates. One three-hour laboratory per week. Corequisite(s): BIO 402.

**BIO 403. Physiology I. 3 Hours**

Physical-chemical examination of the physiological events occurring in a living system with emphasis on physiology of the cell, excretion, nerves, muscles, bone, blood, heart, circulation, and respiration. Prerequisite(s): BIO 152; CHM 314.

**BIO 403L. Physiology Laboratory I. 1 Hour**

Systematic approach to the acquisition and interpretation of information about the physiology of living systems. One three-hour laboratory per week. Corequisite(s): BIO 403.

**BIO 404. Physiology II. 3 Hours**

Integrated systems based examination of physiological processes in humans with a special emphasis on molecular mechanisms of pathophysiological conditions in humans and experimental animal systems. Prerequisite(s): BIO 403.

**BIO 407. Plant Diversity & Ecology. 3 Hours**

Lecture course addressing plant diversity and ecology. Course includes an overview of plant systematics and aspects of plant anatomy, population ecology, community ecology, ecosystem ecology, and global ecology. Prerequisite(s): BIO 310.

**BIO 407L. Plant Diversity & Ecology Laboratory. 1 Hour**

Field laboratory course addressing plant diversity and ecology. Includes a series of field labs focused on plant identification, followed by labs focused on quantitatively assessing plants, plant communities, and ecosystems. Labs will take place in a variety of natural areas. Corequisite(s): BIO 407.

**BIO 409. Ecological Restoration. 3 Hours**

Principles and practices of ecological restoration. The course presents the rationale and knowledge needed to understand, appreciate, plan and perform ecological restoration. Prerequisite(s): BIO 310.

**BIO 409L. Ecological Restoration Laboratory. 1 Hour**

Practical applications of the principles of ecological restoration to a variety of ecosystems. One three-hour laboratory per week. Corequisite(s): BIO 409.

**BIO 411. General Microbiology. 3 Hours**

Introductory course stressing the physiology, cultivation, and classification of microbial organisms; their role in medicine, agriculture, and industry. Prerequisite(s): BIO 152; CHM 313.

**BIO 411L. General Microbiology Laboratory. 1 Hour**

Lab exercises focusing on the basic techniques involved in the isolation and identification of bacteria, including assessment of biochemical activities, growth characteristics of bacteria, and the impact of the environment on microbial growth. One three-hour laboratory per week. Corequisite(s): BIO 411.

**BIO 412. Genetics Human Diseases. 3 Hours**

Study of the molecular genetics of inherited human diseases using a systems approach. Survey of inherited diseases linked to major organs and organ systems. Prerequisite(s): BIO 312; CHM 313.

**BIO 415. Neurobiology. 3 Hours**

Structure and function of the brain and nervous system. Emphasis on understanding cellular and molecular events within the nervous system using model organisms. Prerequisite(s): BIO 152; CHM 124.

**BIO 420. Seminar. 1 Hour**

Practice in development, presentation, and discussion of papers dealing with biological research problems, and career development. Core biology course. Prerequisite(s): BIO 299, BIO 310, BIO 312.

**BIO 421. Biological Problems. 1-2 Hours**

Laboratory research problems. Topics arranged with faculty advisors. Prerequisite(s): (BIO 310 or BIO 312); Permission of department chairperson.

**BIO 422. Biological Problems. 1-2 Hours**

Library research problems. Topics arranged with faculty advisors. Prerequisite(s): (BIO 310 or BIO 312); Permission of department chairperson.

**BIO 425. Parasitology. 3 Hours**

Introduction to the morphology, life history, and clinical significance of parasites and other symbionts. Prerequisite(s): BIO 310 or BIO 312.

**BIO 425L. Parasitology Laboratory. 1 Hour**

Recognition of common human parasites. Study of both living and preserved forms. One three-hour laboratory per week. Corequisite(s): BIO 425.

**BIO 427. Immunology. 3 Hours**

Discussions of antigens, antibodies, antigenicity, immunogenicity, and antigen-antibody reactions including hypersensitivity, immune tolerance, and transplants. Prerequisite(s): (BIO 403 or BIO 411 or BIO 440 or BIO 442) or CHM 420.

**BIO 435. Microbial Ecology. 3 Hours**

Study of the diversity and activity of microorganisms and the interrelationships between microorganisms and their environments with emphasis on aquatic ecosystems. Prerequisite(s): BIO 411; CHM 314.

**BIO 435L. Microbial Ecology Laboratory. 1 Hour**

Examination of the methods of isolation and enumeration of microorganisms and techniques for determining their activities in the field and laboratory. One three-hour laboratory per week. Corequisite(s): BIO 435.

**BIO 439. Analysis & Interpretation of Biological Data. 3 Hours**

Introducing the nature of some of the important types of data that are generated in biological research, the databases that warehouse such data, the principles involved in the analysis of such data, the use of appropriate software to analyze such data, and the biological interpretation of the results of analysis. Prerequisite(s): BIO 152.

**BIO 440. Cell Biology. 3 Hours**

Study of the function, structure, composition, heredity, and growth of cells. Analysis of cell concepts in biochemical terms. Prerequisite(s): BIO 152; CHM 314.

**BIO 440L. Cell Biology Laboratory. 1 Hour**

Experimental approaches to explore modern concepts in cell structure, function, and biology. One three-hour laboratory per week. Corequisite(s): BIO 440.

**BIO 441. Environmental Plant Biology. 3 Hours**

Study of the physiological basis for environmental effects on plant metabolism, structure, growth and development, including plant responses to elevated carbon dioxide, acid deposition, and water stress. Prerequisite(s): BIO 310 or BIO 312.

**BIO 442. Developmental Biology. 3 Hours**

Study of animal development, including morphological patterns of development, mechanisms of cellular differentiation, cell-cell interactions during development, and mechanisms of differential gene expression. Emphasis on understanding development at the cellular and molecular levels. Prerequisite(s): BIO 152; CHM 314.

**BIO 442L. Developmental Biology Laboratory. 1 Hour**

Exploration of the development of key model organisms from the morphological and molecular perspectives with an emphasis on basic developmental laboratory techniques. One three-hour laboratory per week. Corequisite(s): BIO 442.

**BIO 444. Plant Diversity. 3 Hours**

Broad survey of the major divisions of the plant kingdom; consideration of algae, fungi, bryophytes, vascular plant groups; includes generalized life histories, ecological and physiological characteristics, and evolutionary relationships. Prerequisite(s): BIO 310.

**BIO 444L. Plant Diversity Laboratory. 1 Hour**

Laboratory studies of the plant groups, including life cycles and evolutionary, physiological, and ecological adaptations. One three-hour laboratory per week. Corequisite(s): BIO 444.

**BIO 445. Evolution & Development. 3 Hours**

Molecular and population genetic examination of the evolution of animal form. Topics include comparative developmental biology, population genetics, and molecular evolution. Prerequisite(s): BIO 312.

**BIO 450. Comparative Animal Physiology. 3 Hours**

Organized on a function-system basis, course dealing with environment-organism interaction and with integrative systems of the principle phyla of animals. Prerequisite(s): (BIO 310 or BIO 312); CHM 124.

**BIO 450L. Comparative Animal Physiology Laboratory. 1 Hour**

Examination of physiological responses to the physical environment. Variations of the physical environment are examined in the field. Study of animals under controlled laboratory conditions with experimental design, data collection and analysis to assess physiological adaptations. One three-hour laboratory or field trip per week. Corequisite(s): BIO 450.

**BIO 452. Biology of Rivers & Lakes. 3 Hours**

The biological interrelationships of organisms in rivers, streams, lakes and ponds including biodiversity, ecological/evolutionary adaptations and structure of aquatic ecosystems. Prerequisite(s): BIO 310.

**BIO 452L. Biology of Rivers & Lakes Laboratory. 1 Hour**

Laboratory and field exercises emphasizing the biological, chemical and physical attributes of freshwater ecological systems. One three-hour laboratory or field trip per week. Corequisite(s): BIO 452.

**BIO 459. Environmental Ecology. 3 Hours**

The application of current ecological knowledge and principles toward the study of human impact on the environment. Emphasis on ecosystem dynamics, applied ecology, disturbance ecology, and approaches to solving global environmental problems. Prerequisite(s): BIO 310.

**BIO 459L. Environmental Ecology Laboratory. 1 Hour**

Analytical approach to studying applied ecology and human impact on the environment. Emphasis on laboratory and field approaches to solving environmental problems through the use of ecological principles. One three-hour laboratory per week. Corequisite(s): BIO 459.

**BIO 460. Introduction to Bioinformatics. 3 Hours**

This course introduces the concepts involved in bioinformatics, using the appropriate material from the disciplines of biology, chemistry and computer science, among others. Prerequisite(s): BIO 152.



**BIO 461. Invertebrate Zoology. 3 Hours**

Survey of the structure, activities, life histories, and relationships of the invertebrate animals, with some emphasis on their origin and development. Prerequisite(s): BIO 310 or BIO 312.

**BIO 461L. Invertebrate Zoology Laboratory. 1 Hour**

Examination of the structure and function of the major invertebrate phyla. Survey of representative animals with an emphasis on observational skills for analysis of the structural adaptations of live animals. One three-hour laboratory per week. Corequisite(s): BIO 461.

**BIO 462. Molecular Biology. 3 Hours**

Analysis of the nature of the gene and gene action. Particular attention to genetic regulation and to recent advances in molecular genetics. Prerequisite(s): BIO 312; CHM 314.

**BIO 465. Disease Ecology. 3 Hours**

Examination of ecological factors affecting the emergence and dynamics of infectious diseases of humans and wildlife. History and overview of how diseases are often a product of populations, communities, ecosystems, and global systems. Includes an introduction to epidemiology and current molecular and geographic information system techniques used to study these integrated systems. Prerequisite(s): (BIO 310, BIO 411) or permission of department chairperson or instructor.

**BIO 466. Biology of Infectious Disease. 3 Hours**

The nature of infectious diseases, host-parasite relationships in resistance and infection, defense mechanism (antigen-antibody response); survey of the bacteria causing disease in humans. Prerequisite(s): BIO 411.

**BIO 470. Cancer Biology. 3 Hours**

Study of growth patterns and causes of cancer at the cellular and molecular levels. Discussion of the hereditary and environmental factors that contribute to the development of the disease in cancer patients. Description of the research being conducted to understand and cure the disease. Prerequisite(s): BIO 403 or BIO 440.

**BIO 475. Human Anatomy. 3 Hours**

Study of the fundamental principles of human gross anatomy with emphasis on all organ systems. Prerequisite(s): BIO 152; CHM 314.

**BIO 475L. Human Anatomy Laboratory. 1 Hour**

Study of human gross anatomy emphasizing all organs systems using computer-assisted dissection, anatomical human models and occasional dissection of nonhuman cadaver organs. One three-hour laboratory per week. Corequisite(s): BIO 475.

**BIO 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**BIO 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**BIO 479L. Environmental Instrumentation Laboratory. 2 Hours**

The understanding and use of field- and laboratory-based equipment to study current environmental issues. Emphasis on team-centered approaches to investigating environmental problems. Same as GEO 479L. One five-hour laboratory or field trip per week. Prerequisite(s): BIO 310; GEO 116.

**BIO 480. Principles of Microscopy. 3 Hours**

Focus on basic principles and theory of light and electron microscopy, and how these techniques address fundamental questions in science. Prerequisite(s): BIO 152.

**BIO 480L. Principles of Microscopy Laboratory. 1 Hour**

Application and practice of light and electron microscopy. One three-hour laboratory per week. Corequisite(s): BIO 480.

**BIO 489. Mycology. 3 Hours**

Introductory course stressing the interrelationship between fungi and the rest of the biological world. Emphasis on the basic biology and ecology of fungi, decomposition, species interactions, plant pathology and medical mycology. Prerequisite(s): BIO 152.

**BIO 496. Special Topics in Biology. 1-3 Hours**

Lecture course addressing advanced topics in biology. Topics are variable depending on faculty teaching the course and the course aims. Students should consult the class schedule. May be repeated. Prerequisite(s): BIO 151, BIO 152.

**BIO 499. Environmental Biology Internship. 3 Hours**

Majors will have the opportunity to obtain valuable training and experience under the mentorship of established scientists and professionals. Emphasis on approaches to solving environmental problems including such research areas as bioremediation, risk assessment, and ecological restoration. May be repeated up to six semester hours. No science credit for biology majors. Prerequisite(s): Permission of Environmental Biology Program Coordinator.

## Chemistry

Majors:

- Bachelor of Arts, Chemistry
- Bachelor of Science, Biochemistry
- Bachelor of Science, Chemistry
- Bachelor of Science, Medicinal-Pharmaceutical Chemistry

Minor:

- Chemistry

The B.S. in Chemistry (BS-CHM) program is approved by the American Chemical Society for the training of professional chemists, and provides students with the opportunity to perform an original research project under the direction of a faculty mentor. BS-CHM majors electing to perform research typically select their faculty mentor and project during the first term of their junior year. The research project may be conducted over the entire senior year, but is more commonly conducted over a ten-week period during the summer following the junior year. In either case, the project culminates in the senior year with enrollment in CHM 498, the submission of an acceptable thesis, and the presentation of a seminar in CHM 497. Additional research work to a maximum total of six semester hours may be elected provided the work extends beyond two semesters.

The B.S. in Biochemistry (BCM) program prepares students for careers in the biochemical and life sciences. BCM majors may elect to conduct an original research project in biochemistry or a related chemical sub-



discipline. In all other respects these biochemically-related research projects are identical to those detailed for the BS-CHM program above.

The B.S. in Medicinal-Pharmaceutical Chemistry (MCM) program is designed for students pursuing careers in medicine, pharmacy or forensic chemistry, and provides a focused preparation in the analysis and synthesis of compounds of pharmacological significance. MCM majors may elect to conduct an original research project, typically in synthetic or analytical chemistry. In all other respects these research projects are identical to those detailed for the BS-CHM program above.

The B.A. in Chemistry (BA-CHM) program prepares students for a wide range of interdisciplinary professions, and consists of a curriculum in which the traditional B.S. curriculum has been modified, most notably in mathematics, physics, and advanced chemistry. The BA-CHM program is accordingly somewhat flexible, and affords students a wide selection of courses in the humanities and social sciences. BA-CHM majors are free to choose courses which prepare them for careers in medicine, dentistry, optometry, veterinary medicine, biochemistry, education, law, and other professions which require a science background.

A minor in chemistry consists of twenty semester hours. Typically these consist of 8 credit hours of general chemistry (CHM 123, 123L, 124, 124L), 8 credit hours of organic chemistry (CHM 313, 313L, 314, 314L), 3 credit hours of physical chemistry (CHM 302, 303 or 304), and one credit hour in basic molecular spectroscopy (CHM 317). Of these, the physical chemistry course is the only requirement.

## Faculty

David Johnson, Chairperson

Professors Emeriti: Fratini, Keil, Knachel, Morrow, Singer

Professor: S. Swavey

Associate Professors: Benin, Church, Crosson, Johnson, Lopper, Masthay

Assistant Professors: Erb, Kovacs, Mammana

Lecturers: Trick, Turner

Lab Instructors: DeBeer, Eckerle, Gunawan, Hils, Piepgrass, R. Swavey

## Bachelor of Arts, Chemistry (CHM) minimum 124 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	

Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- 1 Completed with ASI 110 and ASI 120.
- 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- 3 Completed with ENG 200H or ASI 120.
- 4 Must include two different disciplines and accompanying lab.

### Liberal Studies Curriculum

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics (Satisfies CAP Mathematics)	9
MTH 148 Introductory Calculus I & MTH 149 and Introductory Calculus II	
MTH 367 Statistical Methods I	
Natural Sciences (Applies to CAP Natural Science)	8
PHY 201 College Physics I & 201L and College Physics Laboratory I	
PHY 202 General Physics & 202L and General Physics Laboratory	
Social Sciences (Includes CAP Social Science)	12
<b>Major Requirements <sup>1</sup></b>	<b>36</b>

(CHM 123 applies to CAP Natural Science)	
CHM 123 General Chemistry & 123L and General Chemistry Laboratory	4
CHM 124 General Chemistry & 124L and General Chemistry Laboratory	4
CHM 201 Quantitative Analysis & 201L and Quantitative Analysis Laboratory	4
CHM 302 Physical Chemistry	3-6
or CHM 303 Physical Chemistry & CHM 304 and Physical Chemistry	
CHM 313 Organic Chemistry & 313L and Organic Chemistry Laboratory	4
CHM 314 Organic Chemistry & 314L and Organic Chemistry Laboratory	4
CHM 496 Professional Practices Seminar (Satisfies CAP Major Capstone)	0
Select four courses from: <sup>2</sup>	10-13
CHM 317 Spectroscopic Identification of Organic Compounds	
CHM 341 Environmental Chemistry	
CHM 404 Special Topics in Physical Chemistry	
CHM 412 Intermediate Organic Chemistry	
CHM 415 Analytical Chemistry	
CHM 415L Analytical Chemistry Laboratory	

CHM 417	Inorganic Chemistry	
CHM 418L	Inorganic Chemistry Laboratory	
CHM 420	Biochemistry	
CHM 426	Biosynthetic Organic Chemistry	
CHM 427	Medicinal Chemistry	
CHM 451	General Biochemistry I	
CHM 452	General Biochemistry II	
CHM 462L	Biochemistry Laboratory	
CHM 477	Honors Thesis Project	3
CHM 478	Honors Thesis Project	3
CHM 497 & CHM 498	Research Seminar and Research & Thesis	
CHM 499	Research & Thesis	

**Breadth**

ASI 150	Introduction to the University Experience	1
Total Hours to total at least		124

- Advanced placement is permitted.
- May substitute two upper level courses from other science departments with permission of chairperson.

## Bachelor of Science, Biochemistry (BCM) minimum 120 hours

**Common Academic Program (CAP)**

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

- Completed with ASI 110 and ASI 120.
- Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- Completed with ENG 200H or ASI 120.
- Must include two different disciplines and accompanying lab.

**Science Breadth Requirements**

CPS 132	Computer Programming for Engineering & Science	3
MTH 168	Analytic Geometry & Calculus I (Satisfies CAP Mathematics)	4
MTH 169	Analytic Geometry & Calculus II	4
MTH 218	Analytic Geometry & Calculus III	4
PHY 206	General Physics I - Mechanics	3
PHY 207	General Physics II - Electricity & Magnetism	3
PHY 201L	College Physics Laboratory I	1
Select courses from:		10

BIO 312	General Genetics	
BIO 314	Plant Biology	
BIO 403	Physiology I	
BIO 404	Physiology II	
BIO 411	General Microbiology	
BIO 427	Immunology	
BIO 440	Cell Biology	
BIO 462	Molecular Biology	
BIO 466	Biology of Infectious Disease	
CHM 404	Special Topics in Physical Chemistry	
CHM 412	Intermediate Organic Chemistry	
CHM 415 & 415L	Analytical Chemistry and Analytical Chemistry Laboratory	
CHM 417	Inorganic Chemistry	
CHM 418L	Inorganic Chemistry Laboratory	
CHM 426	Biosynthetic Organic Chemistry	
CHM 427	Medicinal Chemistry	
CHM 497 & CHM 498	Research Seminar and Research & Thesis	
CHM 499	Research & Thesis	

**Major Requirements <sup>1</sup>** 45

Satisfies CAP Natural Science

## Year 1

BIO 151 & 151L	Concepts of Biology I: Cell & Molecular Biology and Concepts of Biology Laboratory I: Cell & Molecular Biology	4
BIO 152	Concepts of Biology II: Evolution & Ecology	3
CHM 123 & 123L	General Chemistry and General Chemistry Laboratory	4
CHM 124 & 124L	General Chemistry and General Chemistry Laboratory	4

## Year 2

CHM 201 & 201L	Quantitative Analysis and Quantitative Analysis Laboratory	4
CHM 313 & 313L	Organic Chemistry and Organic Chemistry Laboratory	4
CHM 314 & 314L	Organic Chemistry and Organic Chemistry Laboratory	4

BIO Elective and Laboratory		4
Year 3		
CHM 303 & 303L	Physical Chemistry and Physical Chemistry Laboratory	4
CHM 304	Physical Chemistry	3
CHM 451	General Biochemistry I	3
CHM 452	General Biochemistry II	3
CHM 462L	Biochemistry Laboratory	1
CHM 495	Introduction to Research Seminar	0
Year 4		
CHM 496	Professional Practices Seminar (Satisfies CAP Major Capstone)	0

**Breadth**

ASI 150	Introduction to the University Experience	1
Foreign Language		6-8
Social and Behavioral Sciences (Includes CAP Social Science)		6
Total Hours to total at least		120

<sup>1</sup> Advanced placement is permitted.

## Bachelor of Science, Chemistry (CHM) minimum 120 hours

**Common Academic Program (CAP)**

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

- Completed with ASI 110 and ASI 120.
- Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- Completed with ENG 200H or ASI 120.
- Must include two different disciplines and accompanying lab.

**Science Breadth Requirements**

Mathematics, Computer Sciences <sup>1</sup>		15
CPS 132	Computer Programming for Engineering & Science	
MTH 168	Analytic Geometry & Calculus I (Satisfies CAP Mathematics)	
MTH 169	Analytic Geometry & Calculus II	
MTH 218	Analytic Geometry & Calculus III	
PHY 206	General Physics I - Mechanics (Applies to CAP Natural Science)	3
PHY 207	General Physics II - Electricity & Magnetism	3
PHY 208	General Physics III - Mechanics of Waves	3
PHY 210L	General Physics Laboratory I	1
PHY 211L	General Physics Laboratory II	1

**Major Requirements <sup>2</sup>**

Year 1		
CHM 123 & 123L	General Chemistry and General Chemistry Laboratory (Applies to CAP Natural Science)	4
CHM 124 & 124L	General Chemistry and General Chemistry Laboratory	4
Year 2		
CHM 201 & 201L	Quantitative Analysis and Quantitative Analysis Laboratory	4
CHM 313 & 313L	Organic Chemistry and Organic Chemistry Laboratory	4
CHM 314 & 314L	Organic Chemistry and Organic Chemistry Laboratory	4
Year 3		
CHM 303 & 303L	Physical Chemistry and Physical Chemistry Laboratory	4
CHM 304 & 304L	Physical Chemistry and Physical Chemistry Laboratory	4
CHM 317	Spectroscopic Identification of Organic Compounds	1
CHM 417	Inorganic Chemistry	3
CHM 418L	Inorganic Chemistry Laboratory	1
CHM 495	Introduction to Research Seminar	0
Year 4		
CHM 415 & 415L	Analytical Chemistry and Analytical Chemistry Laboratory	4
CHM 420 or CHM 451 & CHM 452	Biochemistry General Biochemistry I and General Biochemistry II	3
CHM 496	Professional Practices Seminar (Satisfies CAP Major Capstone)	0
Select three courses from: <sup>3</sup>		9
CHM 404	Special Topics in Physical Chemistry	
CHM 412	Intermediate Organic Chemistry	
CHM 426	Biosynthetic Organic Chemistry	

CHM 427	Medicinal Chemistry	
CHM 462L	Biochemistry Laboratory	
CHM 477H	Course CHM 477H Not Found	3
CHM 478H	Course CHM 478H Not Found	3
CHM 497 & CHM 498	Research Seminar and Research & Thesis	
CHM 499	Research & Thesis	

**Breadth**

ASI 150	Introduction to the University Experience	1
Foreign Language		6-8
Social and Behavioral Sciences (Includes CAP Social Science)		6
Total Hours to total at least		120

<sup>1</sup> Should be completed during the first two years.

<sup>2</sup> Advanced placement is permitted.

<sup>3</sup> May substitute one approved science course from another department.

## Bachelor of Science, Medicinal-Pharmaceutical Chemistry (MCM) minimum 120 hours

**Common Academic Program (CAP)**

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

<sup>1</sup> Completed with ASI 110 and ASI 120.

<sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.

<sup>3</sup> Completed with ENG 200H or ASI 120.

<sup>4</sup> Must include two different disciplines and accompanying lab.

**Science Breadth Requirements**

Satisfies CAP Mathematics and CAP Natural Science

BIO 151 & 151L	Concepts of Biology I: Cell & Molecular Biology and Concepts of Biology Laboratory I: Cell & Molecular Biology	4
BIO 152 & 152L	Concepts of Biology II: Evolution & Ecology and Concepts of Biology Laboratory II: Evolution & Ecology	4
MTH 148 & MTH 149	Introductory Calculus I and Introductory Calculus II	6
MTH 367	Statistical Methods I	3
PHY 201 & 201L	College Physics I and College Physics Laboratory I	4
PHY 202 & 202L	General Physics and General Physics Laboratory	4

**Major Requirements** <sup>2, 3</sup> 53

Year 1		
CHM 123 & 123L	General Chemistry and General Chemistry Laboratory	4
CHM 124 & 124L	General Chemistry and General Chemistry Laboratory	4
Year 2		
CHM 201 & 201L	Quantitative Analysis and Quantitative Analysis Laboratory	4
CHM 313 & 313L	Organic Chemistry and Organic Chemistry Laboratory	4
CHM 314 & 314L	Organic Chemistry and Organic Chemistry Laboratory	4
Year 3		
CHM 302 & 302L	Physical Chemistry and Physical Chemistry Laboratory <sup>1</sup>	4
CHM 317	Spectroscopic Identification of Organic Compounds	1
CHM 420	Biochemistry <sup>4</sup>	3
CHM 462L	Biochemistry Laboratory	1
CHM 495	Introduction to Research Seminar	0
Year 4		
CHM 319L	Advanced Organic Synthesis Laboratory	1
CHM 426	Biosynthetic Organic Chemistry	3
CHM 427	Medicinal Chemistry	3
CHM 454	Rational Drug Design	3
CHM 463L	Bioanalytical Chemistry Laboratory	1
CHM 496	Professional Practices Seminar (Satisfies CAP Major Capstone)	0

**Science Requirements** 13

Select six semester hours from: <sup>5</sup>

CHM 412	Intermediate Organic Chemistry	
CHM 415 & 415L	Analytical Chemistry and Analytical Chemistry Laboratory	
CHM 417	Inorganic Chemistry	
CHM 418L	Inorganic Chemistry Laboratory	

CHM 497 & CHM 498	Research Seminar and Research & Thesis
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Select two lecture courses and one laboratory from:

BIO 403 & 403L	Physiology I and Physiology Laboratory I
BIO 411 & 411L	General Microbiology and General Microbiology Laboratory
BIO 440 & 440L	Cell Biology and Cell Biology Laboratory

### Breadth<sup>6</sup>

ASI 150	Introduction to the University Experience	1
Social and Behavioral Sciences (Includes CAP Social Science)		6
Total Hours to total at least		120

- Substitution of more advanced courses is possible upon consultation with the Department of Chemistry chairperson.
- Consult General Requirements for all Bachelor of Science programs and the Common Academic Program requirements.
- Advanced placement is permitted.
- Biochemistry courses CHM 451 and CHM 452 may be substituted, with CHM 452 counting as a general elective.
- Chemistry graduate courses or advanced electives from other departments may be selected with the permission of the Department of Chemistry chairperson.
- If composition requirement is waived, the student should seek the English elective. Advanced writing courses are recommended.

## Minor in Chemistry (CHM)

### Chemistry

CHM 123 & 123L	General Chemistry and General Chemistry Laboratory	4
CHM 124 & 124L	General Chemistry and General Chemistry Laboratory	4
CHM 302 or CHM 303	Physical Chemistry Physical Chemistry	3

Select three CHM courses (300/400 level)<sup>1</sup> 9

- In consultation with the chairperson.

- Bachelor of Arts, Chemistry
- Bachelor of Science, Medicinal-Pharmaceutical Chemistry
- Bachelor of Science, Biochemistry
- Bachelor of Science, Chemistry

## Bachelor of Arts, Chemistry

First Year	Hours	Spring	Hours
<b>Fall</b>			
ASI 150	1	CHM 124 & 124L	4
CHM 123 & 123L	4	MTH 149	3
MTH 148	3	ENG 100 (CAP Writing Seminar)	3

REL 103, PHL 103, or HST 103 (CAP Humanities)	3	REL 103, PHL 103, or HST 103 (CAP Humanities)	3
REL 103, PHL 103, or HST 103 (CAP Humanities) Intro Social Science	3	Laugage 3	4
	17		17

### Second Year

Fall	Hours	Spring	Hours
CHM 313 & 313L	4	CHM 201 & 201L	4
MTH 367	3	CHM 314 & 314L	4
ENG 200 (CAP Writing Seminar)	3	CMM 100 (CAP Communication)	3
Language Intro Social Science	4	Language Literature	3
	14		17

### Third Year

Fall	Hours	Spring	Hours
CHM 302	3	PHY 202	3
PHY 201 & 201L	4	PHY 202L	1
CHM elective	3	CHM elective	3
Social Science (upper level)	3	Arts	3
Adv HST	3	SSC 200 (CAP Social Science)	3
		Adv PHL/REL (PEA/FT)	3
	16		16

### Fourth Year

Fall	Hours	Spring	Hours
CHM 496 (capstone)	0	CHM elective	3
CHM elective	3	Integrative	3
Adv PHL/REL (PEA/FT)	3	Diversity and Social Justice	3
Inquiry	3	General Elective (optional)	3
General Elective	3	General Elective (optional)	3
General Elective	3		
	15		15

Total credit hours: 127

## Bachelor of Science, Medicinal-Pharmaceutical Chemistry

### First Year

Fall	Hours	Spring	Hours
ASI 150	1	CHM 124 & 124L	4
CHM 123 & 123L	4	BIO 152 & 152L	4
BIO 151 & 151L	4	MTH 149	3
MTH 148	3	REL 103, PHL 103, or HST 103 (CAP Humanities)	3



ENG 100 (CAP Writing Seminar)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3	MTH 168	4 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
	<b>15</b>	<b>17</b>		<b>16</b>	<b>17</b>
<b>Second Year</b>			<b>Second Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
CHM 201 & 201L	4 PHY 202 & 202L	4	CHM 201 & 201L	4 CHM 314 & 314L	4
CHM 313 & 313L	4 MTH 367	3	CHM 313 & 313L	4 CPS 132	3
PHY 201 & 201L	4 CHM 314 & 314L	4	MTH 218	4 ENG 200 (CAP Writing Seminar)	3
REL 103, PHL 103, or HST 103 (CAP Humanities)	3 ENG 200 (CAP Writing Seminar)	3	REL 103, PHL 103, or HST 103 (CAP Humanities)	3 CMM 100 (CAP Communication)	3
Social Science	3 CMM 100 (CAP Communication)	3		BIO elective w/lab	4
	<b>18</b>	<b>17</b>		<b>15</b>	<b>17</b>
<b>Third Year</b>			<b>Third Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
CHM 302 & CHM 303L	4 CHM 420 & CHM 462L	4	CHM 303 & 303L	4 CHM 304	3
CHM 317	1 CHM 495	0	CHM 451	3 CHM 452 & CHM 462L	4
CHM elective	3 CHM elective	3	PHY 206 & PHY 210L	4 CHM 495	0
BIO elective and lab	4 BIO elective	3	Foreign Language	4 PHY 207	3
Adv HST	3 Arts SSC 200 (CAP Social Science)	3	Arts	3 SSC 200 (CAP Social Science)	3
	<b>15</b>	<b>16</b>		Foreign language	4
<b>Fourth Year</b>			<b>Fourth Year</b>	<b>Hours Spring</b>	<b>Hours</b>
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
CHM 426	3 CHM 454	3	CHM 496 (capstone)	0 CHM 497	0
CHM 319L	1 CHM 463L	1	BIO/CHM elective w/lab	4 BIO/CHM elective	3
CHM 427	3 Adv PHL/REL (PEA/FT)	3	BIO/CHM elective	3 Adv PHL/REL (PEA/FT)	3
CHM 496 (capstone)	0 Integrative	3	Adv PHL/REL (PEA/FT)	3 Integrative	3
Adv PHL/REL (PEA/FT)	3 Diversity and Social Justice	3	Social Science	3 Adv HST	3
Inquiry	3 General Elective (Optional)	3	Inquiry	3 Diversity and Social Justice	3
General Elective (optional)	3				
	<b>16</b>	<b>16</b>		<b>16</b>	<b>15</b>

Total credit hours: 130

## Bachelor of Science, Biochemistry

<b>First Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
ASI 150	1 CHM 124 & 124L	4
CHM 123 & 123L	4 BIO 152	3
BIO 151 & 151L	4 MTH 169	4
ENG 100 (CAP Writing Seminar)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3

Total credit hours: 131

## Bachelor of Science, Chemistry

<b>First Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
ASI 150	1 CHM 124 & 124L	4
CHM 123 & 123L	4 MTH 169	4
MTH 168	4 CMM 100	3
ENG 100 (CAP Writing Seminar)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
REL 103, PHL 103, or HST 103 (CAP Humanities)	3 Foreign Language	4

REL 103, PHL 103, or HST 103 (CAP Humanities)	3		
	<b>18</b>		<b>18</b>
<b>Second Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
CHM 201 & 201L	4	CHM 314 & 314L	4
CHM 313 & 313L	4	CPS 132	3
MTH 218	4	PHY 206 & PHY 210L	4
Foreign Language	4	ENG 200 (CAP Writing Seminar)	3
		Adv PHL/REL (PEA/FT)	3
	<b>16</b>		<b>17</b>
<b>Third Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
CHM 303 & 303L	4	CHM 304 & 304L	4
PHY 207 & PHY 211L	4	CHM 317	1
CHM elective	3	CHM 417 & CHM 418L	4
Arts	3	CHM 495	0
Social Science (CAP)	3	SSC 200 (CAP Social Science)	3
		Adv HST	3
	<b>17</b>		<b>15</b>
<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
CHM 496	0	CHM 420	3
CHM 415 & 415L	4	CHM 497	0
CHM elective	3	CHM elective	3
Adv PHL/REL (PEA/FT)	3	Integrative	3
Inquiry	3	Diversity and Social Justice	3
General Elective (optional)	3	General Elective (Optional)	3
	<b>16</b>		<b>15</b>

Total credit hours: 132

## Courses

### CHM 115. College Preparatory Chemistry. 3 Hours

One-term course for students desiring to enter a science or engineering program but whose background is insufficient for CHM 123 and CHM 124. Unacceptable for credit toward chemistry requirements in any chemistry program.

### CHM 115L. College Preparatory Chemistry Laboratory. 1 Hour

Course to accompany CHM 115 or to be elected by students in CHM 200 who lack previous chemistry laboratory experience. One three-hour laboratory each week.

### CHM 123. General Chemistry. 3 Hours

Comprehensive treatment of the fundamentals of general chemistry. Prerequisite(s): One year of high school chemistry or equivalent.

### CHM 123L. General Chemistry Laboratory. 1 Hour

Laboratory course to complement CHM 123. One three-hour laboratory session each week. Corequisite(s): CHM 123.

### CHM 124. General Chemistry. 3 Hours

Comprehensive treatment of the fundamentals of general chemistry. Prerequisite(s): CHM 123.

### CHM 124L. General Chemistry Laboratory. 1 Hour

Laboratory course to complement CHM 124. One three-hour laboratory session each week. Prerequisite(s): CHM 123L Corequisite(s): CHM 124.

### CHM 200. Chemistry & Society. 3 Hours

Course for nonscience majors. The application of chemical principles to the examination of issues such as environmental quality, disease, hunger, synthetic materials, and law enforcement. Depending upon background and experience, a student needing a laboratory course may enroll in either CHM 115L or CHM 123L. Prerequisite(s): One year of high school chemistry or equivalent.

### CHM 201. Quantitative Analysis. 3 Hours

Application of the principles of chemical equilibrium to the theory and techniques of gravimetric, volumetric, spectrophotometric, and electroanalytical methods of chemical analysis. Prerequisite(s): CHM 124, CHM 124L.

### CHM 201L. Quantitative Analysis Laboratory. 1 Hour

Course to accompany CHM 201. One three-hour laboratory period each week.

### CHM 234. Energy Resources. 3 Hours

The chemical and geological aspects of formation, production, and benefits/costs (including environmental impacts) of energy derived from fossil fuels (coal and hydrocarbons), biofuels (e.g., ethanol production), radioactive materials (nuclear power), and renewable sources (e.g., geothermal, hydro, wind, and solar power). Prerequisite(s): CHM 123, CHM 124. Corequisite(s): GEO 208.

### CHM 302. Physical Chemistry. 3 Hours

Essential elements of thermodynamics, chemical kinetics, equilibria, and electrochemistry for those with a primary interest in the life sciences. For B.A. chemistry majors and premedical, pre dental, and biology majors. Prerequisite(s): CHM 124.

### CHM 302L. Physical Chemistry Laboratory. 1 Hour

Course to accompany CHM 302. One three-hour laboratory each week. Prerequisite(s): CHM 201, CHM 201L. Corequisite(s): CHM 302.

### CHM 303. Physical Chemistry. 3 Hours

Fundamentals of thermodynamics, chemical kinetics, electrochemistry, and spectroscopy with a mathematics format. For B.S. chemistry and biochemistry majors and chemical engineers. Prerequisite(s): CHM 201 or equivalent. Corequisite(s): MTH 218.

### CHM 303L. Physical Chemistry Laboratory. 1 Hour

Course to accompany CHM 303. One three-hour laboratory each week. Prerequisite(s): MTH 218.

### CHM 304. Physical Chemistry. 3 Hours

Fundamentals of thermodynamics, chemical kinetics, electrochemistry, and spectroscopy with a mathematics format. For B.S. chemistry and biochemistry majors and chemical engineers.

### CHM 304L. Physical Chemistry Laboratory. 1 Hour

Course to accompany CHM 304. One three-hour laboratory each week. Corequisite(s): MTH 218.

### CHM 313. Organic Chemistry. 3 Hours

Major topics in organic chemistry including synthesis, mechanisms, stereochemistry, and spectroscopy. Required of all chemistry majors and students in the life sciences. Prerequisite(s): CHM 124.

**CHM 313L. Organic Chemistry Laboratory. 1 Hour**

Common separation, purification, and analytical techniques including chromatography and spectroscopy. One three-hour laboratory each week. Corequisite(s): CHM 313.

**CHM 314. Organic Chemistry. 3 Hours**

Major topics in organic chemistry including synthesis, mechanisms, stereochemistry, and spectroscopy. Required of all chemistry majors and students in the life sciences. Prerequisite(s): CHM 313.

**CHM 314L. Organic Chemistry Laboratory. 1 Hour**

Synthesis and characterization of organic materials utilizing skills from CHM 313L. One three-hour laboratory each week. Prerequisite(s): CHM 313L. Corequisite(s): CHM 314.

**CHM 317. Spectroscopic Identification of Organic Compounds. 1 Hour**

The use of nuclear magnetic resonance, infrared, and mass spectrometry in elucidating structures. Emphasis on interpretation and integration of spectral data in problem solving. Prerequisite(s): (CHM 314, CHM 314L) or equivalent.

**CHM 319L. Advanced Organic Synthesis Laboratory. 1 Hour**

Preparation of organic compounds by single and multi-step synthetic sequences. Basic techniques in synthesis including use of organometallics, inert atmosphere, temperature control, extraction, vacuum distillation, column chromatography, recrystallization, and spectroscopic characterization methods. One four-hour laboratory each week. Prerequisite(s): CHM 314, CHM 314L.

**CHM 341. Environmental Chemistry. 3 Hours**

An introduction to the chemical processes in the environment. Topics include chemical equilibrium in aqueous solution, reaction mechanisms as applied to atmospheric chemistry, and analytical methods commonly applied to environmental samples. Prerequisite(s): CHM 314 or permission of instructor.

**CHM 341L. Environmental Chemistry Laboratory. 1 Hour**

Laboratory course to accompany CHM 341. Corequisite(s): CHM 341.

**CHM 404. Special Topics in Physical Chemistry. 3 Hours**

Thorough treatment of topics such as electrochemistry, macromolecules, photochemistry, or spectroscopy. May be repeated as topics change. Prerequisite(s): CHM 302 or CHM 303.

**CHM 412. Intermediate Organic Chemistry. 3 Hours**

Modern theory and practice of organic chemistry. May include structure-reactivity relationships, reaction mechanism, and synthetic topics not normally treated in introductory courses. Prerequisite(s): CHM 302 or equivalent; CHM 313, CHM 314; senior standing.

**CHM 415. Analytical Chemistry. 2 Hours**

Chemical analysis based on modern instrumentation. Chromatographic, electrochemical, and spectroscopic methods. Prerequisite(s): CHM 201, CHM 201L; (CHM 302 or CHM 304).

**CHM 415L. Analytical Chemistry Laboratory. 2 Hours**

Course to accompany CHM 415. Two three-hour laboratory sessions each week. Prerequisite(s): CHM 201L; CHM 302 or equivalent.

**CHM 417. Inorganic Chemistry. 3 Hours**

An advanced course in modern inorganic chemistry. Atomic structure, principles of bonding and structure, acid-base chemistry, periodicity, coordination compounds, nonaqueous solvents, electrochemistry, molecular symmetry, organometallic compounds, and the chemistry of selected representative elements. Prerequisite(s): CHM 314. Corequisite(s): CHM 302 or CHM 304.

**CHM 418L. Inorganic Chemistry Laboratory. 1 Hour**

Laboratory course dealing with the synthesis and characterization of inorganic and organometallic compounds. Topics include vacuum and inert atmosphere techniques, separation and purification, spectroscopic characterization, X-ray diffraction, magnetic moment, and conductance measurements. Prerequisite(s): CHM 201L, CHM 314L. Corequisite(s): CHM 417.

**CHM 420. Biochemistry. 3 Hours**

The fundamental aspects of the chemistry and biochemistry of carbohydrates, lipids, proteins, and nucleic acids. Enzymology, protein purification, bioenergetics, metabolism of carbohydrates, lipids, amino acids, nucleotides and nucleic acids, elementary molecular biology, and control processes are described. Acceptable preparation for medical school. Prerequisite(s): CHM 314.

**CHM 426. Biosynthetic Organic Chemistry. 3 Hours**

Mechanistic fundamentals of the biosynthesis and transformation of organic natural products, with special emphasis on medicinal compounds, toxins, pheromones and other secondary metabolite structures. Prerequisite(s): (CHM 314, CHM 314L) or equivalent.

**CHM 427. Medicinal Chemistry. 3 Hours**

The chemical mechanisms of action of the major drug classes will be surveyed with particular emphasis on the facets of organic chemistry that control drug-receptor interactions, metabolism and mechanisms of toxicity and resistance. First term. Prerequisite(s): CHM 314; (CHM 420 or CHM 451).

**CHM 450. Advanced Organic Synthesis. 3 Hours**

Fundamentals of synthesis and transformations of organic compounds, with emphasis on mechanisms; pericyclic reactions; small and medium ring synthesis; chemoselectivity, regioselectivity, stereoselectivity, retrosynthesis, functional group transformations, carbon-carbon bond forming reactions, oxidations, reductions and protecting groups. Prerequisite: (CHM 314, CHM 314L) or equivalent.

**CHM 451. General Biochemistry I. 3 Hours**

Discussion of the chemistry and biochemistry of carbohydrates, amino acids, proteins, and nucleic acids, including health-science and methodologic aspects. Descriptions of enzymology, protein purification, and carbohydrate metabolism related to such topics as bioenergetics, membranes, and disease processes. Recommended for students desiring entry into graduate and professional schools. Prerequisite(s): CHM 201, CHM 314.

**CHM 452. General Biochemistry II. 3 Hours**

Discussion of selected topics in bioenergetics, and metabolism of lipids, amino acids, porphyrins, nucleic acids, and proteins. Current aspects of nutrition, biochemical genetics, endocrinology, regulation, and genetic engineering addressed and related to health-science topics as time permits. Suitable preparation for medical school. Prerequisite(s): CHM 451.

**CHM 454. Rational Drug Design. 3 Hours**

Introduction to drug target selection, lead compound discovery, and application of structure-activity relationships and computational chemistry towards refinement and optimization of lead compounds and their derivatives. Use of molecular graphics software and publicly available macromolecular structure databases will provide the foundation for evaluating macromolecular models of drug targets and allow a hands-on exploration of the structure/function relationships of proteins that have been successful targets of rational drug design. Prerequisite(s): (CHM 420 or CHM 452) or equivalent.

**CHM 462L. Biochemistry Laboratory. 1 Hour**

Laboratory course to accompany biochemistry lecture courses. Spectrophotometry, pH and dissociation, enzymologic methodology and analytical techniques, chromatographic techniques. Corequisite(s): CHM 420 or CHM 451.

**CHM 463L. Bioanalytical Chemistry Laboratory. 1 Hour**

Introduction to analytical methods in current use in biochemistry. Course will focus on separations and spectroscopic methods for the analysis of biomolecules. Prerequisite(s): CHM 201, CHM 201L, CHM 302.

**CHM 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**CHM 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**CHM 490L. Scientific Glassblowing. 1 Hour**

Theory and practice of glass working. Under the supervision of a professional glassblower, students learn to make several standard seals and fabricate pieces of glass apparatus. Enrollment limited. One three-hour laboratory each week. Grading Option Two. Prerequisite(s): Permission of department chairperson.

**CHM 495. Introduction to Research Seminar. 0 Hours**

Research topics presented by visiting scientists and faculty, and the results of thesis research by senior students. Required of all junior chemistry and biochemistry majors in the B.S. programs. Grading Option two.

**CHM 496. Professional Practices Seminar. 0 Hours**

After discussions of the chemical literature and information retrieval, resumes, graduate education, and career opportunities, students present technical talks on topics with social, ethical, or historical implications. Required of all chemistry and biochemistry majors, both B.S. and B.A.

**CHM 497. Research Seminar. 0 Hours**

A series of seminars as described under CHM 495. Required of all senior chemistry and biochemistry majors in the B.S. programs.

**CHM 498. Research & Thesis. 3 Hours**

All students in the B.S. programs including co-op students are required to enroll for a minimum of three semester hours in a research course (CHM 498). Students may take additional research semester hours (CHM 499) if the work extends for more than two semesters. Successful completion of research courses requires the submission of a typewritten thesis and the presentation of a seminar. With the prior approval of the department chairperson, B.S. co-op students may substitute work experience for research. Prerequisite(s): Permission of department chairperson.

**CHM 499. Research & Thesis. 1-3 Hours**

All students in the B.S. programs including co-op students are required to enroll for a minimum of three semester hours in a research course (CHM 498). Students may take additional research semester hours (CHM 499) if the work extends for more than two semesters. Successful completion of research courses requires the submission of a typewritten thesis and the presentation of a seminar. With the prior approval of the department chairperson, B.S. co-op students may substitute work experience for research. Prerequisite(s): CHM 498; permission of department chairperson.

## Communication

- Bachelor of Arts, Communication

**Concentrations:**

- Communication Management
- Communication Studies
- Journalism
- Media Production
- Public Relations
- Theatre

**Minors:**

- Communication
- Political Journalism

The course requirement for communication majors is 39 semester hours. Teacher licensure through the dual-degree B.A. and B.S.E. program, conducted in conjunction with the Department of Teacher Education in the School of Education and Health Sciences, is an option for communication majors. Consult department chairperson for details.

A minor in communication consists of 15 semester hours. A minor in political journalism is available for political science majors and international studies majors. The political journalism minor consists of 18 semester hours. The department also offers a Bachelor of Arts with a major in theatre. See Theatre (p. 277).

**Faculty**

Joseph Valenzano, III, Interim Chairperson

Professors Emeriti: Blatt, Gilvary, Lain, Morlan

Professors: Cusella, Hess, Robinson, Skill, Thompson

Associate Professors: Griffin, Han, Hayford, Scantlin, Valenzano, Wallace, Watters

Assistant Professors: Dunlevy, Taylor, Vibber

Lecturers: Angel, Beran, Combs, Dickson, Evans, Flynn, Kearney, Kennedy, Oh, Sweet, Toomb, Walter

Media Specialist in Residence: Kennedy

## Bachelor of Arts, Communication (CMM) minimum 124 hours

**Common Academic Program (CAP)**

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103	West and the World
REL 103	Introduction to Religious and Theological Studies
PHL 103	Intro To Philosophy
ENG 100	Writing Seminar I <sup>2</sup>

Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- <sup>1</sup> Completed with ASI 110 and ASI 120.
- <sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- <sup>3</sup> Completed with ENG 200H or ASI 120.
- <sup>4</sup> Must include two different disciplines and accompanying lab.

**Liberal Studies Curriculum**

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

**Major Requirements**

CMM 100 Principles of Oral Communication	3
CMM 201 Foundations of Mass Communication	3
CMM 202 Foundations of Communication Theories & Research	3
CMM 351 Public Speaking	3

**Select one concentration from:**

**Communication Management (CMT)**

CMM 325 Principles of Communication Management <sup>1</sup>	3
CMM 322 Interviewing for Communication & Business	3
CMM 412 Research Methods in Communication <sup>2</sup>	3
CMM 420 Communication & Conflict Management	3
CMM 425 Professional Seminar in Communication Management in Organizations <sup>3</sup>	3

Optional Courses <sup>4, 5</sup> 12

**Communication Studies (CSS)**

Select courses from CMM 27

Must include a capstone and department diversity course.

Course selection requires advisor and department chair approval.

**Media Production (RTV)**

CMM 343 Writing for Electronic and Digital Media <sup>1</sup>	3
CMM 341 Audio Production	3
or CMM 342 Fundamentals of Video Production	
CMM 417 Media Audience Research <sup>2</sup>	3
CMM 441 Media Processes & Effects	3
CMM 397 Communication Practicum & CMM 398 and Communication Practicum & CMM 399 and Communication Practicum (Capstone) <sup>3</sup>	3

Optional Courses <sup>4, 5</sup> 12

**Journalism (JRN)**

CMM 330 Media Writing <sup>1</sup>	3
CMM 337 Journalism Ethics and Values	3
CMM 338 Reporting <sup>2</sup>	3
CMM 432 Media Law	3
CMM 438 Multi-Media Journalism <sup>3</sup>	3

Optional Courses <sup>4, 5</sup> 12

**Public Relations (PUB)**

CMM 330 Media Writing <sup>1</sup>	3
CMM 360 Principles of Public Relations	3
CMM 412 Research Methods in Communication <sup>2</sup>	3
CMM 460 Advanced Public Relations Writing	3
CMM 461 Public Relations Campaigns <sup>3</sup>	3

Optional Courses <sup>4, 5</sup> 12

**Communication - Theatre (CTR)**

THR/VAR 250 Creative Arts for Social Justice	3
THR/EGR 308 Engineering for the Performing Arts <sup>2</sup>	3
THR 310 Acting for Everyone <sup>2</sup>	3
THR 425 Theatre Theory & History <sup>1</sup>	3
THR 499 Creating New Works <sup>3</sup>	3

Optional Courses <sup>4</sup> 12

**Breadth**

ASI 150 Introduction to the University Experience	1
Supporting Area of Study	12
Total Hours to total at least	124

- <sup>1</sup> Writing-intensive course.
- <sup>2</sup> Methods course.
- <sup>3</sup> Capstone course.
- <sup>4</sup> Any four CMM or CMS courses. THR course by exception and requires approval of department chair.
- <sup>5</sup> One course must have diversity as a significant learning outcome as defined by the department. Current courses include CMM 313, CMM 410, CMM 447, CMM 464, CMS 316, CMS 414, CMS 415, and any course offered on the Communication Study Abroad program.



## Minor in Communication (CMM)

### Communication

CMM 100	Principles of Oral Communication	3
Select four CMM courses (300/400-level) <sup>1</sup>		12
Total Hours		15

<sup>1</sup> In consultation with the chairperson.

## Minor in Political Journalism (POJ)

### Political Journalism <sup>1</sup>

CMM 201	Foundations of Mass Communication	3
CMM 330	Media Writing	3
Select four courses from:		12
CMM 331	Feature Writing	
CMM 354	Political Campaign Communication	
CMM 355	Rhetoric of Social Movements	
CMM 431	Public Affairs Reporting	
CMM 432	Media Law	
Total Hours		18

<sup>1</sup> Available only to international studies majors and political science majors.

### First Year

Fall	Hours	Spring	Hours
ASI 150		1 CMM 351	3
CMM 100 (CAP Communication)		3 ENG 100 (CAP Writing Seminar)	3
CMM 201		3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)		3 Language	4
HST 103, PHL 103, or REL 103 (CAP Humanities)		3 MTH (CAP Mathematics)	3
Language		4	
		<b>17</b>	<b>16</b>

### Second Year

Fall	Hours	Spring	Hours
CMM 202		3 CMM Concentration	3
CMM Concentration		3 SSC 200 (CAP social science)	3
ENG 200		3 Arts (CAP) or Literature	3
INSS (CAP Natural Science)		4 INSS (CAP Natural Science)	4
Language		3 Social Science / Professional Studies	3
		<b>16</b>	<b>16</b>

### Third Year

Fall	Hours	Spring	Hours
CMM Concentration		3 CMM Concentration	3

CMM/CMS/THR Elective	3 CMM/CMS/THR Elective	3
Arts (CAP) or Literature	3 Social Science / Professional Studies	3
Social Science	3 Adv HST (Integrative)	3
INSS (CAP Inquiry)	3 Social Science	3
	<b>15</b>	<b>15</b>

### Fourth Year

Fall	Hours	Spring	Hours
CMM Concentration		3 CMM 480	3
CMM Concentration		3 Adv PHL/REL (PEA/FT)	3
Adv PHL/REL (PEA/FT)		3 Social Science / Professional Studies	3
Social Science		3 General Elective	2
Social Science / Professional Studies		3 Diversity and Social Justice	3
		<b>15</b>	<b>14</b>

Total credit hours: 124

## Communication/Social Sciences Courses

### CMS 316. Intercultural Communication. 3 Hours

Study of interpersonal communication with emphasis on people from different countries and with different cultural backgrounds. Focus on the influence of culture on communication and language, verbal and non-verbal communication similarities and differences from culture to culture, and challenges of successful intercultural communication.

### CMS 414. Global Communication. 3 Hours

Introduction to the main topics in the field of global communication. Emphasis on comparative mass media and current issues in global communication. Will not satisfy humanities requirement.

### CMS 415. Women & Communication. 3 Hours

Seminar focusing on gender differences in communication, unique aspects to women's communication, and women's rhetoric. Current theory and research examined. Will not satisfy humanities requirement.

## Communication Courses

### CMM 100. Principles of Oral Communication. 3 Hours

Introduces the relationship between communication and democratic life in contemporary and historical contexts. This course examines the importance of communication in achieving mutual understanding and provides the opportunity to demonstrate effective and ethical dialogue. Students learn to structure messages that deliver complex information to non-experts, effectively advocate a position, and critique the messages of others.

### CMM 113. Interviewing. 1 Hour

Communication processes for information gathering and employment interviewing. Focus is on the development of general competencies in the conduct and organization of interviews, preparation of resumes, evaluation of questions and responses, research, listening, and nonverbal communication.

**CMM 201. Foundations of Mass Communication. 3 Hours**

Historical development of mass media in America; survey of mass media theories, impact of mass media on people and society, the role and influence of the news media, new technologies, programming, and pressure groups.

**CMM 202. Foundations of Communication Theories & Research. 3 Hours**

Study of the nature and scope of communication theories and research. Examination of how the communication discipline developed from classical traditions to its modern perspective.

**CMM 311. Studies in Oral Performance. 3 Hours**

Oral performance of poetry, prose, and drama; combining study of vocal modulations, pitch, inflection, and tone color with intellectual and emotional analysis of selections as a means of making the literature alive and immediately present.

**CMM 313. Nonverbal Communication. 3 Hours**

A survey of the theory and research in nonverbal communication designed to raise students' awareness of their own and others' nonverbal behaviors. Goals include enabling students to use nonverbal behaviors to enhance their communicative abilities, to more accurately interpret the nonverbal behaviors of others, and to successfully adapt to changing cultural and relational communication contexts.

**CMM 315. International Mass Media. 3 Hours**

Focus on the mass media of a particular foreign country or region of the world. Topics may include media content, use, societal effects and ownership.

**CMM 320. Interpersonal Communication. 3 Hours**

Study of communication behavior in a variety of dyadic relationships including acquaintance, friendship, work, romantic, and family. Focus on communicative behavior and communicative processes in relationship development including building trust, managing conflict, negotiating power, and listening empathetically.

**CMM 321. Small Group Communication. 3 Hours**

Examination of theory and research related to communicative processes in small, task-oriented groups. Applications include a focus upon decision-making strategies, leadership, conflict management, and cohesion. Prerequisite(s): CMM 110.

**CMM 322. Interviewing for Communication & Business. 3 Hours**

Analysis of communication in structured dyadic interaction. Emphasis on the following types of interviews: information-gathering, employment, appraisal, and persuasive. Application through role-playing and feedback systems. Prerequisite(s): CMM 100.

**CMM 325. Principles of Communication Management. 3 Hours**

Introduction to issues, theory, and research in organizational communication. Topics may include organizational culture, conflict management, small group decision making and collaboration, leadership, diversity, and technology in the modern organization. Prerequisite(s): CMM 100.

**CMM 330. Media Writing. 3 Hours**

Students develop and practice writing skills for journalism and public relations across media platforms. Course introduces techniques for writing news and information for mass audiences, news principles and values, and skills for gathering information and interviewing. Clarity and accuracy are emphasized.

**CMM 331. Feature Writing. 3 Hours**

Developing and writing nonfiction stories for newspapers and magazines. Story types include personality profile, color, background, consumer, and commentary. Study and practice in journalistic reporting skills and literary writing techniques. Emphasis on content, organization, style, and accuracy. Strong command of AP style necessary. Prerequisite(s): CMM 330.

**CMM 332. Publication Design. 3 Hours**

Layout and design of print and electronic publications, including newsletters, brochures, and web-based publications. Instruction in desktop and web publishing software, use of type and illustration, cost appraisal, printing methods.

**CMM 333. Free Lance Writing. 3 Hours**

Steps of free-lance publication, from market analysis to query letters to writing and rewriting. Mostly nonfiction, magazine markets, some newspaper and nonfiction book markets.

**CMM 334. Sportswriting. 3 Hours**

In addition to game stories, attention is also paid to writing about personalities, legal issues, and financial issues on the interscholastic, intercollegiate, amateur, and professional levels. Strong writing skills and knowledge of journalistic style expected. Prerequisite(s): CMM 330.

**CMM 337. Journalism Ethics and Values. 3 Hours**

This course explores ethics and values that guide the practice of journalism. Students will analyze ethical situations and critically evaluate principles and standards. Through discussion, research, and case studies, students will enhance their awareness of ethical issues in journalism and their ability to make ethical choices. Prerequisite(s): CMM 330.

**CMM 338. Reporting. 3 Hours**

Exploration of issues and institutions of public concern through accurate and ethical beat reporting. Students develop news judgment and research strategies, including accessing public documents and interviewing, and build skills for reporting and editing across media platforms. Prerequisite(s): CMM 330.

**CMM 340. Fundamentals of Broadcasting. 3 Hours**

Survey of broadcasting, with emphasis on television and radio networks, programming, regulation, audience measurement, audience effects, and technology. Although attention is given both to the origins and future of the field, contemporary broadcasting is emphasized.

**CMM 341. Audio Production. 3 Hours**

Study of the theories, processes, and technologies of audio production practices that can be applied in radio, television, and multimedia production. Exercises in recording of voice, music, and special effects. Course includes the operation of basic studio and field equipment, including analog and basic digital recording and editing.

**CMM 342. Fundamentals of Video Production. 3 Hours**

Explores the techniques of studio and remote video production. Includes the technical and creative aspects of planning and script preparation, producing, directing, technical directing, graphics, editing, camera, lighting, and sound for a variety of video programs.

**CMM 343. Writing for Electronic and Digital Media. 3 Hours**

Study of concrete approaches to and practical applications of professional level writing for video, audio, television, radio, digital and corporate media platforms.

**CMM 344. Multimedia Design & Production I. 3 Hours**

Introduction to producing in the interactive media of CD-ROM and other digital formats. Reviews basic object linking and embedding in familiar computer programs such as Word, PowerPoint, and Freelance Graphics. Students build skills in multimedia authoring, using all the fundamental tools of graphics, text, audio, and video.

**CMM 345. Classic American Film. 3 Hours**

Introduction to classic U.S. films through the ages. Revolves around the viewing and analysis of significant Hollywood films. Course varies topically, ranging from a broad overview of classic American films to versions examining a particular film genre to versions exploring a theme through the medium of classic film. May be repeated once as topics change.

**CMM 350. Propaganda Analysis. 3 Hours**

Examination of major propaganda campaigns in history beginning with Greek democracy. Emphasis on twentieth century propaganda as psychological warfare. Principles of Aristotelean rhetorical theory applied to propaganda analysis.

**CMM 351. Public Speaking. 3 Hours**

Oral communication in professional situations. Adaptation of principles of ethical and effective speaking to specific audiences and occasions. Delivery of informative and persuasive speeches. Prerequisite(s): CMM 100.

**CMM 352. Persuasion. 3 Hours**

Study of the use of communication to form attitudes. Examination of attitudes and social influence and their effects on human behavior. Topics include selected theories of persuasion, argument construction, and practical application.

**CMM 354. Political Campaign Communication. 3 Hours**

Examination of theory and research on the role, processes and effects of communication in political campaigns with emphasis on mass media, public speaking, debates, advertising, and interpersonal communications.

**CMM 355. Rhetoric of Social Movements. 3 Hours**

Study of rhetorical communication in American social movements through examination of the strategies, themes and tactics used by agitators and the institutional responses to discourse aimed at social change.

**CMM 360. Principles of Public Relations. 3 Hours**

Survey of the field of public relations emphasizing writing and public relations, theoretical implications of the field, the practitioner's role in organization and the community.

**CMM 390. Independent Study. 1-3 Hours**

Supervised study involving directed readings, individual research (library, field, or experimental), or projects in the specialized areas of communication. May be repeated for up to six semester hours. Prerequisite(s): Permission of department chairperson.

**CMM 397. Communication Practicum. 1 Hour**

Offers students an opportunity to participate in the operation of Flyer TV, Flyer Radio, or Flyer News (the University of Dayton's student-run media platforms.) One semester hour per term.

**CMM 398. Communication Practicum. 1 Hour**

Offers students an opportunity to participate in the operation of Flyer TV or Flyer Radio. One semester hour per term.

**CMM 410. Family Communication. 3 Hours**

Study of the family from a communication perspective, considering the communication processes within the family and the extent to which communication affects and is affected by the family.

**CMM 411. Health Communication. 3 Hours**

Examination of communication theory and research as they relate to health care. Issues include reassurance, the role of the patient, interviews, health organizations, the media and health, compliance, providing explanations, and health care professions frequently neglected.

**CMM 412. Research Methods in Communication. 3 Hours**

Study of data gathering and analysis in communication research. Specific attention to survey design and analysis, and focus group implementation and analysis.

**CMM 413. Communication in the Information Age. 3 Hours**

Examination of issues related to development, economics, programming, and the future of new mass communication technologies. Prerequisite(s): CMM 201 or permission of instructor.

**CMM 416. Development of Mass Media. 3 Hours**

History and analysis of the development and interdependence of mass media, print and electronic. Emphasis on its role in political and economic progress of U.S. and attendant responsibility.

**CMM 417. Media Audience Research. 3 Hours**

An overview of the concepts, methods, and tools used by communication researchers to design, conduct, interpret, and critically evaluate audience research.

**CMM 420. Communication & Conflict Management. 3 Hours**

Examination of the functions of communication in interpersonal conflict such as marital conflict, role conflict, and organizational conflict. Communicative strategies and tactics for managing conflict.

**CMM 421. Communication in Organizations. 3 Hours**

Analysis of message initiation, diffusion, and reception in organizations; analysis of the role of communication in developing productive work relationships, management practices, and organizational cultures.

**CMM 430. Copyediting. 3 Hours**

Editing, particularly news copy editing and headline writing. Emphasis on clear and concise wording; proper spelling, grammar, and punctuation; and accuracy. Strong command of AP style necessary. Prerequisite(s): CMM 330.

**CMM 431. Public Affairs Reporting. 3 Hours**

Investigative and specialized reporting on matters of public concern. Practice in gathering information from primary and secondary sources, and writing about complex subjects for mass audiences. Prerequisite(s): CMM 330.

**CMM 432. Media Law. 3 Hours**

Media Law explores the press, expression and mass media within the context of the U.S. Constitution, state and federal legislation, and court rulings. This course introduces students to core values of the First Amendment, and such topics as government regulation, censorship, copyright protection, libel, and privacy.

**CMM 438. Multi-Media Journalism. 3 Hours**

Capstone course in the journalism concentration. Applies knowledge and skills from previous classes to develop in-depth stories across media platforms. Prerequisite(s): CMM 330, CMM 337, CMM 338, CMM 432.

**CMM 439. Special Topics in Journalism. 3-6 Hours**

Concentrated study in special areas of journalism. May be repeated with change of topic.

**CMM 440. Broadcast News. 3 Hours**

Study of the process and practice of news gathering and writing for radio and television. Course includes research, analysis, writing and editing news and features, as well as legal and ethical concerns of broadcast news. Prerequisite(s): CMM 330, CMM 342.

**CMM 441. Media Processes & Effects. 3 Hours**

Advanced study of how the media may influence people and outcomes of media exposure. Also examines media effects within historical and present contexts.

**CMM 442. Advanced Television Production. 3 Hours**

Advanced techniques of both studio and electronic field production and post-production editing for television. Prerequisite(s): CMM 342.

**CMM 444. Multimedia Design & Production II. 3 Hours**

Advanced level multimedia production emphasizing client-based project generation through a design/production team approach. Focus is on interface design; project planning, script writing, story boarding; digital image, sound and video editing; and the use of authoring software. Prerequisite(s): CMM 344.

**CMM 445. Media Performance. 3 Hours**

Course focuses on learning and practicing the fundamentals of on-camera and on-air broadcast and digital delivery performance. Students will also practice critical analysis of broadcast performance.

**CMM 446. Electronic Media Management. 3 Hours**

Survey of the leadership/management roles and responsibilities of broadcasting, cable television and corporate media enterprises. Prerequisite(s): CMM 340.

**CMM 447. Children and Mass Media. 3 Hours**

Introduction to and understanding of how children and adolescents use media in their daily lives. Also examines how that use influences their cognitive, emotional, social, and physical development.

**CMM 449. Topics in Electronic Media. 3 Hours**

Concentrated study in special areas of electronic media production, criticism, and management. May be repeated once with change of topic. Depending on topic, prerequisites may be imposed.

**CMM 452. Public Discourse & Criticism. 3 Hours**

Examination of the foundations of the field of communication. Major focus on the development of rhetorical theory with attention to rhetorical analysis and criticism.

**CMM 460. Advanced Public Relations Writing. 3 Hours**

Study, development and application of public relations strategies and tactics. Emphasis on strategically effective, factually accurate and grammatically sound written communications for organizational and mass audiences. Prerequisite(s): CMM 330, CMM 360, junior or senior standing.

**CMM 461. Public Relations Campaigns. 3 Hours**

Capstone course in the PR concentration that focuses on planning and implementing a public relations campaign for an established professional organization. Students work out solutions to communication and public relations problems, and prepare written campaign materials. Prerequisite(s): CMM 330, CMM 360, CMM 460; senior standing.

**CMM 463. Digital Public Relations. 3 Hours**

Exploration of Internet's impact on public relations, especially on relationships among public relations practitioners, journalists, and the publics. The perceived credibility and trust issues of the Internet; new trends the digital and social media is bringing to PR; and how to inform, persuade, and build relationships with organizations and their public via digital communication are covered. Prerequisite(s): CMM 360.

**CMM 464. International Public Relations. 3 Hours**

Examination of effective PR practices beyond the United States. Analysis and evaluation of real cases to investigate effective PR strategies for different countries or organizational settings. Prerequisite(s): CMM 360.

**CMM 468. Case Studies in PR. 3 Hours**

Examination of PR cases that illustrate models and theories, and teach key PR principles. Allows students to critically analyze, judge, and evaluate situations by applying PR principles and theories. Prerequisite(s): CMM 360.

**CMM 469. Special Topics in Public Relations. 3 Hours**

A concentrated study in specific areas of public relations. Development of specialized projects. May be repeated once with change of topics. Prerequisite(s): CMM 360 or permission of instructor.

**CMM 471. Communication and Digital Literacy. 3 Hours**

Exploration of questions surrounding the development of media literacy skills from childhood through adulthood, creation of media literacy materials applicable to diverse audiences, and evaluation of implications of participatory culture.

**CMM 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**CMM 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**CMM 480. Communication Capstone Project & Presentation. 3 Hours**

Project and presentation in the scholarship, activity and/or practice related to the major concentration. Students will present their work in a forum appropriate to their concentration.

**CMM 498. Communication Internship. 1-6 Hours**

Communication work experience in an approved organization. Student must be in good academic standing. Students are normally limited to a maximum of three semester hours. Under exceptional circumstances, students may petition the department chair for an additional three semester hours if the second internship is at a different organization and the student can demonstrate that the position offers a unique and significant educational opportunity not available through the first internship. Grading Option Two only. Prerequisite(s): CMM 110, (CMM 111 or CMM 112), CMM 113, CMM 201, CMM 202, CMM 330; permission of department chairperson.

**CMM 499. Special Topics in Communication. 3-6 Hours**

Concentrated study in specific areas of speech communication. May be repeated once with change of topic.

## Computer Science

Majors:

- Bachelor of Science, Computer Information Systems
- Bachelor of Science, Computer Science

Minors:



- Computer Information Systems
- Computer Science

The Department of Computer Science offers two programs leading to a Bachelor of Science degree in either computer science or computer information systems. Both programs require similar introductory core sequence of courses in computer science. The main differences between the two programs are in the mathematics and science requirements and in the application emphases.

### Computer Science

Computer science is the study of algorithms and their implementation as applications (apps). This includes the study of data structures, software design, programming languages, operating systems, and computer architecture. Each student must take appropriate upper-level electives from any subject areas of ambient intelligence, 3-D modeling, and game development; cyber security and computer networks; theory of computation; software engineering and project management; and big data and cloud computing.

### Computer Information Systems

This program emphasizes computer science concepts with particular attention to systems analysis and design, and includes a concentration area or minor chosen by the student in consultation with the student's advisor.

Both of these B.S. programs provide a foundation for students to embark on successful careers in a variety of computing disciplines, including software engineering, system design, database management, big data, ambient intelligence, gaming, cyber security, computer networking, systems programming, and systems administration. In addition, graduates will be prepared to pursue graduate study in computer science and related disciplines.

Computer Science and Computer Information Systems majors are required to attain grades of C- or better in the following courses: CPS 150, CPS 151, and CPS 350.

A minor in computer science consists of 20 semester hours. A minor in computer information systems consists of twenty-three semester hours.

### Faculty

Mehdi Zargham, Chairperson  
 Professors Emeriti: Kester, Lang, Smith, Winslow  
 Professors: Sritharan, Zargham  
 Associate Professors: Buckley, Courte, Gowda, Perugini, Yao  
 Assistant Professors: Shen, Phung  
 Lecturers: Bashias, Sanyal

## Bachelor of Science, Computer Information Systems (CIS) minimum 120 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	

Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- <sup>1</sup> Completed with ASI 110 and ASI 120.
- <sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- <sup>3</sup> Completed with ENG 200H or ASI 120.
- <sup>4</sup> Must include two different disciplines and accompanying lab.

### Science Breadth Requirements

Mathematics <sup>1</sup>	9
MTH 148 Introductory Calculus I (Satisfies CAP Mathematics)	
MTH 149 Introductory Calculus II	
MTH 367 Statistical Methods I	
Natural Sciences (Applies to CAP Natural Science) <sup>1</sup>	8
Select two sequences from:	
BIO 151 & 151L Concepts of Biology I: Cell & Molecular Biology and Concepts of Biology Laboratory I: Cell & Molecular Biology	
BIO 152 & 152L Concepts of Biology II: Evolution & Ecology and Concepts of Biology Laboratory II: Evolution & Ecology	
CHM 123 & 123L General Chemistry and General Chemistry Laboratory	
CHM 124 & 124L General Chemistry and General Chemistry Laboratory	
GEO 115 & 115L Physical Geology and Physical Geology Laboratory	
GEO 116 & 116L Geological History of the Earth and Geological History of the Earth Laboratory	
PHY 201 & 201L College Physics I and College Physics Laboratory I	
PHY 202 & 202L General Physics and General Physics Laboratory	
PHY 206 & PHY 210L General Physics I - Mechanics and General Physics Laboratory I	



PHY 207 & PHY 211L	General Physics II - Electricity & Magnetism and General Physics Laboratory II	
<b>Major Requirements</b>		62
CPS 149	Creative Media Applications	3
CPS 150	Algorithms & Programming I (Applies to CAP Natural Science)	4
CPS 151	Algorithms & Programming II	4
CPS 242	Web Application Development	3
CPS 250	Computer Organization and Architecture	3
CPS 310	Systems Analysis	3
CPS 312	Systems Design	3
CPS 341	Discrete Structures	3
CPS 350	Data Structures & Algorithms	3
CPS 356	Operating Systems	3
CPS 490	Capstone I (Satisfies CAP Major Capstone)	3
Select four CPS courses (310 level or above)		12
<b>Concentration: courses below or an approved minor</b>		15-27
ACC 207	Introduction to Financial Accounting	
ACC 208	Introduction to Managerial Accounting	
ECO 203	Principles of Microeconomics	
ECO 204	Principles of Macroeconomics	
MGT 301	Organizational Behavior	
MKT 300	Survey of Marketing	
<b>Breadth</b>		
ASI 150	Introduction to the University Experience	1
PHL 319	Information Ethics (Satisfies CAP Practical Ethical Action and Adv Studies in PHL)	3
Social and Behavioral Sciences (includes CAP Social Science) <sup>1</sup>		6
Total Hours to total at least		120

<sup>1</sup> This requirement, and CAP components, will be satisfied in some cases by the minor that is chosen.

## Bachelor of Science, Computer Science (CPS) minimum 120 hours

### Common Academic Program (CAP)

*credit hours will vary depending on courses selected		
First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7

Crossing Boundaries variable credit

Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

<sup>1</sup> Completed with ASI 110 and ASI 120.

<sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.

<sup>3</sup> Completed with ENG 200H or ASI 120.

<sup>4</sup> Must include two different disciplines and accompanying lab.

### Science Breadth Requirements

MTH 168	Analytic Geometry & Calculus I (Satisfies CAP Mathematics)	4
MTH 169	Analytic Geometry & Calculus II	4
MTH 218	Analytic Geometry & Calculus III	4
MTH 310	Linear Algebra & Matrices <sup>1</sup>	3
or CPS 353	Numerical Methods I	
MTH 367	Statistical Methods I	3
Select one natural sciences group from (Applies to CAP Natural Sciences):		8

BIO 151 & 151L & BIO 152 & BIO 152L	Concepts of Biology I: Cell & Molecular Biology and Concepts of Biology Laboratory I: Cell & Molecular Biology and Concepts of Biology II: Evolution & Ecology and Concepts of Biology Laboratory II: Evolution & Ecology
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CHM 123 & 123L & CHM 124 & CHM 124L	General Chemistry and General Chemistry Laboratory and General Chemistry and General Chemistry Laboratory
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GEO 115 & 115L & GEO 116 & GEO 116L	Physical Geology and Physical Geology Laboratory and Geological History of the Earth and Geological History of the Earth Laboratory
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PHY 206 & PHY 207 & PHY 210L & PHY 211L	General Physics I - Mechanics and General Physics II - Electricity & Magnetism and General Physics Laboratory I and General Physics Laboratory II
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Natural Sciences<sup>2</sup> 6

**Major Requirements** 50

CPS 149	Creative Media Applications	3
CPS 150	Algorithms & Programming I	4
CPS 151	Algorithms & Programming II	4
CPS 250	Computer Organization and Architecture	3
CPS 341	Discrete Structures	3
CPS 350	Data Structures & Algorithms	3

CPS 352	Concepts and Implementation of Programming Languages	3
CPS 356	Operating Systems	3
CPS 450	Design and Analysis of Algorithms (Satisfies CAP Integrative)	3
CPS 490	Capstone I (Satisfies CAP Major Capstone)	3
CPS 491	Capstone II	3
Select five CPS courses (300/400 level) <sup>3</sup>		15

**Breadth**

ASI 150	Introduction to the University Experience	1
PHL 319	Information Ethics (Satisfies CAP Practical Ethical Action and Adv Studies in PHL)	3
Social and Behavioral Sciences (Includes CAP Social Science)		6
Total Hours to total at least		120

- 1 CPS 353 will not count towards major requirement.
- 2 Select two acceptable courses for Science or Engineering majors.
- 3 These courses may be taken from any area as defined by the department. At least three courses in an area are required for obtaining a concentration.

## Minor in Computer Information Systems (CIS)

**Computer Information Systems**

CPS 150	Algorithms & Programming I	4
CPS 151	Algorithms & Programming II	4
CPS 242	Web Application Development	3
CPS 310	Systems Analysis	3
CPS 312	Systems Design	3
Select two CPS courses (320 level or above)		6
Total Hours		23

## Minor in Computer Science (CPS)

**Computer Science**

CPS 150	Algorithms & Programming I	4
CPS 151	Algorithms & Programming II	4
CPS 350	Data Structures & Algorithms	3
Select three CPS courses (320 level or above, excluding CPS 437)		9
Total Hours		20

- Bachelor of Science, Computer Information Systems
- Bachelor of Science, Computer Science

## Computer Information Systems

**First Year**

Fall	Hours Spring	Hours
ASI 150	1 CPS 150	4
CPS 149	3 MTH 149	3
MTH 148	3 Science w/lab	4
ENG 100 (CAP Writing Seminar)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3

REL 103, PHL 103, or HST 103 (CAP Humanities)	3 CMM 100 (CAP Communication)	3
REL 103, PHL 103, or HST 103 (CAP Humanities)	3	17
<b>16</b>		<b>17</b>

**Second Year**

Fall	Hours Spring	Hours
CPS 151	4 CPS 250	3
CPS 341	3 CPS 350	3
MTH 367	3 Science w/lab	4
ACC 207	3 ACC 208	3
ENG 200 (CAP Writing Seminar)	3 SSC 200 (CAP Social Science)	3
<b>16</b>		<b>16</b>

**Third Year**

Fall	Hours Spring	Hours
CPS 242	3 CPS 312	3
CPS 310	3 CPS elective	3
ECO 203	3 ECO 204	3
MGT 301	3 MKT 300	3
Arts	3 PHL 319 (PEA)	3
	Adv PHL or REL (FT)	3
<b>15</b>		<b>18</b>

**Fourth Year**

Fall	Hours Spring	Hours
CPS 356	3 CPS 490	3
CPS elective	3 CPS elective	3
Social Science	3 CPS elective	3
Adv HST	3 Integrative	3
Inquiry	3 Diversity and Social Justice	3
<b>15</b>		<b>15</b>

Total credit hours: 128

## Computer Science

**First Year**

Fall	Hours Spring	Hours
ASI 150	1 CPS 150	4
CPS 149	3 MTH 169	4
MTH 168	4 Science w/lab	4
Science w/lab	4 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
ENG 100 (CAP Writing Seminar)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
REL 103, PHL 103, or HST 103 (CAP Humanities)	3	18
<b>18</b>		<b>18</b>

**Second Year**

Fall	Hours Spring	Hours
CPS 151	4 CPS 250	3
CPS 341	3 CPS 350	3
MTH 218	4 MTH 310 or CPS 353	3
ENG 200	3 CMM 100 (CAP Communication)	3

SSC 200 (CAP Social Science)	3 Arts	3
	<b>17</b>	<b>15</b>
<b>Third Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
CPS 352	3 CPS 356	3
MTH 367	3 CPS elective	3
CPS 450	3 Science elective	3
Science elective	3 Social Science	3
Adv HST	3 PHL 319 (PEA)	3
	<b>15</b>	<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
CPS 490	3 CPS 491	3
CPS elective	3 CPS elective	3
CPS elective	3 CPS elective	3
Inquiry	3 Diversity and Social Justice	3
Adv PHL/REL (FT)	3 Integrative	3
	<b>15</b>	<b>15</b>

Total credit hours: 128

## Courses

### CPS 107. Introduction to Computer Science. 3 Hours

An introduction to the field of Computer Science, covering computers and society, the internals and externals of computer hardware and software, as well as some exposure to advanced topics of artificial intelligence, computer forensics, and databases. Intended for science and engineering students.

### CPS 111. Introduction to Personal Computers. 3 Hours

Emphasis on use of operating system, particularly file organization, and applications: word processor, spreadsheet, database and presentation software.

### CPS 132. Computer Programming for Engineering & Science. 3 Hours

Fundamentals of computer programming including algorithms, program structure, library routines, debugging, and program verification. Calculus-based computer solutions of problems from science and engineering using C++. Corequisite(s): MTH 168.

### CPS 144. Introduction to Computer Programming. 3 Hours

Fundamentals of computer programming including algorithms, program structure, library routines, debugging, and program verification. Computer solutions of problems from social sciences using a suitable compiler language such as Visual Basic.

### CPS 149. Creative Media Applications. 3 Hours

Multidisciplinary, project-driven learning process that encourages students to develop problem solving and teamwork skills while fostering creativity and logic. The goal is to not only provide students with some "programming maturity," but to also engage them through working in small teams on existing projects related to their discipline and interest. Projects may include creative animations and games, mobile app developments, or avatars.

### CPS 150. Algorithms & Programming I. 4 Hours

Introduction to computers and programming using a high-level, structured language. Topics include problem solving, algorithms, programming constructs, data representation, stepwise refinement, and debugging.

### CPS 151. Algorithms & Programming II. 4 Hours

Algorithms and Programming II covers object-oriented design and development, data abstraction, exception handling, linked lists, stacks, queues, binary trees, and recursion using a high level, structured language. Prerequisite(s): CPS 150.

### CPS 242. Web Application Development. 3 Hours

Web application development using the state-of-the-art environments such as markup languages, scripting languages, dynamic web pages, server side technologies, and database access. Prerequisite(s): CPS 151.

### CPS 250. Computer Organization and Architecture. 3 Hours

Machine and assembly language instructions, and writing assembly programs. Design of basic logic circuits needed in constructing a computer. Design of circuits for information encoding, arithmetic units, and transferring and storing information. Data path and control unit for a simple processor. Multiprocessing and alternative parallel systems. Prerequisite(s): CPS 151.

### CPS 309. Topics in Computer Science. 1-4 Hours

Lectures or laboratory work in areas of current interest. May be taken more than once. Does not count as upper level credit for majors/minors.

### CPS 310. Systems Analysis. 3 Hours

Methodologies for developing software, software development life cycles, data flow approach for system development, data dictionary, process specification, input/output design, E-R diagrams, normalization, and introduction to object-oriented analysis. Prerequisite(s): CPS 151.

### CPS 312. Systems Design. 3 Hours

Software design process; developing structured design (e.g., structure charts) from data flow approach using coupling, cohesion, and other design guidelines; fine-tuning object-oriented analysis model to design using design patterns, and implementation. Prerequisite(s): CPS 310.

### CPS 341. Discrete Structures. 3 Hours

Propositional logic, Boolean algebra, predicate logic, logical deductions, proof techniques, sets, combinatorics, recurrences, functions, relations, discrete structures such as graphs, digraphs, and associated algorithms. Prerequisite(s): CPS 150.

### CPS 343. Comparative Languages. 3 Hours

Language design issues, formal syntax specification, data types and storage methods, activation records and procedural object oriented, functional, and logic programming paradigms. Prerequisite(s): CPS 350.

### CPS 346. Operating Systems I. 3 Hours

Semaphores, conditions, monitors, and kernels. Concurrent programming, interrupts, memory, and process management. Design and implementation of multithreaded and distributed system components using concurrent languages. Prerequisite(s): CPS 250, CPS 350.

### CPS 350. Data Structures & Algorithms. 3 Hours

Dynamic nonlinear data structures including trees, binary trees, search trees, balanced search trees, priority queues, and graphs, with an emphasis on their implementation, uses, and associated algorithms. Analysis of the computational complexity of algorithms related to these structures. Prerequisite(s): CPS 151.

**CPS 352. Concepts and Implementation of Programming Languages. 3 Hours**

Study of programming language concepts through the implementation of interpreters and assessment of the conceptual differences in the resulting languages. Concepts covered include syntax and semantics, regular and context-free grammars, parsing, binding, scope, parameter passing, lazy evaluation, types, currying, and continuations. A comparative survey of the imperative, functional, logical, and object-oriented paradigms of programming is presented. Prerequisite(s): CPS 350.

**CPS 353. Numerical Methods I. 3 Hours**

Study of the algorithms of numerical mathematics with emphasis on interpolation, the solution of nonlinear equations, and linear systems of equations including matrix methods; analysis of errors associated with the algorithms. Prerequisite(s): (CPS 132 or CPS 150); MTH 169.

**CPS 356. Operating Systems. 3 Hours**

Introduces the theoretical and practical concepts underlying an operating system's structure and operation. Topics include process and thread creation and management, scheduling, concurrent, multi-threaded programming and synchronization, deadlock, memory management, virtual memory, and computer security. Prerequisite(s): (CPS 250 or ECE 314) and CPS 350.

**CPS 387. Computer System Design I. 3 Hours**

Study of the elements of computer design. Design of combinatorial and sequential logic circuits using current integrated circuit devices. Discussion of encoders, decoders, registers, counters, etc. as applied to design and use of control, arithmetic, logic, and storage units. Instruction set, addressing modes and CPU design. Laboratory experiments with these devices. Prerequisite(s): CPS 250, CPS 341.

**CPS 410. User Interface Design and Development. 3 Hours**

Addresses the practical problems of designing interfaces for modern software as well as other interactive media. Topics include interaction framework and styles, design principles, design models, new interactive technologies, usability testing and facets of interaction. Group activities and project work is an integral part of this course. Prerequisite(s): CPS 350.

**CPS 415. Software Testing and Security Analysis. 3 Hours**

Detailed examination of the software testing and security analysis process. Topics include testing methodologies, code analysis techniques, and secure programming principles and practices. Prerequisite(s): CPS 350.

**CPS 420. Software Engineering. 3 Hours**

Provides an overview of the software engineering discipline. Topics include software processes, requirements engineering, system modeling, architectural design, software testing, dependability and security, software reuse, distributed software engineering, project planning, quality management, configuration management, and process improvement. Prerequisite(s): CPS 350.

**CPS 422. Software Project Management. 3 Hours**

Introduction to software project management. Topics include process models for software development, project planning techniques, estimation techniques, measuring and controlling work products and processes, managing project risk, teams and communication, and organizational issues. Prerequisite(s): CPS 310.

**CPS 424. Discrete Event Simulation Techniques. 3 Hours**

Design and use of simulation models; study and use of special-purpose simulation languages such as GPSS and GASP IV, SIMSCRIPT II.5. Applications. Prerequisite(s): CPS 151.

**CPS 430. Database Management Systems. 3 Hours**

Physical and logical organization of databases: the entity-relationship model; relational database model; the data definition and data manipulation language of a commercial database management system; integrity constraints; conceptual database design. Prerequisite(s): CPS 350.

**CPS 432. Database Management Systems II. 3 Hours**

Study of query execution and optimization, transaction management, concurrency control, recovery and security techniques. Advanced data models and emerging trends in database systems, like object oriented database systems, distributed database systems, the client-server architecture, multidatabase and heterogeneous systems. Other current database topics and emerging technologies will be discussed. Prerequisite(s): CPS 430.

**CPS 433. Cyber Forensics. 3 Hours**

Preserving, recovering, and analyzing digital evidence found in physical and virtual worlds. Topics include data and information retrieval; computer/media forensic analysis, techniques, and tools; and basic criminal law concepts. Prerequisite(s): CPS 356.

**CPS 434. Big Data and Cloud Computing. 3 Hours**

Focuses on technologies to make intelligent decisions for scientific and business applications. Topics include semantic web, knowledge representation languages for expressing metadata, machine learning, data visualization, data integration, and predictive models. Prerequisite(s): CPS 350.

**CPS 437. System Architectures & Networking. 3 Hours**

Issues and techniques used in the physical design of computer-based information systems. Basic operating systems, hardware architecture and networking principles. Intended for students majoring in MIS; not open to students majoring in CPS, CIS, or PCS. Prerequisite(s): MIS 380, MIS 385.

**CPS 444. UNIX/Linux Programming. 3 Hours**

Prepares students for developing software in the UNIX/Linux environment using the C programming language. Topics include system libraries and system calls, shells, system structures and internals, interprocess communication (pipes and signals), network programming (client-server model and sockets), pattern matching and filters, shell programming, automatic program generation, and GUI programming. Prerequisite(s): CPS 356.

**CPS 450. Design and Analysis of Algorithms. 3 Hours**

Introduction to Order notation and algorithm analysis. Emphasis will be on learning algorithm design techniques such as divide and conquer, greedy approach, and dynamic programming through exposition of classical algorithms from domains such as sorting, string matching, and graph algorithms. Hardness of problems and introduction to the complexity classes P, NP, and NP-complete. Prerequisite(s): CPS 341, CPS350.

**CPS 455. Computer Architecture and Design. 3 Hours**

Provides a foundation for understanding and evaluating the design principles incorporated in modern computers. Topics include history and classification of computers, instruction-level, data-level, and thread-level parallelism. Prerequisite(s): CPS 250, CPS 350.

**CPS 460. Computer Graphics. 3 Hours**

Introduction to primitives and interactive graphics software development. Topics include transforms, clipping, modeling, rendering, texture, animation, and ray tracing. Prerequisite(s): CPS 350.

**CPS 465. Interactive Media. 3 Hours**

Provides an exposure to the capabilities of new digital tools to create new experiences. Topics include tools/techniques for collecting, analyzing, and visualizing 3D data; interactive audio/video using motion/light detectors; mobile interfaces; animation; smart rooms; and social networks. Prerequisite(s): CPS 350.

**CPS 470. Computer Networks. 3 Hours**

Computer Networks focus on Internet protocols. Topics include packet-switch and multi-access networks, routing, flow control, congestion control, quality of service, Internet protocols, wireless networks, security, and the design of network services. Prerequisite(s): CPS 350.

**CPS 472. Computer and Network Security. 3 Hours**

Computer and Network Security covers information protection. Topics includes techniques for security in multi-user and distributed systems, principles of secure design, cryptography, authentication, access-control, intrusion detection and viruses, firewalls, wireless security, cracking WEP keys, and VPN security. Prerequisite(s): CPS 356.

**CPS 473. Reverse Code Engineering. 3 Hours**

Study theories on the application of cyber power to achieve certain objectives. Topics includes cyber policy, tracing strategy, targeting, cyber intelligence, measuring effects, and legal and ethical issues. Prerequisite(s): CPS 350.

**CPS 477. Honors Thesis. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**CPS 478. Honors Thesis. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**CPS 480. Artificial Intelligence. 3 Hours**

Fundamentals concepts and techniques of intelligent systems. Topics includes knowledge representation, search strategies, predicate logic, and expert systems. Prerequisite(s): CPS 350.

**CPS 481. Intelligent Systems and Machine Learning. 3 Hours**

State-of-art techniques in building intelligent systems. Topics include soft computing, agents and multiagent systems, and machine learning. Prerequisite(s): CPS 350.

**CPS 482. Automata Theory. 3 Hours**

Formal languages (regular, context-free, recursive, and recursively enumerable), machine models (deterministic and non-deterministic finite automata, push down automata, Turing machines), grammars (regular, context-free, and unrestricted), interplay among these concepts, Church-Turing thesis, and undecidability. Prerequisite(s): CPS 341.

**CPS 483. Graph Algorithms. 3 Hours**

Design and analysis of algorithms for problems based on graphs. Classical algorithms and efficient algorithms for restricted domains of graphs will be covered. Analysis of algorithms, complexity classes P, NP, and NP-complete, traversals, bi-connectedness, strongly-connectedness, 2-SAT, planarity testing, and algorithms for restricted classes of graphs. Prerequisite(s): CPS 341, CPS 350.

**CPS 485. Evolutionary Computation. 3 Hours**

The history and use of Evolutionary Computation (EC) are explored. Popular approaches to EC (genetic algorithms, genetic programming, evolution strategies, evolutionary programming) are defined and discussed. Coursework includes implementation of evolutionary techniques and review and analysis of literature in the field. Prerequisite(s): CPS 350.

**CPS 490. Capstone I. 3 Hours**

Principles, practices, and methodology for development of large software systems using data flow and object-oriented methodologies. User interface design, software testing, and software project management. Selecting and planning a team project; this involves team formation, project selection, project planning, and proposal writing and presentation. Prerequisite(s): CPS 350.

**CPS 491. Capstone II. 3 Hours**

An exercise in the design, implementation, documentation, and deployment of a group project culminating in a presentation to the computer science faculty and industry representatives. Prerequisite(s): CPS 490.

**CPS 496. Cooperative Education. 1-3 Hours**

Computer science cooperative education work experience in an approved organization. Not open to students with credit in CPS 497. Credit does not apply to major requirements. Repeat to a maximum of three semester hours. Prerequisite(s): Twelve hours of upper-level CPS courses with a GPA of 3.0; total ninety semester hours with a GPA of 2.75; permission of the department in advance of the work.

**CPS 497. Internship. 1-3 Hours**

Computer science work experience in an approved organization. Not open to students with CPS 496 credit. Credit does not apply to major requirements. Repeat to a maximum of three semester hours. Prerequisite(s): Twelve semester hours of upper-level CPS courses with GPA of 3.0; total ninety semester hours and 2.75 GPA; permission of department in advance of the work.

**CPS 498. Problems in Computer Science. 1-4 Hours**

Individual readings and research in a specialized area. (See CPS 499.) By arrangement. May be taken more than once for additional credit. Prerequisite(s): Permission of department chairperson.

**CPS 499. Special Topics in Computer Science. 1-4 Hours**

Lectures or laboratory work in advanced topics from the various areas of computer science. By arrangement. May be taken more than once. Prerequisite(s): Permission of department chairperson.

## Criminal Justice Studies

Major:

- Bachelor of Arts, Criminal Justice Studies

Minor:

- Criminal Justice

Criminal Justice is the scientific study of crime, deviance, and the agencies of the criminal justice system. The Bachelor of Arts with a major



in Criminal Justice Studies, is a broadly structured interdisciplinary and criminological curriculum designed to introduce students to:

1. A practical and critical understanding of criminal justice and criminology.
2. Necessary knowledge for public service, e.g., law enforcement and/or investigative services at the local, state, and national levels; careers in the correctional field, community programs, and other rehabilitative services, as well as staff positions in the judiciary system.
3. Preparation for pursuing advanced study in a criminal justice or criminological graduate program or in law school.

In addition to courses in criminal justice studies, students may take courses in political science, psychology, social work, and sociology.

Those who enter the University of Dayton as first-year students, or as transfers without associate degrees, will be classified under Option A, a total program sequence. Students who transfer to the University of Dayton with acceptable associate degrees in specific fields similar or closely related to criminal justice will be classified under Option B, a transfer program sequence. All students transferring into the curriculum must be in good academic standing and meet entry requirements.

A minor in Criminal Justice Studies consists of 18 semester hours.

Students intending to major or minor in Criminal Justice Studies should consult with the program director to begin planning their program. It is the sole responsibility of students to inform themselves of whatever changes occur in the curriculum and to observe all the regulations, procedures, and requirements of the University and the Criminal Justice Studies program. The Criminal Justice Studies Program is a part of the Department of Sociology, Anthropology, and Social Work.

**Criminal Justice Advisory Committee**

Arthur J. Jipson, Director

Additional faculty who teach in the Criminal Justice Studies Program are located in several social science departments including: Sociology, Anthropology, and Social Work; Psychology; and Political Science. Faculty who teach in the program: Apolito (Criminal Justice Studies/ Sociology), Becker (Sociology), Berry (Psychology), Cassiman (Social Work), Davis-Berman (Social Work), Donnelly (Sociology), Forbis (Sociology), Ghere (Political Science), Holcomb (Sociology), Ingram (Political Science), Longazel (Sociology), Majka, T. (Sociology), Martorano Miller (Political Science), Neeley (Political Science), Pierce (Political Science), Reeb (Psychology), Small (Sociology), Thompson-Miller (Sociology).

**Bachelor of Arts, Criminal Justice Studies-Option A (CJS) minimum 124 hours**

**Common Academic Program (CAP)**

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	

Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- 1 Completed with ASI 110 and ASI 120.
- 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- 3 Completed with ENG 200H or ASI 120.
- 4 Must include two different disciplines and accompanying lab.

**Liberal Studies Curriculum**

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics) <sup>1</sup>	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

**Major Requirements <sup>2, 3</sup>**

CJS 101 Introduction to Criminal Justice Studies	3-4
CJS 207 Research Methods in Criminal Justice Studies <sup>1, 4</sup>	3
CJS 347 Senior Project Design	1
CJS 447 Senior Seminar in Criminal Justice Studies (Satisfies CAP Major Capstone)	3
SOC 305 Criminological Theory	3
Select two behavior courses from:	6
PSY 363 Abnormal Psychology	
PSY 461 Current Implications of Drug Dependency	
SOC 325 Deviant Behavior	
SOC 327 Criminology	
SOC 410 Victimology	
SWK 325 Child Abuse	
Select two institutions courses from:	6
CJS 303 Corrections	
POL 303 State & Local Government	
POL 305 Introduction to Public Administration	
POL 360 Urban Politics & Policy	
SOC 323 Juvenile Justice	

SWK 305	Social Services in the Health Field	6
Select two law courses from:		
CJS 305	Criminal Law	
CJS 315	Criminal Procedure	
POL 301	The American Judicial Process	
POL 411	Constitutional Law	
POL 450	Civil Liberties	
SOC 326	Law & Society	
Select two social structure courses from:		
CJS 322	Policing & Society	
CJS 336	Comparative Criminal Justice	
SOC 328	Racial & Ethnic Relations	
SOC 339	Social Inequality	
SOC 351	Urban Sociology	

**Breadth**

ASI 150	Introduction to the University Experience	1
Total Hours to total at least		124

- CJS 207, Research Methods in Criminal Justice Studies, requires as a prerequisite MTH 207 or PSY 216 or SOC 308. Neither PSY 216 nor SOC 308 fills the three semester hours mathematics requirement for graduation.
- Internships and independent studies may be taken in CJS, POL, PSY, and SOC that have a Criminal Justice Studies emphasis. No more than six semester hours of internships may be taken. Also to be offered is CJS 300 Criminal Justice Studies Career Development, CJS 399, Special Topics in Criminal Justice Studies and CJS 497, Service Learning Experience. This course work is in addition to the thirty-six hours required for a CJS interdisciplinary major in the Option A, total program sequence. They are not to be used as substitute courses for those listed in the areas of behavior, institutions, law and/or social structure, unless approved in advanced by the director of the Criminal Justice Studies program and the College of Arts and Sciences.
- May include CAP components.
- May substitute SOC 208, POL 207, or PSY 217.

**Bachelor of Arts, Criminal Justice Studies-Option B (CJS) minimum 124 hours**

**Common Academic Program (CAP)**

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3

SSC 200	Social Science Integrated	
Arts		
		3
Natural Sciences <sup>4</sup>		
		7
Crossing Boundaries		
		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

- Completed with ASI 110 and ASI 120.
- Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- Completed with ENG 200H or ASI 120.
- Must include two different disciplines and accompanying lab.

**Liberal Studies Curriculum**

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics) <sup>1</sup>	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

**Major Requirements <sup>2, 3, 4, 5</sup>** 22

CJS 207	Research Methods in Criminal Justice Studies <sup>1</sup>	3
CJS 347	Senior Project Design	1
CJS 447	Senior Seminar in Criminal Justice Studies (Satisfies CAP Major Capstone)	3
SOC 305	Criminological Theory	3
Select one behavior course from:		3
PSY 363	Abnormal Psychology	
PSY 461	Current Implications of Drug Dependency	
SOC 325	Deviant Behavior	
SOC 327	Criminology	
SOC 410	Victimology	
SWK 325	Child Abuse	
Select one institutions course from:		3
CJS 303	Corrections	
POL 303	State & Local Government	
POL 305	Introduction to Public Administration	
POL 360	Urban Politics & Policy	
SOC 323	Juvenile Justice	
SWK 305	Social Services in the Health Field	
Select one law course from:		3
CJS 305	Criminal Law	
CJS 315	Criminal Procedure	
POL 301	The American Judicial Process	

POL 411	Constitutional Law	
POL 450	Civil Liberties	
SOC 326	Law & Society	
Select one social structure course from:		3
CJS 322	Policing & Society	
CJS 336	Comparative Criminal Justice	
SOC 328	Racial & Ethnic Relations	
SOC 339	Social Inequality	
SOC 351	Urban Sociology	

**Breadth**

ASI 150	Introduction to the University Experience	1
ENG 316	Elements of Style	3
ENG 370 or ENG 372 or ENG 474	Report & Proposal Writing (Satisfies CAP Inquiry) Business and Professional Writing Argument and Style	3
Total Hours to total at least		124

- CJS 207, Research Methods in Criminal Justice Studies, require as a prerequisite MTH 207 or PSY 216 or SOC 308. Neither PSY 216 nor SOC 308 fills the three semester hours mathematics requirements for graduation. May substitute SOC 208, POL 207, PSY 217 for CJS 207.
- To be admitted as a major in the program under Option B, a transfer student must have received an accredited associate degree in corrections, law enforcement, police administration, police science, or a similar field of criminal justice and must have a 2.5 cumulative grade-point average on a 4.0 grading system. For criminal justice studies majors who have completed the basic requirements for an accredited two-year criminal justice degree, sixty semester hours beyond the associate degree is suggested, which includes a minimum of twenty-one semester hours in the program. The Liberal Studies Curriculum is required for all criminal justice studies transfer majors in addition to the baccalaureate degree requirements if they were not included in the candidates' associate degree programs.
- Internships and Independent Studies may be taken in CJS, POL, PSY, and SOC that have a criminal justice studies emphasis. No more than six semester hours of internships may be taken. Also to be offered is CJS 300 Criminal Justice Studies Career Development, CJS 399, Special Topics in Criminal Justice Studies and CJS 497, Service Learning Experience. This course work is in addition to the hours required for a CJS interdisciplinary major in the Option B, transfer program sequence. They are not to be used as substitute courses for those listed in the areas of behavior, institutions, law and/ or social structure, unless approved in advance by the director of the Criminal Justice Studies program and the College of Arts and Sciences.
- To be considered a viable candidate for graduation, a student must have completed a minimum of 124 semester hours with accepted transfer credits.
- May include CAP components.

**Minor in Criminal Justice Studies (CJS)**

**Criminal Justice Studies**

CJS 101	Introduction to Criminal Justice Studies	3-4
SOC 305	Criminological Theory	3

Select four CJS courses (300/400 level) <sup>1</sup>	12
<b>Total Hours</b>	<b>18-19</b>

<sup>1</sup> One course from each of the four areas involving behavior, institutions, law, and social structure.

**First Year**

Fall	Hours Spring	Hours
ASI 150	1 PSY 101 or POL 201	3
CJS 101	3 SCI 190	3
SOC 101	3 SCI 190L	1
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 ENG 100 (CAP Writing Seminar)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
Language 101	4 Language 141	4
	<b>17</b>	<b>17</b>

**Second Year**

Fall	Hours Spring	Hours
SCI 210 or 220	3 SCI 230 or 240	3
SCI 210L or 220L	1 Language 201 or contextual course	3
CMM 100 (CAP Communication)	3 ENG 200	3
MTH 114 or 207 (CAP Mathematics)	3 Behavior course	3
Behavior course	3 Institutions course	3
Arts	3 CJS 300	1
	<b>16</b>	<b>16</b>

**Third Year**

Fall	Hours Spring	Hours
Institutions course	3 CJS 347	1
SOC 305	3 Law course	3
Adv REL or PHL	3 SSC 200 (CAP Social Science)	3
CJS 207 or SOC 208	3 Inquiry	3
PSY 101, ECO 203, or POL 201	3 Adv REL or PHL Adv HST	3
	<b>15</b>	<b>16</b>

**Fourth Year**

Fall	Hours Spring	Hours
CJS 447	3 Social Structure	3
Law course	3 Literature	3
Social Structure	3 Diversity and Social Structure	3
Integrative	3 Faith Traditions	3
Practical Ethical Action	3 General Elective	3
	<b>15</b>	<b>15</b>

Total credit hours: 127

## Courses

### **CJS 101. Introduction to Criminal Justice Studies. 3-4 Hours**

Introduction to the field of criminal justice studies, stressing the theoretical foundations, origin, nature, methods, and limitations of criminal justice studies as a college curriculum.

### **CJS 207. Research Methods in Criminal Justice Studies. 3 Hours**

Review of the nature, language, and processes of inquiry involving experiments, studies, surveys, and investigations. The instrumentation, types, and structures of content analysis, questionnaires, interviews, and structured observation, including, analytic techniques, data processing resources, and preparation of research reports are also examined.

Prerequisite(s): MTH 207 or PSY 216 or SOC 308.

### **CJS 300. Criminal Justice Studies Career Development. 1 Hour**

Exploration of career opportunities and the professional career placement process including setting goals and identifying educational objectives, noting professional concerns, the role of a given criminal justice organization, and assessing experiences.

### **CJS 303. Corrections. 3 Hours**

The administration of correctional institutions and other detention facilities with emphasis on probation and parole systems to include the rehabilitation and treatment of the incarcerated with reference to correctional law cases.

### **CJS 305. Criminal Law. 3 Hours**

Principles of criminal liability, preparation of case materials, court procedures, and case disposition.

### **CJS 315. Criminal Procedure. 3 Hours**

Fundamentals of criminal procedure: arrest, search, and seizure; interrogation, constitutional limitations upon state and federal rules of criminal procedure. Prerequisite(s): A course in criminal law.

### **CJS 322. Policing & Society. 3 Hours**

Analyzes the history of policing in society and assesses the social and political forces that are correlated with both the rise of formal policing and the variety of structures law enforcement agencies have assumed. Reviews the primary functions of policing in American society and examines those issues affecting federal, state, county, municipal and private policing.

### **CJS 336. Comparative Criminal Justice Systems. 3 Hours**

Survey of cross-cultural uniformities and diversities in law-enforcement agencies, correctional systems, and the courts in selected countries. Prerequisite(s): An introductory course in criminal justice.

### **CJS 347. Senior Project Design. 1 Hour**

Preparation for the criminal justice capstone course with a focus on a workable research topic, literature review, and research methods design. Required for Criminal Justice majors. Prerequisites: SOC 208 or POL 207 or PSY 217; SOC 305 (may be taken as a corequisite).

### **CJS 399. Special Topics in Criminal Justice Studies. 1-3 Hours**

An extensive examination of a current topic affecting the criminal justice system and its law enforcement, corrections or judicial components. May be repeated to a maximum of three semester hours when the topic changes.

### **CJS 440. Independent Study. 3 Hours**

Directed study and research on selected topics of significant academic publications in law enforcement and criminal justice. Prerequisite(s): An introductory CJS course; permission of instructor.

### **CJS 447. Senior Seminar in Criminal Justice Studies. 3 Hours**

Capstone experience in criminal justice studies consisting of a seminar on research and writing in criminology and criminal justice, an empirical research project of the student's choosing, and a written and oral presentation of the research.

### **CJS 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

### **CJS 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved CJS 477; approval of University Honors Program.

### **CJS 495. Internship in Criminal Justice I. 1-3 Hours**

Supervised experience solely in a civilian capacity in a criminal justice or law-enforcement agency. Open to pre-service criminal justice studies majors only; in-service students do not qualify. Students who enroll for internship credit are not given a stipend. Credit granted only under Grading Option Two. Prerequisite(s): 2.5 cumulative grade-point average; sophomore status; permission of program director.

### **CJS 496. Internship in Criminal Justice II. 1-3 Hours**

Continuation of CJS 495.

### **CJS 497. Service Learning Experience. 1 Hour**

Supervised community research or service experience that complements a specific upper division course in Criminal Justice Studies. No more than three semester hours of Social Science 497 credits can count for graduation. Repeatable up to three semester hours. Prerequisite(s): Permission of instructor. Corequisite(s): CJS course (300- or 400-level).

## Economics

Major:

- Bachelor of Arts, Economics

Minor:

- Economics

In cooperation with the Department of Economics and Finance in the School of Business Administration, the College of Arts and Sciences offers the degree of Bachelor of Arts with a major in economics.

The field of economics covers topics ranging from making sound business decisions to tackling some of society's most challenging social issues. Economics students learn to think critically about how choices are made in the presence of scarcity. An undergraduate education in economics enables individuals to better understand and help resolve problems in today's business and society.

The major in economics requires 30 semester hours of courses in economics: ECO 203, ECO 204, ECO 346, ECO 347, ECO 410 or ECO 441, ECO 490, and four elective courses in economics.

A minor in economics is also available, requiring 18 semester hours of courses in economics: ECO 203, ECO 204, ECO 346, ECO 347, and two elective courses in economics.

Information on a specialized degree, applied mathematical economics (MTE), is offered by the Department of Mathematics.

**Faculty**

Trevor Collier, Chairperson  
 Professors Emeriti: Frasca, Gustafson  
 Edmund B. O’Leary Chair in Economics: John Ruggiero  
 Professors: Caporale, Ruggiero  
 Associate Professors: Collier, Poitras  
 Assistant Professors: Haskell, Williams  
 Lecturer: John

**Bachelor of Arts, Economics (ECO)  
 minimum 124 hours**

**Common Academic Program (CAP)**

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

<sup>1</sup> Completed with ASI 110 and ASI 120.  
<sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.  
<sup>3</sup> Completed with ENG 200H or ASI 120.  
<sup>4</sup> Must include two different disciplines and accompanying lab.

**Liberal Studies Curriculum**

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics (Satisfies CAP Mathematics) <sup>1, 2</sup>	6-9
MTH 138 Calculus I with Review <sup>3</sup> or MTH 148 Introductory Calculus I	
MTH 207 Introduction to Statistics <sup>4</sup>	
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences, excluding ECO courses (Includes CAP Social Science)	12

**Major Requirements**

ECO 203 Principles of Microeconomics <sup>5</sup>	3
ECO 204 Principles of Macroeconomics <sup>5</sup>	3
ECO 346 Intermediate Microeconomic Analysis <sup>6</sup>	3
ECO 347 Intermediate Macroeconomic Analysis	3
ECO 410 Bus&Eco Forecasting	3
or ECO 441 Econometrics	
ECO 490 Senior Seminar in Applied Economics (Satisfies CAP Major Capstone)	3
ECO electives (300/400 level)	12

**Breadth**

ASI 150 Introduction to the University Experience	1
Total Hours to total at least	124

<sup>1</sup> In addition, MTH 149 strongly recommended.  
<sup>2</sup> CAP Mathematics is satisfied with MTH 129, MTH 148, MTH 168, or MTH 207.  
<sup>3</sup> MTH 168 or MTH 128-MTH 129 may be substituted with permission of department chairperson.  
<sup>4</sup> May substitute DSC 210-DSC 211.  
<sup>5</sup> Minimum C grade  
<sup>6</sup> ECO 340 may be substituted for ECO 346 with permission of the department chairperson.

**Minor in Economics (ECO)**

**Economics**

ECO 203 Principles of Microeconomics <sup>1</sup>	3
ECO 204 Principles of Macroeconomics <sup>1</sup>	3
ECO 346 Intermediate Microeconomic Analysis <sup>2</sup>	3
ECO 347 Intermediate Macroeconomic Analysis	3
Select two ECO courses (300/400 level)	6
Total Hours	18

<sup>1</sup> ECO 300 and an upper level ECO course can substitute for ECO 203 and ECO 204.  
<sup>2</sup> ECO 340 may be substituted for ECO 346 with permission of department chairperson.

**First Year**

Fall	Hours Spring	Hours
ASI 150	1 ECO 204	3



ECO 203	3	ENG 100 (CAP Writing Seminar)	3
HST 103, PHL 103, or REL 103	3	HST 103, PHL 103, or REL 103 (CAP Humanities)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3	SCI 190	3
MTH 137 (CAP Mathematics)	1	SCI 190L	1
SOC 101	4	MTH 138	4
	<b>17</b>		<b>17</b>
<b>Second Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
ENG 200 (CAP Writing Seminar)	3	ECO 346	3
CMM 100 (CAP Communication)	3	SCI 210	3
MTH 207	1	SCI 210L	1
Intro Social Science	3	SSC 200 (CAP Social Science)	3
Language 101	4	Language 141	4
	<b>16</b>		<b>14</b>
<b>Third Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
ECO 347	3	300/400 Eco elective	3
SCI 230	3	300/400 Eco elective	3
Integrative	3	CAP Arts	3
Social Science 300/400	3	Faith Traditions	3
Language 201 or contextual course	3	General elective	3
	<b>15</b>		<b>15</b>
<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
ECO 410 or 441	3	ECO 490	3
300/400 Eco elective	3	300/400 Eco elective	3
Adv Philosophy/Religious Studies (CAP)	3	Adv Historical Studies (CAP)	3
Inquiry	3	Diversity and Social Justice (CAP)	3
General elective	3	Faith Traditions (CAP)	3
	<b>15</b>		<b>15</b>

Total credit hours: 124

## Courses

### ECO 203. Principles of Microeconomics. 3 Hours

An introduction to consumer and producer behavior in a market economy, demand and supply, pricing and firm behavior under perfect and imperfect competition, and the distribution of income. Discussion of current topics in microeconomics may be included.

### ECO 204. Principles of Macroeconomics. 3 Hours

Introductory economic analysis of the macroeconomy; the determination of gross national product, employment, inflation and the interest rate in the U.S. economy. Government policy, money and banking, and international trade are analyzed.

### ECO 301. Seminar in Market Economics. 3 Hours

Market solutions to economic and political issues. Topics vary, but may include issues relating to drugs, gun control, environmental concerns, government interventions, economic and political freedom, and others. Team taught course. Prerequisite(s): ECO 203.

### ECO 340. Managerial Economics. 3 Hours

Application of economic models to managerial decision making. Topics include demand analysis, forecasting demand, short-run cost analysis, long-run cost and production functions, pricing, and risk and uncertainty. May not get credit for both ECO 340 and ECO 346. ECB, ECO, MTE majors & minors only. Prerequisite(s): ECO 203.

### ECO 346. Intermediate Microeconomic Analysis. 3 Hours

Analysis of the theory of consumer behavior, production theory, equilibrium of the firm, price determination in various market structures, distribution of income, allocation of resources, and welfare economics. May not get credit for both ECO 346 and ECO 340. ECO, ECB, and MTE majors and minors only. Prerequisite(s): ECO 203.

### ECO 347. Intermediate Macroeconomic Analysis. 3 Hours

National income accounting and the determination of the level of income and employment; classical, Keynesian, and post-Keynesian models; private, government, and foreign sectors; theories of inflation and economic growth. ECO, ECB, and MTE majors and minors only. Prerequisite(s): ECO 204, ECO 203.

### ECO 390. Antitrust Economics. 3 Hours

Study of how economic analysis has been applied in the interpretation of the antitrust statutes. Examines major anti-trust laws and relevant case law; reviews economic theories of market behavior. Prerequisite(s): ECO 203.

### ECO 410. Business & Economic Forecasting. 3 Hours

Forecasting techniques, including ARIMA time series models, econometric models, moving averages, exponential smoothing, and time series decomposition, are used to forecast business and economic variables. Data sources, selection of appropriate forecasting tools and models, and evaluation of forecast results are studied. Prerequisite(s): ECO 203, ECO 204; Statistics (DSC 211 or MTH 207 or MTH 367 or MTH 412).

### ECO 415. Game Theory with Business Applications. 3 Hours

Introductory course in strategic decision making; provides a thorough discussion of the basic techniques of applied game theory and of systematic thinking in making business decisions. Among the topics covered with applications to business are equilibrium strategies, understanding situations involving conflict and cooperation, auction design and bidding strategy, and bargaining and negotiations. Prerequisite(s): ECO 203.

### ECO 435. Economics of the Environment. 3 Hours

Introduction to the economics of the global environment including an analysis of market failure as a cause of environmental degradation. Topics covered include cost-benefits analysis, criteria for public investment, regulation of the environment, and the sustainable global environment. Prerequisite(s): ECO 203.

**ECO 441. Econometrics. 3 Hours**

Training in the art of making economic measurements from empirical data using regression analysis as the principle tool; use of computer software to estimate and test regression equations; interpretation of results using statistical inference. Prerequisite(s): ECO 203, ECO 204, [one of the following DSC 211, MTH 207, MTH 367, or MTH 412].

**ECO 442. Money & Banking. 3 Hours**

Principles of money and monetary systems; commercial banking and the role of the Federal Reserve System; monetary theory and policy; the mechanism of international payments. Prerequisite(s): ECO 203, ECO 204.

**ECO 445. Public Finance. 3 Hours**

The economic aspects of government finance at the local, state, and especially the national level; the behavioral effects of various taxes, efficiency in spending, the changing role of the U.S. government, fiscal policy, and intergovernmental revenue and expenditure programs; emphasis on relating analytical tools to current developments. Prerequisite(s): ECO 203, ECO 204.

**ECO 460. Economic Development & Growth. 3 Hours**

Study of various dynamic economic theories of growth and structural change; the role of particular factors of production and related noneconomic variables in the development process, primarily, though not exclusively, of Third World nations. Prerequisite(s): ECO 203, ECO 204.

**ECO 461. International Economics. 3 Hours**

Major issues surrounding international trade and finance, the economic interdependence of nations and businesses, essential theoretical and empirical tools necessary to monitor and analyze international economic phenomena, and the application of these tools to contemporary business problems and issues. Prerequisite(s): ECO 203, ECO 204.

**ECO 471. Labor Economics. 3 Hours**

Theory of labor supply and demand, human capital theory, and the process by which wages are determined in various factor markets; applications to topics of unemployment, unions, migration, discrimination, and skill differentials. Prerequisite(s): ECO 203, ECO 204.

**ECO 480. Sports Economics. 3 Hours**

The application of economic analysis to the sports industry. Examines demand and efficiency in the product market; the labor market for professional athletes and mechanisms for restricting competition in that market; problems in achieving an efficient allocation of resources in the sports industry. Prerequisite(s): ECO 203.

**ECO 485. Urban & Regional Economics. 3 Hours**

Treatment of certain theoretical concepts such as location theory and theories of land use and land rent; an economic interpretation for the existence of cities; applying economic analysis to the problems of traffic congestion, pollution, race, poverty, and urban sprawl. Prerequisite(s): ECO 203.

**ECO 488. Production Economics & Performance Evaluation. 3 Hours**

Intermediate course in theoretical and applied microeconomic production theory; provides a thorough discussion of the basic techniques of applied production theory and performance evaluation of decision making units. Topics include returns to scale, technical and allocative efficiency, benchmarking, environmental costs, and programming. Prerequisite(s): ECO 203.

**ECO 490. Senior Seminar in Applied Economics. 3 Hours**

The capstone seminar course is required for all Economics and Business Economics majors. Students apply economic analysis to topics of interest through projects, presentations, and group discussion, as directed by the instructor. The course provides students the opportunity to extend their proficiency in theoretical, mathematical, and statistical methods learned in previous economics courses through practical application. Typically offered during the spring semester. Economics or Business Economics majors only. Prerequisite(s): 12 semester hours in Economics, including one (1) of the following: ECO 441 or ECO 410. Senior standing only.

**ECO 491. Honors Thesis. 3 Hours**

Selection, design, investigation, and completion of an independent original research thesis under the guidance of a departmental faculty member. Restricted to students in the University Honors Program with permission of the director of the program and the departmental chairperson.

**ECO 492. Honors Thesis. 3 Hours**

Selection, design, investigation, and completion of an independent original research thesis under the guidance of a departmental faculty member. Restricted to students in the University Honors Program with permission of the director of the program and the departmental chairperson.

**ECO 494. Seminar. 3 Hours**

Subject varies from time to time. May be taken more than once if topic changes. Prerequisites to be announced.

**ECO 496. Cooperative Education. 3 Hours**

Optional full-time work period off campus alternating with study period on campus. (See Chapter X; consult Cooperative Education Office for details.) Does not count toward economics major. Permission of chairperson required. Economics or Business Economics majors only. Prerequisite(s): Permission of department chairperson.

**ECO 497. Internship for General Elective Credit. 1-3 Hours**

Practical work experience associated with career development and career exploration relating to the student's major. Permission of the department chair or designee required. Does not replace economics courses for the economics major. Economics or Business Economics majors only. Prerequisite(s): Forty-five semester hours of credit.

**ECO 498. Independent Study in Economics. 1-6 Hours**

Directed readings and research in selected fields of economics. The number of semester hours will depend on the amount of work chosen. The course will involve periodic discussions with faculty and other students in the course. May be taken more than once for additional credit. Prerequisite(s): 3.0 GPA in economics with a minimum of nine semester hours in economics; nomination by faculty; permission of the department chairperson.

## English

Major:

- Bachelor of Arts, English

Minor:

- English

The University requirement in English composition is satisfied by the completion of ( ENG 100A and ENG 100B), ENG 200 or ENG 200H or ASI 120. Completing this requirement is a prerequisite for most other English courses. For placement information, see Composition Competencies in the Degree Requirements section. For additional

details, consult the department chairperson or the director of writing programs.

Students majoring in English must complete at least 42 semester hours of English courses, including first-year composition, and at least 24 semester hours at the 300/400 level.

A minor in English consists of 12 semester hours beyond the composition requirement.

Students in B.A. programs can pursue State of Ohio teacher licensing in Integrated Language Arts through the dual-degree B.A. and B.S.E. program conducted in conjunction with the Department of Teacher Education in the School of Education and Health Sciences. Candidates must meet set standards for admission to this program, which must be verified by the Transfer Officer in the Office of the Dean, School of Education and Allied Professions. For further information, consult the Department of English chairperson.

The English department awards a writing certificate to students who achieve a 3.0 grade-point average in 18 semester hours of approved writing and writing-related courses, including at least 12 semester hours of upper-divisional (300-400) courses, and who successfully complete an approved writing portfolio and an assigned, impromptu writing task. The English department also offers a writing internship program. For details on these advanced writing opportunities, consult the department chairperson.

**Faculty**

R. Andrew Slade, Chairperson  
 Tereza Szeghi, Director of Graduate Studies  
 Laura Vorachek, Director of Undergraduate Studies  
 Ann Biswas, Director of Writing Programs  
 Professors Emeriti: August, Henninger, Labadie, K. Marre, L. Marre, H. Martin, Means, Murphy, Palumbo, Patrouch, Stockum, Youngkin  
 Professors: Farrelly, Kimbrough, McCombe, Pici, Strain, Wilhoit  
 Associate Professors: Bardine, Boehnlein, Carrillo, Krummel, Morgan, Potter, Slade, Szeghi, Trollinger, Vorachek  
 Assistant Professors: Bloom-Poljar, Esseili, Haan, Li, Naruse, Thomas  
 Lecturers: Adams, Biswas, Burnside, DeAloia, Doench, Getrost, Hohman, Keane-Sexton, MacKay, MacLeod, E. Martin, Patterson, Taaffe

**Bachelor of Arts, English (ENG) minimum 124 hours**

**Common Academic Program (CAP)**

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7

Crossing Boundaries variable credit

Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- 1 Completed with ASI 110 and ASI 120.
- 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- 3 Completed with ENG 200H or ASI 120.
- 4 Must include two different disciplines and accompanying lab.

**Liberal Studies Curriculum**

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

**Major Requirements <sup>1, 2, 3</sup> 42**

ENG 200 Writing Seminar II	3
or ENG 200H Writing Seminar II	
or ASI 120 The Development of Western Culture in a Global Context	
ENG 220 Foundations of Textual Analysis & Research	3
ENG 386 Genre in Writing	3
Select one early literature survey course from:	3
ENG 301 Survey of Early English Literature	
ENG 303 Survey of Early American Lit	
Select one additional literature survey course from:	3
ENG 301 Survey of Early English Literature	
ENG 302 Survey of Later British Literature	
ENG 303 Survey of Early American Lit	
ENG 304 Survey of Later American Lit	
ENG 498 Capstone I-Project	3
ENG 499 Capstone II-Seminar (Satisfies CAP Major Capstone)	0

Select one track from:

<b>Literature (LIT)</b>	24
ENG 388 Introduction to Literary Theory	3
Select one approved authors course from:	3
ENG 362 Shakespeare	
ENG 363 Shakespeare's Worlds	
ENG 365 Studies in an Author	
ENG 405 Chaucer	
ENG 431 Milton	
ENG 490 Research Seminar-Literature	3

Select another approved research seminar from:	3
ENG 490    Research Seminar-Literature	
ENG 497    Research Seminar-Writing	
ENG 496    Research Seminar-Teaching	
Select one approved ENG diversity course <sup>4</sup>	3
ENG electives (300-400 level) <sup>5</sup>	9
<b>Teaching (ETC) <sup>6</sup></b>	24
ENG 391    Introduction to Composition Theory	3
ENG 393    Approaches to Literature for Middle and High School	3
ENG 466    TESOL Methods for Teaching English Language Learners	3
Select two ENG language courses from:	6
ENG 468    Introduction to Linguistics	
ENG 470    History of English	
ENG 472    The Structure of English	
Select one approved diversity course <sup>4</sup>	3
ENG 496    Research Seminar-Teaching	3
ENG elective (300-400 level)	3
<b>Writing - Creative Writing (WCW)</b>	24
ENG 280    Introduction to Creative Writing	3
ENG 389    Introduction to Poetics and Narrative Theory	3
Select two workshops from:	6
ENG 308    Intermediate Poetry Workshop	
ENG 310    Intermediate Fiction Workshop	
ENG 312    Advanced Writing of Drama	
ENG 315    Creative Nonfiction	
ENG 460    Advanced Poetry Workshop	
ENG 462    Advanced Fiction Workshop	
Select one approved new media course from:	3
ENG 375    Writing for the Web	
ENG 497    Research Seminar-Writing	3
Select one approved ENG diversity course <sup>4</sup>	3
ENG electives (300-400 level)	3
<b>Writing - Rhetoric &amp; Composition (WRC)</b>	24
ENG 391    Introduction to Composition Theory	3
or ENG 390    Introduction to Rhetorical Theory	
ENG 374    Visual Rhetoric	3
Select one approved new media course from:	3
ENG 375    Writing for the Web	
ENG 377    Writing in Social Contexts	3
ENG 474    Argument and Style	3
ENG 497    Research Seminar-Writing	3
Select one approved diversity course <sup>4</sup>	3
ENG elective (300-400 level)	3
<b>Writing - Professional &amp; Technical (WPT)</b>	24
ENG 390    Introduction to Rhetorical Theory	3
ENG 368    Introduction to Professional and Technical Writing	3
ENG 369    Writing in Organizations	3
Select one approved new media course from:	3

ENG 375    Writing for the Web	
ENG 475    Usability in Technical Writing	3
ENG 497    Research Seminar-Writing	3
Select one approved diversity course <sup>4</sup>	3
ENG elective (300-400 level)	3
<b>Self-Designed (ESD)</b>	24
Select one approved ENG theory course <sup>7</sup>	3
Select one approved ENG diversity course <sup>4</sup>	3
Select one approved ENG research seminar <sup>8</sup>	3
Approved ENG electives	15
<b>Breadth</b>	
ASI 150    Introduction to the University Experience	1
Total Hours to total at least	124

- 1 Satisfies CAP First and/or Second-Year Writing Seminar.
- 2 May include CAP Arts.
- 3 ENG 100A and ENG 100B together will satisfy the requirement of 3 semester hours of ENG 100. ASI 120 satisfies the requirement of 3 semester hours of ENG 200H. Students exempt from ENG 200H due to ACT/SAT scores still need to complete 42 semester hours for the major.
- 4 Approved courses for the English major diversity requirement include: ENG 333, ENG 335, ENG 336, ENG 339, ENG 340, ENG 341, ENG 345, ENG 346, and ENG 360.
- 5 At least 9 of the 18 required credit hours in ENG electives and research seminars must be taken in approved literature courses. At least 3 of these 9 hours must be in a literature course designated as "early" (e.g. pre-1800 English literature; pre-1865 American literature). Not all courses in the track may be taken in a single national literary tradition.
- 6 Teaching Track students who are also enrolled in the Bachelor of Science in Education degree program in Teacher Education for Adolescent-Young Adult English and Language Arts must fulfill their literature survey requirements with the two early surveys: ENG 301 and ENG 303, and they must take an approved ENG new media course in place of the ENG elective.
- 7 Theory course options for the Self-Designed Track include: ENG 388, ENG 389, ENG 390, ENG 391, ENG 476, ENG 488, and ENG 489. The option selected for the Self-Designed Track must also be approved by the academic advisor and department chairperson.
- 8 Research seminar options for the Self-Designed Track include: ENG 490, ENG 496, and ENG 497. The option selected for the Self-Designed Track must also be approved by the academic advisor and department chairperson.

## Minor in English (ENG)

<b>English</b>	
Select four ENG courses (300/400 level) <sup>1</sup>	12
Total Hours	12

<sup>1</sup> In addition to the composition requirement.

<b>First Year</b>			
<b>Fall</b>		<b>Hours Spring</b>	<b>Hours</b>
ASI 150		1 ASI 120	8

ASI 110	7 MTH (CAP Mathematics)	3	
Social Science Intro	3 Language 141	4	
Language 101	4		15
<b>Second Year</b>			
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours</b>
ENG 220	3 ENG 386	3	
ENG 303 (or additional ENG literature)	3 ENG 301 (or additional ENG literature)	3	
Language 201 or contextual course	3 CMM 100 (CAP Communication)	3	
Social Science Intro	3 SSC 200 (CAP Social Science)	3	
SCI 190 & 190L (CAP Natural Science)	4 SCI 210 or 220 (CAP Natural Science) SCI 210L or 220L	3	1
	<b>16</b>		<b>16</b>
<b>Third Year</b>			
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours</b>
ENG Concentration	3 ENG Concentration	3	
ENG Concentration	3 ENG Concentration	3	
Advanced Historical Study	3 ENG Concentration	3	
CAP Arts	3 Faith Tradition	3	
SCI 230 or 240 (CAP Inquiry)	3 Practical Ethical Action	3	
Social Science elective at 300/400 level	3		
	<b>18</b>		<b>15</b>
<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours</b>
ENG 498	3 ENG 499	0	
ENG Research Seminar	3 ENG Concentration	3	
Advanced PHL or REL	3 ENG Concentration	3	
Integrative	3 Advanced PHL or REL	3	
General elective (optional)	3 Diversity and Social Justice General elective (optional)	3	3
	<b>15</b>		<b>15</b>

Total credit hours: 125

## Courses

### ENG 100. Writing Seminar I. 3 Hours

Introductory composition course focused on personal and academic literacies, with an emphasis on expository writing. Instruction and practice in developing college-level reading, writing, research, and critical thinking skills. Emphasis is on a process approach to writing effective academic prose. Students must pass the course with a grade of C- or higher to satisfy College of Arts and Sciences' composition competency requirement.

### ENG 100A. Writing Seminar 1A. 2 Hours

First half of two-semester introductory composition course sequence focused on personal and academic literacies, with an emphasis on expository writing. Instruction and practice in developing college-level reading, writing, research, and critical thinking skills. Emphasis is on a process approach to writing effective academic prose. Students must pass the course with a grade of C- or higher to satisfy College of Arts and Sciences' composition competency requirement. Prerequisite(s): Placement as determined by the Office of the Dean.

### ENG 100B. Writing Seminar 1B. 2 Hours

Second half of year-long introductory composition course focused on personal and academic literacies, with an emphasis on expository writing. Instruction and practice in developing college-level reading, writing, research, and critical thinking skills. Emphasis is on a process approach to writing effective academic prose. Students must pass the course with a grade of C- or higher to satisfy College of Arts and Sciences' composition competency requirement. Prerequisite(s): ENG 100A.

### ENG 101. College Composition I. 3 Hours

Analysis of the processes of reading and writing aimed at the development and refinement of critical thinking skills, critical reading skills, and critical writing skills. Students must pass course with a grade of C- or higher to satisfy the University requirement in general reading and writing competencies.

### ENG 102. College Composition II. 3 Hours

Study of appropriate rhetorical structures and styles for analytic, synthetic, and argumentative essays. Practice in developing critical reading and writing skills with an emphasis on writing from sources. Students must pass the course with a grade of C- or higher to satisfy the University requirement in general reading and writing competencies. Prerequisite(s): ENG 101.

### ENG 151. Introduction to Literature. 3 Hours

Critical study of literary forms - fiction, drama, and poetry - representative of various eras and cultures. Prerequisite(s): ENG 100 or ENG 100B or ASI 110 or equivalent. ENG 100 or ENG 100B may be taken as a corequisite.

### ENG 198. English Scholars' Seminar. 3 Hours

Study and seminar discussion of selected literary masterworks and appropriate criticism thereof, with equal emphasis on composition. Open by permission only to first-year students in the Berry Scholars Program. Students must pass the course with a grade of C- or higher to satisfy the University requirement in general reading and writing competencies.



**ENG 200. Writing Seminar II. 3 Hours**

Variable topic composition course focused on academic discourse, research, and argumentation. Instruction and practice in developing reading, writing, and research skills introduced in ENG 100 and employed across the curriculum. Emphasis on rhetorical analysis and a process approach to writing effective academic arguments. Students must pass the course with a grade of C- or higher to satisfy College of Arts and Sciences' composition competency requirement. Prerequisite(s): ENG 100 or ENG 100B, and sophomore status, or placement as determined by the Dean's Office.

**ENG 200H. Writing Seminar II. 3 Hours**

Variable theme composition course focused on academic discourse, research, and argumentation. Instruction and practice in developing reading, writing, and research skills introduced in ENG 100 and employed across the curriculum. Emphasis is on rhetorical analysis and a process approach to writing effective academic arguments. Students must pass the course with a grade of C- or higher to satisfy College of Arts and Sciences' composition competency requirement. Prerequisite(s): Placement as determined by the Office of the Dean.

**ENG 203. Major British Writers. 3 Hours**

Study of four or five writers representative of the principal periods in English literature. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 204. Major American Writers. 3 Hours**

Study of four or five writers representative of the principal periods in American literature. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 205. Major World Writers. 3 Hours**

Study (in translation) of four or five writers representative of the principal periods in (chiefly Western world) literature, exclusive of English and American literature. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 210. Poetry. 3 Hours**

Study of representative examples of a major literary genre. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 220. Foundations of Textual Analysis & Research. 3 Hours**

Introduction to the skills and habits of reading, writing, textual analysis and research that are central to the discipline of English. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 230. Topics in Literature. 1-6 Hours**

Exploration of varying approaches to the study of literature. Can be repeated under special circumstances. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 242. Sophomore Honors. 3 Hours**

Seminar in which selected works from the literature of Western civilization are studied. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 270. Reading & Writing in the American University. 4 Hours**

Provides students who are English language learners with an understanding of rhetorical principles and the conventions of Western academic literacy as well as competence in applying those principles and conventions for success as writers in an American university. Prerequisite(s): Permission of department chairperson.

**ENG 271. Technical Writing Laboratory. 2 Hours**

Designed to complement Engineering Technology courses by analyzing representative technical reports and documents and by providing guidance in planning, drafting, and revising writing assignments. Its focus is on the discipline-specific types of writing in the professional technical/engineering fields including laboratory reports, correspondence, technical descriptions, specifications, and proposals. Prerequisite(s): ENG 270.

**ENG 271L. Technical Writing Laboratory. 2 Hours**

Designed to complement Engineering Technology courses by analyzing representative technical reports and documents and by providing guidance in planning, drafting, and revising writing assignments. Its focus is on the discipline-specific types of writing in the professional technical/engineering fields including laboratory reports, correspondence, technical descriptions, specifications, and proposals. Prerequisite(s): ENG 270.

**ENG 272. Writing & Research. 3 Hours**

Study and practice of research methods commonly required to complete writing assignments across the curriculum. Formulation of research questions, use of appropriate methods to gather data, analysis of information, and creation of effective written documents. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 280. Introduction to Creative Writing. 3 Hours**

Introduction to writing poetry, short fiction, and creative non-fiction. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 282. Introduction to Writing Poetry. 3 Hours**

Beginning course in analyzing and writing poetry. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 284. Introduction to Writing Fiction. 3 Hours**

Beginning course in analyzing and writing short fiction. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 286. Introduction to Writing Drama. 3 Hours**

Beginning course in analyzing and writing short plays. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 300. Literary Analysis & Research - Poetry. 3 Hours**

Detailed analysis of selected poems, with attention to their use of traditional forms and conventions, combined with training in standard methods of interpretation and research. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 301. Survey of Early English Literature. 3 Hours**

Survey of English literature from the Medieval period to the end of the eighteenth century. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 302. Survey of Later British Literature. 3 Hours**

Survey of British literature from the early nineteenth century Romantic period to the present. Emphasis is placed on a critical engagement with creative literary genres, including poetry, fiction, drama and prose. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 303. Survey of Early American Lit. 3 Hours**

Survey of American literature from the Colonial period to 1865. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 or equivalent.

**ENG 304. Survey of Later American Lit. 3 Hours**

Survey of American literature from 1865 to the present. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 or equivalent.

**ENG 305. Survey of American Literature. 3 Hours**

Survey of American literature from the Colonial period to the present. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 306. Survey of Continental Literature. 3 Hours**

Survey of continental European literature from Homer to the present. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 308. Intermediate Poetry Workshop. 3 Hours**

Intensive practice in the writing of poems. Prerequisite(s): ENG 282 or permission of department chairperson.

**ENG 310. Intermediate Fiction Workshop. 3 Hours**

Intensive practice in the writing of fiction. Prerequisite(s): ENG 284 or permission of department chairperson.

**ENG 312. Advanced Writing of Drama. 3 Hours**

Intensive practice in the writing of plays. Prerequisite(s): ENG 286 or permission of department chairperson.

**ENG 315. Creative Nonfiction. 3 Hours**

Study, analysis, and writing of a number of creative nonfiction forms, including memoir, personal essay, biography, opinion essay, and weblogs. Focus on writing process, rhetorical awareness, style, and voice in expressive writing. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 316. Elements of Style. 3 Hours**

Study of stylistic options available to all writers. Examination of and practice in adapting writing style for various audiences and purposes, altering style to achieve desired effects, and developing a distinctive written voice. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 317. Contemporary Poetry. 3 Hours**

Study of selected poems by recent writers. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 318. Detective Fiction. 3 Hours**

Introduction to detective fiction, focusing on its developments, conventions, subgenres and themes, including crime and concepts of justice. Emphasis is placed on the methods of inquiry in literary studies with the aim of developing students' critical reading and writing skills. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 (or equivalent).

**ENG 319. Contemporary Fiction. 3 Hours**

Study of selected novels and short fiction by recent writers. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 320. Contemporary Drama. 3 Hours**

Study of selected plays to illustrate major tendencies of modern drama. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 321. Reading Popular Music. 3 Hours**

A focus on popular music texts and scholarly approaches to these texts drawn from a wide range of academic disciplines. Assignments and in-class activities will emphasize critical reading and writing skills as applied to both the popular music texts and the secondary sources which analyze them. Course may be repeated as topics change. Prerequisite(s): ENG 200 or ENG 200H or ASI 120.

**ENG 322. Masterpieces of World Literature. 3 Hours**

Intensive study of major literary works representative of various cultures. Works are studied in translation, although an English language work or two may be included for appropriate comparison. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 323. Literature of the Christian Tradition. 3 Hours**

Study of literary works that form part of the Christian religious tradition. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 324. The Novel. 3 Hours**

Consideration of selected novels to illustrate various fictional modes. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 325. Science Fiction. 3 Hours**

Survey of science fiction with detailed analysis of selected novels and short fiction. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 326. Sport & Literature. 3 Hours**

An historical approach to analyzing the function of sport in society and literature, from Greek times to contemporary times. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 327. Studies in Popular Fiction. 3 Hours**

Analysis of selected artifacts of popular culture with reference to serious literature. May be repeated as topics change. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 328. American Nobel Authors. 3 Hours**

Analysis and discussion of the works of several American Nobel Prize winners in the field of literature. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 329. Short Story. 3 Hours**

Study of the techniques employed in the writing of the short story. Analysis of various models of the short story. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 330. Development of Drama. 3 Hours**

Study of the historical development of the drama from its beginnings to the nineteenth century. Analysis of plays from each significant period. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 331. Studies in Film. 3 Hours**

Studies in special topics in film to introduce students to the conceptual and analytical practices of cinema as an art form. Emphasis is placed on a critical engagement with the formal and stylistic dimensions of motion pictures, as well as discussions of the various roles that the cinema plays in society. May be repeated as topics change. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 332. Studies in Literature & Film. 3 Hours**

Studies in literary texts and the film treatments of those texts. May be repeated as topics change. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 333. Images of Women in Literature. 3 Hours**

Examination of significant works from literature that present and respond to images of women, with critical attention to social and historical context, including application of feminist critical approaches. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 334. Modern Men -- Images. 3 Hours**

Critical examination of significant literary works that portray males in traditional and non-traditional roles. Prerequisite(s): ((ENG 100 or ENG 100B or ENG 200 or ENG 200H) or ASI 110) or equivalent.

**ENG 335. African American Literature. 3 Hours**

Study of African American writers and their oral and literary traditions. Emphasis on issues such as race, gender, and religion. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 336. Gender and Fiction. 3 Hours**

Study of the relationship between gender and fiction as constructions that give shape and meaning to human experience and introduction to critical and literary methods for reading both. Consideration given to the impact of gender on the production and reception of fiction and to the ways fiction writers not only inscribe but also challenge conventions of gender and genre. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 337. Studies in Folklore. 3 Hours**

Selected studies in American and/or world folklore. May be repeated as topics change. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 338. Images of Business. 3 Hours**

Examination of the modern world of work, the image of the business 'professional', and the influence of organization on global society and values as these themes are revealed primarily in modern literature. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 339. American Indian Literature. 3 Hours**

Study of American Indian writers and their oral and literary traditions. Emphasis on such issues as race, gender, and religion. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 340. Prison Literature and Culture. 3 Hours**

Prison Literature and Culture introduces students to some of the major voices that have emerged from the prison system from the rise of the modern prison in the late eighteenth century through the contemporary period. Emphasis will be placed on critical engagement with multiple literary texts and film, as well as discussions of contemporary social issues regarding prison culture. This course will also bring together different disciplinary perspectives in order to enhance students' understanding of the significant issues within prison literature and culture. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 341. Asian-American Literature. 3 Hours**

Study of Asian American writers and their literary traditions. Emphasis on issues of race, gender, and class. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 342. Literature & Environment. 3 Hours**

Examination of nature and environment in literature, focusing on literary representations of nature; nature writing; fiction and ecocriticism; the environment and the literary imagination. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 343. Literature of the Fifties. 3 Hours**

Study of three identifiable cultures of the 1950s in America that were concerned with disillusionment, conformity, alienation, and artistic standards in literature: African-American, Beat, and Jewish writers. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 344. Literature of the Sixties. 3 Hours**

Examination of the Sixties from the perspectives of cultural and literary studies. To this end, it focuses on major works of fiction, essays, New Journalism, and film. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 345. Colonial & Postcolonial Literature. 3 Hours**

Examination of significant literary works that reveal the diversity of human cultures shaped by colonial and postcolonial contexts. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 346. Literature & Human Rights. 3 Hours**

Study of works of literature that address human rights concerns, supplemented with study of foundational philosophical, theological, and political texts that address the meaning and origin of human rights. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 347. Young Adult Literature. 3 Hours**

Critical study of literature written for young adults, including an analysis of the historical trends, debates, and issues in the field. Prerequisite(s): ENG 100 or 100B or 200H or ASI 110.

**ENG 348. Modern Irish Literature. 3 Hours**

Consideration principally of the Irish literary revival of the late nineteenth and early twentieth centuries with appropriate background material. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 350. European Literature of Antiquity. 3 Hours**

Study of significant works from the Old Testament and Greek, Roman, English, Irish, and/or Scandinavian writers. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 351. European Literature of Middle Ages. 3 Hours**

Study of selected literary masterpieces of western civilization in the Middle Ages. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 353. Literature of the Renaissance. 3 Hours**

Study of selected literary masterpieces from England and the Continent that illustrate the culture and ideas of the Renaissance. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 354. Literature of the Enlightenment. 3 Hours**

Study of selected English and European literature from the Age of Reason. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 355. Literature of the Romantic Age. 3 Hours**

Study of the Romantic Revolution as illustrated in representative writings of English and European authors. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 356. European Literature of the 19th Century. 3 Hours**

Study of representative masterpieces from the literature of England and the Continent during the nineteenth century. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 357. European Literature of the Early 20th Century. 3 Hours**

Study of significant English and European literature that illustrates the ideas and culture of the early modern period. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 358. Contemporary Literature of Europe. 3 Hours**

Study of selected western European literature that illustrates the ideas and culture of the present age. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 360. US Latina/Latino Literature. 3 Hours**

Study of U.S. Latina/o authors writing in English and their literary traditions. Emphasis on issues of race, gender, and class. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 362. Shakespeare. 3 Hours**

Study of selected plays and poems of Shakespeare. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 362L. Shakespeare Performance Laboratory. 1 Hour**

Study of Shakespearean performances through films, video tapes, and recordings. Three hours a week. Students in 362L must have already taken or be registered for ENG 362 or an equivalent Shakespeare course. Corequisite(s): ENG 362 or equivalent Shakespeare course.

**ENG 363. Shakespeare's Worlds. 3 Hours**

Concentrated analysis of the various worlds created in Shakespeare's plays and their interconnection with and depiction of the major elements of the historical world of early modern England. In the process of this integrated analysis, the Historical Study and Arts Study domains will be respected and taught as separate disciplines. This course is cross-listed with HST 308.

**ENG 365. Studies in an Author. 3 Hours**

The study and analysis of a significant author's work, literary achievement and influence. May be repeated as topics change. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 366. Health Literacy and Social Justice. 3 Hours**

Study of health literacy from a public health and social justice perspective, examining the impact of limited health literacy on people's access to and understanding of written healthcare information. Students identify and practice using the key elements of effective written information for groups marginalized by differences such as race, socioeconomic class, culture, gender, sexual orientation, and dis/ability. Focus is on research, writing, and designing effective health information materials for diverse audiences. Study of the influences that have served to obstruct access to and understanding of health information and the ability to navigate healthcare systems and services. Junior or senior standing (This course requires prior experience with academic writing and knowledge of writing in the students' own discipline) Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 368. Introduction to Professional and Technical Writing. 3 Hours**

Examination of the histories, theories, processes, functions, and tools of writing in field-specific workplace contexts such as corporate, legal, medical, scientific, technical, and non-profit settings. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 or equivalent.

**ENG 369. Writing in Organizations. 3 Hours**

Intensive study and production of rhetorically effective texts for a variety of professional purposes and audiences. Emphasis on strategically employing technology and writing skills to analyze, create, and edit print and digital texts such as web documents, grant proposals, reports, newsletters, instructions, and other forms of internal and external communication reflective of current workplace practices. (English majors only). Prerequisite(s): ENG 220, ENG 368, English majors only.

**ENG 370. Report & Proposal Writing. 3 Hours**

Analysis and practice in effective report and proposal writing. Emphasis on employing appropriate rhetorical and technological tools to analyze, produce, and edit proposals and reports for both business and non-profit audiences. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent; junior or senior standing.

**ENG 371. Technical Communication. 3 Hours**

Study and practice of effective written communication in technical professions. Emphasis on rhetorical and technological tools and editing skills needed to analyze and create technical documents with written and visual elements. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent; junior or senior standing.

**ENG 372. Business Communication. 3 Hours**

Study and practice in the principles and processes of effective written communication typically encountered in business and other professions. Focus on use of appropriate rhetorical and technological tools to analyze, write, and edit a range of texts including letters, memos, policies, procedures, job descriptions, resumes, performance reviews, reports, and proposals. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent; junior or senior standing.

**ENG 373. Writing in the Health Professions. 3 Hours**

Intensive practice in reading and writing for the healthcare professions. Practice in rhetorically composing written medical information in specific genres for various purposes and audiences (such as patient educational materials to patients and families and medical reports to health professionals). Critical reading, analysis, and reflection on issues, trends, and texts in healthcare. Topics include medical writing research strategies and writing the personal essay for graduate/professional school applications. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent; junior or senior standing.

**ENG 374. Visual Rhetoric. 3 Hours**

Exploration of theories of visual rhetoric and application of those theories to specific instances of visual rhetoric in culture and history. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 375. Writing for the Web. 3 Hours**

Study of the theory and practice of writing rhetorically effective website content and producing websites. Focus on writing and editing effective web content that engages users. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 376. Topics in Writing. 1-6 Hours**

Analysis of and practice in specific forms of writing. May be repeated as forms change. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 377. Writing in Social Contexts. 3 Hours**

Examination of the role writing plays in establishing, maintaining, and regulating social relationships in a specified social context. Involves rhetorical analysis of discourse conventions common to those contexts, original research of writing practices in those contexts, and practice writing within those contexts with attention to audience, genre, and style. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 378. Professional & Technical Writing. 3 Hours**

Professional and Technical Writing.

**ENG 379. Rhetoric of Science. 3 Hours**

Introduction to the role rhetoric and language play in science writing. Focus on the rhetorical analysis of public policy controversies involving science and technology and the role rhetoric plays in the public's understanding of these issues. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 380. Studies in Literature. 1-6 Hours**

Study of special topics or themes in literature. May be repeated as topics change. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.



**ENG 382. Mozart's Operas. 3 Hours**

An interdisciplinary survey of Mozart's operas - German and Italian, serious and comic. Class discussions will be supplemented by extensive listening and/or viewing of recorded performances and, when possible, attendance at live performances. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 383. Tragic Dilemma. 3 Hours**

Examination of tragedy from ancient times to modern times, with emphasis on both the form(s) of tragedy and the tragic vision of life. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 384. Christianity & Modern Poetry. 3 Hours**

Study of selected poets from the modern period whose work draws from the major literary, intellectual, cultural, and theological traditions of Christianity. Prerequisite(s): Examination of tragedy from ancient times to modern times, with emphasis on both the form(s) of tragedy and the tragic vision of life. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 385. Religion & Literature. 3 Hours**

Interdisciplinary study of literature and religion, seeking the sacred in the secular, discussing the doctrines of humans and of God in major writings, especially those of current collegiate interest. Prerequisite(s): ENG 100 or ENG 100B or ENG 200H or ASI 110 equivalent.

**ENG 386. Genre in Writing. 3 Hours**

Survey of various approaches to the study of genre, with emphasis on analysis and production of texts within academic and/or professional genres. Prerequisite(s): ENG 220 or permission of department chairperson.

**ENG 387. Literature & Ethics. 3 Hours**

Prerequisite(s): ENG 220 or permission of department chairperson.

**ENG 388. Introduction to Literary Theory. 3 Hours**

Introduction to Literary Theory, its historical development, rhetorical and argumentative strategies, and practice. Prerequisite(s): ENG 220 or permission of department chairperson.

**ENG 389. Introduction to Poetics and Narrative Theory. 3 Hours**

Examination of a variety of poetic and narrative theories and their application to the study of creative writing. Prerequisite(s): ENG 220 or permission of department chairperson.

**ENG 390. Introduction to Rhetorical Theory. 3 Hours**

Examination of a variety of rhetorical theories from classical, modern, and contemporary times. Students explore the limits and possibilities of these theories for explaining persuasion, identification, and affect across texts aimed at diverse audiences. Prerequisite(s): ENG 220 or permission of department chairperson.

**ENG 391. Introduction to Composition Theory. 3 Hours**

Study of the principal current theories of composition, with application to the teaching and evaluating of writing. Prerequisite(s): ENG 220 or permission of department chairperson.

**ENG 393. Approaches to Literature for Middle and High School. 3 Hours**

The theory and practice of introducing literature and language arts to a diverse middle and high school student population. Strategies for planning and implementing textual interpretation techniques appropriate to secondary education settings. The investigation and use of literary analysis, critical theory, and approaches to writing about multiple genres of literature. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 395. Junior Honors Tutorial. 3 Hours**

Independent directed study on special topics for selected students. May be repeated as topic or instructor changes. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent; junior standing; permission of instructor.

**ENG 405. Chaucer. 3 Hours**

Study of Chaucer's life, world, language, and literary achievement, concentrating on *The Canterbury Tales* (in Middle English). Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 407. Medieval English Literature. 3 Hours**

Study of the dominant types in the literature of England from the beginning to 1500. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 410. Early Renaissance Literature. 3 Hours**

Survey of the literature of the sixteenth century from Thomas More to Sidney and Spenser. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 414. Later Renaissance Literature. 3 Hours**

Survey of the literature of the early seventeenth century from Bacon, Jonson, and Donne to Marvell, exclusive of Milton. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 431. Milton. 3 Hours**

Study of the major and minor poems and selected prose of Milton. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 433. Studies in Neo-Classical Literature. 3 Hours**

Study of English literature from Dryden to Johnson. May be repeated as topics change. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 438. English Romanticism. 3 Hours**

Study of the major poets and critics of the Romantic Age. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 444. Studies in 19th Century English Literature. 3 Hours**

Study of English literature in the nineteenth century. May be repeated as topics change. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 448. 20th Century British Literature. 3 Hours**

Study of significant developments in modern British literature. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 451. American Romanticism. 3 Hours**

Study of significant developments in American literature of the mid-19th century. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 453. American Realism & Naturalism. 3 Hours**

Study of representative writers from the post-Civil War period in American literature. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 455. 20th Century American Literature. 3 Hours**

Study of significant developments in American literature of the twentieth century. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 460. Advanced Poetry Workshop. 3 Hours**

Intensive practice in writing of poetry and production of a chapbook. Prerequisite(s): ENG 308.

**ENG 462. Advanced Fiction Workshop. 3 Hours**

Intensive practice in writing of fiction and production of a novella or short story cycle. Prerequisite(s): ENG 310.



**ENG 466. TESOL Methods for Teaching English Language Learners. 3 Hours**

Introduction to key concepts in Teaching English to Speakers of Other Languages.. Theoretical perspectives on second language (ESL) and literacy instruction will be interwoven with practical techniques for classroom instruction. Students will investigate approaches to teaching the four skills of English (reading, writing, listening, speaking) across varying contexts and proficiency levels. Prerequisite(s): ENG 200 or ENG 200H or ASI 120; and junior or senior standing or permission of department chairperson.

**ENG 468. Introduction to Linguistics. 3 Hours**

Introduction to the basic concepts and procedures of general linguistics, including language description, history, variation, theory, and acquisition. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent; junior or senior standing or permission of department chairperson.

**ENG 470. History of English. 3 Hours**

Study of stages in the development of the English language and of influences shaping its development from the beginning to the present. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent; junior or senior standing or permission of department chairperson.

**ENG 472. The Structure of English. 3 Hours**

Study of the grammatical structure of modern English from traditional and modern linguistic points of view. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent; junior or senior standing or permission of department chairperson.

**ENG 474. Argument and Style. 3 Hours**

Intensive study of argumentative writing with emphasis on different methods of argumentation and appropriate stylistic choices for each. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 475. Usability in Technical Writing. 3 Hours**

Examination of theory and methods of usability testing in technical writing. Students survey approaches to usability testing in print and online technical writing. Students plan, conduct, and analyze usability tests for selected print and digital texts. Students analyze and design test plans, conduct testing sessions, write reports, and present recommendations. Prerequisite(s): ENG 368.

**ENG 476. Composition Theory. 3 Hours**

Study of the principal current theories of composition, with application to the teaching and evaluating of writing. Prerequisite(s): ENG 316 or permission of instructor.

**ENG 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**ENG 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved ENG 477; approval of University Honors Program.

**ENG 480. Independent Study. 1-6 Hours**

Individual investigations of special topics under faculty direction. May be repeated under special circumstances. Prerequisite(s): At least fifteen semester hours of English; permission of department chairperson.

**ENG 481. Topics in English Studies. 1-6 Hours**

Systematic study of a specialized topic in English Studies. Prerequisite(s): 200- or 300-level English course excluding ENG 200, ENG 200H.

**ENG 482. Modern Poetry. 3 Hours**

Concentrated, advanced study in the development of modern poetry, both English and American. Prerequisite(s): ENG 200 or ENG 200H or ASI 120 or equivalent.

**ENG 485. Internship in Writing. 1-6 Hours**

Application of writing skills to specific projects of an approved organization. Practical and professional experience offered to juniors and seniors (particularly English majors and minors) as a supplement to the writing curriculum. Option 2 grading only. Prerequisite(s): ENG 370, ENG 371, ENG 372; junior or senior standing; 2.5 cumulative GPA and at least 3.0 GPA in English courses; permission of Internship Coordinator.

**ENG 488. Literary Theory. 3 Hours**

Comparative critical reading of classical and modern theoretical texts and analysis of critical methodology. Prerequisite(s): 200- or 300-level English course excluding ENG 200, ENG 200H.

**ENG 489. Rhetorical Criticism. 3 Hours**

Study and practice of classical and contemporary rhetorical theories and techniques. Focus on writing rhetorical analyses of non-literary texts, including political discourse, advertising, scholarly essays, and visual images. Prerequisite(s): ENG 272 or ENG 316 or permission of instructor; junior or senior standing.

**ENG 490. Research Seminar-Literature. 3 Hours**

Concentrated study of a topic designed to integrate selected aspects of literary history, critical approaches, and research skills developed by English majors in previous required courses. May be repeated as topics change. Prerequisite(s): (ENG 220 or 300) and (ENG 301 or 302 or 303 or 304 or 305) and (ENG 388 or 476 or 488 or 489) and (junior or senior standing or permission of department chairperson).

**ENG 495. Senior Honors Tutorial. 3 Hours**

Independent directed study on special topics for selected students. May be repeated as topic or instructor changes. Prerequisite(s): Permission of department chairperson.

**ENG 496. Research Seminar-Teaching. 3 Hours**

Examination of methods for teacher research in the field of English/Language Arts. Students will practice various methods and create research proposals for their capstone course project. Prerequisite(s): (ENG 220 or 300) and (ENG 301 or 302 or 303 or 304 or 305) and (ENG 391 or 476 or 488 or 489) and (ENG 393 or 466) and (junior or senior standing or permission of department chairperson).

**ENG 497. Research Seminar-Writing. 3 Hours**

Advanced study of one or more theories or research methodologies from the fields of creative writing, rhetoric and composition, or professional and technical writing and their application to an appropriate research question in the field. May be repeated as topic changes. Prerequisite(s): (ENG 220 or ENG 300) and (ENG 389 or ENG 390 or ENG 391 or ENG 476 or ENG 489) and (junior or senior standing or permission of department chairperson).

**ENG 498. Capstone I-Project. 3 Hours**

Part one of the capstone for English majors. Independent project (research or other form of scholarship) under the direction of an individual faculty mentor. English majors only. Prerequisite(s): ENG 490 or ENG 496 or ENG 497.

**ENG 499. Capstone II-Seminar. 0 Hours**

Part two of the English major capstone. Weekly seminar integrating the work of the capstone project (ENG 498) with students' past experiences and future goals. Students prepare their capstone projects for public presentation, present those projects in a public forum, and reflect upon the process and product of their work. Prerequisite(s): ENG 498.

## Family Development

The interdisciplinary minor in family development increases understanding of the meaning and dynamics of marriage and parenthood in contemporary society. It examines the family as a major institution affecting society and surveys the individual, social, and economic problems found within families. This background contributes to preparation for careers in areas such as social work, psychology, education, communication, human ecology, and religious work.

Students minoring in family development must complete 16 semester hours, including ASI 448, SOC 331 and 12 semester hours from approved courses. The total semester hours for the minor must come from three different academic disciplines and may double count to majors and other minors.

Students desiring to minor in family development should notify their advisors, their deans, and the coordinator of family development.

**Family Development Coordinator**

Brenda Donnelly (Fitz Center for Leadership in Community)

## Minor in Family Development (FDV)

**Family Development**

ASI 448	Seminar in Family Development	1
SOC 331	Marriages & Families	3
Select four courses from three different disciplines:		12
ANT 320	Anthropology of Childhoods	
CMM 410	Family Communication	
CMM 499	Special Topics in Communication	
CMS 415	Women & Communication	
HST 351	American Gender & Women's History	
HST 352	History of the American Family	
HST 353	History of Women in European Societies	
HST 354	History of Women & Gender in the Middle East	
PHL 318	Family Ethics	
PSY 251	Human Growth & Development	
PSY 351	Child Psychology	
PSY 353	The Psychology of Adult Development & Aging	

PSY 355	Developmental Psychopathology
PSY 443	Psychology of Women
PSY 457	Television & Its Effects on Children
PSY 462	Human Sexuality
REL 344	Christian Marriage
REL 362	Christian Family Values & Television
SOC 322	Sex Roles & Society
SOC 323	Juvenile Justice
SOC 330	Perspectives on Aging
SOC 333	Sociology of Sexualities
SOC 355	Families & the Economy
SWK 325	Child Abuse
SWK 327	Parenting: Social Welfare Role
SWK 330	Perspectives on Aging
SWK 331	Death, Dying and Suicide

Total Hours 16

## Film Studies

The interdisciplinary minor in film studies (FLM) provides students an opportunity to explore one of the most popular and influential media from the twentieth century to the present. Students study the history, theory, and aesthetics of film and consider film from literary, philosophic, religious, economic, and creative perspectives. The minor complements many of the existing majors in the arts and sciences and enhances the academic preparation of students who are considering graduate school and/or careers in film criticism, screenwriting, or film production.

Students minoring in film studies must complete 13 semester hours including four approved three-credit film courses in various disciplines and a one-credit required capstone course, ASI 350.

Students desiring to minor in film studies should notify their respective deans and the coordinator of film studies.

**Film Studies Committee**

James Farrelly (English), Coordinator

Fouke (Philosophy), Kimbrough (English), McCombe (English), Zukowski (Religious Studies)

## Minor in Film Studies (FLM)

**Film Studies**

ASI 350	Interdisciplinary Film Study <sup>1</sup>	1
Select four courses from: <sup>2</sup>		12
CMM 345	Classic American Film	
ENG 331	Studies in Film	
ENG 332	Studies in Literature & Film	
MUS 327	Music in Film	
PHL 324	Philosophy & Film	
REL 372	Religion & Film	
Total Hours		13

<sup>1</sup> Capstone course taken after all elective courses have been completed.

<sup>2</sup> Or other courses with permission of the committee.

# General Studies

- Bachelor of General Studies

The Bachelor of General Studies program is designed for those students who desire to pursue a non-traditional degree program at the University outside of any departmental major. This degree program permits great latitude in utilizing the academic resources of the University for planning and acquiring an education to meet individual needs. Students may plan their programs to the best advantage of their particular educational objectives. Students build their programs on the foundation of University's Common Academic Program requirements.

## Bachelor of General Studies (GEN) minimum 120 hours

Admission requirements for the Bachelor of General Studies are the same as those for any other degree offered in the College of Arts and Sciences.

Candidacy for the Bachelor of General Studies may be declared in the first year but not later than the commencement of a student's last 30 semester hours of study. An application for acceptance into the degree program must be completed and approved by an Assistant Dean in the College of Arts and Sciences. Any students in good academic standing may request transfer into this program.

The General Studies student is required to plan an academic program to satisfy the requirements for graduation in consultation with an Assistant Dean. The General Studies student must complete a minimum of the last 30 semester hours of study under the supervision of an Assistant Dean who will serve as the student's advisor. The usual policy of prerequisites remains in effect in this program:

1. College of Arts and Sciences' Competencies and the University's Common Academic Program requirements.
2. Three semester hours of mathematics selected from courses offered by the Mathematics department (excluding MTH 205).
3. Study of the natural sciences by completing seven semester hours in approved natural science courses (biology, chemistry, geology, physics), including one course with accompanying laboratory.
4. A minimum of 54 semester hours of courses at the 300-400 level with a grade point average of 2.0 or better.
5. Not more than 30 semester hours of work from any one academic discipline.
6. Credits earned in completion of the Bachelor of General Studies may not be applied at a later time to the credits for a second degree from the College of Arts and Sciences.
7. Successful completion of GNS 480, Senior Capstone course.

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	

Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- 1 Completed with ASI 110 and ASI 120.
- 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- 3 Completed with ENG 200H or ASI 120.
- 4 Must include two different disciplines and accompanying lab.

### Major Requirements

General Studies Area at the 300/400 level <sup>1, 2</sup>	54
GNS 480 Senior Capstone	0

### Breadth

ASI 150 Introduction to the University Experience	1
Total Hours to total at least	120

- 1 Includes 300/400 CAP courses.
- 2 May not include more than thirty semester hours from any one academic discipline.

### First Year

Fall	Hours Spring	Hours
ASI 150	1 ENG 100 (CAP Writing Seminar)	3
CMM 100 (CAP Communication)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 CAP Mathematics	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 CAP Natural Science	4
CAP Arts	3 General Elective	3
CAP Natural Science	3	
	<b>16</b>	<b>16</b>

### Second Year

Fall	Hours Spring	Hours
ENG 200 (CAP Writing Seminar)	3 CAP Faith Traditions (GS Major)	3
SSC 200 (CAP Social Science)	3 General Studies Major	3

General Studies Major	3 General Studies Major	3
General Studies Major	3 General Elective	3
General Elective	3 General Elective	3
	<b>15</b>	<b>15</b>
<b>Third Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
Advanced PHL/REL (GS Major)	3 Advanced HST (GS Major)	3
CAP Inquiry	3 Advanced PHL/REL (GS Major)	3
General Studies Major	3 CAP Practical Ethical Action (GS Major)	3
General Studies Major	3 General Studies Major	3
General Elective	3 General Elective	3
	<b>15</b>	<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
General Studies Major	3 GNS 480	0
General Studies Major	3 CAP Diversity and Social Justice	3
General Studies Major	3 General Studies Major	3
General Elective	3 General Studies Major	3
General Elective	2 General Studies Major	3
	General Elective	2
	<b>14</b>	<b>14</b>

Total credit hours: 120

# Geology

Majors:

- Bachelor of Science, Environmental Geology
- Bachelor of Science, Geology

Minor:

- Geology

Geology is the study of the Earth, both past and present. It incorporates many aspects of our complex planet including its composition, structure, environment, internal and surficial processes, and the development of life, continents, and oceans through time. Geology plays a critical role in interpreting the Earth's long history of physical and biological changes, finding and managing natural resources, and understanding natural hazards and future environmental change.

The geology department offers two programs leading to Bachelor of Science degrees in geology and environmental geology. The geology (GEO) major provides basic courses in the geological sciences as well as a range of advanced level classes that allow students to develop courses of study that complement particular interests within the field such as energy and mineral resources, plate tectonics or paleontology.

The environmental geology (EVG) program is broad in scope, providing a broad foundation in the fundamentals of earth and environmental

science as well as an interdisciplinary curriculum that includes geology, biology, chemistry, and other allied science courses. The EVG curriculum stresses the interdisciplinary nature of modern environmental issues such as climate change and the development of alternative energy resources.

The geology department also offers a Geographic Information Systems (GIS) Certificate Program. GIS is used in a wide range of disciplines, and the certificate program is a great option for professionals, graduate students, and undergraduate students who are interested in becoming proficient at managing, analyzing, and displaying all forms of geographically referenced information.

The geology department aims to prepare students for both careers in the geological sciences, and for further academic studies. Hence, graduates of the department are also highly competitive for entry to graduate programs. Geology department majors pursue careers in a wide range of settings including:

- State and Federal Geological Agencies
- Geological Consulting Companies
- Natural Resource Exploration, Development and Management
- Museums
- Research Laboratories
- Education

Environmental geologists address critical needs of our society including global climate change, groundwater protection, energy resources, and the identification and assessment of natural hazards.

A minor in geology consists of 12 semester hours.

## Faculty

Daniel Goldman, Chairperson  
 Professor Emeritus: Ritter  
 Professors: Goldman, Pair, Sandy  
 Associate Professors: Koziol, A. McGrew, Wu  
 Assistant Professor: Haritashya  
 Lecturer: Bedaso  
 Lab Coordinator: Klosterman

## Bachelor of Science, Environmental Geology (EVG) minimum 120 hours

The following program, leading to the Bachelor of Science with a major in environmental geology, is designed to present students with the basic courses in the geological sciences as well as provide specific environmental geology courses. The program also requires additional related science courses.

### Common Academic Program (CAP)

*credit hours will vary depending on courses selected	
First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3

SSC 200	Social Science Integrated			GEO 309	Surface & Groundwater Hydrology	4
Arts		3		& 309L	and Surface and Groundwater Hydrology Laboratory	
Natural Sciences <sup>4</sup>		7		GEO 479L	Environmental Instrumentation Laboratory	2
Crossing Boundaries		variable credit		Select one from: (Satisfies CAP Major Capstone)		4-6
Faith Traditions				GEO 480	Senior Capstone Project & Presentation	
Practical Ethical Action				GEO 477	Honors Thesis Project	
Inquiry				& GEO 478	and Honors Thesis Project	
Integrative				GEO 498	Geological Research & Thesis	
Advanced Study		variable credit		Select GEO electives from:		4
Philosophy and/or Religious Studies				GEO 302	Glacial Geology	
Historical Studies				& 302L	and Glacial Geology Laboratory	
Diversity and Social Justice		3		GEO 303	Field Geology	
Major Capstone		0-3		GEO 401	Paleontology	
				& 401L	and Paleontology Laboratory	
				GEO 403	Sedimentology	
				& 403L	and Sedimentology Laboratory	
				GEO 404	Problems in Geology	
				GEO 411	Petrology	
				& 411L	and Petrology Laboratory	
				GEO 412	Introductory Geochemistry	
				& 412L	and Introductory Geochemistry Laboratory	
				GEO 450	Applied Geographic Information Systems	
				Select six science electives from:		17
				BIO 310	Ecology	
				& 310L	and Ecology Laboratory	
				BIO 350	Applied Microbiology	
				& 350L	and Applied Microbiology Laboratory	
				BIO 452	Biology of Rivers & Lakes	
				& 452L	and Biology of Rivers & Lakes Laboratory	
				BIO 459	Environmental Ecology	
				& 459L	and Environmental Ecology Laboratory	
				CEE 312	Geotechnical Engineering	
				& 312L	and Geotechnical Engineering Laboratory	
				CEE 390	Environmental Pollution Control	
				CEE 434	Water & Wastewater Engineering	
				& 434L	and Water & Wastewater Engineering Laboratory	
				CHM 201	Quantitative Analysis	
				& 201L	and Quantitative Analysis Laboratory	
				CHM 302	Physical Chemistry	
				CHM 313	Organic Chemistry	
				& 313L	and Organic Chemistry Laboratory	
				CHM 341	Environmental Chemistry	
				& 341L	and Environmental Chemistry Laboratory	
				CPS 132	Computer Programming for Engineering & Science	
				CPS 144	Introduction to Computer Programming	
				MTH 218	Analytic Geometry & Calculus III	
				MTH 219	Applied Differential Equations	
				MTH 367	Statistical Methods I	
				MTH 368	Statistical Methods II	
				<b>Breadth</b>		
				ASI 150	Introduction to the University Experience	1

<sup>1</sup> Completed with ASI 110 and ASI 120.

<sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.

<sup>3</sup> Completed with ENG 200H or ASI 120.

<sup>4</sup> Must include two different disciplines and accompanying lab.

#### Science Breadth Requirements

(Satisfies CAP Mathematics and CAP Natural Science)

BIO 151	Concepts of Biology I: Cell & Molecular Biology	3
BIO 152	Concepts of Biology II: Evolution & Ecology	3
CHM 123	General Chemistry	4
& 123L	and General Chemistry Laboratory	
CHM 124	General Chemistry	4
& 124L	and General Chemistry Laboratory	
MTH 168	Analytic Geometry & Calculus I <sup>1</sup>	4
MTH 169	Analytic Geometry & Calculus II <sup>1</sup>	4
PHY 206	General Physics I - Mechanics <sup>2</sup>	3
PHY 207	General Physics II - Electricity & Magnetism <sup>2</sup>	3

#### Major Requirements

Year 1		61
GEO 115	Physical Geology	4
& 115L	and Physical Geology Laboratory	
GEO 116	Geological History of the Earth	4
& 116L	and Geological History of the Earth Laboratory	
Year 2		
GEO 201	Mineralogy	4
& 201L	and Mineralogy Laboratory	
GEO 208	Environmental Geology	3
Year 3		
GEO 301	Structural Geology	4
& 301L	and Structural Geology Laboratory	
GEO 307	Geomorphology	4
& 307L	and Geomorphology Laboratory	
GEO 310	Stratigraphy	4
& 310L	and Stratigraphy Laboratory	
Year 4		
GEO 308	Problems & Decisions in Environmental Geology	3



Social and Behavioral Sciences (Includes CAP Social Science)	6
Total Hours to total at least	120

- <sup>1</sup> May substitute MTH 148-MTH 149 with permission of department chairperson.
- <sup>2</sup> May substitute PHY 201-PHY 202 with permission of department chairperson.

## Bachelor of Science, Geology (GEO) minimum 120 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- <sup>1</sup> Completed with ASI 110 and ASI 120.
- <sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- <sup>3</sup> Completed with ENG 200H or ASI 120.
- <sup>4</sup> Must include two different disciplines and accompanying lab.

### Science Breadth Requirements

(Satisfies CAP Mathematics and CAP Natural Sciences)

CHM 123 General Chemistry & 123L and General Chemistry Laboratory	4
CHM 124 General Chemistry & 124L and General Chemistry Laboratory	4
MTH 168 Analytic Geometry & Calculus I <sup>1</sup>	4
MTH 169 Analytic Geometry & Calculus II <sup>1</sup>	4

PHY 206 General Physics I - Mechanics <sup>2</sup>	3
PHY 207 General Physics II - Electricity & Magnetism <sup>2</sup>	3

### Major Requirements

<b>Major Requirements</b>	<b>54</b>
Year 1	
GEO 115 Physical Geology & 115L and Physical Geology Laboratory	4
GEO 116 Geological History of the Earth & 116L and Geological History of the Earth Laboratory	4
Year 2	
GEO 201 Mineralogy & 201L and Mineralogy Laboratory	4
Year 3	
GEO 301 Structural Geology & 301L and Structural Geology Laboratory	4
GEO 307 Geomorphology & 307L and Geomorphology Laboratory	4
Year 4	
GEO 303 Field Geology	6
GEO 310 Stratigraphy & 310L and Stratigraphy Laboratory	4
GEO 401 Paleontology & 401L and Paleontology Laboratory	4
GEO 403 Sedimentology & 403L and Sedimentology Laboratory	4
Select one from: (Satisfies CAP Major Capstone)	2-6
GEO 480 Senior Capstone Project & Presentation	
GEO 477 Honors Thesis Project & GEO 478 and Honors Thesis Project	
GEO 498 Geological Research & Thesis	
Select GEO electives from:	4
GEO 302 Glacial Geology & 302L and Glacial Geology Laboratory	
GEO 308 Problems & Decisions in Environmental Geology & 308L and Problems & Decisions in Environmental Geology Laboratory	
GEO 309 Surface & Groundwater Hydrology & 309L and Surface and Groundwater Hydrology Laboratory	
GEO 404 Problems in Geology	
GEO 411 Petrology & 411L and Petrology Laboratory	
GEO 412 Introductory Geochemistry & 412L and Introductory Geochemistry Laboratory	
GEO 450 Applied Geographic Information Systems	
GEO 477 Honors Thesis Project	
Science electives and laboratories where applicable from:	8
BIO, CHM, CPS, GEO, MTH, PHY, Engineering <sup>3</sup>	
<b>Breadth</b>	
ASI 150 Introduction to the University Experience	1
Social and Behavioral Sciences (Includes CAP Social Science)	6
Total Hours to total at least	120

- <sup>1</sup> May substitute MTH 148-MTH 149 with permission of department chairperson.

- 2 May substitute PHY 201-PHY 202 with permission of department chairperson.
- 3 With permission of department chairperson.

## Minor in Geology (GEO)

### Geology

Select four GEO courses (300/400 level) <sup>1</sup>	12
<b>Total Hours</b>	<b>12</b>

<sup>1</sup> Appropriate prerequisites must be completed.

- Bachelor of Science, Environmental Geology
- Bachelor of Science, Geology

## Environmental Geology

### First Year

Fall	Hours Spring	Hours
ASI 150	1 GEO 116 & 116L	4
GEO 115 & 115L	4 MTH 169	4
MTH 168 (satisfies CAP Mathematics)	4 CHM 124 & 124L	4
CHM 123 & 123L (satisfies CAP Natural Science)	4 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
ENG 100 (CAP Writing Seminar)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
	<b>16</b>	<b>18</b>

### Second Year

Fall	Hours Spring	Hours
GEO 201 & 201L	4 GEO 208	3
BIO 151	3 Geology elective w/lab	4
PHY 206	3 BIO 152	3
ENG 200 (CAP Writing Seminar)	3 PHY 207	3
REL 103, PHL 103, or HST 103 (CAP Humanities)	3 CMM 100 (CAP Communication)	3
	<b>16</b>	<b>16</b>

### Third Year

Fall	Hours Spring	Hours
GEO 301 & 301L	4 GEO 310 & 310L	4
GEO 307 & 307L	4 Science Elective	3
Science Elective	3 Arts	3
SSC 200 (CAP Social Science)	3 Adv HST	3
Adv PHL/REL (PEA/FT)	3 Adv PHL/REL (PEA/FT)	3
	<b>17</b>	<b>16</b>

### Fourth Year

Fall	Hours Spring	Hours
GEO 477, 480, or 498 (Capstone)	3 GEO 479L	2
GEO 308	3 Science Elective	4

GEO 309 & 309L	4 Science Elective	3
Science elective w/lab	4 Inquiry	3
Integrative	3 Diversity and Social Justice	3
	Social Science	3
	<b>17</b>	<b>18</b>

Total credit hours: 134

## Geology

### First Year

Fall	Hours Spring	Hours Summer	Hours
ASI 150	1 GEO 116 & 116L	4 GEO 303	6
GEO 115 & 115L	4 Science Elective	4	
MTH 168 (CAP MTH)	4 MTH 169	4	
ENG 100 (CAP Writing Seminar)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3	
REL 103, PHL 103, or HST 103 (CAP Humanities)	3		
	<b>15</b>	<b>15</b>	<b>6</b>

### Second Year

Fall	Hours Spring	Hours
GEO 201 & 201L	4 CHM 124 & 124L	4
CHM 123 & 123L (satisfies CAP Natural Science)	4 PHY 207	3
PHY 206	3 GEO elective w/lab	4
REL 103, PHL 103, or HST 103 (CAP Humanities)	3 CMM 100 (CAP Communication)	3
Social Science	3 ENG 200 (CAP Writing Seminar)	3
	<b>17</b>	<b>17</b>

### Third Year

Fall	Hours Spring	Hours
GEO 301 & 301L	4 GEO 307 & 307L	4
Science elective	4 Inquiry	3
Adv PHL/REL (PEA/FT)	3 SSC 200 (CAP Social Science)	3
Arts	3 Adv PHL/REL (PEA/FT)	3
General Elective	3 Adv HST	3
	<b>17</b>	<b>16</b>

### Fourth Year

Fall	Hours Spring	Hours
GEO 477, 480, or 498 (capstone)	3-4 GEO 310 & 310L	4
Integrative	3 GEO 401 & 401L	4
Diversity and Social Justice	3 GEO 403 & 403L	4
General elective (optional)	3 General Elective	3
	<b>12-13</b>	<b>15</b>

Total credit hours: 130-131

## Courses

### **GEO 103. Principles of Geography. 3 Hours**

The study of spatial processes that shape the Earth's physical and cultural environment through a survey of major branches of physical and human geographic inquiry.

### **GEO 104. Biology-Geology Field Course. 3 Hours**

Fundamental earth science topics with emphasis on direct field experience. One week on campus, three weeks in the Rocky Mountains near Denver, Colorado, and one week of travel. For all non-geology and non-biology majors. Corequisite(s): BIO 104; (BIO 104L or GEO 104L).

### **GEO 104L. Biology-Geology Field Laboratory. 1 Hour**

Course to accompany GEO 104.

### **GEO 109. Earth, Environment, and Society. 3 Hours**

This course examines the complex relationship between natural geologic processes and their effects on human society. The course will examine fundamental geologic processes and associated hazards (such as earthquakes, tsunamis, volcanic eruptions, flooding) while also assessing human impacts such as pollution, energy industry and land-use planning. This course provides an opportunity to discuss, from a geologic perspective, the ramifications of and potential solutions to problems associated with utilization of Earth's resources. Laboratory optional but not required. No prerequisite.

### **GEO 109L. General Geology to earth, Environment and Society. 1 Hour**

Course to accompany GEO 109. Two hours each week.

### **GEO 115. Physical Geology. 3 Hours**

Introductory course in geologic principles and processes. Examines Earth's major systems including the solid Earth, atmosphere, hydrosphere, and cryosphere. Laboratory optional for non-majors.

### **GEO 115L. Physical Geology Laboratory. 1 Hour**

Course to accompany GEO 115. Two hours each week. Prerequisite(s): (GEO 109 or GEO 115); permission of instructor.

### **GEO 116. Geological History of the Earth. 3 Hours**

Comprehensive study of earth history from its origins to the present. Prerequisite(s): (GEO 109 or GEO 115); permission of instructor.

### **GEO 116L. Geological History of the Earth Laboratory. 1 Hour**

Course to accompany GEO 116. Two hours each week.

### **GEO 198. Geology, Landscape & Environment of the Miami Valley. 3 Hours**

Field-based course examining the geologic history of the Miami Valley and Dayton area; processes leading to the modern landscape; the impact of human activity will be assessed. Prerequisite(s): GEO 109 or GEO 115 or permission of instructor.

### **GEO 201. Mineralogy. 3 Hours**

Introduction to crystallography, crystal chemistry and crystal structure. Study of the major groups of rock-forming minerals, their association and occurrence with emphasis on identification by physical properties and optical techniques. Prerequisite(s): (GEO 109 or GEO 115) or permission of instructor.

### **GEO 201L. Mineralogy Laboratory. 1 Hour**

Course to accompany GEO 201. Three hours per week.

### **GEO 204. Geology for Teachers. 4 Hours**

Introduction for preservice teachers to the Earth system and the processes that operate in the atmosphere, hydrosphere, biosphere, and solid Earth. Emphasis is on understanding how interactions among these fundamental Earth systems maintain our livable planet. Students will explore the Earth system through best practices in teaching and inquiry, and through field trips. For ECE, EMS, and EMM majors only. Students completing this course may not take SCI 210. Prerequisite(s): EDT 110; SCI 190.

### **GEO 208. Environmental Geology. 3 Hours**

Environmental Geology is the study of the relationship of geologic factors to natural hazards and the problems of water supply, pollution, erosion, land use, and earth resource utilization. Laboratory optional.

### **GEO 208L. Environmental Geology Laboratory. 1 Hour**

Laboratory course to accompany GEO 208. This lab is designed to provide practical exercises that will enhance a student's understanding of how human beings interact with the geological environment. Lab activities will take an experiential, inquiry-based approach to topics relevant in past, present, and future societies. One two-hour laboratory per week concurrently run with the GEO 208 lecture course. Prerequisite(s): GEO 208 (or co-requisite).

### **GEO 218. Geological Site Investigation for Engineers. 3 Hours**

Exploration of the principles of geological site investigation applied to land-use planning, geohazard risk analysis, and diverse engineering applications.

### **GEO 234. Energy Resources. 3 Hours**

The chemical and geological aspects of formation, production, and benefits/costs (including environmental impacts) of energy derived from fossil fuels (coal and hydrocarbons), biofuels (e.g., ethanol production), radioactive materials (nuclear power), and renewable sources (e.g., geothermal, hydro, wind, and solar power).

### **GEO 301. Structural Geology. 3 Hours**

The origin and development of structural features of the earth's crust; folding, faulting, volcanism, mountain building, and metamorphism. Prerequisite(s): GEO 115, GEO 116, GEO 201.

### **GEO 301L. Structural Geology Laboratory. 1 Hour**

Course to accompany GEO 301. Two hours each week.

### **GEO 302. Glacial Geology. 3 Hours**

The origin of mountain and continental glaciers; their depositional features and erosive activity; history of glaciation in geologic past with special emphasis on North American Quaternary ice advances. Prerequisite(s): GEO 115, GEO 116.

### **GEO 302L. Glacial Geology Laboratory. 1 Hour**

Course to accompany GEO 302. Two hours each week.

### **GEO 303. Field Geology. 6 Hours**

Study of field relationships in an area containing abundant igneous, metamorphic, and sedimentary rocks. Prerequisite(s): GEO 115, GEO 116.

### **GEO 307. Geomorphology. 3 Hours**

Detailed study of landforms and the erosional processes that develop them. Prerequisite(s): GEO 115, GEO 116.

### **GEO 307L. Geomorphology Laboratory. 1 Hour**

Course to accompany GEO 307. Two hours each week.

**GEO 308. Problems & Decisions in Environmental Geology. 3 Hours**

An in-depth examination of selected environmental problems and the way in which scientific information guides practice and policy. Topics will range from investigations of natural hazards to considerations of land use and water resources. Prerequisite(s): (GEO 109 or GEO 115) or permission of instructor.

**GEO 308L. Problems & Decisions in Environmental Geology Laboratory. 1 Hour**

Course to accompany GEO 308. Two hours each week and periodic field work.

**GEO 309. Surface & Groundwater Hydrology. 3 Hours**

This course is designed to provide a science or engineering student with the fundamental concepts and principles central to the study of water as a resource. This will include an examination of all components of the hydrologic cycle including surface-water hydrology and management, groundwater hydrogeology, and water resource management.

Prerequisite(s): (GEO 109 or GEO 218) or permission of instructor.

**GEO 309L. Surface and Groundwater Hydrology Laboratory. 1 Hour**

Laboratory exercises to accompany GEO 309. Three hours per week.

**GEO 310. Stratigraphy. 3 Hours**

The interpretation of specific lithotypes and the synthesis of the stratigraphic record. Prerequisite(s): GEO 116.

**GEO 310L. Stratigraphy Laboratory. 1 Hour**

Course to accompany GEO 310. Two hours each week.

**GEO 401. Paleontology. 3 Hours**

The study of ancient life. The morphology, ecology, evolution, and stratigraphic distributions of selected invertebrates, vertebrates, and plants.

**GEO 401L. Paleontology Laboratory. 1 Hour**

Course to accompany GEO 401. Two hours each week.

**GEO 403. Sedimentology. 3 Hours**

Detailed study of sediments: their sources, environments of deposition, and methods of consolidation. Emphasis on the interpretation of ancient sediments. Prerequisite(s): GEO 201.

**GEO 403L. Sedimentology Laboratory. 1 Hour**

Course to accompany GEO 403. Two hours each week.

**GEO 404. Problems in Geology. 1-4 Hours**

Consideration of special problems involving advanced work in the laboratory and library; arranged to meet the needs of individual students.

**GEO 411. Petrology. 3 Hours**

Study of the formation of sedimentary, igneous, and metamorphic rocks.

Prerequisite(s): GEO 201.

**GEO 411L. Petrology Laboratory. 1 Hour**

Course to accompany GEO 411. Two hours each week. Prerequisite(s): GEO 201.

**GEO 412. Introductory Geochemistry. 3 Hours**

Study of elementary thermodynamics, aqueous geochemistry, and principles governing the distribution of trace elements, radioisotopes and stable isotopes in igneous, metamorphic and sedimentary rocks. Emphasis on applications and solution of geological problems.

Prerequisite(s): GEO 201 or permission of instructor.

**GEO 412L. Introductory Geochemistry Laboratory. 1 Hour**

Course to accompany GEO 412. Three hours each week.

**GEO 450. Applied Geographic Information Systems. 4 Hours**

Concepts and implementation of project design and analysis in geographic information systems (GIS). Students will learn the practice of GIS as a tool for spatial analysis, and as it applies in professional disciplines. The course will stress database design and present skills for data input, query analysis, and data output using GIS.

**GEO 455. Environmental Remote Sensing. 4 Hours**

Introduction to principles and concepts of remote sensing, a sophisticated technology of earth observation that provides fundamental data for global environmental investigation. Prerequisite(s): GEO 208 or permission of instructor.

**GEO 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**GEO 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**GEO 479L. Environmental Instrumentation Laboratory. 2 Hours**

The understanding and use of field and laboratory based equipment to study current environmental issues. Emphasis on team-centered approaches to investigating environmental problems. Prerequisite(s): (BIO 151, BIO 152) or (GEO 115, GEO 116) or permission of instructor.

**GEO 480. Senior Capstone Project & Presentation. 3 Hours**

Project and presentation in the scholarship, activity and/or practice related to the major. Students will present their work in a forum appropriate to the major.

**GEO 485. Geographic Information Systems Applications in Water Resources Planning & Management. 4 Hours**

An introduction to GIS applications in water resource management. Following an introduction to GIS basics, this course focuses on GIS techniques in surface water modeling and floodplain delineation and management.

**GEO 495. Geology Seminar. 1 Hour**

Introduction to professional practices in the geosciences. Students will attend seminar talks by guest speakers, research career options and graduate programs in the earth sciences, develop a professional resume, and participate in other profession-building activities. May be repeated. Prerequisite(s): Permission of instructor.

**GEO 498. Geological Research & Thesis. 4 Hours**

Research project within an area of the geological sciences, including, but not limited to, environmental geology, geochemistry, geomorphology, or paleontology. The results are to be presented in a written thesis. Prerequisite(s): Permission of instructor.

## Global Languages and Cultures

### Majors:

- Bachelor of Arts, French
- Bachelor of Arts, German
- Bachelor of Arts, Spanish

### Minors:

- French
- German
- Italian
- Spanish

The Department of Global Languages and Cultures offers instruction in Arabic, Chinese (Mandarin), French, German, Italian, Latin, Russian, and Spanish and thus brings a distinctively international perspective to the university community. The language programs focus on the development of proficiency in speaking, writing, reading, and listening, and integrate the study of literature, linguistics, business, and culture.

Faculty members in the Department of Global Languages and Cultures direct one-month language-immersion study programs in China, France, Germany, Italy, Latin America, and Spain in conjunction with the Center for International Programs (CIP). Participants in these programs can earn up to seven semester hours of language credit.

Students in B.A. programs can acquire teacher licensure in French, German, or Spanish through the dual-degree B.A. and B.S.E. programs conducted in conjunction with the Department of Teacher Education in the School of Education and Health Sciences. For details consult the department chairperson.

All new students who have previously studied their language of choice, continue their study in courses in which all enrolled students are at approximately the same level of proficiency. Students' proficiency levels for the first enrollment in a language class are determined by the results of the department's two-phase placement examination. Credit, but not placement, is awarded for scores of three or higher on the Advanced Placement language examinations.

A major in French, German or Spanish consists of 25 semester hours at the 300-level or higher. Many students combine a major in the department with a major in another discipline.

A minor in French, German, Italian or Spanish consists of 12 semester hours at the 300-level in the target language. Courses taught in English do not count. A minimum of 6 semester hours of course work at the 300-400 level in the minor must be completed at the University. This does not include EM Credit.

Courses beyond the 100-level in Latin and Russian are not offered on a regular basis. Please consult the department chairperson for details.

### Faculty

Francisco Peñas-Bermejo, Chairperson

Professors Emeriti: Chiodo, Conard, Mosher, O'Meara, Romaguera

Professors: Castro, Peñas-Bermejo

Associate Professors: Espinoza, Krugh, Work

Assistant Professors: Aguilar-Sánchez, Costales, Ventura, Yang

Lecturers: Castro Garcia, Crouner, Elyamani, Figueroa, Schellhammer,

Tanova, Tello-Sánchez

## Bachelor of Arts, French (FRN) minimum 124 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103	West and the World
REL 103	Introduction to Religious and Theological Studies
PHL 103	Intro To Philosophy
ENG 100	Writing Seminar I <sup>2</sup>
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200	Writing Seminar II
Oral Communication	3
CMM 100	Principles of Oral Communication
Mathematics	3
Social Science	3
SSC 200	Social Science Integrated
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

1 Completed with ASI 110 and ASI 120.

2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.

3 Completed with ENG 200H or ASI 120.

4 Must include two different disciplines and accompanying lab.

### Liberal Studies Curriculum

Creative and Performing Arts (May include CAP Arts)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

### Major Requirements

FRN 311	French Conversation I	3
or FRN 312	French Conversation II	
FRN 321	French Composition I	3
or FRN 322	French Composition II	
LNG 495	The Language Major in Professional Careers (Satisfies CAP Major Capstone)	1
Select two courses from: (at least one must be in literature)		6
FRN 341	French Culture & Civilization	
FRN 360	Explication De Textes	
FRN 361	Survey of French Literature I	



FRN 362	Survey of French Literature II	
FRN 381	History of French Cinema	
FRN 450	French Literature	
FRN 452	Old World Meets New (FRN)	
Select four FRN courses (300/400 level) <sup>1</sup>		12

**Breadth**

ASI 150	Introduction to the University Experience	1
Total Hours to total at least		124

<sup>1</sup> Only one literature in translation course may count toward the major. Students in the E11A program should note that courses in translation do not count toward the forty-five semester hours of a foreign language required for teacher certification.

## Bachelor of Arts, German (GER) minimum 124 hours

**Common Academic Program (CAP)**

*credit hours will vary depending on courses selected		
First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

- <sup>1</sup> Completed with ASI 110 and ASI 120.
- <sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- <sup>3</sup> Completed with ENG 200H or ASI 120.
- <sup>4</sup> Must include two different disciplines and accompanying lab.

**Liberal Studies Curriculum**

Creative and Performing Arts (May include CAP Arts)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3

Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

**Major Requirements**

Major Requirements		25
GER 311	German Conversation I	3
or GER 312	German Conversation II	
GER 321	German Composition I	3
or GER 322	German Composition II	
LNG 495	The Language Major in Professional Careers (Satisfies CAP Major Capstone)	1
Select two courses from: (at least one must be in literature)		6
GER 341	German Culture & Civilization	
GER 361	Survey of German Literature I	
GER 362	Survey of German Literature II	
GER 450	German Literature	
Select four GER courses (300/400 level) <sup>1</sup>		12

**Breadth**

ASI 150	Introduction to the University Experience	1
Total Hours to total at least		124

<sup>1</sup> Only one literature in translation course may count toward the major. Students in the E11A program should note that courses in translation do not count toward the forty-five semester hours of a foreign language required for teacher certification.

## Bachelor of Arts, Spanish (SPN) minimum 124 hours

**Common Academic Program (CAP)**

*credit hours will vary depending on courses selected		
First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		

Diversity and Social Justice	3
Major Capstone	0-3

- Completed with ASI 110 and ASI 120.
- Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- Completed with ENG 200H or ASI 120.
- Must include two different disciplines and accompanying lab.

**Liberal Studies Curriculum**

Creative and Performing Arts (May include CAP Arts)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

**Major Requirements**

LNG 495	The Language Major in Professional Careers (Satisfies CAP Major Capstone)	1
SPN 311	Spanish Conversation I	3
or SPN 312	Spanish Conversation II	
SPN 321	Spanish Composition I	3
or SPN 322	Spanish Composition II	
Select two courses from: (at least one must be in literature)		6
SPN 341	Spanish Culture & Civilization	
SPN 342	Ibero-American Culture & Civilization	
SPN 361	Survey of Spanish Literature I	
SPN 362	Survey of Spanish Literature II	
SPN 363	Survey of Spanish-American Literature I	
SPN 364	Survey of Spanish-American Literature II	
SPN 450	Topics in Spanish Literature	
SPN 451	Topics in Spanish-American Literature	
SPN 471	Topics in Spanish Literature of the Twentieth Century	
SPN 472	Topics in Spanish-American Literature of the Twentieth Century	
Select four SPN courses (300/400 level) <sup>1</sup>		12

**Breadth**

ASI 150	Introduction to the University Experience	1
Total Hours to total at least		124

- Only one literature in translation course may count toward the major. Students in the E11A program should note that courses in translation do not count toward the forty-five semester hours of a foreign language required for teacher certification.

**Minor in French (FRN)****French**

Select four FRN courses (300/400 level)	12
Total Hours	12

**Minor in German (GER)****German**

Select four GER courses (300/400 level)	12
Total Hours	12

**Minor in Italian (ITA)****Italian**

Select four ITA courses (300/400 level)	12
Total Hours	12

**Minor in Spanish (SPN)****Spanish**

Select four SPN courses (300/400 level)	12
Total Hours	12

- Bachelor of Arts, French
- Bachelor of Arts, German
- Bachelor or Arts, Spanish

**French****First Year**

Fall	Hours Spring	Hours
ASI 150	1 ENG 100 (CAP Writing Seminar)	3
CMM 100 (CAP Communication)	3 FRN 141	4
FRN 101 (CAP Humanities)	4 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 INSS (CAP Natural Science)	4
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 MTH (CAP Mathematics)	3
INSS (CAP Natural Science)	3	
	<b>17</b>	<b>17</b>

**Second Year**

Fall	Hours Spring	Hours
ENG 200 (CAP Writing Seminar)	3 Social Science	3
FRN 201	3 CAP Arts	3
INSS (CAP Inquiry)	4 CAP Integrative	3
Social Science	3 FRN 202	3
General elective	3 SSC 200 (CAP Social Science)	3
	<b>16</b>	<b>15</b>

**Third Year**

Fall	Hours Spring	Hours
FRN 311 or 312	3 FRN 321 or 322	3
Creative & Performing Arts	3 Adv PHL (CAP Practical Ethical Action)	3
Social Science	3 Adv HST	3
General elective	3 FRN Major elective	3
General elective	3 General elective	3
	<b>15</b>	<b>15</b>

Fourth Year		
Fall	Hours Spring	Hours
Adv REL (Faith Traditions)	3 LNG 495 (Capstone)	1
FRN Literature	3 FRN Major elective	3
FRN Major elective	3 FRN Major elective	3
FRN Major elective	3 Diversity and Social Justice	3
General elective	3 General elective	3
	General elective	1
	<b>15</b>	<b>14</b>

Total credit hours: 124

## German

First Year		
Fall	Hours Spring	Hours
ASI 150	1 ENG 100 (CAP Writing Seminar)	3
CMM 100 (CAP Communication)	3 GER 141	4
GER 101	4 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 INSS (CAP Natural Science)	4
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 MTH (CAP Mathematics)	3
INSS (CAP Natural Science)	3	
	<b>17</b>	<b>17</b>

Second Year		
Fall	Hours Spring	Hours
ENG 200 (CAP Writing Seminar)	3 GER 202	3
GER 201	3 SSC 200 (CAP Social Science)	3
INSS (CAP Inquiry)	4 Social Science	3
Social Science	3 CAP Arts	3
General Elective	3 CAP Integrative	3
	<b>16</b>	<b>15</b>

Third Year		
Fall	Hours Spring	Hours
GER 311 or 312	3 GER 321 or 322	3
Creative & Performing Arts	3 Adv PHL (CAP Practical Ethical Action)	3
Social Science	3 Adv HST	3
General elective	3 GER Major elective	3
General elective	3 General elective	3
	<b>15</b>	<b>15</b>

Fourth Year		
Fall	Hours Spring	Hours
Adv REL (Faith Traditions)	3 LNG 495 (Capstone)	1
GER Literature	3 GER Major elective	3
GER Major elective	3 GER Major elective	3
GER Major elective	3 Diversity and Social Justice	3
General elective	3 General elective	3
	General elective	1
	<b>15</b>	<b>14</b>

Total credit hours: 124

## Spanish

First Year		
Fall	Hours Spring	Hours
ASI 150	1 ENG 100	3
CMM 100	3 SPN 141	4
SPN 101	4 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 INSS (CAP Natural Science)	4
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 MTH (CAP Mathematics)	3
INSS (CAP Natural Science)	3	
	<b>17</b>	<b>17</b>

Second Year		
Fall	Hours Spring	Hours
ENG 200 (CAP Writing Seminar)	3 SPN 202 (satisfies CAP social science)	3
SPN 201	3 Social Science	3
INSS (CAP Inquiry)	4 CAP Arts	3
Social Science	3 CAP Integrative	3
General elective	3 SSC 200 (CAP social science)	3
	<b>16</b>	<b>15</b>

Third Year		
Fall	Hours Spring	Hours
SPN 311 or 312	3 SPN 321 or 322	3
Creative & Performing Arts	3 Adv PHL (CAP Practical Ethical Action)	3
Social Science	3 Adv HST	3
General elective	3 SPN Major elective	3
General elective	3 General elective	3
	<b>15</b>	<b>15</b>

**Fourth Year**

Fall	Hours Spring	Hours
Adv REL (Faith Traditions)	3 LNG 495 (Capstone)	1
SPN Literature	3 SPN Major elective	3
SPN Major elective	3 SPN Major elective	3
SPN Major elective	3 Diversity and Social Justice	3
General elective	3 General elective	3
	General elective	1
	<b>15</b>	<b>14</b>

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 Total credit hours: 124

## Arabic Courses

### ARA 101. Basic Proficiency in Arabic I. 4 Hours

Development of basic communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Admission is restricted to those who have not studied Arabic or have placed in this course by examination.

### ARA 141. Basic Proficiency in Arabic II. 4 Hours

Further development of fundamental communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Prerequisite(s): ARA 101 or placement by examination.

### ARA 201. Intermediate Arabic I. 4 Hours

Expansion and extension of proficiency and intercultural skills in reading, listening, writing, and speaking through conversation practice, reading assignments, composition assignments, and grammar exercises. Successful completion of this course includes the demonstration of the proficiency level required by the College of Arts and Sciences' Liberal Studies Curriculum. Prerequisite(s): ARA 141 or placement by examination.

### ARA 202. Intermediate Arabic II. 4 Hours

Continued development of proficiency and intercultural skills in reading, listening, writing, and speaking through conversation practice, reading assignments, composition assignments, and grammar exercises. Prerequisite(s): ARA 201 or placement by examination.

## Chinese Courses

### CHI 101. Basic Proficiency in Mandarin Chinese I. 4 Hours

Development of basic communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Admission is restricted to those who have not studied Mandarin Chinese or have placed into this course by examination.

### CHI 141. Basic Proficiency in Mandarin Chinese II. 4 Hours

Further development of fundamental communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Prerequisite(s): CHI 101 or placement by examination.

### CHI 170. Study Abroad. 3 Hours

Study in a foreign country/region whose everyday language is Chinese, focusing on the culture and civilization of the country. Conducted in English. Available only during the summer session. Repeatable when topic and content change. Prerequisite(s): CHI 101 (may be taken as a corequisite).

### CHI 201. Intermediate Mandarin Chinese I. 4 Hours

Expansion and extension of proficiency and intercultural skills in reading, listening, writing, and speaking through conversation practice, reading assignments, composition assignments, and grammar exercises. Successful completion of this course includes the demonstration of the proficiency level required by the College of Arts and Sciences' Liberal Studies Curriculum. Prerequisite(s): CHI 141 or placement by examination.

### CHI 202. Intermediate Mandarin Chinese II. 4 Hours

Continued development of proficiency and intercultural skills in reading, listening, writing, and speaking through conversation practice, reading assignments, composition assignments, and grammar exercises. Prerequisite(s): CHI 201 or placement by examination.

### CHI 391. Directed Study. 1-3 Hours

Guided study on selected topics and/or issues involving language proficiency, literature, linguistics or culture under the supervision of an instructor. Admission to this course and number of semester hours require approval of the chairperson. May be repeated when topic changes. Prerequisite(s): CHI 202; permission of department chairperson.

## French Courses

### FRN 101. Basic Proficiency in French I. 4 Hours

Development of basic communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Admission is restricted to those who have not studied French or have placed into this course by examination.

### FRN 131. Intensive Fundamental French. 2 Hours

Intensive development of fundamental communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Admission restricted to those who have previous experience with the language and place into this course by examination. Credit granted for only ONE of the following: FRN 101 or FRN 131.

### FRN 141. Basic Proficiency in French II. 4 Hours

Further development of fundamental communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Prerequisite(s): (FRN 101 or FRN 131) or placement by examination.

### FRN 201. Intermediate French I. 3 Hours

Development of reading, listening, writing, and speaking skills. Language laboratory required. Successful completion of this course includes the demonstration of the proficiency level required by the College of Arts and Sciences' Liberal Studies Curriculum. Prerequisite(s): FRN 141.

### FRN 202. Intermediate French II. 3 Hours

Development of reading, listening, writing, and speaking skills. Language laboratory required. Prerequisite(s): FRN 201.

**FRN 270. Intermediate Study Abroad. 1-7 Hours**

Intermediate intensive study in a foreign country/region whose everyday language is French. Instruction in language, culture and civilization. Conducted in French. Available only during the summer session. Repeatable when subtitle and content change. Prerequisite(s): FRN 141 or equivalent.

**FRN 311. French Conversation I. 3 Hours**

Intensive practice in speaking French to develop oral communication skills. Emphasis on vocabulary development, listening comprehension, simulation of life-like situations, and discussions on French life and culture. Prerequisite(s): FRN 202.

**FRN 312. French Conversation II. 3 Hours**

Intensive practice in speaking French to develop oral communication skills. Emphasis on vocabulary development, listening comprehension, simulation of life-like situations, and discussions on French life and culture. Prerequisite(s): FRN 202.

**FRN 321. French Composition I. 3 Hours**

Practice in composition on topics dealing with French life and culture. Systematic vocabulary enrichment, refinement of grammar, and assimilation of stylistic patterns. Emphasis on correct writing and creativity. Initiation into the concept of style in French prose. Prerequisite(s): FRN 311 or FRN 312.

**FRN 322. French Composition II. 3 Hours**

Practice in composition on topics dealing with French life and culture. Systematic vocabulary enrichment, refinement of grammar, and assimilation of stylistic patterns. Emphasis on correct writing and creativity. Initiation into the concept of style in French prose. Prerequisite(s): FRN 311 or FRN 312.

**FRN 325. Introduction to Commercial French. 3 Hours**

Introduction to French business and the French position in international trade. Basic vocabulary of the office and the world of trade, introduction to formal correspondence and transactions. Prerequisite(s): FRN 311 or FRN 312.

**FRN 341. French Culture & Civilization. 3 Hours**

Introduction to the history of French civilization with emphasis on the arts and life in each major cultural period. Recommended for all French majors and minors. Prerequisite(s): FRN 311 or FRN 312.

**FRN 350. French Literature in Translation. 3 Hours**

Course to acquaint students with major topics in French and Francophone literature. Conducted in English. Repeatable when subtitle and content change.

**FRN 352. Old World Meets New (ENG). 3 Hours**

Readings of (1) non-fictional narratives regarding French encounters with American Indians in the sixteenth and seventeenth centuries and (2) literary and philosophical works on this topic. Conducted in English. Students receive credit for either FRN 352 or FRN 452, not both.

**FRN 360. Explication De Textes. 3 Hours**

Introduction to method of analyzing literary texts, both prose and poetry. Elements of French versification. Recommended for all French majors and prospective teachers. Prerequisite(s): FRN 311 or FRN 312.

**FRN 361. Survey of French Literature I. 3 Hours**

Major texts, trends, authors from the Middle Ages to the present, showing influences and continuity. Lectures, discussions, oral and written reports. Recommended for all French majors and prospective teachers. Prerequisite(s): FRN 311 or FRN 312.

**FRN 362. Survey of French Literature II. 3 Hours**

Major texts, trends, authors from the Middle Ages to the present, showing influences and continuity. Lectures, discussions, oral and written reports. Recommended for all French majors and prospective teachers. Prerequisite(s): FRN 311 or FRN 312.

**FRN 370. Advanced Study Abroad. 1-7 Hours**

Advanced intensive study in a foreign country/region whose everyday language is French, treating its language, culture, and civilization. Conducted in French. Available only during the summer session. Repeatable when subtitle and content change. Prerequisite(s): FRN 202 or equivalent.

**FRN 381. History of French Cinema. 3 Hours**

Survey of the trends, styles, and principal directors in the history of French cinema. Discussion of personal, social, and cultural values portrayed in films. Prerequisite(s): FRN 311 or FRN 312.

**FRN 450. French Literature. 3 Hours**

Lectures and discussion concentrating on specialized genres, periods, or authors. Repeatable when subtitle and content change. Prerequisite(s): FRN 311 or FRN 312.

**FRN 452. Old World Meets New (FRN). 3 Hours**

Readings of (1) non-fictional narratives regarding French encounters with American Indians in the sixteenth and seventeenth centuries and (2) literary and philosophical works on this topic. Conducted in French. Students receive credit for either FRN 352 or FRN 452, not both. Prerequisite(s): FRN 311 or FRN 312.

**FRN 469. French Linguistics. 3 Hours**

Synchronic analysis of modern French language, including a contrast of the French sound system, morphology, and syntax with English structures; the historical derivation of French, creolization, and approaches to teaching French to English-speaking persons. Conducted in French. Prerequisite(s): (FRN 311 or FRN 312); LNG 468.

**FRN 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**FRN 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**FRN 491. Independent Study. 1-3 Hours**

Independent research project under the guidance of an instructor. Admission to project and number of semester hours require approval of the chairperson. Prerequisite(s): FRN 202; permission of department chairperson.



## German Courses

### **GER 101. Basic Proficiency in German I. 4 Hours**

Development of basic communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Admission is restricted to those who have not studied German or have placed into this course by examination.

### **GER 131. Intensive Fundamental German. 2 Hours**

Field-based course examining the geologic history of the Miami Valley and Dayton area; processes leading to the modern landscape; the impact of human activity will be assessed. Prerequisite(s): GEO 109 or GER 115 or permission of instructor.

### **GER 141. Basic Proficiency in German II. 4 Hours**

Further development of fundamental communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Prerequisite(s): (GER 101 or GER 131) or placement by examination.

### **GER 201. Intermediate German I. 3 Hours**

Systematic grammar review. Increased use of the language in written exercises and classroom discussions based on readings. Exposure to the development of German civilization and culture. Successful completion of this course includes the demonstration of the proficiency level required by the College of Arts and Sciences' Liberal Studies Curriculum. Prerequisite(s): GER 141.

### **GER 202. Intermediate German II. 3 Hours**

Systematic grammar review. Increased use of the language in written exercises and classroom discussions based on readings. Exposure to the development of German civilization and culture. Prerequisite(s): GER 201.

### **GER 311. German Conversation I. 3 Hours**

Practice to increase listening comprehension and fluency in speaking about topics from the personal and everyday to issues of current interest with focus on describing and narrating in paragraph-length structures. In-depth exploration of cultural commonalities and differences between the German-speaking countries and the United States. Focus on development of vocabulary and practice of expressions essential for oral communication. May be taken in either sequence. Prerequisite(s): GER 202.

### **GER 312. German Conversation II. 3 Hours**

Practice to increase listening comprehension and fluency in speaking about topics from the personal and everyday to issues of current interest with focus on describing and narrating in paragraph-length structures. In-depth exploration of cultural commonalities and differences between the German-speaking countries and the United States. Focus on development of vocabulary and practice of expressions essential for oral communication. May be taken in either sequence. Prerequisite(s): GER 202.

### **GER 321. German Composition I. 3 Hours**

Practice in personal and topical writing in German that seeks to develop the ability to write well-structured paragraphs. Systematic vocabulary building and grammatical refinement and review. Readings on key issues of the day and/or topics providing crucial insight into German and European thinking and concerns. May be taken in either sequence. Prerequisite(s): GER 311 or GER 312.

### **GER 322. German Composition II. 3 Hours**

Practice in personal and topical writing in German that seeks to develop the ability to write well-structured paragraphs. Systematic vocabulary building and grammatical refinement and review. Readings on key issues of the day and/or topics providing crucial insight into German and European thinking and concerns. May be taken in either sequence. Prerequisite(s): GER 311 or GER 312.

### **GER 325. Commercial German. 3 Hours**

Introduction to the business language, customs, and economic profile of the German-speaking countries. Vocabulary of the office and world of trade. Business correspondence. Germany's economic and cultural position and goals within the context of the European Union and the world. Course provides an introduction to working in an international business setting. Prerequisite(s): GER 311 or GER 312 or equivalent.

### **GER 341. German Culture & Civilization. 3 Hours**

Introduction to German culture and civilization with emphasis on the arts, intellectual developments, and life in various periods of German history. Conducted in German. Prerequisite(s): GER 311 or GER 312.

### **GER 342. Germany and the New Europe. 3 Hours**

Examination of developments in the life and culture, and the political, economic, and social realities in Germany from the end of WWI to the reunited country of today which is the largest member of EU. Course also explores the ideas and ideals on which the EU is founded, its present influence in the world, and how this new Europe differs from the United States of America. Conducted in German. Prerequisite(s): (GER 311 or 312) or equivalent.

### **GER 350. German Literature & Civilization. 3 Hours**

Course to acquaint students with major German writers and literary movements. Conducted in English. Repeatable when subtitle and content change.

### **GER 351. German Film. 3 Hours**

Introduction to the aesthetic and thematic richness of German film. Students will study the cinema of the Weimar Republic within its historical context and its appropriation by Hollywood. This course will also introduce cross-cultural films having to do with identity, women, immigrant workers, asylum seekers, postcolonialization, nationalism, social theory, ideology, and political activism. Prerequisite(s): GER 311 or GER 312.

### **GER 361. Survey of German Literature I. 3 Hours**

German literary works from 1750 to the present reflecting the philosophy, aesthetics, and concerns of the time. Skills development for reading literary and cultural texts and writing on analytic and interpretative topics. May be taken in either sequence. Prerequisite(s): ((GER 311 or GER 312); (GER 321 or GER 322)) or equivalent.

### **GER 362. Survey of German Literature II. 3 Hours**

German literary works from 1750 to the present reflecting the philosophy, aesthetics, and concerns of the time. Skills development for reading literary and cultural texts and writing on analytic and interpretative topics. May be taken in either sequence. Prerequisite(s): ((GER 311 or GER 312); (GER 321 or GER 322)) or equivalent.

### **GER 370. Study Abroad. 1-6 Hours**

Intensive study in a foreign country whose everyday language is German, treating the culture and civilization of the country. Conducted in German. Available only during the summer session. Repeatable when subtitle and content change. Prerequisite(s): GER 202.

**GER 450. German Literature. 3 Hours**

Lectures and discussions in German in such specialized areas as Medieval lyric, Romanticism, twentieth-century novel, modern drama, and individual authors. Repeatable when subtitle and content change. Prerequisite(s): GER 311 or GER 312.

**GER 469. German Linguistics. 3 Hours**

Synchronic analysis of modern German language, including a contrast of the German sound system, morphology, and syntax with English structures; the historical derivation of German, the modern German dialects, and approaches to teaching German to English-speakers. Conducted in German. Prerequisite(s): (GER 311 or 312); LNG 468.

**GER 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**GER 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**GER 491. Independent Study. 1-3 Hours**

Independent research project under the guidance of an instructor. Admission to project and number of semester hours require approval of chairperson. Prerequisite(s): GER 202; permission of instructor.

**Hindi Courses****HND 101. Beginning Hindi I. 3 Hours**

Development of fundamental communication skills in reading, listening, writing, and speaking through extensive practice in language use. Admission to HND 101 restricted to those who have not studied Hindi or have placed into that course by examination. Offered only in India in connection with the B.A. Program in Philosophy. Credit is granted for only one of the following: HND 101, HND 102 or HND 121.

**HND 102. Beginning Hindi II. 3 Hours**

Development of fundamental communication skills in reading, listening, writing, and speaking through extensive practice in language use. Admission to HND 102 is open only to those who have successfully completed 101. Offered only in India in connection with the B.A. Program in Philosophy. Credit is granted for only one of the following: HND 101, HND 102 or HND 121.

**HND 121. Elementary Hindi. 4 Hours**

Review and further development of fundamental communication skills in reading, listening, writing, and speaking. Admission restricted to those who have studied the language for at least two years and place into the course by examination. Offered only in India in connection with the B.A. Program in Philosophy. Credit granted for only one of the following: HND 101 and HND 102 or HND 121.

**HND 141. Basic Proficiency in Hindi. 3 Hours**

Further development of communication skills in reading, listening, writing, and speaking. Admission by examination or successful completion of HND 102 or HND 121. Successful completion of this course includes the demonstration of the minimal level of proficiency required for the College of Arts and Sciences' Liberal Studies Curriculum. Offered only in India in connection with the B.A. Program in Philosophy.

**HND 201. Intermediate Hindi I. 3 Hours**

Review of the essentials of grammar, intensive conversation and comprehension exercises, reading of graded modern prose and poetry; brief essays in Hindi. Offered only in India in connection with the B.A. Program in Philosophy. Prerequisite(s): HND 141; previous study of elementary Hindi in school or elsewhere; ability to speak, read, understand, and write simple Hindi.

**HND 202. Intermediate Hindi II. 3 Hours**

Review of the essentials of grammar, intensive conversation and comprehension exercises, reading of graded modern prose and poetry; brief essays in Hindi. Offered only in India in connection with the B.A. Program in Philosophy. Prerequisite(s): HND 201.

**Italian Courses****ITA 101. Beginning Italian I. 4 Hours**

Development of basic communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Admission is restricted to those who have not studied Italian or have placed into this course by examination.

**ITA 141. Basic Proficiency in Italian. 4 Hours**

Further development of fundamental communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Prerequisite(s): ITA 101 or placement by examination.

**ITA 170. Study Abroad. 3 Hours**

Study in a foreign country/region whose everyday language is Italian, focusing on the culture and civilization of the country. Conducted in English. Available only during the summer session. Repeatable when topic and content change. Prerequisite(s): ITA 101 (may be taken as a corequisite).

**ITA 201. Intermediate Italian I. 3 Hours**

Development of reading, listening, writing, and speaking skills. Conversation practice, oral reports, reading assignments, composition assignments, and grammar exercises. The course is conducted in Italian. Successful completion of this course includes the demonstration of the proficiency level required by the College of Arts and Sciences' Liberal Studies Curriculum. Prerequisite(s): ITA 141.

**ITA 202. Intermediate Italian II. 3 Hours**

Development of reading, listening, writing, and speaking skills. Conversation practice, oral reports, reading assignments, composition assignments, and grammar exercises. The course is conducted in Italian. Prerequisite(s): ITA 201.

**ITA 313. Communicating in Italian I. 3 Hours**

Intensive practice in speaking and writing Italian at an advanced level. Emphasis on building vocabulary, learning correct idiomatic usage, increasing fluency, and improving syntax and style. The course is conducted in Italian. ITA 313 and 314 may be taken in either sequence. Prerequisite(s): ITA 202.

**ITA 314. Communicating in Italian II. 3 Hours**

Intensive practice in speaking and writing Italian at an advanced level. Emphasis on building vocabulary, learning correct idiomatic usage, increasing fluency, and improving syntax and style. The course is conducted in Italian. ITA 313 and 314 may be taken in either sequence. Prerequisite(s): ITA 202.

**ITA 341. Italian Culture & Civilization I. 3 Hours**

Survey of the major historical and cultural events in Italy from the Middle Ages to the present. All readings, lectures, discussions, reports, and tests are in Italian. ITA 341 and 342 may be taken in either sequence. Prerequisite(s): ITA 202.

**ITA 361. Survey of Italian Literature I. 3 Hours**

Italian literature from its beginnings in the thirteenth century to the present. Principal writers and literary trends; the techniques of literary analysis. Lectures, discussions, readings, and papers are in Italian. ITA 361 and ITA 362 may be taken in either sequence. Prerequisite(s): ITA 202.

**ITA 362. Survey of Italian Literature II. 3 Hours**

Italian literature from its beginnings in the thirteenth century to the present. Principal writers and literary trends; the techniques of literary analysis. Lectures, discussions, readings, and papers are in Italian. ITA 361 and ITA 362 may be taken in either sequence. Prerequisite(s): ITA 202.

**ITA 491. Independent Study. 1-3 Hours**

Independent research project under the guidance of an instructor. Admission to project and number of semester hours require approval of chairperson. Prerequisite(s): ITA 202 or permission of instructor.

## Languages Courses

**LNG 000. Language Placeholder. 0 Hours****LNG 101. Beginning Language Study. 4 Hours**

Development of fundamental communication skills in reading, listening, writing, and speaking with a focus on basic proficiency in survival communication, and familiarization with culture in languages other than those regularly taught in the Department of Languages. May be offered through distance learning or study abroad with the support of the Department of Languages. No previous study of the language is presupposed (for LNG 101 only). Offered with different suffixes according to the language studied.

**LNG 141. Basic Proficiency in Language. 4 Hours**

Further development of communication skills in reading, listening, writing, and speaking with a focus on basic proficiency in survival communication, and familiarization with culture in languages other than those regularly taught in the Department of Languages. Offered with different suffixes according to the language studied. Prerequisite(s): LNG 101 in the same language or equivalent.

**LNG 201. Intermediate Language I. 4 Hours**

Expansion and extension of listening, speaking, reading, and writing skills through conversation practice, reading assignments, composition assignments, and grammar exercises. Offered with different suffixes according to the language studied. Prerequisite(s): LNG 141 in the same language or equivalent.

**LNG 202. Intermediate Language II. 4 Hours**

Continued development of proficiency in listening, speaking, reading and writing through conversation practice, reading assignments, composition assignments, and grammar exercises. Offered with different suffixes according to the language studied. Prerequisite(s): LNG 201 in the same language or equivalent.

**LNG 320. Instructed Second Language Acquisition. 2 Hours**

Study of cognitive, linguistic, sociolinguistic, and constructivist approaches to instructed second language acquisition, including the relationship between classroom interaction and language acquisition.

**LNG 330. Teaching World Languages in the Elementary School (PK-6). 4 Hours**

An introduction to the pedagogical, philosophical, and psychological aspects of teaching foreign languages in elementary school. Topics: national and state standards, learners with special needs, reading in the foreign language, and professional associations. Prerequisite(s): EDT 110; at least two 300-level courses in the language to be taught.

**LNG 468. Introduction to Linguistics. 3 Hours**

Survey of the various aspects of a scientific description of human language: phonetics, phonology, morphology, syntax, semantics, and pragmatics. Interdisciplinary exploration of the reciprocal impact of linguistics on psychology, sociology, and language acquisition theory. Prerequisite(s): ((ENG 102 or ENG 200 or ENG 200H) or ASI 120) or equivalent; junior or senior standing or permission of department chairperson.

**LNG 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**LNG 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**LNG 495. The Language Major in Professional Careers. 1 Hour**

Exploration of life-long learning opportunities to maintain and increase functional proficiency in the language studied; the relationship between language proficiency and cross-cultural studies and the application of language proficiency in the work place; determination of the student's proficiency-level at the conclusion of the undergraduate experience. Required of declared majors in languages (FRN, GER, LNG, and SPN). Taught in English. Prerequisite(s): Completion of 18 credit hours of upper-division courses in language major.

## Latin Courses

**LAT 101. Basic Proficiency in Latin I. 4 Hours**

Development of basic skills in reading, listening, and writing through extensive practice in language use. Admission is restricted to those who have not studied Latin or have placed into this course by examination.

**LAT 131. Intensive Fundamental Latin. 2 Hours**

Intensive development of fundamental skills in reading, listening, and writing through extensive practice in language use. Admission restricted to those who have previous experience with the language and place into this course by examination. Credit granted for only ONE of the following: LAT 101 or LAT 131.

**LAT 141. Basic Proficiency in Latin II. 4 Hours**

Further development of fundamental skills in reading, listening, and writing through extensive practice in language use. Prerequisite(s): (LAT 101 or LAT 131) or placement by examination.

**LAT 201. Intermediate Latin I. 3 Hours**

Systematic review of grammar, exercises in vocabulary development, readings from Caesar, Cicero, Virgil, or Ovid. Successful completion of this course includes the demonstration of the proficiency level required by the College of Arts and Sciences' Liberal Studies Curriculum. Prerequisite(s): LAT 141.

**LAT 202. Intermediate Latin II. 3 Hours**

Systematic review of grammar, exercises in vocabulary development, readings from Caesar, Cicero, Virgil, or Ovid. Prerequisite(s): LAT 201.

**LAT 321. Latin Composition & Syntax. 3 Hours**

Practice in writing Latin, for enrichment of vocabulary, refinement of grammar, and control of major Latin prose styles. Prerequisite(s): LAT 202.

**LAT 350. Latin Literature. 3 Hours**

Advanced readings in a particular author or genre (epic, drama, history, philosophy). Repeatable when subtitle and content change. Prerequisite(s): LAT 202.

**LAT 491. Independent Study. 1-3 Hours**

Independent research project under the guidance of an instructor. Admission to project and number of semester hours require approval of chairperson. Prerequisite(s): LAT 202 or permission of department chairperson.

## Russian Courses

**RUS 101. Basic Proficiency in Russian I. 4 Hours**

Development of basic communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Admission is restricted to those who have not studied Russian or have placed into this course by examination.

**RUS 141. Basic Proficiency in Russian II. 4 Hours**

Further development of fundamental communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Prerequisite(s): RUS 101 or placement by examination.

**RUS 201. Intermediate Russian I. 3 Hours**

Review of the essentials of grammar, intensive conversation and comprehension exercises, reading of graded modern and contemporary prose and poetry. Successful completion of this course includes the demonstration of the proficiency level required by the College of Arts and Sciences' Liberal Studies Curriculum. Prerequisite(s): RUS 141.

**RUS 202. Intermediate Russian II. 3 Hours**

Review of the essentials of grammar, intensive conversation and comprehension exercises, reading of graded modern and contemporary prose and poetry. Prerequisite(s): RUS 201.

**RUS 311. Russian Conversation I. 3 Hours**

Vocabulary development, pattern drills, and the use of idioms in discussion and oral reports centered on Russian life and culture. RUS 311 and 312 may be taken in either sequence. Prerequisite(s): RUS 202.

**RUS 312. Russian Conversation II. 3 Hours**

Vocabulary development, pattern drills, and the use of idioms in discussion and oral reports centered on Russian life and culture. RUS 311 and RUS 312 may be taken in either sequence. Prerequisite(s): RUS 202.

**RUS 321. Russian Composition. 3 Hours**

Practice in composition on topics dealing with Russian life and culture; personal and business letters. Short weekly assignments to build vocabulary and control of idioms. Prerequisite(s): RUS 202.

**RUS 361. Survey of Russian Literature. 3 Hours**

Russian literature and its development during the nineteenth and twentieth centuries. Study of exemplary works and literary movements. Prerequisite(s): RUS 202.

**RUS 491. Independent Study. 1-6 Hours**

Independent study under the guidance of an instructor. Admission to course and number of semester hours require approval of chairperson. Repeatable when content changes.

## Spanish Courses

**SPN 101. Basic Proficiency in Spanish I. 4 Hours**

Development of basic communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Admission is restricted to those who have not studied Spanish or have placed into this course by examination.

**SPN 131. Intensive Fundamental Spanish. 2 Hours**

Intensive development of fundamental communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Admission restricted to those who have previous experience with the language and place into this course by examination. Credit granted for only ONE of the following: SPN 101 or SPN 131.

**SPN 141. Basic Proficiency in Spanish II. 4 Hours**

Further development of fundamental communication and intercultural skills in reading, listening, writing, and speaking through extensive practice in language use. Prerequisite(s): (SPN 101 or SPN 131) or placement by examination.

**SPN 201. Intermediate Spanish I. 3 Hours**

Intensive development of the basic principles of Spanish through writing and conversation, stressing fluency. Language laboratory required. Successful completion of this course includes the demonstration of the proficiency level required by the College of Arts and Sciences' Liberal Studies Curriculum. Prerequisite(s): SPN 141.

**SPN 202. Intermediate Spanish II. 3 Hours**

Intensive development of the basic principles of Spanish through writing and conversation, stressing fluency. Language laboratory required. Prerequisite(s): SPN 201.

**SPN 270. Study Abroad. 1-6 Hours**

Intensive study in a foreign country whose everyday language is Spanish, treating the culture and civilization of the country. Conducted in Spanish. Available only during the summer session. Repeatable when subtitle and content change. Prerequisite(s): SPN 141 or equivalent.



**SPN 311. Spanish Conversation I. 3 Hours**

Development of fluency in the vocabulary and idioms of the spoken language through discussion of topics related to contemporary life in the Hispanic world. Prerequisite(s): SPN 202.

**SPN 312. Spanish Conversation II. 3 Hours**

Development of fluency in the vocabulary and idioms of the spoken language through discussion of topics related to contemporary life in the Hispanic world. Prerequisite(s): SPN 311.

**SPN 321. Spanish Composition I. 3 Hours**

Practice in composition on a variety of topics. Systematic refinement and mastery of grammar and assimilation of stylistic patterns. Emphasis on developing facility in writing clearly and correctly in Spanish. Prerequisite(s): SPN 311 or SPN 312.

**SPN 322. Spanish Composition II. 3 Hours**

Practice in composition on a variety of topics. Systematic refinement and mastery of grammar and assimilation of stylistic patterns. Emphasis on developing facility in writing clearly and correctly in Spanish. Prerequisite(s): SPN 321.

**SPN 325. Commercial Spanish. 3 Hours**

Introduction to commercial correspondence as a basis for developing skills in writing Spanish business letters and other correspondence. Prerequisite(s): SPN 311 or SPN 312.

**SPN 341. Spanish Culture & Civilization. 3 Hours**

Readings and discussions on the historical, social, political, and cultural phenomena of Spain. Conducted in Spanish. Prerequisite(s): SPN 311 or SPN 312.

**SPN 342. Ibero-American Culture & Civilization. 3 Hours**

Readings and discussions on the historical, social, political, and cultural phenomena of Ibero-America. Conducted in Spanish. Prerequisite(s): SPN 311 or SPN 312.

**SPN 350. Hispanic Literature in Translation. 3 Hours**

Course to acquaint students with major Spanish and Spanish-American writers and literary movements. Conducted in English. Repeatable when subtitle and content change.

**SPN 361. Survey of Spanish Literature I. 3 Hours**

Readings and analysis of the works of major Spanish authors and discussion of the principal literary trends in Spain from the Middle Ages to the twentieth century. Lectures, discussions, and assignments in Spanish. Prerequisite(s): SPN 311 or SPN 312.

**SPN 362. Survey of Spanish Literature II. 3 Hours**

Readings and analysis of the works of major Spanish authors and discussion of the principal literary trends in Spain from the Middle Ages to the twentieth century. Lectures, discussions, and assignments in Spanish. Prerequisite(s): SPN 311 or SPN 312.

**SPN 363. Survey of Spanish-American Literature I. 3 Hours**

Readings and analysis of the works of major Spanish-American authors and discussion of the principal literary trends in Spanish America from Discovery and Conquest through Realism and Naturalism. Conducted in Spanish. Prerequisite(s): SPN 311 or SPN 312.

**SPN 364. Survey of Spanish-American Literature II. 3 Hours**

Readings and analysis of the works of major Spanish-American authors and discussion of the principal literary trends in Spanish America from Modernism through the present day. Conducted in Spanish. Prerequisite(s): SPN 311 or SPN 312.

**SPN 370. Study Abroad. 1-6 Hours**

Intensive study in a foreign country whose everyday language is Spanish, treating the culture and civilization of the country. Conducted in Spanish. Available only during the summer session. Repeatable when subtitle and content change. Prerequisite(s): SPN 202.

**SPN 380. Spanish & Ibero-American Cinema. 3 Hours**

Introduction to cinematography and culture of Spanish and Ibero-American countries, emphasizing themes related to human rights (Socioeconomic, class, sexuality, gender, ethnicity), as well as critical and theoretical perspectives on films from these regions. Conducted in English. Prerequisite(s): ENG 102 or equivalent.

**SPN 440. Spanish Sociolinguistics. 3 Hours**

Analysis of the interrelations between linguistic practices and ideas in the Spanish-speaking world and the social contexts in which they develop. Topics examined include language contact, minority languages, and human rights; language policy and education planning; socially conditioned variation according to gender, class, and ethnicity; and linguistic ideologies and identities in Spain and Latin America. Conducted in Spanish. Prerequisite(s): SPN 321 or permission of department chairperson.

**SPN 450. Topics in Spanish Literature. 3 Hours**

Lectures and discussions concentrating on specialized genres, periods, or authors of Peninsular literature prior to the twentieth century. Conducted in Spanish. Repeatable when subtitle and content change. Prerequisite(s): SPN 311 or SPN 312.

**SPN 451. Topics in Spanish-American Literature. 3 Hours**

Lectures and discussions concentrating on specialized genres, periods, or authors of Spanish-American literature prior to the twentieth century. Conducted in Spanish. Repeatable when subtitle and content change. Prerequisite(s): SPN 311 or SPN 312.

**SPN 469. Spanish Linguistics. 3 Hours**

Synchronic analysis of modern Spanish language, including a contrast of the Spanish sound system, morphology, and syntax with English structures; the historical derivation of Spanish, the modern Spanish dialects (Spain and Latin America), and approaches to teaching Spanish to English speakers. Conducted in Spanish. Prerequisite(s): LNG 468; (SPN 311 or SPN 312).

**SPN 471. Topics in Spanish Literature of the Twentieth Century. 3 Hours**

Lectures and discussions concentrating on specialized periods, genres, or authors of twentieth-century Peninsular literature. Conducted in Spanish. Repeatable when subtitle and content change. Prerequisite(s): SPN 311 or SPN 312.

**SPN 472. Topics in Spanish-American Literature of the Twentieth Century. 3 Hours**

Lectures and discussions concentrating on specialized periods, genres or authors of twentieth-century Spanish-American literature. Conducted in Spanish. Repeatable when subtitle and content change. Prerequisite(s): SPN 311 or SPN 312.

**SPN 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.



**SPN 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**SPN 480. Spanish & Ibero-American Cinema. 3 Hours**

Introduction to cinematography and culture of Spanish and Ibero-American countries, emphasizing themes related to human rights (socioeconomic, class, sexuality, gender, ethnicity), as well as critical and theoretical perspectives on films from these regions. Conducted in Spanish. Prerequisite(s): SPN 312 or equivalent; SPN 342 recommended.

**SPN 491. Independent Study. 1-3 Hours**

Independent research project under the guidance of an instructor. Admission to project and number of semester hours require approval of chairperson. Prerequisite(s): SPN 202; permission of department chairperson.

**SPN 497. Service Learning Experience. 1-3 Hours**

Supervised service experience or project which requires the use of Spanish. Repeatable up to a total of three semester hours. Prerequisite(s): SPN 311 or equivalent.

## History

Major:

- Bachelor of Arts, History

Minor:

- History

History critically studies the past and those key values which have shaped society. The best tradition of historical study enables students to assess change over time and to create an interpretative narrative of the human experience. As an intellectual discipline, historical study includes historiography and historiographical interpretation, critical evaluation of historical sources, and causation and contextualization. Students in historical studies courses should be able to identify what historical details are necessary to understand how change occurs and how the topic at hand relates to wider (temporal and spatial) historical frameworks.

History also provides students with a sense of perspective and with the ability to make critical judgments - skills that are broadly applicable and extremely useful in a broad range of professions across the long term of one's professional career. Those with a sharply honed historical consciousness know that often what appears to be a simple solution to a simple problem will not work because unexpressed historical forces and traditions lie just beneath the surface. Therefore, historical consciousness and historical analysis helps to make the world and the problems we confront on a daily basis - from the mundane to profound - comprehensible. From the broadest perspective, to be ignorant of history is to be, in a very fundamental way, intellectually defenseless, unable to understand the workings of this or other societies which are critical elements necessary in understanding our daily problems and devising solutions for them.

Students majoring in history are offered a flexible curriculum that allows them to have a double major or one or more minors. Students are also strongly encouraged to develop interdisciplinary areas of concentration to

meet their interests and vocational and professional goals. Examples of areas of concentration are:

- Prelaw
- Business (with course work in Marketing, Finance, and other technical fields)
- International Studies and Human Rights
- Historical Administration, Preservation, and Archival Management
- Social Sciences, Mathematics and Statistics, and Economics

History majors should consult the department's Director of Curriculum and Advising for further details.

History majors pursue professions in numerous fields including:

- Historians as Educators  
Elementary Schools  
Secondary Schools  
Postsecondary Education  
Historic Sites and Museums
- Historians as Researchers  
Museums and Historical Organizations  
Cultural Resources Management and Historic Preservation  
Think Tanks
- Historians as Communicators  
Writers and Editors  
Journalists  
Documentary Editors  
Producers of Multimedia Material
- Historians as Information Managers  
Archivists  
Records Managers  
Librarians  
Information Managers
- Historians as Advocates  
Lawyers and Paralegals  
Litigation Support  
Legislative Staff Work  
Foundations
- Historians in Businesses and Associations  
Historians as Skilled Managers in Corporations  
Contract Historians  
Historians and Nonprofit Associations

Students in B.A. programs can acquire teacher licensure through the dual-degree B.A. and B.S.E. program conducted in conjunction with the Department of Teacher Education in the School of Education and Health Sciences. For details consult the department chairperson.

A history minor consists of 18 semester hours.

### Faculty

Juan Santamarina, Chairperson  
Distinguished Service Professors: Alexander, Palermo  
Professors Emeriti: Eid, Morman, Palermo, Taylor  
Professors: Amin, Bednarek, Fleischmann, Heitmann, Schweikart, Trollinger  
Associate Professors: Agnew, Cadegan, Carlson, Carter, Darrow, Flockertzie, Hume, Merithew, Santamarina  
Assistant Professors: Borbonus, Reid, Roy, Sutherland  
Lecturers: Bartley, Gomez, Jaffe, Sanderson, Sextro, Uhlman, Washington

## Bachelor of Arts, History (HST) minimum 124 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- Completed with ASI 110 and ASI 120.
- Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- Completed with ENG 200H or ASI 120.
- Must include two different disciplines and accompanying lab.

### Liberal Studies Curriculum

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May satisfy CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

### Major Requirements <sup>1</sup>

HST 103 West and the World	3
HST 150 Introduction to the Historian's Craft	3
HST 251 American History to 1865 <sup>2</sup>	3
or HST 252 American History Since 1865	
HST 300 Career Development in History	1
HST 301 Research Methods Seminar	3

HST 498 History Capstone Seminar (Satisfies CAP Major Capstone)	3
Select two courses from:	6
HST 220 Survey of Ancient History	
HST 260 History of Pre-Modern East Asia	
HST 280 Survey of Middle Eastern History	
Select 4 HST courses (300 level) <sup>3</sup>	12
Select one HST seminar (400 level) <sup>4</sup>	3

### Breadth

ASI 150 Introduction to the University Experience	1
Total Hours to total at least	124

- Includes CAP components.
- Students who are majoring in both History and Adolescence to Young Adult (AYA) Integrated Social Studies (History and Social Science) Education in the School of Education and Allied Professions are required to take both HST 251 and HST 252, and only one non-U.S. 200-level area survey.
- These electives should be distributed so that the student will have taken history (HST) electives in three geographical areas: United States, Europe, and at least one of the following: Africa, Asia, Latin America, Middle East.
- Three semester hours of the seminar requirement may be achieved through the fulfillment of an experiential component earned through completion of three semester hours of HST 495 Internship.

## Minor in History (HST)

### History

HST 103 West and the World	3
HST 251 American History to 1865	3
or HST 252 American History Since 1865	
Select two courses in American history (300/400 level)	6
Select two courses in Non-American history (300/400 level)	6
Total Hours	18

### First Year

Fall	Hours Spring	Hours
ASI 150	1 ASI 120	8
ASI 110	7 HST 150	3
CMM 100 (CAP Communication)	3 Language 141	4
Language 101	4	
	<b>15</b>	<b>15</b>

### Second Year

Fall	Hours Spring	Hours
HST 251 or 252	3 HST 220, 260, or 280	3
INSS (CAP Natural Science)	4 INSS (CAP Natural Science)	4
Literature	3 Social Science	3
SSC 200 (CAP Social Science)	3 HST 301	3
Language 201 or contextual course	3 CAP Arts	3
	<b>16</b>	<b>16</b>

**Third Year**

Fall	Hours Spring	Hours
HST 300	1 Adv REL (CAP Faith Traditions)	3
Creative & Performing Arts	3 HST Major elective	3
INSS (CAP Inquiry)	3 MTH (CAP Mathematics)	3
HST Major elective	3 Social Science	3
Social Science	3 General elective	3
General Elective	2	
	<b>15</b>	<b>15</b>

**Fourth Year**

Fall	Hours Spring	Hours
Adv PHL (CAP Practical Ethical Action)	3 HST 498 (Capstone)	3
CAP Integrative	3 Diversity and Social Justice	3
HST Major elective	3 HST Major elective	3
HST Seminar	3 General elective	3
General elective	3 General elective	3
General elective	2	
	<b>17</b>	<b>15</b>

Total credit hours: 124

**Courses****HST 103. The West & the World. 3 Hours**

Survey of key themes in world history including the social, economic, cultural, political, and environmental forces that shaped the human past throughout the globe.

**HST 150. Introduction to the Historian's Craft. 3 Hours**

Introduction for history majors to the fundamental aspects of professional history. Basic elements of this reading- and writing-intensive course include terminology, methods of critique, internal and external analysis, and interpretation. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 198. History Scholars' Seminar. 3 Hours**

Study and seminar discussion of selected historical documents dealing with major events and trends in Western civilization since 1715. Open by permission only to first-year students in the Berry Scholars Program.

**HST 220. Survey of Ancient History. 3 Hours**

Survey of ancient Mediterranean, African, and Asian history (c. 3,000 BCE to 500 CE) with emphasis on social structures, intellectual cultures, cross-cultural interaction, and the overall character and impact of antiquity. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 251. American History to 1865. 3 Hours**

Survey of the development of the American nation from colonial times to 1865; political trends, economic and social foundations of American institutions. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 252. American History Since 1865. 3 Hours**

Survey of the development of the nation after the Civil War, stressing social, economic, and political problems. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 260. History of Pre-Modern East Asia. 3 Hours**

Historical survey of the cultures and states of East Asia, from the origins of agricultural civilization to the eighteenth century. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 280. Survey of Middle Eastern History. 3 Hours**

Historical survey of the cultures and societies of the Middle East, from the rise of Islam to the modern period. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 300. Career Development in History. 1 Hour**

Exploration of career opportunities open to History majors, with special emphasis on strategic planning for a career, creating a job portfolio, and mastering the practical mechanics of job searching. HST major. Prerequisite(s): HST 103 or ASI 110 or equivalent; HST 103 or ASI 110 or equivalent; HST 301 (may be taken as a corequisite).

**HST 301. Research Methods Seminar. 3 Hours**

Historical methods, philosophy, and introductory historiography, the last based on the professor's field of specialization. Required for all history majors. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 302. Identity in Ancient Greece. 3 Hours**

This course examines the history of ancient Greece from the 8th century BCE to the 5th century CE and traces the formation of a common identity among Greeks. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 303. History of the Roman Republic & Empire. 3 Hours**

Survey of Roman history with emphasis on the political, social, and institutional evolution of the Roman state and the organization and structure of the Roman Empire. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 304. Ancient History & Modern Ideology. 3 Hours**

Study of the ways in which the Classical past affects the modern world with a particular emphasis on the way in which modern thinkers and societies have used classical antiquity to envision, create, sustain and evaluate national identities and other ideologies. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 305. Early Medieval Europe. 3 Hours**

Study of the social, cultural, political, economic, and religious history of Europe from 400-1100. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 306. High and Late Medieval Europe. 3 Hours**

Study of the social, economic, political, cultural, and religious history of Europe from 1000 to 1500.

**HST 307. Renaissance & Reformation. 3 Hours**

The development of European history from the fourteenth to the middle of the seventeenth century. Emphasis on the economic, political, social, and religious aspects of the Renaissance, Protestant Revolution, and Catholic Reformation. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 308. Shakespeare's Worlds. 3 Hours**

A concentrated analysis of the various worlds created in Shakespeare's plays and their interconnection with and depiction of the major elements of the historical world of early modern England. In the process of this integrated analysis, the Historical Study and Arts Study domains will be respected and taught as separate disciplines. This course is cross-listed with ENG 363. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 311. Old Regime Europe. 3 Hours**

From the later Reformation to the era of the French Revolution: intellectual and cultural development; political, economic, and social trends of the Old Regime. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 312. Age of Democratic Revolutions. 3 Hours**

Historical analysis of the ideological, political, social and economic changes of the late eighteenth and early nineteenth centuries, emphasizing the interaction of revolutions and human rights norms. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 313. The Dual Revolution & its Consequences - Europe 1815-1914. 3 Hours**

Historical analysis of nineteenth century Europe emphasizing the ideological, political, economic and social consequences of the Industrial and French revolutions, commonly known as the Dual Revolution. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 314. Modern Europe in Decline 1900-1945. 3 Hours**

This course examines the history of Europe from the eve of the First World War in 1900 until the end of the Second World War in 1945. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 315. Postwar Europe 1945-1990. 3 Hours**

This course examines the history of Europe from the end of the Second World War in 1945 to the end of the Cold War in 1990. Prerequisite(s): HST 103, REL 103, or equivalent.

**HST 316. Beethoven & His Era. 3 Hours**

Survey of the music of Ludwig van Beethoven, including orchestral works and chamber music, opera, keyboard and sacred music; and a survey of the historical context in which Beethoven lived and worked - Europe and the Habsburg Empire of the late eighteenth and early nineteenth centuries, and especially Vienna, the Habsburg capital. Beethoven is the culmination of the High Classic style and also the first of a new generation of Romantic composers. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 319. The British Empire. 3 Hours**

An examination of the origin, development, decline and continuing legacies of the British Empire in the 19th and 20th century. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 320. European Military History. 3 Hours**

Survey of warfare on the European continent from classical Greece through World War II emphasizing military institutions, organization, weapons, and campaigns and the role of the military in society. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 321. Modern France. 3 Hours**

French history from the Bourbon Restoration to the present. Emphasis on political, socio-economic, and cultural factors. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 322. History of England. 3 Hours**

Major forces and trends in the history of England from the early medieval period to the present, including their influence on social history and literature. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 323. Modern Germany. 3 Hours**

Analysis of the development of the German state from 1848 through the period of unification, Second Empire, Weimar Republic, Third Reich, the post-World War II Germanies, to the present. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 324. Comparative Nationalism. 3 Hours**

Comparative study of the origins and consequences of national movements throughout the world. Attention given to the historiography of nationalism and the fate of the nation-state idea in a number of temporal, geographic, political and cultural settings. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 325. History of Russia to 1860. 3 Hours**

History of Kievan Russia and Orthodox Christianity, the Mongol Conquest, the rise of autocracy, reforms and rebellions, revolutionary movements, and the rise of the Empire to the Crimean War. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 326. Russia, The Soviet Union & Beyond 1860-Present. 3 Hours**

Social, political, and cultural history of Russia from the great reforms of the late empire, through the wars, revolutions, and reconstructions of the Soviet Period, to the present. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 327. National Cultures of the Soviet Union & its Successor States. 3 Hours**

The history of the formation of the Soviet Union and of national and cultural relations between the Russians and their Slavic, Baltic, Caucasus, Central Asian, and Siberian neighbors. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 329. American and Middle East. 3 Hours**

Study of American involvement in the Middle East from the late 18th century until the present day. Topics include political, diplomatic and military events, as well as cultural, social, and religious debates that have defined the mutual interaction between Americans and Middle Easterners. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 330. History of East Asia to 1800. 3 Hours**

Survey of East Asian history from the formation of ancient states to the establishment of the dynastic hegemonies of the seventeenth and eighteenth centuries. Analysis of social, political, and cultural change in East Asia through the intensive reading of Chinese, Japanese, and Korean primary sources in translation. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 331. History of India. 3 Hours**

Survey of the development of civilization on the Indian subcontinent from the first extant records (c. 2500 BCE) to post-Independence modern India in connection with the B.A. Program in Philosophy. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 332. History of Modern East Asia. 3 Hours**

This course examines the processes that shaped the formation of modern East Asia. In particular, the course follows the consolidation of early modern states, the encounter with European imperialism, the subsequent transformation of East Asian states and economies in the late nineteenth and early twentieth centuries, and the impact of war and revolution in the twentieth century on the shaping of contemporary national identities. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 333. The Making of the Modern Middle East. 3 Hours**

This course examines the forces that have shaped the making of the modern Middle East from the nineteenth century to the present: reformist movements; imperialism and colonialism; nationalism; the rise and formation of modern nation states; regional and global interactions and conflicts; religion and the rise of Islamism; and social, cultural, and economic transformations in the region. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 334. History of the Palestinian-Israeli Conflict. 3 Hours**

Study of the history of the Palestinian-Israeli conflict from its beginnings in the late nineteenth century up to the present, with emphasis on a variety of historical interpretations of the actions and perspectives of the different parties involved. Prerequisite(s): HST 103 or ASI 110 or equivalent.



**HST 335. History of South Asia. 3 Hours**

Survey of the major political, religious, cultural and economic developments on the Indian subcontinent over the past 500 years. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 336. History of Africa to the Nineteenth Century. 3 Hours**

Study of African history from the emergence of Africa's ancient kingdoms to the end of the trans-Atlantic slave trade in the nineteenth century. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 337. History of Africa - 19th Century to the Present. 3 Hours**

This course examines the history of Africa from the nineteenth century to the present. It emphasizes slavery, colonialism, nationalism, decolonization, racism, and the post-colonial state. It is interdisciplinary in its approach and focus. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 338. State & Secession in South Asia. 3 Hours**

Survey of the failure of the nation-state and the rise of secessionist movements in South Asia since 1947. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 339. Gandhi's India. 3 Hours**

An examination of the life and times of M.K. Gandhi, an iconic figure in South Asian History, and his legacies worldwide. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 340. History of Science. 3 Hours**

Survey of the development of science from its origins in the ancient world to the present. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 341. Historical Perspectives on Science, Technology & Society. 3 Hours**

Historical study with an institutional focus of how science and science-based technology have interacted with American society from the Colonial era to the present. Central to this course is the genesis of mass production, its coupling with mass distribution, and the rise of the industrial research laboratory. Primary topics include the Industrial Revolution, the revolution in transport, the introduction of new technologies in the electrical, aviation, automotive, nuclear, petrochemical, and pharmaceutical industries, and the relationship between these science-based technologies and society. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 342. Environmental History of the Americas. 3 Hours**

Comparison and contrast of the histories of conservationism and environmentalism in the United States, Canada and Latin America. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 343. History of Civil Engineering. 3 Hours**

Historical study of the development of civil engineering from the origins in the ancient world to the present. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 344. History of Science, Technology & the Modern Corporation. 3 Hours**

Historical study of the emergence of twentieth-century science-based industry. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 346. History of American Aviation. 3 Hours**

Exploration of the technological, social, political, military and industrial history of American aviation. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 347. Sex, Race & Science. 3 Hours**

Examines the development of scientific research on sex, race, and human nature focusing especially on the biological and the human sciences. Topics will include race science, the study of sex and sexuality, evolutionary accounts of human development, and relations between science and society from 1700. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 348. Life & Technology. 3 Hours**

Study of how conceptions of life and technology have been tied together in key historical periods: from the early modern era, the industrial age, and the information age. Topics include life and mechanical philosophy; energy, work and life; cybernetics; reproductive technologies and genetic engineering; bioinformatics; and automata and robots. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 349. Technology & the Culture of War. 3 Hours**

Investigation of the role of invention and engineering as it has been related to defense and war throughout the ages, focusing on the interrelationship of policy, strategy, organization, and technology from a global perspective. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 350. Gay & Lesbian U.S. History. 3 Hours**

Upper level survey course which traces the history and trajectory of Gay and Lesbian communities in the U.S. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 351. American Gender & Women's History. 3 Hours**

A history class which takes into account how men's and women's lives have changed over the course of American history from the colonial period to the present. Gender, as an analytical tool and an historical construct, is incorporated to examine social, political, cultural, economic, environmental, ideological, and legal factors in time and place as well as to evaluate the racial, ethnic, class, and religious differences that shaped everyday experience and structural forces in history. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 352. History of the American Family. 3 Hours**

Survey of the historical development of American family life from the colonial period to the present. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 353. History of Women in European Societies. 3 Hours**

Study of the changing roles of women in European societies from the roots of industrialization to the present. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 354. History of Women & Gender in the Middle East. 3 Hours**

Study of the history of the evolving roles and status of women in Middle Eastern societies, from the early modern period to present. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 355. American Urban History. 3 Hours**

An examination of the modern American city from the late 19th century to the present. The course addresses contemporary (as well as historic) social issues and problems; examines significant social issues or problems in a multidisciplinary or interdisciplinary framework; and, most importantly, brings together different disciplinary perspectives to enhance students' understanding of significant issues facing the modern American city. Prerequisite(s): HST 103 or ASI 110 or equivalent; Junior Standing.

**HST 356. Comparative History of Women in the Third World. 3 Hours**

Study of the comparative histories of women in Third World societies from a global perspective, using specific case studies of women in different societies around the world. Prerequisite(s): HST 103 or ASI 110 or equivalent.



**HST 357. Latin America in the Twentieth Century. 3 Hours**

Intensive examination of revolution and reaction in today's Latin America and the implications for those who formulate U.S. foreign policy.

Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 358. Social & Cultural History of Latin America. 3 Hours**

Survey of social and cultural history of Latin America and the Caribbean from pre-Columbian times to the present. Emphasis on the interaction between the European colonizer and the Amerindian and African peoples of the hemisphere. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 359. History of American City Planning. 3 Hours**

Historical analysis of efforts by Americans to shape the urban environment, focusing on the emergence of the discipline and profession of city planning. Includes examination of U.S. planning theories developed within a larger Atlantic community. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 360. U.S. Legal & Constitutional History I. 3 Hours**

An analysis of the major developments in American legal and constitutional history from colonial beginnings through the Civil War. Emphasis on the relationship between the Constitution, the law, and lawyers, on the one hand, and America's economic, social and political developments, on the other. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 361. U.S. Legal & Constitutional History II. 3 Hours**

An analysis of the major developments in American legal and constitutional history from the Reconstruction era to the present. Emphasis on the relationship between the Constitution, the law, and lawyers, on the one hand, and America's economic, social, and political developments, on the other. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 365. American Films as History. 3 Hours**

Study of the development of American values, myths, institutions, and perspectives through the use of films as a primary source.

Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 369. Civil War & Reconstruction. 3 Hours**

Remote and immediate causes of the Civil War; problems of North and South during the war; consequences of the war; efforts to create a new Union, 1865 to 1877; problems caused by those efforts. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 370. Economic & Business History of the United States. 3 Hours**

Survey and analysis of American economic history, 1600 to present, primarily through a study of American business institutions and leaders. Includes analysis of major economic theories of history as well as case studies of entrepreneurs. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 371. United States Working Class. 3 Hours**

History of American workers - male and female, paid and unpaid, and free and slave - from the beginning of industrialization through the twentieth century. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 372. History of Religion in the United States. 3 Hours**

Survey of religion in the United States from the colonial era to the present. Particular attention to the interaction of religion with other aspects of American society and culture. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 373. American Military History. 3 Hours**

Survey of American military affairs, including military, naval, and air campaigns, from early settlement to the present. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 374. Ireland & America. 3 Hours**

Study of the cultural-historical background of both Scotch-Irish and Celtic Irish immigrants to America and how they influenced the varying reactions of the dominant Anglo-Saxon Protestantism of America.

Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 375. History of US Foreign Relations Since 1750. 3 Hours**

A case-study approach to the philosophical, economic, political, and religious foundations of US foreign relations since 1750, the expansion of foreign relations during the continental expansion of the nineteenth century and the beginning of the extra-continental empire in 1898. Special emphasis on the emergence of multifaceted and interconnected global foreign relations after 1898. Course meets Advanced Historical Studies and Crossing Boundaries: Inquiry components. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 376. Social & Cultural History of the United States. 3 Hours**

Social and cultural development of the American people: growth of national spirit, impact of expansion, conflict over slavery, and problems of industrialization and urbanization. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 377. Contemporary American History. 3 Hours**

The immediate background of contemporary political, social, and economic problems, beginning with the impact of World War II on the United States. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 378. Immigration History. 3 Hours**

This course approaches immigration history from geographically and chronologically expansive perspectives which highlight transnationalism as a category of analysis and a lived historical reality. The course links the experience of immigrants from different sending and receiving countries and compares the ways that local, national, continental and global conditions shaped migration over time. Immigrants were pushed and pulled to find work, to escape religious persecution, to pursue political freedoms, to secure human rights, and to cope with forces of the industrial and post industrial eras that included slavery, capitalism, patriarchy, empire, and other structural forces of oppression. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 380. Native American History. 3 Hours**

Historical and descriptive survey of the native peoples of North America. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 382. History of Mexico. 3 Hours**

Survey of Mexican history from pre-Columbian civilization to the present. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 383. History of the Caribbean. 3 Hours**

Study of the cultural, social, economic, and political history of the islands and the northern shore of South America in modern times, stressing areas that have gained independence or autonomy. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 384. Economic History of Latin America. 3 Hours**

Examination of the integration of Latin America into the world trading system and analysis of the twentieth century's successes and failures of export-led growth and industrialization. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 385. The Atlantic World, 1492-1800. 3 Hours**

Comparative look at the people and cultures of Europe, Africa and the Americas who collaborated in the colonization of the Americas. Topics to be covered will include: slavery, missionary work, virgin soil epidemics, frontier wars, gender and the invention of racial categories. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 386. China in Revolution. 3 Hours**

Study of the history of China's turbulent twentieth century, with a focus on the social, political and cultural impacts of the 1911 Revolution, the Communist Revolution in 1949, and the Cultural Revolution of the 1960s. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 391. American Architectural History & Preservation. 3 Hours**

Career-oriented course offering a theoretical background in historical preservation and techniques used in identification, research, and recording of historic landmarks worthy of preservation as part of the community heritage. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 398. African American History before 1877. 3 Hours**

This course examines the history and culture of African Americans from the great empires in Africa to the end of the United States Reconstruction era in 1877. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 399. History of Blacks in the United States Since 1900. 3 Hours**

Study of the saga of black people in the U.S. from 1900 to the present. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**HST 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**HST 485. Seminar in American History. 3 Hours**

Reading seminar concentrating on one historical topic in American history for detailed analysis. May be repeated as topics change. Prerequisite(s): HST 103 or ASI 110 or equivalent; HST 301 or permission of department chairperson.

**HST 486. Seminar in European History. 3 Hours**

Reading seminar concentrating on one historical topic in European history for detailed analysis. May be repeated as topics change. Prerequisite(s): HST 103 or ASI 110 or equivalent; HST 301 or permission of department chairperson.

**HST 487. Seminar in Latin American History. 3 Hours**

A reading seminar concentrating on one historical topic in Latin American history for detailed analysis. May be repeated as topics change. Prerequisite(s): HST 103 or ASI 110 or equivalent; HST 301 or permission of department chairperson.

**HST 488. Seminar in African History. 3 Hours**

Reading seminar concentrating on one historical topic in African history for detailed analysis. May be repeated as topics change. Prerequisite(s): HST 103 or ASI 110 or equivalent; HST 301 or permission of department chairperson.

**HST 490. Seminar in Historiography. 3 Hours**

Reading seminar concentrating on the various techniques and philosophies of history by which historians have done historical research. May be repeated as topics change. Prerequisite(s): HST 103 or ASI 110 or equivalent; HST 301 or permission of department chairperson.

**HST 491. Seminar in Ancient History. 3 Hours**

Reading seminar concentrating on one historical topic in ancient history for detailed analysis. May be repeated as topics change.

**HST 492. Seminar in Asian History. 3 Hours**

Reading seminar concentrating on one historical topic in Asian history for detailed analysis. May be repeated as topics change.

**HST 493. Seminar in Middle Eastern History. 3 Hours**

Reading seminar concentrating on one historical topic in Middle Eastern history for detailed analysis. May be repeated as topics change. Prerequisite(s): HST 103 or ASI 110 or equivalent; HST 301 or permission of department chairperson.

**HST 495. Internship. 3 Hours**

Practical and professional experience through work with approved organizations such as historical societies, architectural preservation boards, and business firms. Prerequisite(s): HST 103 or ASI 110 or equivalent; permission of supervising instructor.

**HST 496. Independent Study. 1-6 Hours**

The study of a special topic to be mutually selected by the student and a history professor. Prerequisite(s): HST 103 or ASI 110 or equivalent; permission of department chairperson.

**HST 497. Honors Tutorial. 1-6 Hours**

The study of a special topic to be selected by the instructor. Applicants will be admitted on the basis of academic record. May be repeated once. Prerequisite(s): HST 103 or ASI 110 or equivalent.

**HST 498. History Capstone Seminar. 3 Hours**

Capstone seminar course required for all senior history majors as the culmination of the Common Academic Program. Explores the perspective and practices of the professional historian. Students will demonstrate the ability to work critically with primary sources resulting in a scholarly project suited to their own professional goals. History majors only. Prerequisite(s): HST 103 or ASI 110 or equivalent, HST 150, HST 301.

**HST 499. Topics in History. 1-6 Hours**

Specific subtitles and descriptions to be announced in the composite and posted in the History department office. Prerequisite(s): HST 103 or ASI 110 or equivalent.

## International Studies

- Bachelor of Arts, International Studies

Concentrations:

- Global Environmental Sustainability
- Global Migration and Economic Development
- International Business
- International Education
- International Journalism and New Media
- Peace and Global Security

Minor:

- International Studies

International studies is a multidisciplinary major designed to meet the needs of students seeking the broadly based international perspective required for successful careers in education, government,

international business, law, national and homeland security, humanitarian relief, and NGOs, among others. The curriculum includes a core of required courses, a concentration, a foreign language requirement, an international and/or cross-cultural experiential component, and a senior capstone seminar. The experiential component may be satisfied through study abroad, internship, language immersion, service, or work experience. The Center for International Programs and the Center for Social Concern can assist students in identifying many of these opportunities.

A minor in international studies consists of 21 semester hours.

**International Studies Committee**

Marybeth Carlson, Director  
 Bilocerkowycz (Political Science), Carlson (History), Dasgupta (Anthropology), Forbis (Sociology), Hudson (Political Science), Krugh (Languages), MacLachlan (Music), Roy (History)

**Bachelor of Arts, International Studies (INS) minimum 124 hours**

**Common Academic Program (CAP)**

*credit hours will vary depending on courses selected	
First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

<sup>1</sup> Completed with ASI 110 and ASI 120.  
<sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.  
<sup>3</sup> Completed with ENG 200H or ASI 120.  
<sup>4</sup> Must include two different disciplines and accompanying lab.

**Liberal Studies Curriculum**

Creative and Performing Arts (May include CAP Arts)	3
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Literature (May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	3

**Major Requirements: Foundation Requirements <sup>1</sup>** 48

Includes CAP Components	
ECO 204 Principles of Macroeconomics	3
INS 499 Senior Capstone Seminar (Satisfies CAP Major Capstone)	3

Select one course from: 3

HST 375 History of US Foreign Relations Since 1750	
POL 335 United States National Security Policy	

Select one course from: 3

ENG 345 Postcolonial Literature	
MUS 303 Introduction to Musics of the World	
PHL 358 Marxist Philosophy	
PHL 370 Political Philosophy	
REL 363 Faith & Justice	
REL 474 Women & the Global Church	

Select one course from: 3

POL 202 Introduction to Comparative Politics	
POL 214 Introduction to International Politics	

Select one course from: 3

ANT 306 Culture & Power	
POL 331 Nationalism & Ethnopolitics	
POL 340 Gender & International Relations	
SOC 435 Economy & Society	

Select three area studies courses from three different disciplines: 9

ANT 352 Cultures of Latin America	
ANT 356 Cultures of Africa	
ANT 360 Cultures of South Asia	
HST 315 Postwar Europe 1945-1990	
HST 319 The British Empire	
HST 326 Russia, The Soviet Union & Beyond 1860-Present	
HST 327 National Cultures of the Soviet Union & its Successor States	
HST 329 American and Middle East	
HST 330 History of East Asia to 1800	
HST 331 History of India	
HST 332 History of Modern East Asia	
HST 333 The Making of the Modern Middle East	
HST 334 History of the Palestinian-Israeli Conflict	
HST 335 Making of Modern South Asia	
HST 337 History of Africa - 19th Century to the Present	
HST 339 Gandhi's India	
HST 353 History of Women in European Societies	
HST 354 History of Women & Gender in the Middle East	
HST 357 Modern Latin America	
HST 382 History of Mexico	
HST 383 History of the Caribbean	
HST 386 China in Revolution	
PHL 355 Asian Philosophy	

PHL 363	African Philosophy
PHL 365	Islamic Philosophy & Culture
PHL 379	Latin American Philosophy
POL 320	Comparative Politics: Western Europe
POL 321	Comparative Politics: Russia & the New States
POL 404	United States - Latin American Relations
REL 304	Hinduism
REL 305	Eastern Orthodoxy
REL 306	Buddhism
REL 307	Judaism
REL 308	Islam
REL 358	Liberation Theologies
REL 366	The Holocaust: Theological & Religious Responses
VAH 320	Latin American Art
VAH 330	Arts of Asia

Foreign language appropriate to concentration <sup>2</sup> 6

**Select one concentration from: <sup>3</sup>**

**Concentration: Global Environmental Sustainability 15**

Select two courses from: 6

ECO 435	Economics of the Environment
ENG 342	Literature and the Environment
HST 342	Environmental History of the Americas
PHL 321	Environmental Ethics
PHL 334	Philosophy & Ecology
POL 371	Environmental Policy
REL 472	Ecology & Religion
SWK 335	Social Work & Environmental Justice

Select three courses from: 9

ASI 320	Cities & Energy
BIO 359	Sustainability & the Biosphere <sup>4</sup>
BIO 395	Global Environmental Biology
CHM 200	Chemistry & Society
CHM/GEO 234	Energy Resources
GEO 208	Environmental Geology
GEO 450	Applied Geographic Information Systems
GEO 560	Advanced Applications of Geographical Information Systems
SEE 250	Introduction to Sustainability, Energy & the Environment
SEE 301	Global Change & Earth Systems

**Concentration: Global Migration and Economic Development 15**

Select two courses from: 6

ACC 200	Introduction to Accounting
CMM 332	Publication Design
ENG 370	Report & Proposal Writing
POL 361	Leadership in Nongovernmental Organizations

MPA 561	Nonprofit & Community Leadership <sup>5</sup>
MPA 562	Strategic Planning for Nonprofit & Community Organizations <sup>5</sup>

Select three courses from: 9

ANT/SOC 368	Immigration & Immigrants
ECO 460	Economic Development & Growth
ECO 461	International Economics
HST 378	Immigration History
POL 333	Politics of Human Rights
POL 334	Politics of Human Rights II
PHL 310	Social Philosophy
PHL 371	Philosophy & Human Rights
REL 330	Faith, Discrimination, and the U.S. Immigrant Experience
SOC 328	Racial & Ethnic Relations
SOC 339	Social Inequality
SOC 371	Sociology of Human Rights
SWK 360	International Social Work

**Concentration: International Business 15**

INB 302 Survey of International Business 3

MGT 403 Cross-Cultural Management 3

Select three courses from: 9

ACC 207	Introduction to Financial Accounting
ECO 460	Economic Development & Growth
ECO 461	International Economics
FIN 450	International Business Finance
INB 350	Doing Business in Emerging Markets
INB 351	Doing Business in Latin America
INB 352	Doing Business in Asia
INB 353	Doing Business in Europe
INB 354	Doing Business in Africa
INB 357	Export Management
MKT 440	Global Marketing
PHL 313	Business Ethics

**Concentration: International Education 15**

EDT 437 Second Language Learning and Teaching 3

ENG 466 TESOL Methods for Teaching English Language Learners 3

ENG 472 The Structure of English 3

ENG/LNG 468 Introduction to Linguistics 3

Select one course from: 3

ANT 315	Language & Culture
CMS 316	Intercultural Communication
SWK 360	International Social Work

**Concentration: International Journalism and New Media 15**

Select five courses from: 15

CMM 331	Feature Writing
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CMM 332	Publication Design	
CMM 340	Fundamentals of Broadcasting	
CMM 344	Multimedia Design & Production I	
CMM 350	Propaganda Analysis	
CMM 355	Rhetoric of Social Movements	
CMM 431	Public Affairs Reporting	
CMM 432	Media Law	
CMS 414	Global Communication	

**Concentration: Peace and Global Security** 15

Select three courses form: 9

CJS 336	Comparative Criminal Justice	
POL/INS 336	United Nations System: Theory and Practice	
POL 406	International Law & Organization	
POL 408	American Foreign Policy	
POL 452	Political Violence	

Select one course from: 3

HST 320	European Military History	
HST 349	Technology & the Culture of War	
HST 373	American Military History	

Select one course from: 3

PHL 317	Ethics & Modern War	
PHL 327	Philosophy of Peace	
PHL 371	Philosophy & Human Rights	

**Breadth**

ASI 150 Introduction to the University Experience 1

Total Hours to total at least 124

- 1 Courses taken for the major may also count toward completion of the Common Academic Program and the Liberal Studies Curriculum.
- 2 Must be at 300 level or above and exclusive of literature, film, or culture courses. There are currently no 300 level courses offered in Arabic or Mandarin Chinese. In these cases, students are required to complete the highest level course offered. Latin is not eligible for the INS language requirement. Completion satisfies the L2 requirement.
- 3 Students pursuing any concentration must take into account prerequisites or class standing restrictions.
- 4 This course counts for biology majors, but is accessible to non-majors as well.
- 5 With permission of the director of the Nonprofit & Community Leadership Certificate Program.
- 6 With permission of the INS director.

**Minor in International Studies (INS)**

**International Studies**

ECO 204	Principles of Macroeconomics	3
POL 214	Introduction to International Politics	3
Select one LNG course (202 level or above)		3
Select four INS courses (300/400 level) <sup>1</sup>		12
<b>Total Hours</b>		<b>21</b>

<sup>1</sup> Must be from at least three different disciplines, taken from International Studies core curriculum or concentrations.

**First Year**

Fall	Hours Spring	Hours
ASI 150	1 SCI 190 & 190L	4
POL 202 or 214	3 ENG 100 (CAP Writing Seminar)	3
HST 103 (CAP Humanities)	3 PHL 103 (CAP Humanities)	3
MTH 114 or 207 (CAP Mathematics)	3 CMM 100 (CAP Communication)	3
REL 103 (CAP Humanities)	3 Language 141	4
Language 101	4	
	<b>17</b>	<b>17</b>

**Second Year**

Fall	Hours Spring	Hours
ECO 204	3 ANT 306, POL 331, POL 340, or SOC 435	3
ENG 200 (CAP Writing Seminar)	3 ENG 345, MUS 303, PHL 358, PHL 370, REL 363, or REL 474	3
SCI 210 & 210L	4 SCI 230 (CAP Inquiry)	3
SSC 200 (CAP Social Science)	3 Advanced PHL or REL	3
Language 201	3 Language 202	3
	<b>16</b>	<b>15</b>

**Third Year**

Fall	Hours Spring	Hours
Arts Study	3 Literature	3
HST 375 (CAP Advanced History)	3 Area Study	3
Area Study	3 Elective	3
Language 311	3 Area Study	3
Concentration course	3 Language 300 or 400 level, Literature	3
	<b>15</b>	<b>15</b>

**Fourth Year**

Fall	Hours Spring	Hours
Concentration course	3 INS 499	3
Concentration course	3 Diversity and Social Justice	3
Integrative	3 Concentration course	3
Practical Ethical Action	3 Concentration course	3
Advanced PHL or REL	3 Faith Traditions	3
	<b>15</b>	<b>15</b>

Total credit hours: 125



## Courses

### INS 336. United Nations System: Theory and Practice. 3 Hours

Introduction to the United Nations system with detailed case studies of specific countries, issues, and policies. Course also serves to prepare students for participation in the National Model United Nations Conference. Prerequisite(s): SSC 200.

### INS 390. Model United Nations. 1 Hour

Examination of the work and procedures of the United Nations and its constituent bodies, study of various international issues and policies of member states, as well as of parliamentary diplomatic practices such as caucusing, resolution writing, and speech making in preparation for participation in Model United Nations simulations. Prerequisite(s): Permission of instructor.

### INS 395. International Experience. 1 Hour

Orientation for and evaluation of study abroad, internship, immersion, work, or service experience in a foreign country, organization involved in international activities, or a cross-cultural setting in the United States. Grading Option Two only.

### INS 399. Independent Study. 1-3 Hours

Independent reading and research on an interdisciplinary topic in international studies chosen by the student in consultation with one or more faculty members. May be repeated. Prerequisite(s): Permission of program director.

### INS 477. Honors Thesis Project. 3 Hours

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

### INS 478. Honors Thesis Project. 3 Hours

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

### INS 495. International Studies Internship. 1-6 Hours

Practical, supervised experience with an approved organization dealing with international affairs. Repeatable up to six hours. Prerequisite(s): Permission of program director.

### INS 499. Senior Capstone Seminar. 3 Hours

Capstone seminar for International Studies seniors in which students integrate the academic and experiential components of their multidisciplinary degree program in a capstone research project. Prerequisite(s): Senior status; international experience completed; permission of program director.

## Marianist Social Transformation

The minor in Marianist social transformation offers an interdisciplinary approach to Catholic, Marianist, and Christian studies. The program allows the student to utilize the rich resources in service, teaching, and research at the University of Dayton in order to explore and investigate those topics and issues that lie at the heart of the University. Open to

all, participants will benefit from the 200 year Marianist experiment in the professions and higher education. Through its courses and activities, the minor prepares distinctive graduates to carry out social transformation based upon an understanding of Catholic and Christian contributions to the arts, sciences, and the professions.

### Marianist Studies Committee

Donald L. Pair (Office of the Dean), Coordinator  
Cadegan (History), Ensalaco (Political Science), Fitz (Ferree Professor in Social Justice), Inglis (Philosophy), Johnson (Religious Studies), McGrath (Religious Studies), Portier (Spearin Chair), Trollinger (History), Zukowski (Institute for Pastoral Initiatives)

## Minor in Marianist Social Transformation (MST)

### Marianist Social Transformation

MST 210	Speakers on Catholic Social Tradition	1
MST 310	Reading the Signs of the Times	3
or MST 311	Reading the Signs of the Times	
or MST 312	Reading the Signs of the Times	
Select one course from:		3
ASI 358	Christianity, Citizenship & Society	
HST 372	History of Religion in America	
PHL 327	Philosophy of Peace	
PHL 356	Christian Philosophy	
REL 363	Faith & Justice	
Select two courses from two different disciplines:		6
ASI 357	Vocation & the Arts	
ASI 371	Professional Ethics in a Global Community - Business Administration	
ASI 372	Professional Ethics in a Global Community - Education	
ASI 373	Professional Ethics in a Global Community - Engineering	
ASI 374	Professional Ethics in a Global Community - Philosophical	
ASI 375	Professional Ethics in a Global Community - Religious	
EGR 330	Engineering Design & Appropriate Technology	
ENG 323	Literature of the Christian Tradition	
ENG 384	Christianity & Modern Poetry	
HST 305	Early Medieval Europe	
HST 307	Renaissance & Reformation	
HST 311	Old Regime Europe	
HST 313	The Dual Revolution & its Consequences - Europe 1815-1914	
HST 358	Social & Cultural History of Latin America	
MUS 301	Music History & Literature I	
MUS 305	African-American Sacred Music	
MUS 350	Sacred Music History	
MUS 452	Contemporary Liturgical Music Repertoire	
PHL 307	Philosophy & Women	
PHL 311	Philosophy of Religion	
PHL 312	Ethics	
PHL 313	Business Ethics	

PHL 315	Medical Ethics
PHL 316	Engineering Ethics
PHL 319	Information Ethics
PHL 351	Jewish, Christian, and Islamic Philosophy
PHL 360	Existentialism
POL 333	Politics of Human Rights
POL 426	Leadership in Building Communities
PSY 451	Psychology of Religion
REL 323	History of Christianity I
REL 324	History of Christianity II
REL 358	Liberation Theologies
REL 367	Christian Ethics & Health Care Issues
REL 368	Practical wisdom in the business world
REL 369	Ethics by Design: Theological Ethics and Engineering
REL 471	Women & Religion
REL 474	Women & the Global Church
SOC 334	Religion & Society
SOC 339	Social Inequality
SOC 426	Leadership in Building Communities
VAH 450	Italian Renaissance Art
VAH 460	Baroque Art
Total Hours	13

## Courses

### MST 210. Speakers on Catholic Social Tradition. 1 Hour

Introduction to contemporary Marianist, Catholic, and Christian social issues as reflected in presentations made on campus by significant outside speakers. Study and discussion of texts in order to meet and evaluate speakers.

### MST 310. Reading the Signs of the Times. 3 Hours

An integrated interdisciplinary exploration of local needs in light of Catholic social tradition and Marianist educational philosophy. In the process of this integrated analysis, the Historical Study domain will be emphasized. This course is cross-listed with MST 311 and MST 312 and is the capstone for the minor. Prerequisite(s): MST 210; three courses in minor.

### MST 311. Reading the Signs of the Times. 3 Hours

An integrated interdisciplinary exploration of local needs in light of Catholic social tradition and Marianist educational philosophy. In the process of this integrated analysis, the domain of Philosophy will be emphasized. This course is cross-listed with MST 310 and MST 312 and is the capstone for the minor. Prerequisite(s): MST 210; three courses in minor.

### MST 312. Reading the Signs of the Times. 3 Hours

An integrated interdisciplinary exploration of local needs in light of Catholic social tradition and Marianist educational philosophy. In the process of this integrated analysis, the domain of Religious Studies will be emphasized. This course is cross-listed with MST 310 and MST 311 and is the capstone for the minor. Prerequisite(s): MST 210; three courses in minor.

## Mathematics

### Majors:

- Bachelor of Arts, Mathematics
- Bachelor of Science, Applied Mathematical Economics
- Bachelor of Science, Mathematics

### Minors:

- Actuarial Science
- Mathematics

The B.A. program in mathematics provides for a breadth of mathematical study within the context of a liberal arts degree. It may be chosen as a preparation for a professional career in business, education, law, or social science. It affords the student a significant distribution of courses in the humanities and social sciences so that he or she can develop a concentration in a field other than mathematics. The student's career goals will generally suggest desirable upper level mathematics electives. For example, prospective secondary mathematics teachers should participate in the licensure program and elect courses such as MTH 370, MTH 395, and MTH 466. Students with an interest in business, law, or social science should complete the probability and statistics sequence MTH 411-MTH 412.

The B.S. program in mathematics provides a foundation for students who wish to pursue graduate studies in any area of the mathematical sciences, to enter the actuarial profession, or to enter careers where mathematics is used in an engineering or science setting. A preparation for graduate programs in a mathematical science should include electives such as MTH 342, MTH 404, and MTH 471. Those planning on pursuing an actuarial career should take the actuarial science minor described below. To prepare for using mathematics in an applied context, some useful elective courses are MTH 403, MTH 404, and the MTH 411-MTH 412 sequence. All students pursuing a bachelor of science in mathematics are required to complete a minor in another subject.

The B.S. program in applied mathematical economics provides a foundation in economics, mathematics, and statistics needed for graduate study in economics or applied statistics, or for research and technical careers in business or government service. This degree is offered jointly by the Department of Mathematics and the Department of Economics and Finance in the School of Business Administration.

The basic courses are offered every term:

MTH 168	Analytic Geometry & Calculus I	4
MTH 169	Analytic Geometry & Calculus II	4
MTH 218	Analytic Geometry & Calculus III	4
MTH 219	Applied Differential Equations	3
MTH 308	Foundations & Discrete Mathematics	3
MTH 310	Linear Algebra & Matrices	3

Most majors will take MTH 218 and MTH 308 in the same term.

The required core courses are offered at least once a year:

MTH 330	Intermediate Analysis	3
MTH 361	Introduction to Abstract Algebra	3
MTH 411	Probability & Statistics I	3
MTH 412	Probability & Statistics II	3
MTH 430	Real Analysis	3

However, most of the other upper-level electives for the major are offered only once every two years; thus careful planning for a student's upper-level electives should be done in consultation with the advisor. In addition, the symbolic logic course, PHL 302, is a recommended Common Academic Program course for all mathematics majors.

A minor in mathematics consists of 12 semester hours (300-400 level).

A minor in actuarial science is offered through the Department of Mathematics. This consists of courses in calculus, statistics, theory of interest, economics, and finance, and is designed to prepare the student to take the actuarial examinations in probability and financial mathematics.

**Faculty**

Joe D. Mashburn, Chairperson  
 Distinguished Service Professor: Peterson  
 Professors Emeriti: Back, Friel, Gantner, Kaufflin, McCloskey, Mushenheim, Rice, Schleppe, Shaughnessy, R. Steinlage, Strange  
 Professors: Abueida, Diestelkamp, Driskell, Elo, Higgins, Islam, Mashburn, Raffoul  
 Associate Professors: Busch, Gorton, Hovey, Krakowski, Liu, Qumsiyeh, Usman, Yengulalp  
 Assistant Professors: Brown, Kublik, Ren, Veliz-Cuba  
 Lecturers: Harrison, Ober, Saintignon, Simon, L. Steinlage

**Bachelor of Arts, Mathematics (MTH) minimum 124 hours**

**Common Academic Program (CAP)**

*credit hours will vary depending on courses selected	
First-Year Humanities Commons <sup>1</sup>	12
HST 103    West and the World	
REL 103    Introduction to Religious and Theological Studies	
PHL 103    Intro To Philosophy	
ENG 100    Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200    Writing Seminar II	
Oral Communication	3
CMM 100    Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200    Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- 1 Completed with ASI 110 and ASI 120.
- 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- 3 Completed with ENG 200H or ASI 120.
- 4 Must include two different disciplines and accompanying lab.

**Liberal Studies Curriculum**

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

**Major Requirements**

MTH 168	Analytic Geometry & Calculus I (Satisfies CAP Mathematics)	4
MTH 169	Analytic Geometry & Calculus II	4
MTH 218	Analytic Geometry & Calculus III	4
MTH 308	Foundations & Discrete Mathematics	3
MTH 310	Linear Algebra & Matrices	3
MTH 330	Intermediate Analysis	3
MTH 361	Introduction to Abstract Algebra	3
MTH 411	Probability & Statistics I	3
MTH 480	Math Capstone (Satisfies CAP Major Capstone)	3
Select two MTH courses (300/400 level)		6

**Breadth**

ASI 150	Introduction to the University Experience	1
Total Hours to total at least		124

**Bachelor of Science, Applied Mathematical Economics (MTE) minimum 120 hours**

**Common Academic Program (CAP)**

*credit hours will vary depending on courses selected	
First-Year Humanities Commons <sup>1</sup>	12
HST 103    West and the World	
REL 103    Introduction to Religious and Theological Studies	
PHL 103    Intro To Philosophy	
ENG 100    Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200    Writing Seminar II	
Oral Communication	3
CMM 100    Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200    Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	

Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- 1 Completed with ASI 110 and ASI 120.
- 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- 3 Completed with ENG 200H or ASI 120.
- 4 Must include two different disciplines and accompanying lab.

**Science Breadth Requirements**

Satisfies CAP Natural Science		
CPS 150	Algorithms & Programming I	4
CPS 151	Algorithms & Programming II	4
Select one natural sciences group from:		8
BIO 151 & 151L & BIO 152 & BIO 152L	Concepts of Biology I: Cell & Molecular Biology and Concepts of Biology Laboratory I: Cell & Molecular Biology and Concepts of Biology II: Evolution & Ecology and Concepts of Biology Laboratory II: Evolution & Ecology	
CHM 123 & 123L & CHM 124 & CHM 124L	General Chemistry and General Chemistry Laboratory and General Chemistry and General Chemistry Laboratory	
GEO 115 & 115L & GEO 116 & GEO 116L	Physical Geology and Physical Geology Laboratory and Geological History of the Earth and Geological History of the Earth Laboratory	
PHY 206 & PHY 207 & PHY 210L & PHY 211L	General Physics I - Mechanics and General Physics II - Electricity & Magnetism and General Physics Laboratory I and General Physics Laboratory II	

**Major Requirements 48**

Mathematics		
MTH 168	Analytic Geometry & Calculus I (Satisfies CAP Mathematics)	4
MTH 169	Analytic Geometry & Calculus II	4
MTH 218	Analytic Geometry & Calculus III	4
MTH 308	Foundations & Discrete Mathematics	3
MTH 310	Linear Algebra & Matrices	3
MTH 330	Intermediate Analysis	3
MTH 411	Probability & Statistics I	3
MTH 412	Probability & Statistics II	3
MTH 480	Math Capstone (Satisfies CAP Major Capstone)	3
Economics		
ECO 203	Principles of Microeconomics (Satisfies CAP Crossing Boundaries: Inquiry)	3
ECO 204	Principles of Macroeconomics (Satisfies CAP Crossing Boundaries: Inquiry)	3
ECO 346	Intermediate Microeconomic Analysis	3
ECO 347	Intermediate Macroeconomic Analysis	3

ECO 441	Econometrics	3
Select one ECO course (300/400 level)		3

**Breadth**

ASI 150	Introduction to the University Experience	1
Social and Behavioral Sciences (Includes CAP Social Science)		6
Total Hours to total at least		120

**Bachelor of Science, Mathematics (MTH) minimum 120 hours**

**Common Academic Program (CAP)**

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	

Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	

Oral Communication		3
CMM 100	Principles of Oral Communication	

Mathematics		3
Social Science		3

SSC 200	Social Science Integrated	
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Arts		3
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Natural Sciences <sup>4</sup>		7
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Crossing Boundaries		variable credit
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Faith Traditions		
Practical Ethical Action		

Inquiry		
Integrative		

Advanced Study		variable credit
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Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

- 1 Completed with ASI 110 and ASI 120.
- 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- 3 Completed with ENG 200H or ASI 120.
- 4 Must include two different disciplines and accompanying lab.

**Science Breadth Requirements**

Computer Science (CPS 150 applies to CAP Natural Sciences)		3-4
CPS 132	Computer Programming for Engineering & Science or CPS 150 Algorithms & Programming I	
Select one natural sciences group from: (Applies to CAP Natural Science)		8

BIO 151 & 151L & BIO 152 & BIO 152L	Concepts of Biology I: Cell & Molecular Biology and Concepts of Biology Laboratory I: Cell & Molecular Biology and Concepts of Biology II: Evolution & Ecology and Concepts of Biology Laboratory II: Evolution & Ecology	
CHM 123 & 123L & CHM 124 & CHM 124L	General Chemistry and General Chemistry Laboratory and General Chemistry and General Chemistry Laboratory	
GEO 115 & 115L & GEO 116 & GEO 116L	Physical Geology and Physical Geology Laboratory and Geological History of the Earth and Geological History of the Earth Laboratory	
PHY 206 & PHY 207 & PHY 210L & PHY 211L	General Physics I - Mechanics and General Physics II - Electricity & Magnetism and General Physics Laboratory I and General Physics Laboratory II	
Select two courses acceptable for science majors		6
<b>Major Requirements</b>		45
MTH 168	Analytic Geometry & Calculus I (Satisfies CAP Mathematics)	4
MTH 169	Analytic Geometry & Calculus II	4
MTH 218	Analytic Geometry & Calculus III	4
MTH 219	Applied Differential Equations	3
MTH 308	Foundations & Discrete Mathematics	3
MTH 310	Linear Algebra & Matrices	3
MTH 330	Intermediate Analysis	3
MTH 361	Introduction to Abstract Algebra	3
MTH 430	Real Analysis	3
MTH 480	Math Capstone (Satisfies CAP Major Capstone)	3
Select four MTH courses (300/400 level) <sup>1</sup>		12
<b>Breadth</b>		
ASI 150	Introduction to the University Experience	1
Social and Behavioral Sciences (Includes CAP Social Science)		6
Total Hours to total at least		120

<sup>1</sup> Departmental approval required.

### Minor in Actuarial Science (ACS)

The Minor in Actuarial Science is designed to prepare students to pass the P and FM actuarial tests. It is also designed to supply students with VEE (Validation by Educational Experience) credit in economics, corporate finance, and applied statistics.

The minor contains eight courses in mathematics for a total of 22 semester hours. One of these is a course in the theory of interest and one is a seminar which prepares students to take the P test. Mathematics majors will take all but two of the mathematics requirements for the minor as part of their major requirements.

The minor also contains eight courses in accounting, economics, and finance for a total of twenty-four semester hours. Economics and finance majors will take all of these courses as part of their major requirements. They will be able to substitute two of the mathematics courses for those that they are required to take for their major.

A total of 46 semester hours are required for the minor.

### Actuarial Science

ACC 207	Introduction to Financial Accounting	3
ECO 203	Principles of Microeconomics <sup>1</sup>	3
ECO 204	Principles of Macroeconomics <sup>1</sup>	3
ECO 410	Bus&Eco Forecasting <sup>2</sup>	3
FIN 301	Introduction to Financial Management <sup>3</sup>	3
FIN 360	Investments	3
FIN 470	Fixed Income Securities	3
FIN 480	Options & Futures Markets	3
MTH 168	Analytic Geometry & Calculus I	4
MTH 169	Analytic Geometry & Calculus II	4
MTH 218	Analytic Geometry & Calculus III	4
MTH 229	Theory of Interest	3
MTH 328	Actuarial Probability Seminar	1
MTH 411	Probability & Statistics I	3
MTH 412	Probability & Statistics II	3
Total Hours		46

- ECO 203 and ECO 204 together qualify for VEE Economics credit in Economics.
- VEE credit in Applied Statistics.
- This course counts as VEE credit in Corporate Finance.

### Minor in Mathematics (MTH)

#### Mathematics

Select four MTH courses (300/400 level)	12
Total Hours	12

- Bachelor of Arts, Mathematics
- Bachelor of Science, Applied Mathematical Economics
- Bachelor of Science, Mathematics

### Bachelor of Arts, Mathematics

First Year	Hours Spring	Hours
<b>Fall</b>		
ASI 150	1 MTH 169	4
MTH 168	4 Natural Science w/lab	4
Natural Science w/lab	4 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
ENG 100 (CAP Writing Seminar)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
REL 103, PHL 103, or HST 103 (satisfies CAP Humanities)	3 Intro Social Science	3
	<b>15</b>	<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
MTH 218	4 MTH 310	3
MTH 308	3 SSC 200 (CAP Social Science)	3



CMM 100 (CAP Communication)	3 Literature	3
ENG 200 (CAP Writing Seminar)	3 Language 101	4
Natural Science	3 Arts	3
	<b>16</b>	<b>16</b>
<b>Third Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
MTH 411	3 MTH 361	3
MTH elective	3 MTH elective	3
Language 141	4 Language 201 or contextual course	3
Intro Social Science	3 Inquiry	3
Adv PHL/REL (PEA/FT)	3 Integrative	3
	<b>16</b>	<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
MTH 330	3 MTH 480 (capstone)	3
Social Science 300/400	3 MTH elective	3
Adv PHL/REL (PEA/FT)	3 Diversity and Social Justics	3
Adv HST	3 General elective	3
General Elective	3 General Elective	3
	<b>15</b>	<b>15</b>

Total credit hours: 125

## Bachelor of Science, Applied Mathematical Economics

<b>First Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
ASI 150	1 MTH 169	4
MTH 168	4 ECO 204	3
ECO 203	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
ENG 100 (CAP Writing Seminar)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
Natural Science w/Lab	4 Natural Science w/ Lab	4
	<b>15</b>	<b>17</b>
<b>Second Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
MTH 218	4 MTH 310	3
MTH 308	3 ECO 347	3
ECO 346	3 CMM 100 (CAP Communication)	3
ENG 200 (CAP Writing Seminar)	3 SSC 200 (CAP Social Science)	3
REL 103, PHL 103, or HST 103 (CAP Humanities)	3 Adv PHL/REL (PEA/FT)	3
	<b>16</b>	<b>15</b>

<b>Third Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
MTH 411	3 MTH 412	3
CPS 150	4 CPS 151	4
Inquiry	3 Integrative	3
Adv PHL/REL (PEA/FT)	3 General Elective	3
Arts	3 General Elective	3
	<b>16</b>	<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
MTH 330	3 MTH 480 (capstone)	3
ECO 441	3 ECO elective	3
Adv HST	3 Diversity and Social Justice	3
General Elective	3 General Elective (optional)	3
General Elective	1 General Elective (optional)	3
General Elective	3	
	<b>16</b>	<b>15</b>

Total credit hours: 126

## Bachelor of Science, Mathematics

<b>First Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
ASI 150	1 MTH 169	4
MTH 168	4 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
ENG 100 (CAP Writing Seminar)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
REL 103, PHL 103, or HST 103 (CAP Humanities)	3 Natural Science w/lab	4
Natural Science w/ lab	4 Social Science	3
	<b>15</b>	<b>17</b>
<b>Second Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
MTH 218	4 MTH 219	3
MTH 308	3 Natural Science	3
ENG 200 (CAP Writing Seminar)	3 MTH 310	3
CMM 100 (CAP Communication)	3 SSC 200 (CAP Social Science)	3
Natural Science	3 Arts	3
	<b>16</b>	<b>15</b>
<b>Third Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
MTH 330	3 MTH 361	3
MTH elective	3 MTH elective	3
CPS 132 or 150	3-4 Inquiry	3
Minor elective	3 Integrative	3
Adv PHL/REL (PEA/FT)	3 Minor elective	3
	<b>15-16</b>	<b>15</b>

Fourth Year	Hours	Spring	Hours
Fall			
MTH 430	3	MTH 480	3
MTH elective	3	MTH elective	3
Adv PHL/REL (PEA/FT)	3	Minor elective	3
Minor elective	3	Diversity and Social Justice	3
Minor elective	3	Adv HST	3
	<b>15</b>		<b>15</b>

Total credit hours: 123-124

## Courses

### MTH 102. Fundamentals of Math. 3 Hours

Sets, functions and graphs, exponents, polynomials and algebraic equations, systems of equations. Prerequisite(s): One year of high school algebra.

### MTH 114. Contemporary Mathematics. 3 Hours

Study of contemporary mathematical topics and their applications. Topics may include management science, statistics, social choice, size and shape, and computer mathematics. Prerequisite(s): Two years of high school algebra.

### MTH 116. Precalculus Math. 4 Hours

Review of topics from algebra and trigonometry including polynomials, functions and graphs, exponential and logarithmic functions, trigonometric functions and identities. Prerequisite(s): Two years of high school algebra.

### MTH 128. Finite Mathematics. 3 Hours

Topics from mathematics used in business including systems of equations, inequalities, matrix algebra, linear programming and logarithms; applications to compound interest, annuities and other finance problems. Prerequisite(s): MTH 102 or sufficient college preparatory mathematics.

### MTH 129. Calculus for Business. 3 Hours

Topics from differential and integral calculus used in business; applications to optimizing financial functions, marginal functions in economics, and consumer or producer surplus. Prerequisite(s): MTH 128 or sufficient college preparatory mathematics.

### MTH 137. Calculus I with Review. 4 Hours

Introduction to the differential and integral calculus with an extensive review of algebra and trigonometry; differentiation and integration of algebraic and transcendental functions with applications. Prerequisite(s): Two years of high school algebra.

### MTH 138. Calculus I with Review. 4 Hours

Introduction to the differential and integral calculus with an extensive review of algebra and trigonometry; differentiation and integration of algebraic and transcendental functions with applications. Prerequisite(s): MTH 137.

### MTH 148. Introductory Calculus I. 3 Hours

Introduction to the differential and integral calculus; differentiation and integration of algebraic and transcendental functions with applications to the life and social sciences. Prerequisite(s): MTH 116 or equivalent.

### MTH 149. Introductory Calculus II. 3 Hours

Continuation of MTH 148. Multivariable calculus, matrices, difference equations, probability, discrete and continuous random variables, and differential equations with applications to the life and social sciences. Prerequisite(s): MTH 138 or MTH 148.

### MTH 168. Analytic Geometry & Calculus I. 4 Hours

Introduction to the differential and integral calculus; differentiation and integration of algebraic and transcendental functions with applications to science and engineering. Prerequisite(s): MTH 116 or equivalent.

### MTH 169. Analytic Geometry & Calculus II. 4 Hours

Continuation of MTH 168. Conic sections, techniques of integration with applications to science and engineering, infinite series, indeterminate forms, Taylor's theorem. Prerequisite(s): MTH 138 or MTH 168.

### MTH 204. Mathematical Concepts I. 3 Hours

First course of a two-semester sequence designed for pre-service teachers. Concepts necessary for an understanding of the structure of arithmetic and its algorithms, number patterns, sets, problem solving, percent, relation and proportion, use of calculators. Prerequisite(s): One year of high school algebra; one year of high school geometry.

### MTH 205. Mathematical Concepts II. 3 Hours

Continuation of MTH 204. Topics include probability, representing and interpreting data, the metric system, elementary geometry, geometric patterns, coordinate geometry, algebra and geometry, transformations, computer literacy. Prerequisite(s): MTH 204.

### MTH 207. Introduction to Statistics. 3 Hours

Introduction to the concepts of statistical thinking for students whose majors do not require calculus. Methods of presenting data, including graphical methods. Using data to make decisions and draw conclusions. Basic ideas of drawing a sample and interpreting the information that it contains. Prerequisite(s): Two years of high school algebra.

### MTH 214. Mathematical Concepts for Middle School Teachers. 3 Hours

Concepts necessary for an understanding of the arithmetic taught in both elementary and middle grades. Includes a study of the structure of arithmetic and its algorithms; problem solving; reasoning and proof; proportional reasoning; use of computers and calculators to solve problems. Prerequisite(s): Two years of high school algebra.

### MTH 215. Algebra, Functions & Graphs. 3 Hours

Development of the algebra of various families of functions including polynomial, exponential, logarithmic, and trigonometric functions; factoring and roots; interpretation of graphs; use of calculators and data collection devices to solve problems. Prerequisite(s): MTH 214.

### MTH 216. Calculus Concepts & Applications. 3 Hours

Develop conceptual understanding of basic calculus concepts; introduction to the notion of limit; rates of change; slopes and area computations; use of calculators and data collection devices to make predictions, estimations, and solve problems. Prerequisite(s): MTH 215.

### MTH 218. Analytic Geometry & Calculus III. 4 Hours

Continuation of MTH 169. Solid analytic geometry, vectors and vector functions, multivariable calculus, partial derivatives, multiple integrals. Prerequisite(s): MTH 169.

### MTH 219. Applied Differential Equations. 3 Hours

First order equations, linear equations with constant coefficients, systems of equations, the Laplace transform, numerical methods, applications. Prerequisite(s): MTH 218.

### MTH 229. Theory of Interest. 3 Hours

Rigorous, calculus-based treatment of the Theory of Interest. Topics covered include interest, compounding, discounting, annuities, sinking funds, amortization, bonds, yield rates, and applications of these ideas and processes to problems in finance. Prerequisite(s): MTH 169.

**MTH 250. Advanced Technical Mathematics. 3 Hours**

Appropriate analytical techniques for students of engineering technology; topics include integration by parts, multivariable calculus, complex numbers, matrices and system of linear equations, and first and second order differential equations. Applications are appropriate for the engineering technology programs (circuits, vibrations, and heat transfer). Prerequisite(s): MTH 138 or MTH 168.

**MTH 266. Discrete & Finite Mathematics for Middle School Teachers. 3 Hours**

Topics in finite and discrete mathematics; linear programming; applications in finance; graph theory; mathematics of social choice; logic; use of computers and calculators to model and solve problems. Prerequisite(s): MTH 214.

**MTH 270. Geometry Concepts & Applications. 3 Hours**

Introduction to the geometry of two- and three-dimensional space; patterns in geometry; measurement systems; transformations and similarity; coordinate geometry; the algebra of geometry; trigonometry; use of dynamic computer software to explore geometric concepts. Prerequisite(s): MTH 214.

**MTH 290. Topics in Mathematics. 1-3 Hours**

Exploration of varying topics appropriate for the needs of the pre-service training of teachers of mathematics. May be repeated as topics change. Prerequisite(s): One mathematics course beyond MTH 102; permission of department chairperson and/or instructor.

**MTH 295. Historical Roots of Elementary Mathematics. 3 Hours**

Fundamental historical development of modern arithmetic, algebra, geometry, and number systems from early Egyptian, Babylonian, and Greek sources. Students may not receive credit for both this course and MTH 395. Prerequisite(s): MTH 214.

**MTH 302. Elementary Diff: EQ. 4 Hours****MTH 308. Foundations & Discrete Mathematics. 3 Hours**

An introduction to proof using topics in foundational and discrete mathematics; propositional logic; number theory; sequences and recursion; set theory; relations; combinatorics; linear programming. Prerequisite(s): MTH 169.

**MTH 310. Linear Algebra & Matrices. 3 Hours**

Fundamental concepts of vector spaces, determinants, linear transformations, matrices, inner product spaces, and eigen-vectors. Offered each term. Prerequisite(s): MTH 218, MTH 308. (May be taken as corequisites).

**MTH 328. Actuarial Probability Seminar. 1 Hour**

Problem solving seminar to develop and improve skills in applied probability. This seminar will focus on actuarial applications of probability theory. Prerequisite(s): MTH 411.

**MTH 329. Actuarial Finance Seminar. 1 Hour**

Problem solving seminar to develop and improve skills in applied mathematical finance. This seminar will focus on integrating the mathematical presentation of the Theory of Interest to the field of finance. Prerequisite(s): FIN 470; MTH 229.

**MTH 330. Intermediate Analysis. 3 Hours**

Theoretical development of the calculus of a real-valued function of a real variable. Topics include the algebraic and topological properties of the real line, limits of sequences and functions, continuity, differentiability, and integration. Prerequisite(s): MTH 310.

**MTH 342. Set Theory. 3 Hours**

Elementary set theory including relations, functions, indexed families, denumerable and nondenumerable sets, cardinal and ordinal arithmetic, Zorn's Lemma, the well-ordering principle and transfinite induction. Prerequisite(s): MTH 218, MTH 308.

**MTH 343. Mathematics for Electrical & Computer Engineers. 3 Hours**

Linear algebra and matrices, complex variables, mathematical transforms and their inter-relations. Focus on mathematical theories as well as applications and an extensive use of MATLAB. Prerequisite(s): MTH 219.

**MTH 361. Introduction to Abstract Algebra. 3 Hours**

Fundamental concepts of groups, rings, integral domains and fields. Prerequisite(s): MTH 218, MTH 308.

**MTH 367. Statistical Methods I. 3 Hours**

Probability distributions including binomial, hypergeometric, Poisson, and normal. Estimation of population mean and standard deviation: Confidence intervals and tests of hypotheses using  $t$ -, Chi-square, and  $F$ -statistics. Mathematics majors enroll in MTH 411 instead of MTH 367. Prerequisite(s): MTH 149 or MTH 169.

**MTH 368. Statistical Methods II. 3 Hours**

Distribution-free methods including rank tests, sign tests, and Kolmogorov-Smirnov test. Method of least squares, correlation, linear regression, analysis of variance. Design of experiments and computer applications. Mathematics majors enroll in MTH 412 instead of 368. Prerequisite(s): MTH 367.

**MTH 370. Introduction to Higher Geometry. 3 Hours**

Projective, affine, and hyperbolic geometries using synthetic and/or analytic techniques. Prerequisite(s): MTH 218, MTH 308.

**MTH 376. Number Theory. 3 Hours**

Topics include Diophantine equations, Chinese Remainder theorem, Mobius inversion formula, quadratic residues and the Law of Quadratic Reciprocity, Gaussian integers, and integral quaternions. Prerequisite(s): MTH 218, MTH 308.

**MTH 395. Development of Mathematical Ideas. 3 Hours**

The evolution of mathematical ideas and techniques from ancient times to the present with emphasis on the Greek era. Famous people and famous problems. Chronological outline of mathematics in each of its branches along with applications. Prerequisite(s): MTH 218, MTH 308.

**MTH 403. Boundary Value Problems. 3 Hours**

Introduction to the Sturm-Liouville problem. Fourier trigonometric series, Fourier integrals, Bessel functions, and Legendre polynomials. The heat equation, wave equation, and Laplace's equation with applications. Solutions by the product method. Prerequisite(s): MTH 219, MTH 310.

**MTH 404. Complex Variables. 3 Hours**

Functions of a complex variable, conformal mapping, integration in the complex plane. Laurent series and residue theory. Prerequisite(s): MTH 219.

**MTH 411. Probability & Statistics I. 3 Hours**

Mathematical probability, random variables, Bayes' Theorem, Chebyshev's Inequality, Binomial, Poisson, and Normal probability laws, moment generating functions, limit theorems, descriptive statistics, large sample statistical inference. MTH 308 is recommended as preparation for this course. Prerequisite(s): MTH 218.

**MTH 412. Probability & Statistics II. 3 Hours**

Multivariate distributions, transformations of random variables, sampling distribution theory, estimation of parameters including maximum likelihood, confidence intervals, the Neyman-Pearson lemma, tests of hypotheses, likelihood ratio tests. Prerequisite(s): MTH 411.

**MTH 430. Real Analysis. 3 Hours**

Continuation of MTH 330. Topics include the theory of convergence of sequences and series of functions in the context of metric spaces, uniform continuity, uniform convergence, and integration. Prerequisite(s): MTH 330.

**MTH 435. Advanced Multivariate Calculus. 3 Hours**

Topics include directional derivatives, chain rule, Lagrange multipliers, Taylor's formula, the mean value theorem, inverse mapping theorem, implicit function theorem, integration, Fubini's theorem, change of variables, line integrals, Green's theorem and Stoke's theorem. Prerequisite(s): MTH 310.

**MTH 440. Introduction to Mathematical Modeling. 3 Hours**

Introduction to the use of mathematical techniques and results in constructing and modifying models designed to solve problems encountered in everyday life. Computer simulation and limitations thereof, dimensional analysis, scaling and approximations at various levels are discussed. Prerequisite(s): MTH 219, MTH 310.

**MTH 441. Mathematics Clinic. 1 Hour**

Student teams will be responsible for the development and/or modification and testing of a mathematical model designed for a particular purpose. Faculty guidance. Prerequisite(s): MTH 440; permission of department chairperson.

**MTH 445. Special Topics in Mathematics. 1-3 Hours**

Lectures in specialized areas such as abstract algebra, applied mathematics, complex variables, differential forms, functional analysis, Galois theory, game theory, general topology, normed linear spaces, probability theory, real variables, topological groups. May be taken more than once. Prerequisite(s): Permission of department chairperson.

**MTH 458. Mathematical Models in Finance. 3 Hours**

Mathematical models in finance which include discrete and continuous models for stock price, interest rate model, bond pricing model, and option pricing model. Quantitative methods are introduced and employed. The methods include Black-Scholes formula, Monte-Carlo simulation, and binomial tree. Markowitz's optimal portfolio selection method is introduced and employed. Prerequisite(s): MTH 310.

**MTH 465. Linear Algebra. 3 Hours**

Vector spaces, linear transformations and matrices, determinants, inner product spaces, invariant direct-sum decomposition and the Jordan canonical form. Prerequisite(s): MTH 310.

**MTH 466. Graph Theory & Combinatorics. 3 Hours**

Graphs as algebraic structures; Eulerian, Hamiltonian, complete, connected and planar graphs. Applications include scheduling and routing problems. Discussion of algorithms for optimal or near-optimal solutions. Combinatorial topics could include generating functions, recurrence relations, Polya's theorem and Ramsey Theory. Prerequisite(s): MTH 308 or MTH 310.

**MTH 467. Combinatorial Design Theory. 3 Hours**

Topic include discussion of Latin squares, mutually orthogonal Latin squares, orthogonal and perpendicular arrays, Steiner triple systems, block designs, difference sets, and finite geometries. Prerequisite(s): MTH 308.

**MTH 471. Topology. 3 Hours**

Introduction to topological spaces and continuous functions including a study of separation and countability axioms and elementary properties of metric spaces, connected spaces, and compact spaces. Prerequisite(s): MTH 308.

**MTH 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**MTH 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**MTH 480. Math Capstone. 3 Hours**

No description available.

**MTH 490. Readings in Mathematics. 1-3 Hours**

Individual study in specialized areas carried out under the supervision of a staff member. May be taken more than once. Prerequisite(s): Permission of department chairperson.

## Military Science ROTC

The Department of Military Science offers the Reserve Officers Training Corps (ROTC) program on the campus, providing instruction in general military subjects applicable to all branches of the Army. The purpose of the Reserve Officers Training Corps is to develop selected college-educated men and women for positions of responsibility as officers in the active Army, the Army Reserve, and the Army National Guard.

The military science program is designed to develop a high degree of personal honor, self-reliance, and leadership and to provide the means of becoming better informed on matters of national defense. The program provides men and women who are working toward a baccalaureate degree the opportunity to become officers in the United States Army.

The four-year program is divided into a basic course<sup>1</sup> (normally first and second years) and an advanced course (normally third and fourth years), and it is offered to all students for academic credit. The advance course classes require permission of the Professor of Military Science for non-cadets and is restricted to classroom activities only.

The basic course emphasizes practical leadership techniques and management concepts that apply equally in both military organizations and private industry. While in this phase of the program, students, other than contracted ROTC scholarship students, have no military obligation and are simply taking ROTC courses, like any other college courses, for credit. Students who receive credit for the basic course and demonstrate a potential for becoming effective officers may continue to pursue a commission by enrolling in the advanced course.

The advanced course is designed to prepare students to be Army lieutenants by including practical work in tactics, training, management, leadership techniques, and the exercise of command. Advanced course students are paid \$450 (juniors) and \$500 (seniors) a month during the school year. During the summer between the junior and senior years, cadets enroll in a thirty day Cadet Leadership Course (CLC), which allows them to apply the leadership and technical training learned in the



classroom. While at CLC, students are paid half a second lieutenant's monthly salary or about \$1200.

In addition to ROTC instruction, a student must attain an equal level of professional military education. Army officers, like other professionals, cannot be satisfied with a collection of knowledge found only in their academic field. In order to be prepared to become officers, students are required to complete a course in military history.

The minor in military science provides students with the opportunity to study the theory and practice of the military profession. The minor consists of twelve semester hours of upper-level courses.

Students desiring to minor in military science should notify their respective deans and the Department of Military Science.

The ROTC program is also available to students with three or two years remaining on campus, including graduate students. Special programs, such as ROTC summer Cadet Initial Entry Training (CIET), have been established to allow second-semester sophomores and juniors or seniors who will be going on to graduate school (Lateral Entry cadets) to participate in the military science program. This training is currently being expanded and will include all committed cadets either between the first year and second year, or between the second year and third year, as well as the Lateral Entry cadets mentioned above.

There are optional paid summer opportunities for contracted and/or committed cadets to attend a four week Cultural Understanding and Language Program (CULP) to certain countries in South America, Africa, Eastern Europe, and Asia. Also following the Cadet Leadership Course (CLC) cadets can attend a Cadet Training Leadership Training (CTLT) for three weeks at an active duty military installation and work with a second lieutenant on active duty, or possibly a four week CTKT in Korea or Europe. Other optional training includes a three week Airborne training at Ft. Benning, GA, or a ten day Air Assault School at several different installations in the United States.

There is also a special program whereby veterans and JROTC students can receive advanced placement credit in Army ROTC. Veterans and students with high school JROTC training, with the approval of the chairperson of the Department of Military Science, may receive placement credit for part or all of the basic course. Each case will be judged individually so that the best interests of both the student and the military may be served.

Army ROTC scholarships are available to students. These scholarships cover four, three, and two-year periods and provide for full tuition and charges, \$1200 a year for books, and a tax-free subsistence allowance of \$300 a month for first year cadets, \$350 a month for sophomore cadets, \$450 a month during the junior year, and \$500 a month in the senior year for up to ten months. Scholarships, which are highly competitive, are awarded to those who demonstrate outstanding scholarly, athletic, and leadership ability.

<sup>1</sup> At Sinclair Community College.

MIL 122, MIL 123

Complete UD requirements for:

MIL 101	Leadership I
MIL 102	Leadership II

MIL 222, MIL 223

Complete UD requirements for:

MIL 201	Map Reading & Small Unit Tactics
MIL 202	Military Leadership

## Faculty

Major Jeffrey Rosengerg, U.S. Army, Chairperson

Professor: Redden

Assistant Professor: Robinson

Instructors: Bingley, Gates, Perez, Quade

## Minor in Military Science (MIL)

### Military Science, ROTC

MIL 301	Leading Small Organizations I	3
MIL 302	Leading Small Organizations II	3
MIL 401	Leadership Management & Staff	3
MIL 402	Applied Leadership & Management	3
Total Hours		12

## Courses

### MIL 101. Leadership I. 1 Hour

ROTC programs and opportunities; rappelling, leadership, communications and management skills, and rifle marksmanship. Optional field trips, field exercises, physical training, leadership laboratory and social events.

### MIL 102. Leadership II. 1 Hour

Rifle marksmanship, fundamentals and principles of leadership, management techniques for individual, group behavior and leadership dimensions. Optional physical training, leadership laboratory, and social events.

### MIL 201. Map Reading & Small Unit Tactics. 2 Hours

Study of basic map reading skills, small unit tactics, movement techniques, weapons marksmanship orientation, and survival skills. Participation in leadership laboratory and two field training exercises. Optional physical training and social events.

### MIL 202. Military Leadership. 2 Hours

Interactive study of the fundamentals of military leadership, ethical decision-making, effective counseling techniques, and conflict resolution. Study of the role and branches of the US Army and the role of the commissioned, warrant, and noncommissioned officer. Optional participation in leadership laboratories, field training exercises, physical fitness training, and social events.

### MIL 301. Leading Small Organizations I. 3 Hours

Study of the methodology, qualities, and the development of leaders through a series of practical opportunities to lead small groups, receive personal assessments, encouragement, and lead again in situations of increasing complexity. Physical training, leadership laboratory, historical field trip, social events, and field training exercises are mandatory.

### MIL 302. Leading Small Organizations II. 3 Hours

Study of emplacement of communications equipment and weapons system. Application of small unit tactics, land navigation-terrain association, operations orders and roles of various branches of the Army. Physical training, leadership laboratory, social events, and field training exercises are mandatory.



**MIL 401. Leadership Management & Staff. 3 Hours**

Study of military staff functions; how to conduct meetings, briefing, and training; how to conduct various types of counseling; and effective and ineffective leadership techniques. Physical training, leadership laboratory, historical field trip, social events, and field training exercises are mandatory.

**MIL 402. Applied Leadership & Management. 3 Hours**

Leadership and management studies in professionalism, ethics, and military justice. Various types of military correspondence and the responsibilities of an officer. Physical training, leadership laboratory, field training exercises, and social events are mandatory.

**MIL 411. Limited War/Low Intensity Conflict. 2 Hours**

This course will identify and discuss the roles and mission of the branches found within the U.S. Army as they relate to limited war and low intensity conflicts. Historical examples of leadership in limited war/low intensity conflicts are identified and discussed. Incorporates the background and experience of resident instructors and presentations by visiting service representatives.

**MIL 412. United States Military Today. 2 Hours**

This course will identify and discuss the roles, missions, organizational structure and equipment, tactical and strategic employment, and future trends of the Armed Services. Incorporates the background and experience of resident instructors and presentations by visiting service representatives.

**MIL 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and departmental chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**MIL 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and departmental chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved MIL 477 and approval of University Honors Program.

## Music

## Majors:

- Bachelor of Arts, Music-Ethnomusicology Concentration
- Bachelor of Arts, Music-Jazz Studies Concentration
- Bachelor of Arts, Music-Music Studies Concentration
- Bachelor of Music, Music Composition
- Bachelor of Music, Music Education-Instrumental Concentration
- Bachelor of Music, Music Education-Vocal Concentration
- Bachelor of Music, Music Performance
- Bachelor of Music, Music Therapy

## Certificate:

- Church Music

## Minor:

- Music
- Music Technology

Music is our passion. We help each student discover the transformative power of music and develop musical interests, talents, and skills that they will use to change the world. The Department's goals include:

- To help students develop their unique musical potential as performer, composer, scholar, teacher, therapist, listener or advocate
- To provide abundant and diverse opportunities for group and individualized music learning
- To connect students and faculty with local and global resources
- To develop musical partnerships that reflect the University's motto: Learn, Lead, and Serve
- To cultivate a safe, respectful, inter-culturally responsive, and stimulating environment that supports student and faculty development (*College of Arts and Sciences Diversity Vision Statement, October 2009*)
- To prepare students through music with essential 21<sup>st</sup> century skills to meet the changing needs of a global society

The Department of Music offers an outstanding and diverse undergraduate curriculum for music majors and non-music majors in a strong liberal arts setting. Faculty are engaged in the process of evaluating and revising existing courses and developing new ones to meet the general education requirements of the Common Academic Program (CAP) that is based on interdisciplinary content and teaching. Foundational ideas of the CAP include learner-centered teaching, education in the Catholic Marianist tradition, and integrative learning. The CAP student learning outcomes are based on UD's Habits of Inquiry, including scholarship, faith traditions, diversity, community, practical wisdom, critical evaluation of our times, and vocation.

The Department of Music is a member of the National Association of Schools of Music, which accredits its degree programs and curricula. In addition, the music education degree program is approved by the State of Ohio and the music therapy degree program by the American Music Therapy Association.

The Department of Music has numerous performing ensembles open to all students:

- University Chorale
- Choral Union
- Opera Workshop
- Ebony Heritage Singers
- World Music Choir
- Hands in Harmony Signing Choir
- University Orchestra
- Symphonic Wind Ensemble
- University Concert Band
- "Pride of Dayton" Marching Band
- Flyer Pep Band
- Percussion Ensemble
- Javanese Gamelan
- Early Music Ensemble
- Dayton Jazz Ensemble
- University Jazz Band
- Flyer Jazz Lab Band

- Winter Drum Line
- Chamber music groups
- Jazz Combo

The Department of Music offers five degree programs.

- Bachelor of Arts with a major in Music (MUS) - Concentration options in Ethnomusicology, Jazz Studies or Music Studies
- Bachelor of Music with a major in Music Composition (MUC)
- Bachelor of Music with a major in Music Education (MUE) - Concentration options in Instrumental or Vocal
- Bachelor of Music with a major in Music Performance (MUP)
- Bachelor of Music with a major in Music Therapy (MUT)

All prospective music students must be admitted to the University of Dayton by the Office of Admission and accepted through an audition process that includes:

1. Submission to the Department of Music two letters of recommendation from their high school music teachers and/or performance teachers
2. Successful completion of a performance audition in person. Specific information regarding audition requirements and dates is available by calling the department office or visiting the department website (<http://www.udayton.edu/artsscience/music>).

The Department of Music offers a minor in music, a minor in music technology for non-music majors, and a church music certificate for all students.

Transfer students pursuing a major in MUC, MUP, or MUT must complete at least 24 of the required semester hours in the Department of Music while in residence at the University of Dayton. Transfer students pursuing a major in MUE must complete at least 20 of the required semester hours in the Department of Music while in residence at the University of Dayton. Transfer students pursuing a music minor must complete at least 12 of the required semester hours in the Department of Music while in residence.

**Faculty**

Sharon Davis Gratto, Chairperson  
 Professors Emeriti: Benedum, Sandness, Snyder  
 Professors: Chenoweth, Cox, Gardstrom, Gratto, Hartley, Magnuson, Street  
 Associate Professors: MacLachlan, Morris, Reynolds  
 Assistant Professors: Daniel-Cox, Dorf, Hiller, Jones, Rush  
 Lecturers: Kim, Kizer  
 Artists-in-Residence: Arnow, Benjamin, Farris, Leslie, McCutcheon, Sievers, Wells

**Bachelor of Arts, Music-Ethnomusicology Concentration (MUS) minimum 124 hours**

The Bachelor of Arts with a major in Music (MUS) with a concentration in Ethnomusicology focuses on the diversity of the world’s musical traditions. Students will participate in both the Western European classical music tradition (in private lessons and in choral or instrumental ensembles) and in musics from across the globe, including Black gospel, Javanese gamelan, American jazz and African choral singing. They will study European music theory in addition to transcription of unwritten musics. They will learn to analyze music in culture by studying anthropology as well, and will ultimately complete a minor in Anthropology. Students will conduct ethnographic fieldwork in order to become conversant with the essential research methods of

ethnomusicology and anthropology, and during their senior year will complete a two-semester capstone project based on their fieldwork. To take advantage of the diverse academic environment at the University of Dayton, students are encouraged to complete a second major within another discipline.

**Common Academic Program (CAP)**

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103	West and the World
REL 103	Introduction to Religious and Theological Studies
PHL 103	Intro To Philosophy
ENG 100	Writing Seminar I <sup>2</sup>
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200	Writing Seminar II
Oral Communication	3
CMM 100	Principles of Oral Communication
Mathematics	3
Social Science	3
SSC 200	Social Science Integrated
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

1 Completed with ASI 110 and ASI 120.  
 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.  
 3 Completed with ENG 200H or ASI 120.  
 4 Must include two different disciplines and accompanying lab.

**Liberal Studies Curriculum**

Creative and Performing Arts, including Music (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature ( May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences	12
ANT 150	Cultural Anthropology
ANT 306	Culture & Power
SOC 101	Principles of Sociology
SOC 394	Popular Culture in Society
<b>Major Requirements</b>	<b>45</b>
MUS 200	Recital Attendance (7 semesters)
	0

MUS 241	Keyboard Competency I	0
MUS 242	Keyboard Competency II	0
MUS 250	Second Year Review	0
MUS 480	Capstone Project Seminar (With MUS 481, satisfies CAP Major Capstone)	1
MUS 481	Capstone Project & Presentation	1
Ensembles <sup>1</sup>		8
MUS 390	Ensembles	
MUS 491	University Orchestra	
or MUS 492	Symphonic Wind Ensemble	
or MUS 493	University Chorale	
Music History and Literature		9
MUS 301	Music History & Literature I (Satisfies CAP Integrative, and Advanced Historical Studies)	
MUS 302	Music History & Literature II	
MUS 303	Introduction to Musics of the World (Satisfies CAP Arts, and Diversity and Social Justice)	
Music Theory and Aural Skills		18
MUS 111	Theory of Music I	
MUS 112	Theory of Music II	
MUS 113	Aural Skills I	
MUS 114	Aural Skills II	
MUS 211	Theory of Music III	
MUS 212	Theory of Music IV	
MUS 213	Aural Skills III	
MUS 214	Aural Skills IV	
MUS 217	Listening & Transcription Skills	
Performance studies <sup>2</sup>		8
MUS 399	Performance Studies	
or MUS 499	Performance Studies	
<b>Breadth</b>		
ASI 150	Introduction to the University Experience	1
Supporting Social Science		9
ANT 352	Cultures of Latin America	
ANT 356	Cultures of Africa	
ANT 360	Cultures of South Asia	
Academic electives to total at least		124

<sup>1</sup> Must include at least one semester of Ebony Heritage Singers (1), World Music Choir (.5), Gamelan (.5), Choral Union (1), Marching Band (1), and University Jazz Bands (1), for a total of 6 credits. Must also include two semesters of MUS 491 University Orchestra (1) or MUS 492 Symphonic Wind Ensemble (1) or MUS 493 University Chorale (1); MUS 390-level ensembles may be substituted for MUS 491, 492, or 493 if necessary, with the approval of the student's academic advisor.

<sup>2</sup> May include MUS 296-297 as needed.

## Bachelor of Arts, Music-Jazz Studies Concentration (MUS) minimum 124 hours

The Bachelor of Arts (BA) with a concentration in Jazz Studies focuses on the musical and historical elements of jazz. Students will study:

- Jazz improvisation

- Jazz performance
- Jazz theory
- Jazz history
- Jazz composition and arranging.

Students also participate in both large and small jazz ensembles, which provide the opportunity to become skilled in the art of practice and performance of jazz. To take advantage of the diverse academic environment at the University of Dayton, students are encouraged to earn a minor or to complete a second major within another discipline.

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

<sup>1</sup> Completed with ASI 110 and ASI 120.

<sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.

<sup>3</sup> Completed with ENG 200H or ASI 120.

<sup>4</sup> Must include two different disciplines and accompanying lab.

### Liberal Studies Curriculum

Creative and Performing Arts, including MUS (May include CAP Arts)		3
L2 Proficiency (Proficiency in a language other than English)		0-11
Literature (May include CAP Components)		3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)		3
Natural Sciences (Satisfies CAP Natural Science)		11
Social Sciences (Includes CAP Social Science)		12
<b>Major Requirements</b>		45
MUS 200	Recital Attendance (7 semesters)	0

MUS 241	Keyboard Competency I	0
MUS 242	Keyboard Competency II	0
MUS 250	Second Year Review	0
MUS 480	Capstone Project Seminar (With MUS 481, satisfies CAP Major Capstone)	1
MUS 481	Capstone Project & Presentation	1
Ensembles		6
MUS 390	Ensembles <sup>1</sup>	
MUS 494	Dayton Jazz Ensemble	
Music History and Literature		9
(MUS 301, MUS 302 satisfy CAP Integrative, and Advanced Historical Studies. MUS 303 satisfies CAP Arts, and Diversity and Social Justice.)		
MUS 301	Music History & Literature I	
or MUS 302	Music History & Literature II	
MUS 303	Introduction to Musics of the World	
MUS 306	History of American Jazz	
Music Theory and Aural Skills		14
MUS 111	Theory of Music I	
MUS 112	Theory of Music II	
MUS 113	Aural Skills I	
MUS 114	Aural Skills II	
MUS 211	Theory of Music III	
MUS 212	Theory of Music IV	
MUS 218	Popular Jazz Theory	
Jazz Performance studies		4
MUS 391	Jazz Improvisation I	
MUS 392	Jazz Improvisation II	
MUS 396	Jazz Keyboard Harmony I	
MUS 397	Jazz Keyboard Harmony II	
Performance studies <sup>2,3</sup>		10
MUS 399	Performance Studies	
or MUS 499	Performance Studies	
<b>Breadth</b>		
ASI 150	Introduction to the University Experience	1
Total Hours to total at least		124

- <sup>1</sup> Choose from any MUS 390. See course descriptions.
- <sup>2</sup> May include MUS 296-297 as needed.
- <sup>3</sup> Must include MUS 391, 396, 397.

## Bachelor of Arts, Music-Music Studies Concentration (MUS) minimum 124 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3

ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

- <sup>1</sup> Completed with ASI 110 and ASI 120.
- <sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- <sup>3</sup> Completed with ENG 200H or ASI 120.
- <sup>4</sup> Must include two different disciplines and accompanying lab.

### Liberal Studies Curriculum

Creative and Performing Arts, including Music (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

### Major Requirements

Major Requirements		45
MUS 200	Recital Attendance (7 semesters)	0
MUS 240	Fundamentals of Conducting	2
MUS 241	Keyboard Competency I	0
MUS 242	Keyboard Competency II	0
MUS 250	Second Year Review	0
MUS 480	Capstone Project Seminar (With MUS 481, satisfies CAP Major Capstone)	1
MUS 481	Capstone Project & Presentation	1
Ensembles		4
MUS 390	Ensembles <sup>1</sup>	
or MUS 491	University Orchestra	
or MUS 492	Symphonic Wind Ensemble	
or MUS 493	University Chorale	
Music History and Literature		9
MUS 301	Music History & Literature I (Satisfies CAP Integrative, and Advanced Historical Studies)	
MUS 302	Music History & Literature II	

MUS 303	Introduction to Musics of the World (Satisfies CAP Arts, and Diversity and Social Justice)	
Music Theory and Aural Skills		16
MUS 111	Theory of Music I	
MUS 112	Theory of Music II	
MUS 113	Aural Skills I	
MUS 114	Aural Skills II	
MUS 211	Theory of Music III	
MUS 212	Theory of Music IV	
MUS 213	Aural Skills III	
MUS 214	Aural Skills IV	
Performance studies <sup>2</sup>		12
MUS 399	Performance Studies	
or MUS 499	Performance Studies	

**Breadth**

ASI 150	Introduction to the University Experience	1
Total Hours to total at least		124

- <sup>1</sup> Choose from any MUS 390. See course descriptions.
- <sup>2</sup> May include MUS 296-299 as needed.

## Bachelor of Music, Music Composition (MUC) minimum 137 hours

**Common Academic Program (CAP)**

*credit hours will vary depending on courses selected		
First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

- <sup>1</sup> Completed with ASI 110 and ASI 120.
- <sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- <sup>3</sup> Completed with ENG 200H or ASI 120.
- <sup>4</sup> Must include two different disciplines and accompanying lab.

**BM Requirements**

Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	7
Social Sciences (Includes CAP Social Science)	6

**Major Requirements**

		87
MUS 200	Recital Attendance (7 semesters)	0
MUS 202	Professional Development Workshop (7 semesters)	0
MUS 241	Keyboard Competency I	0
MUS 242	Keyboard Competency II	0
MUS 250	Second Year Review	0
MUS 314	Score Reading	2
MUS 450	Degree Recital (2 required. Satisfies CAP Major Capstone.)	0
Composition <sup>1</sup>		12
MUS 121	Composition I	
MUS 122	Composition I	
MUS 221	Composition II	
MUS 222	Composition II	
MUS 321	Composition III	
MUS 322	Composition III	
MUS 421	Composition IV	
MUS 422	Composition IV	
Conducting		4
MUS 240	Fundamentals of Conducting	
MUS 345	Choral Conducting	
or MUS 346	Instrumental Conducting	
Ensembles		8
MUS 491	University Orchestra <sup>2</sup>	
or MUS 492	Symphonic Wind Ensemble	
or MUS 493	University Chorale	
Music History and Literature		9
MUS 301	Music History & Literature I (Satisfies CAP Integrative, and Advanced Historical Studies)	
MUS 302	Music History & Literature II	
MUS 303	Introduction to Musics of the World (Satisfies CAP Arts, and Diversity and Social Justice)	
Music Theory and Aural Skills		16
MUS 111	Theory of Music I	
MUS 112	Theory of Music II	
MUS 113	Aural Skills I	
MUS 114	Aural Skills II	
MUS 211	Theory of Music III	
MUS 212	Theory of Music IV	
MUS 213	Aural Skills III	
MUS 214	Aural Skills IV	
Orchestration or arranging		4



MUS 316	Fundamentals of Orchestration	
or MUS 318	Fundamentals of Arranging	
MUS 416	Advanced Orcestration	
Performance Studies <sup>3</sup>		12
MUS 296	Functional Keyboard Skills I	
MUS 297	Functional Keyboard Skills II	
MUS 298	Functional Keyboard Skills III	
MUS 299	Functional Keyboard Skills IV	
MUS 399	Performance Studies	
or MUS 499	Performance Studies	
MUS electives		10
Theory and/or composition electives		10

**Breadth**

ASI 150	Introduction to the University Experience	1
Non-music electives		9
Total Hours to total at least		137

- <sup>1</sup> Each composition major must present one and a half recitals of original work by the senior year.
- <sup>2</sup> May substitute MUS 390 with permission.
- <sup>3</sup> Functional Keyboard Skills or equivalent is required.

**Bachelor of Music, Music Education-Instrumental Concentration (MUE) minimum 139 hours**

**Common Academic Program (CAP)**

*credit hours will vary depending on courses selected		
First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		

Diversity and Social Justice	3
Major Capstone	0-3

- <sup>1</sup> Completed with ASI 110 and ASI 120.
- <sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- <sup>3</sup> Completed with ENG 200H or ASI 120.
- <sup>4</sup> Must include two different disciplines and accompanying lab.

**BM Requirements**

Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	7
Social Sciences (Includes CAP Social Science)	3

**Major Requirements <sup>1</sup>**

MUS 200	Recital Attendance (7 semesters)	0
MUS 202	Professional Development Workshop	0
MUS 231	Introduction to Music Education	2
MUS 240	Fundamentals of Conducting	2
MUS 241	Keyboard Competency I	0
MUS 242	Keyboard Competency II	0
MUS 250	Second Year Review	0
MUS 318	Fundamentals of Arranging	2
MUS 331	Choral Music Methods	3
MUS 332	Instrumental Music Methods	3
MUS 335	Classroom Music Methods	3
MUS 340	Music Education for Students with Special Needs	2
MUS 450	Degree Recital (Satisfies CAP Major Capstone)	0

**Performance Studies (7 semesters) <sup>2</sup>**

MUS 399	Performance Studies	14
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**Ensembles**

MUS 390	Ensembles (1 semester)	6
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Select five semesters from:

MUS 491	University Orchestra	
or MUS 492	Symphonic Wind Ensemble	
or MUS 493	University Chorale	

**Music History and Literature**

MUS 301	Music History & Literature I (Satisfies CAP Integrative, and Advanced Historical Studies)	9
MUS 302	Music History & Literature II	
MUS 303	Introduction to Musics of the World (Satisfies CAP Arts, and Diversity and Social Justice)	

**Music Theory and Aural Skills**

MUS 111	Theory of Music I	16
MUS 112	Theory of Music II	
MUS 113	Aural Skills I	
MUS 114	Aural Skills II	
MUS 211	Theory of Music III	
MUS 212	Theory of Music IV	
MUS 213	Aural Skills III	
MUS 214	Aural Skills IV	

**Additional Requirements for Instrumental Concentration <sup>3</sup>**

Ensembles		3
MUS 390	Ensembles (choral)	

Small Ensembles (4 semesters, 0.5 semester hours each)		
<b>Music Education</b>		<b>9</b>
MUS 195	Beginning Guitar Class I	
MUS 236	Voice Laboratory	
MUS 336	Woodwind Pedagogy (2 semesters)	
MUS 337	Brass Pedagogy (2 semesters)	
MUS 338	Percussion Pedagogy	
MUS 339	String Pedagogy (2 semesters)	
Select a minimum of 6 elective semester hours from:		<b>6</b>
MUS 233	Eurhythmics	
MUS 295	Beginning Guitar Class II	
MUS 338	Percussion Pedagogy	
MUS 345	Choral Conducting	
MUS 346	Instrumental Conducting	
MUS 381	Clinical & Educational Music Improvisation I	
MUS 399	Performance Studies (may be repeated)	
MUS 408	Diction & Literature for Singers	
MUS 430	Jazz Pedagogy	
MUS 431	Marching Band Pedagogy	
<b>Teacher Education</b>		<b>21</b>
EDT 110	The Profession of Teaching	
EDT 110L	The Profession of Teaching Laboratory	
EDT 207	Child and Adolescent in Education	
EDT 207L	Child and Adolescent in Education Laboratory	
EDT 305	Philosophy and History of American Education (Satisfies CAP Practical Ethical Action, and Advanced Study in Philosophy)	
EDT 479	Student Teaching- Music P-12	
<b>Breadth</b>		
ASI 150	Introduction to the University Experience	<b>1</b>
Total Hours to total at least		<b>139</b>

- 1 Students in the music education program are required to maintain a 2.5 cumulative grade point average prior to taking EDT 110; # 2.75 cumulative grade point average after completing EDT 110; and # 3.0 after completing EDT 207. GPA in professional education (EDT) must be # 2.75 after completing EDT 110; # 3.0 after completing EDT 207. Students must earn a grade of a C- or higher in all EDT courses, and a grade of S in all EDT labs prior to entry into clinical experience. Students must earn a grade of C- or higher in the following core music education courses: MUS 331, MUS 332 and MUS 335; and a 2.5 cumulative grade point average in all music courses.
- 2 On principal instrument.
- 3 Students will select one of two concentration areas (instrumental or vocal). Upon successful completion of the degree and the required Ohio Assessment for Educators exams, candidates will receive a Resident Educator License (Four Year, Multi-age, P-12) from the State of Ohio to teach music from pre-kindergarten through senior high school.

## Bachelor of Music, Music Education-Vocal Concentration (MUE) minimum 139 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		<b>12</b>
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		<b>0-3</b>
ENG 200	Writing Seminar II	
Oral Communication		<b>3</b>
CMM 100	Principles of Oral Communication	
Mathematics		<b>3</b>
Social Science		<b>3</b>
SSC 200	Social Science Integrated	
Arts		<b>3</b>
Natural Sciences <sup>4</sup>		<b>7</b>
Crossing Boundaries		<b>variable credit</b>
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		<b>variable credit</b>
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		<b>3</b>
Major Capstone		<b>0-3</b>

- 1 Completed with ASI 110 and ASI 120.
- 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- 3 Completed with ENG 200H or ASI 120.
- 4 Must include two different disciplines and accompanying lab.

### BM Requirements

Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	<b>3</b>
Natural Sciences (Satisfies CAP Natural Science)	<b>7</b>
Social Sciences (May include CAP Social Science)	<b>3</b>

### Major Requirements <sup>1</sup>

MUS 200	Recital Attendance (7 semesters)	<b>0</b>
MUS 202	Professional Development Workshop (7 semesters)	<b>0</b>
MUS 231	Introduction to Music Education	<b>2</b>
MUS 240	Fundamentals of Conducting	<b>2</b>
MUS 241	Keyboard Competency I	<b>0</b>
MUS 242	Keyboard Competency II	<b>0</b>
MUS 250	Second Year Review	<b>0</b>
MUS 318	Fundamentals of Arranging	<b>2</b>
MUS 331	Choral Music Methods	<b>3</b>
MUS 332	Instrumental Music Methods	<b>3</b>
MUS 335	Classroom Music Methods	<b>3</b>
MUS 340	Music Education for Students with Special Needs	<b>2</b>
MUS 450	Degree Recital (Satisfies CAP Major Capstone)	<b>0</b>
Performance Studies (7 semesters) <sup>2</sup>		<b>14</b>

MUS 399	Performance Studies (7 semesters) <sup>2</sup>	
Ensembles		6
MUS 390	Ensembles (1 semester)	
Select five semesters from:		
MUS 491	University Orchestra	
or MUS 492	Symphonic Wind Ensemble	
or MUS 493	University Chorale	
Music History and Literature		9
MUS 301	Music History & Literature I (Satisfies CAP Integrative, and Advanced Historical Studies)	
MUS 302	Music History & Literature II	
MUS 303	Introduction to Musics of the World (Satisfies CAP Arts, and Diversity and Social Justice)	
Music Theory and Aural Skills		16
MUS 111	Theory of Music I	
MUS 112	Theory of Music II	
MUS 113	Aural Skills I	
MUS 114	Aural Skills II	
MUS 211	Theory of Music III	
MUS 212	Theory of Music IV	
MUS 213	Aural Skills III	
MUS 214	Aural Skills IV	
<b>Additional requirements for Vocal Concentration <sup>3</sup></b>		
MUS 408	Diction & Literature for Singers	2
Ensembles		1
MUS 390	Ensembles (instrumental)	
Music Education		7
MUS 195	Beginning Guitar Class I	
MUS 295	Beginning Guitar Class II	
MUS 235	Voice Pedagogy	
or MUS 236	Voice Laboratory	
MUS 237	Brass Instrument Laboratory	
MUS 238	Woodwind Instrument Laboratory	
MUS 338	Percussion Pedagogy	
MUS 339	String Pedagogy	
Select a minimum of 8 elective semester hours from:		8
MUS 233	Eurhythmics	
MUS 338	Percussion Pedagogy	
MUS 345	Choral Conducting	
MUS 346	Instrumental Conducting	
MUS 381	Clinical & Educational Music Improvisation I	
MUS 399	Performance Studies (on secondary instrument, may be repeated)	
MUS 408	Diction & Literature for Singers	
MUS 430	Jazz Pedagogy	
MUS 431	Marching Band Pedagogy	
<b>Teacher Education</b>		21
EDT 110	The Profession of Teaching	
EDT 110L	The Profession of Teaching Laboratory	
EDT 207	Child and Adolescent in Education	
EDT 207L	Child and Adolescent in Education Laboratory	

EDT 305	Philosophy and History of American Education (Satisfies CAP Practical Ethical Action, and Advanced Study in Philosophy)
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EDT 479	Student Teaching- Music P-12
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**Breadth**

ASI 150	Introduction to the University Experience	1
Total Hours to total at least		139

- 1 Students in the music education program are required to maintain a 2.5 cumulative grade point average prior to taking EDT 110; # 2.75 cumulative grade point average after completing EDT 110; and # 3.0 after completing EDT 207. GPA in professional education (EDT) must be # 2.75 after completing EDT 110; # 3.0 after completing EDT 207. Students must earn a grade of a C- or higher in all EDT courses, and a grade of S in all EDT labs prior to entry into clinical experience. Students must earn a grade of C- or higher in the following core music education courses: MUS 331, MUS 332 and MUS 335; and a 2.5 cumulative grade point average in all music courses.
- 2 On principal instrument.
- 3 Students will select one of two concentration areas (instrumental or vocal). Upon successful completion of the degree and the required Ohio Assessment for Educators exams, candidates will receive a Resident Educator License (Four Year, Multi-age, P-12) from the State of Ohio to teach music from pre-kindergarten through senior high school.

**Bachelor of Music, Music Performance (MUP) minimum 137 hours**

**Common Academic Program (CAP)**

*credit hours will vary depending on courses selected		
First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		

Diversity and Social Justice	3
Major Capstone	0-3

- 1 Completed with ASI 110 and ASI 120.
- 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- 3 Completed with ENG 200H or ASI 120.
- 4 Must include two different disciplines and accompanying lab.

**BM Requirements**

Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	7
Social Sciences (Includes CAP Social Science)	6

**Major Requirements**

MUS 200	Recital Attendance (7 semesters)	0
MUS 202	Professional Development Workshop (7 semesters)	0
MUS 241	Keyboard Competency I	0
MUS 242	Keyboard Competency II	0
MUS 250	Second Year Review	0
MUS 450	Degree Recital (2 required. Satisfies CAP Major Capstone.)	0

Conducting		4
MUS 240	Fundamentals of Conducting	
MUS 318	Fundamentals of Arranging	

Ensembles		8
MUS 491	University Orchestra	
or MUS 492	Symphonic Wind Ensemble	
or MUS 493	University Chorale	

Music History and Literature		9
MUS 301	Music History & Literature I (Satisfies CAP Integrative, and Advanced Historical Studies)	
MUS 302	Music History & Literature II	
MUS 303	Introduction to Musics of the World (Satisfies CAP Arts, and Diversity and Social Justice)	

Music Theory and Aural Skills		16
MUS 111	Theory of Music I	
MUS 112	Theory of Music II	
MUS 113	Aural Skills I	
MUS 114	Aural Skills II	
MUS 211	Theory of Music III	
MUS 212	Theory of Music IV	
MUS 213	Aural Skills III	
MUS 214	Aural Skills IV	

Performance Studies <sup>1</sup>		36
Major area of specialization (24-32 hours)		
Minor area of specialization (4-12 hours)		

MUS electives <sup>2</sup>		14
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**Breadth**

ASI 150	Introduction to the University Experience	1
Non-music electives <sup>3</sup>		3
Total Hours to total at least		137

- 1 Performance study in major area must lead to a half junior solo recital and a full senior solo recital.
- 2 Voice majors must take MUS 235 and MUS 408; piano majors must include MUS 405 and MUS 435; instrumental majors must take a pedagogy course in their area of specialization. Wind, string, brass and percussion majors should register for the appropriate pedagogy course in their area of performance (MUS 336-MUS 339). Majors are strongly urged to register for a Special Topics class with their performance instructor chosen to complement other performance studies.
- 3 Voice majors must include two semesters of foreign language study.

**Bachelor of Music, Music Therapy (MUT) minimum 131 hours**

**Common Academic Program (CAP)**

*credit hours will vary depending on courses selected	
First-Year Humanities Commons <sup>1</sup>	12
HST 103	West and the World
REL 103	Introduction to Religious and Theological Studies
PHL 103	Intro To Philosophy
ENG 100	Writing Seminar I <sup>2</sup>
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200	Writing Seminar II
Oral Communication	3
CMM 100	Principles of Oral Communication
Mathematics	3
Social Science	3
SSC 200	Social Science Integrated
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- 1 Completed with ASI 110 and ASI 120.
- 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- 3 Completed with ENG 200H or ASI 120.
- 4 Must include two different disciplines and accompanying lab.

**BM Requirements**

Mathematics (Satisfies CAP Mathematics) <sup>1</sup>	3
Natural Sciences, includes:	7
HSS 305	Human Anatomy (Applies to CAP Natural Science)

Lecture with Lab		
Social Sciences (Includes CAP Social Science)		3
<b>Major Requirements</b>		<b>84</b>
MUS 200	Recital Attendance (7 semesters)	0
MUS 202	Professional Development Workshop (7 semesters)	0
MUS 241	Keyboard Competency I	0
MUS 242	Keyboard Competency II	0
MUS 250	Second Year Review	0
MUS 450	Degree Recital (Satisfies CAP Major Capstone)	0
MUS 489	Music Therapy Internship <sup>2</sup>	2
Conducting and Arranging		4
MUS 240	Fundamentals of Conducting	
MUS 318	Fundamentals of Arranging	
Ensembles		6
MUS 491	University Orchestra	
or MUS 492	Symphonic Wind Ensemble	
or MUS 493	University Chorale	
Music History and Literature		9
MUS 301	Music History & Literature I (Satisfies CAP Integrative, and Advanced Historical Studies)	
MUS 302	Music History & Literature II	
MUS 303	Introduction to Musics of the World (Satisfies CAP Arts, and Diversity and Social Justice)	
Music Theory and Aural Skills		16
MUS 111	Theory of Music I	
MUS 112	Theory of Music II	
MUS 113	Aural Skills I	
MUS 114	Aural Skills II	
MUS 211	Theory of Music III	
MUS 212	Theory of Music IV	
MUS 213	Aural Skills III	
MUS 214	Aural Skills IV	
Music Therapy, including core courses and practica		28
MUS 233	Eurhythmics	
MUS 282	Functional Music Therapy Skills	
MUS 285	Introduction to Music Therapy	
MUS 286	Music Therapy Methods	
MUS 287	Practicum in Music Therapy I	
MUS 288	Practicum in Music Therapy II	
MUS 289	Practicum in Music Therapy III	
MUS 290	Music Therapy Treatment Processes	
MUS 381	Clinical & Educational Music Improvisation I	
MUS 382	Clinical & Educational Music Improvisation II	
MUS 385	Music Therapy Principles	
MUS 386	Music & Psychotherapy	
MUS 387	Practicum in Music Therapy IV	
MUS 388	Practicum in Music Therapy V	
MUS 486	Research in Music Therapy	
Performance Studies <sup>3</sup>		10
MUS 399	Performance Studies	

Vocal and instrumental methods, including accompanying instruments of piano and guitar: 4

MUS 195 Beginning Guitar Class I

MUS 295 Beginning Guitar Class II

MUS 338 Percussion Pedagogy <sup>4</sup>

Select one semester hour from:

MUS 237 Brass Instrument Laboratory

MUS 238 Woodwind Instrument Laboratory

MUS 293 Organ Class

Music and dance electives 5

### Breadth

ASI 150 Introduction to the University Experience 1

PSY 101 Introductory Psychology (Satisfies CAP Social Science) 3

PSY 351 Child Psychology 3

PSY 355 Developmental Psychopathology 3

PSY 363 Abnormal Psychology 3

Total Hours to total at least 131

1 MTH 207 recommended.

2 This internship of a minimum of 900 hours is taken after student completes all other course requirements. In order to be recommended for an internship, the student must 1) demonstrate certain skills, characteristics, and dispositions required in the music therapy profession, 2) earn a grade of C- or better in each music therapy course, and 3) have an overall grade point average of at least 2.00 and a grade point average of at least 2.50 in music, music therapy, and psychology coursework. Upon earning a grade of C- or better in an internship, the graduate is eligible to take a national certification examination to become a Music Therapist - Board Certified.

3 Performance studies on the student's principal instrument leading to a minimum of a half-recital during the junior or senior year.

4 One semester of MUS 338 must be completed for a total of one semester hour.

## Certificate in Church Music (MCH)

### Church Music

MUS 110 Fundamentals of Music <sup>1</sup> 2

MUS 350 Sacred Music History 3

MUS 351 Church Music Administration 2

MUS 390 Ensembles 1

MUS 399 Performance Studies 1-2

MUS 452 Contemporary Liturgical Music Repertoire 2

MUS 459 Church Music Internship 2

REL 446 Christian Liturgy <sup>2</sup> 3

Select one course from: 2

MUS 240 Fundamentals of Conducting

MUS 545 Advanced Choral Conducting & Rehearsal Techniques

Select six semester hours from: 6

MUS 318 Fundamentals of Arranging

MUS 461 Special Topics in Church Music

MUS 505 Teaching Music with Technology I



MUS 506	Teaching Music with Technology II	
Total Hours		24-25

- 1 May substitute additional credits in performance studies or church music workshops for MUS 110.
- 2 Or two to three semester hours of a suitable religious studies course.

## Minor in Music (MUS)

<b>Music</b>	
Select one track from:	22

<b>Track A:</b>	
MUS 115	Music in Theory & Practice
MUS 116	Music in Theory & Practice
MUS 217 or MUS 218	Listening & Transcription Skills Popular Jazz Theory
MUS 301	Music History & Literature I
MUS 302	Music History & Literature II
Select MUS electives (8 hours) <sup>1,2</sup>	

<b>Track B:</b>	
MUS 111	Theory of Music I
MUS 112	Theory of Music II
MUS 113	Aural Skills I
MUS 114	Aural Skills II
MUS 301	Music History & Literature I
MUS 302	Music History & Literature II
Select MUS electives (8 hours) <sup>1,2</sup>	

Total Hours	22
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- 1 Must include six semester hours at the 300/400 level.
- 2 No more than two semester hours of ensemble (MUS 390, MUS 491, MUS 492, MUS 493) will count toward the minor.

## Minor in Music Technology (MTC)

<b>Music Technology</b>	
Select one music theory option from:	8

<b>Option A</b>	
MUS 115	Music in Theory & Practice
MUS 116	Music in Theory & Practice
MUS 217 or MUS 218	Listening & Transcription Skills Popular Jazz Theory

<b>Option B</b>	
MUS 111	Theory of Music I
MUS 112	Theory of Music II
MUS 113	Aural Skills I
MUS 114	Aural Skills II

<b>Applied Studies</b> <sup>1</sup>	6
MUS 399	Performance Studies
MUS 499	Performance Studies

<b>Ensembles</b> <sup>2</sup>	2
MUS 390	Ensembles <sup>3</sup>
MUS 491	University Orchestra
MUS 492	Symphonic Wind Ensemble

MUS 493	University Chorale	
Music History and Literature		3

MUS 301	Music History & Literature I
MUS 302	Music History & Literature II
MUS 303	Introduction to Musics of the World

Music Technology		5
MUS 223	Introduction to Music Technology	
MUS 323	Recording Arts & Digital Media	

Total Hours	24
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- 1 Take a total of six semester hours from any combination of these courses.
- 2 Take a total of two semester hours from any combination of these courses.
- 3 Choose from any MUS 390. See course descriptions.

- Bachelor of Arts, Music- Ethnomusicology Concentration
- Bachelor of Arts, Music - Jazz Studies Concentration
- Bachelor of Arts, Music - Music Studies Concentration
- Bachelor of Music, Music Composition
- Bachelor of Music, Music Education - Instrumental Concentration
- Bachelor of Music, Music Education - Vocal Concentration
- Bachelor of Music, Music Performance
- Bachelor of Music, Music Therapy

## Bachelor of Arts, Music- Ethnomusicology Concentration

First Year		
Fall	Hours Spring	Hours
ASI 150	1 ENG 100 (CAP Writing Seminar)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 CMM 100 (CAP Communication)	3
MUS 111	2 MUS 112	2
MUS 113	2 MUS 114	2
MUS 200	0 MUS 200	0
MUS 390, 491, 492, or 493	0.5-1 MUS 390, 491, 492, or 493	0.5-1
MUS 399	1 MUS 399	1
MUS 303 (CAP Arts)	3	
	<b>15.5-16</b>	<b>14.5-15</b>

Second Year		
Fall	Hours Spring	Hours
ANT 150	3 ANT 336	3
ENG 200 (CAP Writing Seminar)	3 MUS 200	0
MUS 200	0 MUS 212	2
MUS 211	2 MUS 214	2
MUS 213	2 MUS 241	0
MUS 301 (CAP Faith Traditions, Adv Religious Studies)	3 MUS 250	0

MUS 390, 491, 492, or 493	0.5-1 MUS 302 (CAP Integrative, Adv Historical Study)	3	MUS 200	0 MUS 390 or 494	0.5-1
			MUS 390 or 494	0.5-1 MUS 399	2
			MUS 399	2	
MUS 399	2 MUS 390, 491, 492, or 493	0.5-1	<b>Second Year</b>	<b>16.5-17</b>	<b>15.5-16</b>
	MUS 399	1	<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
	ANT 306	3	ENG 200 (CAP Writing Seminar)	3 SSC 200 (CAP Social Science)	3
	<b>15.5-16</b>	<b>14.5-15</b>	Language 101	4 INSS (CAP Natural Science)	3
<b>Third Year</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
INSS (CAP Natural Science)	3 INSS (CAP Natural Science)	4	MUS 200	0 Language 141	4
Language 101	4 Language 141	4	MUS 211	2 MUS 200	0
MUS 200	0 MUS 200	0	MUS 301 or 302 (CAP Faith Trad, Adv REL/ Integrative, Adv HST)	3 MUS 212	2
MUS 217	2 MUS 242	0	MUS 390 or 494	0.5-1 MUS 241	0
MUS 390, 491, 492, or 493	0.5-1 MUS 399	2	MUS 399	2 MUS 218	2
MUS 399	1 MUS 390, 491, 492, or 493	0.5-1		MUS 250	0
				MUS 390 or 494	0.5-1
ANT 360	3 SOC 394	3	<b>Third Year</b>	<b>14.5-15</b>	<b>14.5-15</b>
SOC 101	3		<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
	<b>16.5-17</b>	<b>13.5-14</b>	Language 201 or contextual course	3 INSS (CAP Inquiry)	4
<b>Fourth Year</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	INSS (CAP Natural Science)	4 MUS 200	0
INSS (CAP Inquiry)	4 CAP Adv PHL	3	MTH (CAP Mathematics)	3 MUS 242	0
Language 201 or contextual course	3 CAP Practice Ethical Action	3	MUS 200	0 MUS 306 (CAP Arts)	3
MUS 200	0 CAP Diversity & Social Justice	3	MUS 303 (CAP Arts)	3 MUS 392	1
MUS 390, 491, 492, or 493	0.5-1 Literature (Liberal Studies)	3	MUS 391	1 MUS 399	2
			MUS 390 or 494	0.5-1 MUS 390 or 494	0.5-1
MUS 480	1 MUS 481	1	MUS 399	1 MUS 399	1
MTH (CAP Mathematics)	3 MUS 390, 491, 492, or 493	0.5-1		Social Science	3
ANT 352	3 SSC 200 (CAP Social Science)	3	<b>Fourth Year</b>	<b>15.5-16</b>	<b>14.5-15</b>
	<b>14.5-15</b>	<b>16.5-17</b>	<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
			CAP Faith Trad, Adv REL, or Integrative, Adv HST	3 Adv PHL (CAP Practical Ethical Action)	3

Total credit hours: 121-125

## Bachelor of Arts, Music- Jazz Studies Concentration

### First Year

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
ASI 150	1 ENG 100 (CAP Writing Seminar)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 Social Science	3
CMM 100 (CAP Communication)	3 MUS 112	2
MUS 111	2 MUS 114	2
MUS 113	2 MUS 200	0

MUS 200	0 CAP Diversity & Social Justice	3
MUS 396	1 Literature	3
MUS 399	2 MUS 397	1
MUS 480	1 MUS 481	1
General elective	3 General elective	1
Social Science	3 Social Science	3
General elective	2	
	<b>15</b>	<b>15</b>

Total credit hours: 121-124

## Bachelor of Arts, Music- Music Studies Concentration

### First Year

Fall	Hours Spring	Hours
ASI 150	1 ENG 100 (CAP Writing Seminar)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 Social Science	3
CMM 100 (CAP Communication)	3 MUS 112	2
MUS 111	2 MUS 114	2
MUS 113	2 MUS 200	0
MUS 200	0 MUS 390, 491, 492, or 493	0.5-1
MUS 390, 491, 492, or 493	0.5-1 MUS 399	2
MUS 399	2	
	<b>16.5-17</b>	<b>15.5-16</b>

### Second Year

Fall	Hours Spring	Hours
ENG 200 (CAP Writing Seminar)	3 SSC 200 (CAP Social Science)	3
Language 101	4 INSS (CAP Natural Science)	3
MUS 200	0 Language 141	4
MUS 211	2 MUS 200	0
MUS 213	2 MUS 212	2
MUS 241	0 MUS 214	2
MUS 390	0.5-1 MUS 242	0
MUS 390, 491, 492, or 493	0.5-1 MUS 240	2
MUS 399	2 MUS 250	0
	MUS 399	1
	<b>14-15</b>	<b>17</b>

### Third Year

Fall	Hours Spring	Hours
Language 201 or contextual course	3 INSS (CAP Inquiry)	4
INSS (CAP Natural Science)	4 MUS 200	0
MTH (CAP Mathematics)	3 MUS 302 (CAP Integrative, Adv Historical Study)	3
MUS 200	0 MUS 390, 491, 492, or 493	0.5-1
MUS 301 (CAP Faith Traditions, Adv Religious Studies)	3 MUS 399	1
MUS 399	2 General elective	3
	Social Science	3
	<b>15</b>	<b>14.5-15</b>

### Fourth Year

Fall	Hours Spring	Hours
Adv REL (CAP Faith Traditions)	3 Adv PHL (CAP Practical Ethical Action)	3
MUS 200	0 CAP Diversity & Social Justice	3
MUS 303 (CAP Arts)	3 Literature	3
MUS 399	2 MUS 481	1
MUS 480	1 Social Science	3
General elective	3 General elective	1
General elective	3	
	<b>15</b>	<b>14</b>

Total credit hours: 121.5-124

## Bachelor of Music, Music Composition

### First Year

Fall	Hours Spring	Hours
ASI 150	1 ENG 100 (CAP Writing Seminar)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 CMM 100 (CAP Communication)	3
MUS 111	2 MUS 112	2
MUS 113	2 MUS 114	2
MUS 121	1 MUS 122	1
MUS 200	0 MUS 200	0
MUS 202	0 MUS 202	0
MUS 296	1 MUS 297	1
MUS 491, 492, or 493	1 MUS 399	2
MUS 399	2 MUS 491, 492, or 493	1
Music elective	1 Music elective	1
	<b>17</b>	<b>19</b>

### Second Year

Fall	Hours Spring	Hours
MTH (CAP Mathematics)	3 ENG 200	3
MUS 200	0 MUS 200	0
MUS 202	0 MUS 202	0
MUS 211	2 MUS 212	2
MUS 213	2 MUS 214	2
MUS 221	1 MUS 222	1
MUS 241	0 MUS 242	0
MUS 298	1 MUS 250	0
MUS 301 (CAP Faith Traditions, Adv Religious Studies)	3 MUS 299	1
MUS 399	2 MUS 302 (CAP Integrative, Adv Historical Study)	3
MUS 491, 492, or 493	1 MUS Theory or Composition	2

MUS Theory or Composition	2 MUS 491, 492, or 493	1	MUS 202	0 MUS 202	0
Music elective	1 MUS 399	2	MUS 399	2 MUS 241	0
	<b>18</b>	<b>17</b>	MUS 337	1 MUS 337	1
			MUS 492	1 MUS 390 (Chamber Ensemble)	0.5
<b>Third Year</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
MUS 200	0 MUS 200	0	MTH (CAP Mathematics)	3 MUS 399	2
MUS 202	0 MUS 202	0		MUS 492	1
MUS 240	2 MUS 303 (CAP Arts)	3		EDT 110	3
MUS 321	2 MUS 316 or 318	2		EDT 110L	0
				<b>18</b>	<b>18.5</b>
MUS 314	2 MUS 322	2	<b>Second Year</b>		
MUS Theory or Composition	3 MUS 345 or 346	2	<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
MUS 491, 492, or 493	1 MUS 491, 492, or 493	1	ENG 200 (CAP Writing Seminar)	3 MUS 200	0
CAP Inquiry	3 MUS 450	0	MUS 200	0 MUS 202	0
CAP Natural Science	4 Music elective	1	MUS 202	0 MUS 212	2
	CAP Natural Science	3	MUS 211	2 MUS 214	2
	SSC 200 (CAP Social Science)	3	MUS 213	2 MUS 236	1
	<b>17</b>	<b>17</b>	MUS 231	2 MUS 242	0
			MUS 236	1 MUS 250	0
			MUS 301 (CAP Faith Traditions, Adv Religious Studies)	3 MUS 302 (CAP Integrative, Adv Historical Study)	3
<b>Fourth Year</b>			MUS 336	1 MUS 336	1
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	MUS 339	1 MUS 339	1
CAP Inquiry	3 Adv PHL (CAP Practical Ethical Action)	3	MUS 390 (Chamber Ensemble)	0.5 MUS 390 (Chamber Ensemble)	0.5
MUS 200	0 CAP Diversity & Social Justice	3		2 MUS 399	2
MUS 202	0 MUS 422	2		1 MUS 492	1
MUS 416	2 MUS 450	0		MUS 430	2
MUS 421	2 MUS 491, 492, or 493	1		EDT 207	3
MUS 491, 492, or 493	1 Music elective	3		EDT 207L	0
Music elective	3 Social Science	3		<b>18.5</b>	<b>18.5</b>
MUS Theory or Composition	3		<b>Third Year</b>		
General elective	3		<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
	<b>17</b>	<b>15</b>	CMM 100 (CAP Communication)	3 MUS 200	0
			MUS 200	0 MUS 202	0
			MUS 202	0 MUS 332	3
			MUS 240	2 MUS 346	2
			MUS 318	2 MUS 399	2
			MUS 335	3 MUS 430	2
			MUS 338	1 MUS 492	1
			MUS 340	2 CAP Natural Science	3
			MUS 390 (Choral Ensemble)	1 CAP Inquiry	3
			MUS 399	2 CAP Diversity & Social Justice	3
			EDT 305 (CAP Practical Ethical Action & Adv Philosophy)	3	
				<b>19</b>	<b>19</b>
			<b>Fourth Year</b>		
			<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
			MUS 200	0 EDT 479	12
			MUS 202	0	
			MUS 303 (CAP Arts)	3	
			MUS 331	3	
			MUS 390 (Chamber Ensemble)	0.5	
			MUS 390 (Marching Band)	1	
			MUS 399	2	
			MUS 431	2	

Total credit hours: 137

## Bachelor of Music, Music Education- Instrumental Concentration

<b>First Year</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
ASI 150	1 ENG 100 (CAP Writing Seminar)	3			
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3			
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 MUS 112	2			
MUS 111	2 MUS 114	2			
MUS 113	2 MUS 195	1			
MUS 200	0 MUS 200	0			

MUS 450	0	
SSC 200 (CAP Social Science)	3	
CAP Natural Science	4	
	<b>18.5</b>	<b>12</b>

Total credit hours: 142

## Bachelor of Music, Music Education-Vocal Concentration

### First Year

Fall	Hours Spring	Hours
ASI 150	1 ENG 100 (CAP Writing Seminar)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 MUS 112	2
MUS 111	2 MUS 114	2
MUS 113	2 MUS 200	0
MUS 200	0 MUS 202	0
MUS 202	0 MUS 235	1
MUS 399	2 MUS 241	0
MUS 195	1 MUS 295	1
MUS 493	1 MUS 399	2
MTH (CAP Mathematics)	3 MUS 493	1
	EDT 110	3
	EDT 110L	0
	<b>18</b>	<b>18</b>

### Second Year

Fall	Hours Spring	Hours
ENG 200 (CAP Writing Seminar)	3 MUS 200	0
MUS 200	0 MUS 202	0
MUS 202	0 MUS 212	2
MUS 211	2 MUS 214	2
MUS 213	2 MUS 242	0
MUS 231	2 MUS 250	0
MUS 237	1 MUS 302 (CAP Integrative, Adv Historical Study)	3
MUS 301 (CAP Faith Traditions, Adv Religious Studies)	3 MUS 408	2
MUS 338	1 MUS 399 (elective)	2
MUS 390	1 MUS 399	2
MUS 399	2 MUS 493	1
MUS 493	1 EDT 207	3
MUS 399	1 EDT 207L	0
	<b>19</b>	<b>17</b>

### Third Year

Fall	Hours Spring	Hours
CMM 100 (CAP Communication)	3 MUS 200	0
MUS 200	0 MUS 202	0
MUS 202	0 MUS 332	3
MUS 240	2 MUS 339	1
MUS 318	2 MUS 345	2
MUS 335	3 MUS 233	1
MUS 238	1 MUS 399	2

MUS 340	2 MUS 390 (University Concert Band)	1
MUS 399	2 CAP Natural Science	3
EDT 305 (CAP Practical Ethical Action & Adv Philosophy)	3 CAP Inquiry	3
MUS 493	1 CAP Diversity & Social Justice	3
	<b>19</b>	<b>19</b>

### Fourth Year

Fall	Hours Spring	Hours
MUS 200	0 EDT 479	12
MUS 202	0	0
MUS 303 (CAP Arts)	3	3
MUS 331	3	3
MUS 390	1	1
MUS 390 (Ebony Heritage Singers)	1	1
MUS 408	2	2
MUS 450	0	0
SSC 200 (CAP Social Science)	3	3
CAP Natural Science	4	4
	<b>17</b>	<b>12</b>

Total credit hours: 139

## Bachelor of Music, Music Performance

### First Year

Fall	Hours Spring	Hours
ASI 150	1 ENG 100 (CAP Writing Seminar)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 MTH (CAP Mathematics)	3
CMM 100 (CAP Communication)	3 MUS 112	2
MUS 111	2 MUS 114	2
MUS 113	2 MUS 200	0
MUS 200	0 MUS 202	0
MUS 202	0 MUS 399 or MUS 499	4
MUS 399 or MUS 499	4 MUS 491, 492, or 493	1
MUS 491, 492, or 493	1	1
	<b>19</b>	<b>18</b>

### Second Year

Fall	Hours Spring	Hours
CAP Natural Science	4 ENG 200	3
MUS 200	0 CAP Natural Science	3
MUS 202	0 MUS 200	0
MUS 211	2 MUS 202	0
MUS 213	2 MUS 212	2
MUS 240	2 MUS 214	2
MUS 241	0 MUS 242	0
MUS 399 or MUS 499	4 MUS 250	0
MUS 491, 492, or 493	1 MUS 318	2
SSC 200 (CAP Social Science)	3 MUS 399 or MUS 499	4



	MUS 491, 492, or 493	1	
<b>Third Year</b>	<b>18</b>	<b>17</b>	
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	
CAP Inquiry	3 MUS 200	0	
MUS 200	0 MUS 202	0	
MUS 202	0 MUS 302 (CAP Integrative, Adv Historical Study)	3	
MUS 301 (CAP Faith Traditions, Adv Religious Studies)	3 MUS 399 and/or MUS 499	6	
MUS 399 and/or MUS 499	6 MUS 491, 492, or 493	1	
Music elective	1 Music elective	2	
MUS 491, 492, or 493	1 Music elective	1	
General elective	3 Social Science	3	
	<b>17</b>	<b>16</b>	

<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	
CAP Diversity & Social Justice	3 Adv PHL (CAP Practical Ethical Action)	3	
MUS 200	0 MUS 399 or MUS 499	4	
MUS 202	0 MUS 450	0	
MUS 303 (CAP Arts )	3 MUS 491, 492, or 493	1	
MUS 416	2 Music elective	2	
MUS 399 or MUS 499	4 Music elective	2	
MUS 450	0 Music elective	2	
MUS 491, 492, or 493	1 General elective	1	
Music elective	2		
Music elective	2		
	<b>17</b>	<b>15</b>	

Total credit hours: 137

## Bachelor of Music, Music Therapy

<b>First Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	
ASI 150	1 ENG 100 (CAP Writing Seminar)	3	
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3	
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 MUS 112	2	
PSY 101	3 MUS 114	2	
MUS 111	2 MUS 195	1	
MUS 113	2 MUS 200	0	
MUS 200	0 MUS 202	0	
MUS 202	0 MUS 233	1	

MUS 399	2 MUS 285	3
MUS 491, 492, or 493	1 MUS 399	2
	MUS 491, 492, or 493	1
	MUS 241	0
	<b>17</b>	<b>18</b>

<b>Second Year</b>	<b>Hours Spring</b>	<b>Hours</b>
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
ENG 200 (CAP Writing Seminar)	3 MTH 207 (CAP Mathematics)	3
CMM 100 (CAP Communication)	3 PSY 351	3
MUS 200	0 MUS 200	0
MUS 202	0 MUS 202	0
MUS 211	2 MUS 212	2
MUS 213	2 MUS 214	2
MUS 282	2 MUS 242	0
MUS 290	1 MUS 250	0
MUS 301 (CAP Faith Traditions, Adv Religious Studies)	3 MUS 287	1
MUS 399	2 MUS 295	1
MUS 491, 492, or 493	1 MUS 302 (CAP Integrative, Adv Historical Study)	3
	MUS 338	1
	MUS 399	2
	MUS 491, 492, or 493	1
	<b>19</b>	<b>19</b>

<b>Third Year</b>	<b>Hours Spring</b>	<b>Hours</b>
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
MUS 200	0 MUS 200	0
MUS 202	0 MUS 202	0
MUS 237, 238, or 293	1 MUS 289	1
MUS 286	2 MUS 303 (CAP Arts)	3
MUS 288	1 MUS 491, 492, or 493	1
MUS 381	2 MUS 486	2
MUS 399	2 MUS 450	0
MUS 491, 492, or 493	1 MUS --- Instrument Lab	1
PSY 363	3 Music elective	2
CAP Natural Science	4 HSS 305	3
	CAP Inquiry	3
	<b>16</b>	<b>16</b>

<b>Fourth Year</b>	<b>Hours Spring</b>	<b>Hours</b>
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
MUS 200	0 MUS 382	2
MUS 202	0 MUS 386	3
MUS 240	2 MUS 388	2
MUS 318	2 Music electives	3
MUS 385	3 Adv PHL (CAP Practical Ethical Action)	3
MUS 387	2 CAP Diversity & Social Justice	3
SSC 200 (CAP Social Science)	3	

PSY 355	3	
	15	16
<b>Fifth Year</b>		
<b>Fall</b>	<b>Hours</b>	
MUS 489 (completed after all other coursework)	2	
	2	

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Total credit hours: 138

## Courses

### **MUS 104. Music Literature for the Elementary Classroom. 2 Hours**

Study of music literature and its direct application to elementary classroom use.

### **MUS 110. Fundamentals of Music. 2 Hours**

For the student with no previous experience with theory of music. Notation of music, key and time signatures, fundamental harmonic progression, and introduction to the piano keyboard. Elementary ear training and dictation. Open to all University students.

### **MUS 111. Theory of Music I. 2 Hours**

Basic vocabulary and grammar of music: fundamentals (intervals, scales, modes, keys, triads), and counterpoint studies. Assignments are done with computer notation programs, and portions of the course use web-based texts.

### **MUS 112. Theory of Music II. 2 Hours**

Basic diatonic and chromatic harmonic vocabulary studies, emphasizing both writing and analysis skills. Assignments are done with computer notation programs, and portions of the course use web-based texts. Prerequisite(s): (MUS 111 with a grade of C- or better) or permission of instructor.

### **MUS 113. Aural Skills I. 2 Hours**

The hearing of musical structure is developed through active listening to representative pieces from music literature. Emphasis on formal relations, musical development and historical styles. Introduction to solfège singing and music transcription.

### **MUS 114. Aural Skills II. 2 Hours**

Further developing the ability to hear musical structure through transcription of intervals, melody, rhythm and harmonic patterns and short musical compositions of music in representative stylistic categories. Use of solfège singing to represent students' internalization of melodic structure. Prerequisite(s): (MUS 113 with a grade of C- or better) or permission of instructor.

### **MUS 115. Music in Theory & Practice. 3 Hours**

Music theory studies in an historical context, appropriate for non-music majors. Fundamentals of music vocabulary and music prior to 1600: origins of melody and counterpoint. Aural skills incorporated into daily classes. Open to all University students. Prerequisite(s): At least one year of instrument/voice studies which required note-reading ability. Corequisite(s): Current performance studies or active participation in a music ensemble which requires note-reading skills.

### **MUS 116. Music in Theory & Practice. 3 Hours**

Continuation of MUS 115: music between 1600-1900, harmony and analysis. Aural skills incorporated into daily classes. Prerequisite(s): MUS 115. Corequisite(s): Current performance studies or active participation in a music ensemble which requires note-reading skills.

### **MUS 121. Composition I. 1 Hour**

2Supplemental explorations for majors in music composition, to accompany work in MUS 111-112. Basic notational practices and application of traditional techniques to the creative process. Prerequisite(s): MUS 111 (may be taken as a corequisite).

### **MUS 122. Composition I. 1 Hour**

Supplemental explorations for majors in music composition, to accompany work in MUS 111-112. Basic notational practices and application of traditional techniques to the creative process. Prerequisite(s): MUS 112 (may be taken as a corequisite). Corequisite(s): MUS 121.

### **MUS 191. Voice Class. 2 Hours**

Basic principles of good singing; development of the voice; vocal literature. Open to all students, especially non-music majors.

### **MUS 195. Beginning Guitar Class I. 1 Hour**

Introduction to playing the guitar with emphasis on chord playing and accompaniment, improvisation, and application of the guitar to music teaching.

### **MUS 196. Group Piano I. 1 Hour**

For the student with no previous piano study. Rudiments of music reading, performance of simple folk and popular music, basic knowledge of scales, key signatures, and chords. Open to all University students.

### **MUS 200. Recital Attendance. 0 Hours**

All music majors are required to attend professional and student concerts and recitals, to develop critical listening experience and knowledge of repertoire.

### **MUS 201. Music In Concert. 3 Hours**

Survey of music literature, styles, and important composers, through preparation for and attendance at selected concerts on the campus and in the community. Concert ticket fees will be required. Open to all University students.

### **MUS 202. Professional Development Workshop. 0 Hours**

All Bachelor of Music majors are required to attend a weekly professional workshop in their degree area. Course format is didactic and/or experiential according to degree program needs. Course material includes a variety of professional, pedagogical, and technological topics. May be repeated.

### **MUS 203. Sights & Sounds of Music. 3 Hours**

An introduction to music and its literature, with emphasis on the way music has been shaped by its cultural, geographic, and historical contexts. Open to all University students.

### **MUS 205. Music, Technology and Culture. 3 Hours**

Through interactive and creative activities, students will explore the intersections of music technology and culture historically and in our current rapidly changing media and musical communities at UD and beyond. The course will also consider the ways technology has altered our approach and access to music making and listening.

### **MUS 211. Theory of Music III. 2 Hours**

Advanced diatonic and chromatic harmonic vocabulary studies and Schenkerian analysis, emphasizing both writing and analysis skills. Assignments are done with computer notation programs, and portions of the course use web-based texts. Prerequisite(s): (MUS 112 with grade of C- or better) or permission of instructor.

**MUS 212. Theory of Music IV. 2 Hours**

Music of the twentieth century, emphasizing both writing and analysis skills. Assignments are done with computer notation programs, and portions of the course use web-based texts. Prerequisite(s): (MUS 211 with a grade of C- or better) or permission of instructor.

**MUS 213. Aural Skills III. 2 Hours**

Explores more advanced musical hearing and transcription techniques through later harmonic, melodic and rhythmic styles. More advanced melodic, harmonic and rhythmic materials as well as the continuing use of solfege singing to represent students' internalization of melodic structure. Prerequisite(s): (MUS 114 with grade of C- or better) or permission of instructor.

**MUS 214. Aural Skills IV. 2 Hours**

Late nineteenth, twentieth and twenty-first century musical structures of harmony, melody, rhythm and compositional development/form explored through listening, transcription and performance. Prerequisite(s): (MUS 213 with a grade of C- or better) or permission of instructor.

**MUS 217. Listening & Transcription Skills. 2 Hours**

Skills in hearing and notating music of representative and diverse styles through use of digital recording, sequencing, and computer notation software. Prerequisite(s): (MUS 112, 114) or permission of instructor.

**MUS 218. Popular Jazz Theory. 2 Hours**

Skills in the composition and arranging of popular and jazz styles in music including harmonic progression, melodic forms and the structure of voices and instruments in arrangements. Emphasis on creative applications of technology on the facility of music production. Culminating project is an arrangement, produced and recorded by the student. Prerequisite(s): (MUS 111, 112) or (MUS 115, 116) or permission of instructor.

**MUS 221. Composition II. 1 Hour**

Supplemental explorations for majors in music composition, to accompany work in MUS 211-212. Style analysis and synthesis, extension of traditional techniques, and basic instrumental applications. Prerequisite(s): MUS 211 (may be taken as a corequisite).

**MUS 222. Composition II. 1 Hour**

Supplemental explorations for majors in music composition, to accompany work in MUS 211-212. Style analysis and synthesis, extension of traditional techniques, and basic instrumental applications. Prerequisite(s): MUS 212, 221, (may be taken as corequisites).

**MUS 223. Introduction to Music Technology. 2 Hours**

Provides students with an introduction to the notation and recording of music with a computer. Students will learn to compile and print music, record digital instruments with MIDI, and record and mix music with portable digital audio workstations. Prerequisite(s): (MUS 111, 112) or (MUS 115, 116) or permission of instructor.

**MUS 231. Introduction to Music Education. 2 Hours**

An introduction to a wide variety of pedagogical and philosophical aspects of teaching the arts. Topics will include technology, national and state standards, history, and professional organizations. Prerequisite(s): EDT 110.

**MUS 232. Integrating the Arts. 2 Hours**

Primarily for Teacher Education majors. Development of knowledge, skills, values, and attitudes in music for integration into a classroom setting in which other classroom subjects are taught. Prerequisite(s): EDT 110.

**MUS 233. Eurhythmics. 1 Hour**

Exploration of time, space, and energy through individual and collaborative structured and creative movement for musicianship skill development.

**MUS 235. Voice Pedagogy. 1 Hour**

Techniques for teaching singing. Prerequisite(s): Voice major or permission of instructor.

**MUS 236. Voice Laboratory. 1 Hour**

Introduction to the performance and pedagogical techniques for voice. Prerequisite(s): Instrumental music major or permission of department chairperson.

**MUS 237. Brass Instrument Laboratory. 1 Hour**

Introduction to the performance and pedagogical techniques for the brass instrument family.

**MUS 238. Woodwind Instrument Laboratory. 1 Hour**

Introduction to the performance and pedagogical techniques for the woodwind instrument family.

**MUS 240. Fundamentals of Conducting. 2 Hours**

Introductory-level course discussing basic conducting techniques, musical styles, interpretation, score study and analysis, transposition, and literature. Dual emphasis of choral and instrumental techniques.

**MUS 241. Keyboard Competency I. 0 Hours**

Successful mastery of keyboard competency skills required for the first year music major. Prerequisite(s): Permission of department chairperson.

**MUS 242. Keyboard Competency II. 0 Hours**

Successful mastery of keyboard competency skills required for the second year music major. Prerequisite(s): MUS 241; permission of department chairperson.

**MUS 250. Second Year Review. 0 Hours**

Required mid-point evaluation of all music majors typically completed in the second semester of the second year of study toward the degree. Students must earn a satisfactory grade (S) in this course in order to enroll in upper-level coursework in their respective degree programs. Prerequisite(s): Permission of department chairperson.

**MUS 280. Music & Movement for Persons with Disabilities. 1 Hour**

Training in the use of music and movement for children with disabilities under the supervision of AIM (Adventures in Movement) for the Handicapped, Inc. Includes observations and practices in the field.

**MUS 282. Functional Music Therapy Skills. 2 Hours**

Aids music therapy majors in the development of functional competencies on keyboard, guitar, and voice, as well as the ability to learn, memorize, and perform a broad repertoire of American popular song. Prerequisite(s): MUS 195, MUS 241.

**MUS 285. Introduction to Music Therapy. 3 Hours**

History and development of music therapy profession; survey of theoretical bases, current trends, and music therapy applications with varied clientele. Prerequisite(s): PSY 101.

**MUS 286. Music Therapy Methods. 2 Hours**

Introduction to four methods of music therapy: re-creative, receptive, composition, and improvisation. Emphasis on assessment, planning, facilitation, and evaluation of music therapy experiences within each method. Prerequisite(s): MUS 285.

**MUS 287. Practicum in Music Therapy I. 1 Hour**

Supervised pre-internship field experiences with children and/or adults with special needs. One-hour weekly lab required. Prerequisite(s): MUS 282; permission of department chairperson.

**MUS 288. Practicum in Music Therapy II. 1 Hour**

Supervised pre-internship field experiences with children and/or adults with special needs. One-hour weekly lab required. Prerequisite(s): MUS 250, 287.

**MUS 289. Practicum in Music Therapy III. 1 Hour**

Supervised pre-internship field experiences with children and/or adults with special needs. One-hour weekly lab required. Prerequisite(s): MUS 288.

**MUS 290. Music Therapy Treatment Processes. 1 Hour**

Addresses the development of established competencies in the areas of music therapy referral, assessment, treatment planning, evaluation, supervision, and documentation of these processes. Prerequisite(s): MUS 285.

**MUS 293. Organ Class. 1 Hour**

Introduction to the organ, including basic performance techniques, registration, beginning literature, and hymn playing.

**MUS 294. Harpsichord Class. 1 Hour**

Beginning course in harpsichord performance, including basic technique, stylistic considerations, and simple maintenance and tuning of the instrument.

**MUS 295. Beginning Guitar Class II. 1 Hour**

Note reading in first position; advanced chord work, introduction to chord solo playing, and improvisation. Prerequisite(s): MUS 195 or equivalent.

**MUS 296. Functional Keyboard Skills I. 1 Hour**

Instruction in development of basic performance technique, sight reading, accompanying, transposing, playing by ear, improvising, and score reading.

**MUS 297. Functional Keyboard Skills II. 1 Hour**

Further development of techniques introduced in MUS 296. Prerequisite(s): MUS 296.

**MUS 298. Functional Keyboard Skills III. 1 Hour**

Continuation of MUS 297 with emphasis on improvisation and harmonization techniques.

**MUS 299. Functional Keyboard Skills IV. 1 Hour**

Continuation of MUS 298 with emphasis on advanced chord work and modulation techniques. Prerequisite(s): MUS 298.

**MUS 301. Music History & Literature I. 3 Hours**

Survey of Western music history and literature from the earliest notations through the 18th century, with a particular emphasis on the religious, political, and social dimensions of the production, purposes, and reception of Western Art Music. Prerequisite(s): MUS 110, MUS 111, REL 103 or permission of department chairperson.

**MUS 302. Music History & Literature II. 3 Hours**

Survey of Western music history and literature from Beethoven to the present. Important composers, masterworks of music literature, music historiography, and compositional styles. Prerequisite(s): HST 103 AND either MUS 110, MUS 111 or with instructor permission.

**MUS 303. Introduction to Musics of the World. 3 Hours**

Survey of music from around the world, and its role and function in society.

**MUS 304. The Practice of American Music. 3 Hours**

An exploration of American musical practices and traditions in relation to America's political, social and racial history. This course is a theme-based course. Open to all University students.

**MUS 305. African-American Sacred Music. 3 Hours**

Historical survey of African-American sacred music from its African roots to the present with an emphasis on developments in recent decades. Examines spirituals, the ring-shout, civil rights songs, the various forms of Gospel music, traditional hymnody of the African-American church, and the musical aspects of black preaching. Open to all University students.

**MUS 306. History of American Jazz. 3 Hours**

Survey of the literature and performance practices from 1890 to the present. Includes blues, Dixieland, ragtime, boogie-woogie, swing, bop, cool, funky, and current techniques. Open to all University students.

**MUS 307. Development of American Popular Song. 3 Hours**

Survey of American popular music from the days of the colonies, the war years, the ballad opera, minstrel, vaudeville, operetta, early film music, through Tin Pan Alley to Broadway, including European influences. Open to all University students.

**MUS 308. Chamber Music & Symphony. 2 Hours**

Formal and harmonic analysis of chamber music. Formal analysis of symphonies of classic, romantic, and contemporary composers. Prerequisite(s): MUS 211, MUS 212.

**MUS 309. Opera History & Literature. 3 Hours**

Survey of the development of the opera and its literature from its seventeenth-century beginnings to the present. Focus upon major works and composers. Open to all University students.

**MUS 310. Mozart's Operas. 3 Hours**

An interdisciplinary survey of Mozart's operas - German and Italian, serious and comic. Class discussions will be supplemented by extensive listening and/or viewing of recorded performances and, when possible, attendance at live performances.

**MUS 311. Eighteenth-Century Counterpoint. 2 Hours**

Study of the contrapuntal technique of the eighteenth century, particularly in the instrumental works of J.S. Bach. Original compositions in forms of the invention and the fugue. Prerequisite(s): MUS 211, MUS 212.

**MUS 312. Sixteenth-Century Counterpoint. 2 Hours**

Study of the medieval modes and the vocal polyphony of the motet and the Mass, up to and including five-part writing; original student compositions.

**MUS 313. Advanced Aural Skills. 2 Hours**

Advanced training in dictation, solfege, and aural analysis. Prerequisite(s): MUS 215.

**MUS 314. Score Reading. 2 Hours**

Training in reading music at the piano from open score. Drill in transposition, improvisation, and reading of various clefs, leading to the realization of full vocal and orchestral scores.

**MUS 315. Music and Gender. 3 Hours**

Survey of issues concerning music, gender and sexuality across cultures and time periods. Open to all University students.

**MUS 316. Fundamentals of Orchestration. 2 Hours**

Instrumentation studies of the four main orchestral families: woodwinds, brass, percussion, strings. Some work in combining families. Prerequisite(s): MUS 212.

**MUS 318. Fundamentals of Arranging. 2 Hours**

Arranging studies for woodwinds, brass, percussion, strings, and choir. Individual examination of instruments; projects. Prerequisite(s): MUS 212.

**MUS 321. Composition III. 2 Hours**

Explorations of original composition, which utilize equally the concepts of pitch, temporal elements, timbres, and dynamics. Prerequisite(s): MUS 214, 250.

**MUS 322. Composition III. 2 Hours**

Explorations of original composition, which utilize equally the concepts of pitch, temporal elements, timbres, and dynamics. Prerequisite(s): MUS 250, 321.

**MUS 323. Recording Arts & Digital Media. 3 Hours**

Comprehensive overview of digital audio and digital visual media. Skills in recording, archiving, and presenting work. Prerequisite(s): MUS 223 or permission of instructor.

**MUS 325. Beethoven & His Era. 3 Hours**

Survey of the music of Ludwig van Beethoven, including orchestral works and chamber music, opera, keyboard and sacred music; and a survey of the historical context in which Beethoven lived and worked - Europe and the Habsburg Empire of the late eighteenth and early nineteenth centuries, and especially Vienna, the Habsburg capital. Beethoven is the culmination of the High Classic style and also the first of a new generation of Romantic composers.

**MUS 327. Music in Film. 3 Hours**

Survey of the styles, aesthetics, and techniques of film music, emphasizing the interaction of music and visual image in film. Consideration of the changes in both film and film music, and their relationship to culture, society, and students' own lives.

**MUS 328. History of the American Musical. 3 Hours**

Survey of the history and literature of the American musical from its nineteenth century predecessors to the present day. The course will focus on major representative works, major composers, and other artistic innovators. Open to all University students.

**MUS 331. Choral Music Methods. 3 Hours**

Pedagogical techniques for choral ensembles. Topics include the singing voice, the changing voice, organization, artistic development, literature, and rehearsal techniques. National standards are emphasized as they relate to specific objectives. Current related practices in technology are incorporated in specific assignments. Field experience required. Prerequisite(s): MUS 250.

**MUS 332. Instrumental Music Methods. 3 Hours**

Pedagogical techniques for band and orchestra. Topics include teaching and rehearsal techniques, organization, assessment, learning theories, philosophy, literature, and programming. National standards are emphasized as they relate to specific objectives. Current related practices in technology are incorporated in specific assignments. Field experience required. Prerequisite(s): MUS 250.

**MUS 335. Classroom Music Methods. 3 Hours**

Pedagogical techniques for classroom music in grades preK through 8. Topics include the pedagogical methods of Orff, Kodaly, Suzuki, and Dalcroze; lesson-plan design, implementation, and assessment. Special emphasis on the exceptional learner. National Standards are emphasized as they relate to specific objectives. Current related practices in technology are incorporated in specific assignments. Field experience required. Prerequisite(s): MUS 250.

**MUS 336. Woodwind Pedagogy. 1 Hour**

Course in woodwind pedagogy offered in two semester-long sections: (1) pedagogical techniques for clarinet and flute; (2) pedagogical techniques for saxophone, oboe, and bassoon. Repeatable up to two semester hours.

**MUS 337. Brass Pedagogy. 1 Hour**

Course in brass pedagogy offered in two semester-long sections (1) pedagogical techniques for trumpet and horn; (2) pedagogical techniques for trombone, euphonium, and tuba. Repeatable up to two semester hours.

**MUS 338. Percussion Pedagogy. 0.5-1 Hours**

Course in percussion pedagogy offered in two semester-long sections: (1) Pedagogical techniques for the percussion instruments; (2) performance study on snare drum, mallets and timpani; teaching techniques for accessory instruments; minor repairs: method book analysis. Repeatable up to one and a half semester hours.

**MUS 339. String Pedagogy. 1 Hour**

Pedagogical techniques for the string instruments. Separate sections for upper strings and lower strings. Each section is a full-term course.

**MUS 340. Music Education for Students with Special Needs. 2 Hours**

Introduction to issues affecting music education with students who have physical, cognitive, emotional, and sensory challenges that affect the learning process. Specific musical characteristics and needs of special learners will be presented along with methods and strategies for teaching. Information and guidelines regarding regulatory issues related to music education will be addressed. Field experience required. Prerequisite(s): MUS 231.

**MUS 345. Choral Conducting. 2 Hours**

Continuation of techniques introduced in MUS 240, dealing specifically with techniques for choral ensembles. Prerequisite(s): MUS 240.

**MUS 346. Instrumental Conducting. 2 Hours**

Continuation of techniques introduced in MUS 240, dealing specifically with techniques for band and orchestra. Prerequisite(s): MUS 240.

**MUS 350. Sacred Music History. 3 Hours**

Survey of the development of Christian Music and its function in worship. The focus will be on historical styles, including both their impact on and their application within liturgical settings, as well as on the religious reflections engendered by specific works.

**MUS 351. Church Music Administration. 2 Hours**

Examination of the process, organization, administration, planning, and presentation of church music in various Christian traditions. Attention is given to concepts of worship planning, the organization of a comprehensive music program, program development and the relationship between the music ministry and various other church entities.

**MUS 352. Understanding Sacred Music & Worship in the Local Church. 3 Hours**

Focus on the important relationship between music and worship in the life of the church with an emphasis on major contemporary trends in sacred music and work. An historical overview of music and worship with biblical foundations for both are provided. Prerequisite(s): REL 103; (ASI 111, 112).

**MUS 354. Gospel Music: Instrument of Social Change. 3 Hours**

Study of gospel music as social, political, cultural, religious and historical commentary on and a vehicle for discussing and addressing issues of justice and race in America.

**MUS 360. Special Topics in Music. 1-3 Hours**

Studies in specialized areas of music. May be repeated as topics change, up to six semester hours. Prerequisite(s): Permission of instructor.

**MUS 365. Music In Society. 3 Hours**

Study of how music and musicians affect, and are affected by, the human societies in which they live. May be repeated for additional credit as topics change.



**MUS 381. Clinical & Educational Music Improvisation I. 2 Hours**

Music improvisation techniques and procedures using piano, percussion, voice, guitar, and student's major instrument. Emphasis on the acquisition of clinical and educational music improvisational skills to be applied in the medical, rehabilitation, clinical and/or school music education setting. Prerequisite(s): MUS 212, 214.

**MUS 382. Clinical & Educational Music Improvisation II. 2 Hours**

Intermediate skill development in clinical and educational music improvisation. Emphasis on assessment, implementation, and evaluation of individual, dyadic, and group improvisatory experiences. Acquisition of expressive movement repertoire to improvised music. Prerequisite(s): MUS 381.

**MUS 385. Music Therapy Principles. 3 Hours**

Principles and processes underlying the applications of music in therapy, including philosophical approaches, assessment procedures, goals and objectives, evaluation and documentation techniques, and professional ethics and standards of clinical practice. Prerequisite(s): MUS 289.

**MUS 386. Music & Psychotherapy. 3 Hours**

Overview of concepts, methods, and materials in the clinical practice of various forms of music psychotherapy. Exploration of the role and function of music within other therapeutic approaches (e.g., cognitive, humanistic, etc.). Identification of factors and issues affecting the helping process.

**MUS 387. Practicum in Music Therapy IV. 2 Hours**

Supervised pre-internship experiences with children and/or adults with special needs. One-hour weekly lab required. Corequisite(s): MUS 385.

**MUS 388. Practicum in Music Therapy V. 2 Hours**

Supervised pre-internship experiences with children and/or adults with special needs. One-hour weekly lab required. Corequisite(s): MUS 386.

**MUS 390. Ensembles. 0.5-1 Hours**

Experience the performing arts in instrumental or choral/vocal ensembles of the student's choice. Prerequisite(s): While there are no prerequisites, certain ensembles may require an audition as criteria for enrollment, permission of the instructor or auditions for seating or sectional placement.

**MUS 391. Jazz Improvisation I. 1 Hour**

Study and performance of the musical elements that define the various styles of jazz improvisation from the beginning to the intermediate level. Prerequisite(s): MUS 114 or permission of department chairperson.

**MUS 392. Jazz Improvisation II. 1 Hour**

Study of the musical elements that define the various styles of jazz improvisation from the intermediate to the advanced level. Prerequisite(s): MUS 391 or permission of department chairperson.

**MUS 396. Jazz Keyboard Harmony I. 1 Hour**

Practical and theoretical course of study achieved through in-depth analyses at an introductory level of chords and chord voicings, repertoire, manuscripts, videos and recordings of great jazz pianists. Students identify and perform harmonic techniques of jazz piano used by twentieth century jazz pianists. Prerequisite(s): MUS 297 or permission of department chairperson.

**MUS 397. Jazz Keyboard Harmony II. 1 Hour**

Practical and theoretical course of study achieved through in-depth analyses at an intermediate level of chords and chord voicings, repertoire, manuscripts, videos and recordings of great jazz pianists. Students identify and perform harmonic techniques of jazz piano used by twentieth century jazz pianists. Prerequisite(s): MUS 396 or permission of department chairperson.

**MUS 398. Instrumental Jazz Improvisation. 1 Hour**

Individualized instruction in instrumental jazz improvisation. Study of jazz theory, aural development, stylistic considerations, and repertoire. Prerequisite(s): Participation in Jazz Ensemble and/or Jazz Combo.

**MUS 399. Performance Studies. 1-2 Hours**

Private instruction (one thirty to forty-five minute lesson each week) in piano, voice, organ, violin, viola, cello, bass, flute, oboe, clarinet, bassoon, saxophone, trumpet-cornet, French horn, trombone, baritone, tuba, percussion, harp, harpsichord, classical and pick-style guitar, and jazz lessons in piano, guitar, bass, drums, brass, and woodwinds. Prerequisite(s): Permission of instructor.

**MUS 401. Medieval & Renaissance Music. 1 Hour**

The development of music from circa 400 to 1600, including plainchant, early polyphony, Ars Nova, and Renaissance music; the relationship of music to other arts and to its historical context. Open to all University students.

**MUS 402. Baroque Music. 2 Hours**

Literature and performing practices from 1600 to 1750; the relationship of music to social and cultural movements. Open to all University students.

**MUS 403. Classic & Romantic Music. 3 Hours**

Literature and performing practices from 1750 to 1900; the relationship of music to social and cultural movements. Open to all University students.

**MUS 404. Twentieth-Century Music. 2 Hours**

Study of twentieth-century music, its styles, and its cultural contexts, including post-romantic, impressionistic, neo-classic, and avant-garde. Open to all University students.

**MUS 405. Piano Literature. 2 Hours**

Comprehensive survey of literature for the piano. Required of piano performance majors.

**MUS 408. Diction & Literature for Singers. 2 Hours**

Course in foreign language diction with an associated survey of significant and representative works from the vocal solo repertoire. Course alternates its content: German and English; and French and Italian. Course may be repeated as content changes. Prerequisite(s): MUS 399 or 499.

**MUS 413. Style & Design. 2 Hours**

Exploration of appropriate analytical techniques as applied to Western music from the Renaissance to the present. Prerequisite(s): MUS 212.

**MUS 414. Style & Design. 2 Hours**

Exploration and application of various musical styles as demonstrated by original compositions patterned after selected historic models. Prerequisite(s): MUS 413.

**MUS 416. Advanced Orchestration. 2 Hours**

Continuation of MUS 316. Intensive instrumentation studies and detailed analysis of orchestral work. Prerequisite(s): MUS 316.

**MUS 418. Research in Music Theory. 2 Hours**

Practical experience in analysis for music composition majors. Prerequisite(s): Senior standing in music.

**MUS 419. Research in Music Theory. 2 Hours**

Practical experience in analysis for music composition majors. Prerequisite(s): Senior standing in music.

**MUS 421. Composition IV. 2 Hours**

Advanced work in musical composition, writing multi-movement forms of both vocal and instrumental music. Prerequisite(s): MUS 250, 321, 322.

**MUS 422. Composition IV. 2 Hours**

Advanced work in musical composition, writing multi-movement forms of both vocal and instrumental music. Prerequisite(s): MUS 250, 321, 322.

**MUS 423. Composition for Large Ensembles. 2 Hours**

Preparation and execution of an extended work for large instrumental or vocal ensemble. All aspects of score and part preparation, notation, orchestration, correction, rehearsal, and performance will be considered.

**MUS 424. Advanced Notational Techniques. 2 Hours**

Study of special problems in contemporary notation and calligraphy. Work will be done through analysis of twentieth-century techniques and creative solutions to individual problems.

**MUS 425. Electronic Music Composition. 2 Hours**

Study of musical electronic techniques, ranging from tape recorders and musique concrete through synthesizer and computer-generated and organized sound.

**MUS 426. Improvisational Music Composition. 2 Hours**

Discussion, study, and performance of improvisational musical techniques, including historical overview of classical extemporization, stream of consciousness, jazz, and aleatory and indeterminism.

**MUS 430. Jazz Pedagogy. 2 Hours**

Methods and materials for the organization and teaching of jazz performance classes. Topics include teaching improvisation, the rhythm section, and repertoire for the school jazz band. Field experience required. Corequisite(s): Participation in the jazz program.

**MUS 431. Marching Band Pedagogy. 2 Hours**

Methods and materials for the organization and teaching of the high school marching band. Topics include teaching and rehearsal techniques, drill design, and philosophy. Field experience required. Corequisite(s): Participation in the marching band.

**MUS 435. Piano Pedagogy. 2 Hours**

Systematic preparation for the development of piano technique and tone; survey and study of graded teaching material of grades I and II. Prerequisite(s): Four terms of piano study or equivalent.

**MUS 440. Advanced Instrumental Conducting. 2 Hours**

Individualized instruction dealing with advanced analysis, interpretation, aural skills, repertoire study, and conducting. Prerequisite(s): MUS 346.

**MUS 450. Degree Recital. 0 Hours**

Required performance for all students pursuing MUC, MUE, MUP, and MUT majors. In order to successfully complete the degree program, students must earn a satisfactory grade ("S") in this course. Prerequisite(s): MUS 250; permission of department chairperson.

**MUS 452. Contemporary Liturgical Music Repertoire. 2 Hours**

Examination of ways in which contemporary musical resources are utilized in the worship of Christian churches. Choral, congregational, cantoral, and instrumental material will be considered in the context of both the liturgical seasons and specific services. REL 446 recommended.

**MUS 459. Church Music Internship. 2 Hours**

Minimum of one semester's supervised service as organist and/or choral director in an approved parish setting. Prerequisite(s): Completion of half of certificate requirements; permission of department chairperson.

**MUS 460. Special Studies in Music. 1-9 Hours**

Studies in specialized areas of music, including music therapy and music education. May be repeated as topics change, up to nine semester hours. Prerequisite(s): Senior standing in music or permission of instructor.

**MUS 461. Special Topics in Church Music. 1-8 Hours**

Studies in specialized areas of music, including music therapy and music education. May be repeated as topics change, up to eight semester hours. Prerequisite(s): Senior standing in music or permission of instructor.

**MUS 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**MUS 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**MUS 480. Capstone Project Seminar. 1 Hour**

The first in a sequence of two capstone courses. To be taken in the first semester of the senior year. This course is required for all Bachelor of Arts with a major in Music degrees. Students select a faculty mentor and work with the mentor to establish a capstone project topic, goals, outcomes, and timeline associated with the project. Prerequisite(s): MUS 250; senior standing; MUS major or permission of department chairperson.

**MUS 481. Capstone Project & Presentation. 1 Hour**

The second of two capstone courses leading to graduation. To be taken in the second semester of the senior year. Students implement, complete, present, and evaluate a project within their area of concentration, reviewed by faculty and peers. Faculty approval of project and presentation is required for graduation. Prerequisite(s): MUS 480 or permission of department chairperson.

**MUS 486. Research in Music Therapy. 2 Hours**

Introduction to research methods; review of literature on experimental studies. Research project.

**MUS 489. Music Therapy Internship. 2 Hours**

Minimum of 900 hours supervised clinical training through resident internship in an AMTA roster or university-affiliate internship. This requirement precedes the granting of the music therapy degree. Prerequisite(s): Senior standing in music therapy; permission.

**MUS 491. University Orchestra. 1 Hour**

Performing arts experience in ensemble of string, wind, brass and percussion players; preparing literature for orchestra and chamber orchestra. Open to all University community members by audition.

**MUS 492. Symphonic Wind Ensemble. 1 Hour**

Performing arts experience in select band performing the finest in wind literature. Presents regular concerts during fall and winter terms. Auditions required.

**MUS 493. University Chorale. 1 Hour**

Arts experience in mixed vocal ensemble performing music from all style periods in regular concert appearances. Open to all University students. Auditions required.

**MUS 494. Dayton Jazz Ensemble. 1 Hour**

Performing arts experience in the interpretation and performance of traditional and contemporary big band jazz, including the art of improvisation. Audition required.

**MUS 499. Performance Studies. 4 Hours**

Private instruction (one-hour lessons weekly) in the same subjects as MUS 399. Prerequisite(s): Permission of instructor.

# Philosophy

Major

- Bachelor of Arts, Philosophy

Minor:

- Philosophy

The objective of the philosophy major program is to provide students with the opportunity to understand contemporary philosophy in view of the history of philosophy. Students majoring in philosophy must successfully complete a minimum of 37 semester hours. The philosophy major program is also offered in India in conjunction with the Marianists. Consult the department chairperson for further information.

A minor in philosophy consists of 18 semester hours.

**Faculty**

John Inglis, Chairperson  
 Distinguished Service Professor: Johnson  
 Professors Emeriti: Fischer, Johnson, Kunkel, Quinn, Richards, Ulrich, Zembaty  
 Professors: Benson, DesAutels, Fouke, Inglis, Kebede, Poe, Tibbetts  
 Associate Professors: Gabbe, James, Mosser, Paslaru, Payne, Whisnant  
 Assistant Professors: Bein, Bresnahan, Cheung, Mesami, Velasquez  
 Lecturers: Dunham, Florek, Marvin

## Bachelor of Arts, Philosophy (PHL) minimum 124 hours

**Common Academic Program (CAP)**

*credit hours will vary depending on courses selected	
First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	

Inquiry Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- 1 Completed with ASI 110 and ASI 120.
- 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- 3 Completed with ENG 200H or ASI 120.
- 4 Must include two different disciplines and accompanying lab.

**Liberal Studies Curriculum**

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

**Major Requirements <sup>1, 2</sup>** 37

PHL 103 or ASI 120	Intro To Philosophy The Development of Western Culture in a Global Context	3-7
PHL 240	Research Methodologies & Technologies	1
PHL 301 or PHL 302	Practical Logic <sup>3</sup> Symbolic Logic	3
PHL 350	Classical Greek Philosophy	3
PHL 352	Modern Philosophy	3
PHL 375	Ethical Theory	3
Select two seminars from: (Satisfies CAP Major Capstone)		6
PHL 440	Seminar - Advanced Problems in Philosophy	
PHL 451	Seminar - Individual Philosophers	
PHL 461	Seminar - Contemporary Epistemology	
PHL 462	Seminar - Contemporary Ethics	
PHL 463	Seminar - Contemporary Metaphysics	

**Select one track from:**

**Ethics and Social Justice** 15

Select two courses from:	
PHL 307	Philosophy & Women
PHL 310	Social Philosophy
PHL 312	Ethics
PHL 313	Business Ethics
PHL 314	Philosophy of Law
PHL 315	Medical Ethics
PHL 316	Engineering Ethics
PHL 317	Ethics & Modern War
PHL 318	Family Ethics
PHL 319	Information Ethics
PHL 321	Environmental Ethics
PHL 327	Philosophy of Peace
PHL 328	Philosophy of Punishment

PHL 357	Radical Philosophy
PHL 358	Marxist Philosophy
PHL 364	Race, Gender and Philosophy
PHL 370	Political Philosophy
PHL 371	Philosophy & Human Rights
PHL 372	Values & Economics
PHL 373	Philosophy & Cultural Diversity

Philosophy electives (9 hours)

**History of Philosophy** 15

Select two courses from:

PHL 351	Jewish, Christian, and Islamic Philosophy
PHL 353	Kant & Nineteenth-Century Philosophy
PHL 354	Twentieth-Century Philosophy
PHL 361	Philosophies of Change in U.S. History

Philosophy electives (9 hours)

**Science, Technology, and Values** 15

PHL 330	Philosophy of Science
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Select one course from:

PHL 306	Philosophy of Knowledge
PHL 315	Medical Ethics
PHL 316	Engineering Ethics
PHL 319	Information Ethics
PHL 321	Environmental Ethics
PHL 331	Science, Objectivity & Values
PHL 332	Technology & Values
PHL 333	Philosophy & Cognitive Science
PHL 334	Philosophy & Ecology

Philosophy electives (9 hours)

**Religion, Mind, and Metaphysics** 15

PHL 308	Metaphysics
or PHL 311	Philosophy of Religion

Select one course from:

PHL 309	Philosophy of Mind
PHL 351	Jewish, Christian, and Islamic Philosophy
PHL 355	Asian Philosophy
PHL 356	Christian Philosophy
PHL 360	Existentialism
PHL 365	Islamic Philosophy & Culture

Philosophy electives (9 hours)

**Culture and Human Diversity** 15

Select two courses from:

PHL 307	Philosophy & Women
PHL 355	Asian Philosophy
PHL 361	Philosophies of Change in U.S. History
PHL 363	African Philosophy
PHL 364	Race, Gender and Philosophy
PHL 365	Islamic Philosophy & Culture
PHL 373	Philosophy & Cultural Diversity

Philosophy electives (9 hours)

**Arts and Human Expression** 15

Select two courses from:

PHL 320	Philosophy of Art
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PHL 323	Philosophy & Literature
PHL 324	Philosophy & Film
PHL 325	Philosophy of Music
PHL 362	Philosophy of Language

Philosophy electives (9 hours)

**Self-Designed** 15

Philosophy electives (15 hours)

**Breadth**

ASI 150	Introduction to the University Experience	1
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Total Hours to total at least 124

- 1 Includes CAP Components
- 2 PHL courses are not applicable to CAP Advanced Studies.
- 3 Students who anticipate graduate work in philosophy are advised to take PHL 302.

**Minor in Philosophy (PHL)**

**Philosophy**

PHL 103	Intro To Philosophy	3
PHL 301	Practical Logic	3
or PHL 302	Symbolic Logic	

Select one course from: 3

PHL 350	Classical Greek Philosophy
PHL 351	Jewish, Christian, and Islamic Philosophy
PHL 352	Modern Philosophy
PHL 353	Kant & Nineteenth-Century Philosophy
PHL 354	Twentieth-Century Philosophy

Select one PHL seminar (400 level) 3

Select two PHL courses 6

Total Hours 18

**First Year**

Fall	Hours Spring	Hours
ASI 150	1 ASI 120	8
ASI 110	7 Language 141	4
CMM 100 (CAP Communication)	3 MTH (CAP Mathematics)	3
Language 101	4	
	<b>15</b>	<b>15</b>

**Second Year**

Fall	Hours Spring	Hours
SSC 200 (CAP Social Science)	3 PHL 240	1
PHL 301 or 302	3 PHL 350	3
INSS (CAP Natural Science)	4 PHL 352	3
Literature	3 CAP Arts	3
Language 201 or contextual course	3 INSS (CAP Natural Science)	3
	Social Science	3
	<b>16</b>	<b>16</b>

**Third Year**

Fall	Hours Spring	Hours
PHL 375	3 Adv HST	3

Creative & Performing Arts	3 Adv REL (CAP Faith Trad)	3
INSS (CAP Inquiry)	4 PHL Major Track	3
PHL Major Track	3 PHL Major Track	3
Social Science	3 Social Science	3
	<b>16</b>	<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
Adv REL	3 Diversity and Social Justice	3
CAP Integrative	3 PHL Major Track	3
PHL Seminar (Capstone)	3 PHL Seminar (Capstone)	3
PHL Major Track	3 General elective	3
General elective	3 General elective	3
General elective	1	
	<b>16</b>	<b>15</b>

Total credit hours: 124

## Courses

### PHL 103. Introduction to Philosophy. 3 Hours

Introduction to philosophical reflection and study of some central philosophical questions in the Western intellectual tradition, including questions of ethics, human knowledge, and metaphysics. Readings from major figures in the history of philosophy such as Plato, Aristotle, Augustine, Aquinas, Descartes, Hume, and Kant.

### PHL 240. Research Methodologies & Technologies. 1 Hour

Development of research skills appropriate for the major. Students submit papers carefully selected from written work required for major classes. Required for all Philosophy majors. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

### PHL 301. Practical Logic. 3 Hours

Introduction to the principles of correct reasoning; techniques for the evaluation of arguments; common fallacies in argumentation; applications to current issues in ethics and other areas.

### PHL 302. Symbolic Logic. 3 Hours

Concentrated study of the valid forms of deductive argument and proof in propositional logic and in predicate logic; study of formal systems and of logic and language. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

### PHL 304. Philosophy of Human Nature. 3 Hours

Examination of humanist, religious and scientific perspectives regarding what defines our 'human nature?' These perspectives include: Western and non-Western philosophical and spiritual traditions, social psychology, cultural anthropology, and evolutionary biology. Throughout the focus is on primary-source texts rather than on summaries and surveys. Prerequisite(s): (ASI 110, ASI 120) or PHL 103.

### PHL 306. Philosophy of Knowledge. 3 Hours

Various criteria, origins, and definitions of knowledge proposed by common sense, science, philosophy, and mysticism; questions of evidence, consistency, and validity pertaining to the problem of truth and belief. Prerequisite(s): (ASI 110, ASI 120) or PHL 103.

### PHL 307. Philosophy & Women. 3 Hours

Issues and problems related to feminist analysis of society and its ideals, such as equal opportunity, sex roles and gender, reverse discrimination, violence, and language. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

### PHL 308. Metaphysics. 3 Hours

Issues and problems under such topics as appearance and reality; universals; relations of mind and matter; the nature of persons and personal identity; causality; freedom and determination. Prerequisite(s): (ASI 110, ASI 120) or PHL 103.

### PHL 309. Philosophy of Mind. 3 Hours

An analysis of the concept of mind and related issues such as Descartes' mind-body dualism and various responses; the nature of human agency, self-deception; and the rationality of emotions. Prerequisite(s): (ASI 110, ASI 120) or PHL 103.

### PHL 310. Social Philosophy. 3 Hours

The concepts of liberty, justice, and equality as they relate to social problems such as autonomy, responsibility, privacy, common good, power, economic justice, and discrimination. This course also addresses how the obstacles to justice can be overcome. Prerequisite(s): PHL 103 or equivalent.

### PHL 311. Philosophy of Religion. 3 Hours

The main issues involved in religious belief and practice, such as the relationship between reason and revelation; critical presentation of views of main writers in the field. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

### PHL 312. Ethics. 3 Hours

Various types of moral and ethical theory in the Western tradition and major problems such as the extent of human responsibility and the conditions for making ethical judgments. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

### PHL 313. Business Ethics. 3 Hours

Review of major ethical theories and concepts such as justice, human flourishing, rights, virtues, common good, and examination of their implications for today's business world. Prerequisite(s): PHL 103 or equivalent.

### PHL 314. Philosophy of Law. 3 Hours

This is a course in the philosophy of law and jurisprudence that is designed for upper-level work in law, philosophy and law-related fields. The course includes the topics of rule of law, natural law theory, critical approaches to law, international law and human rights, distributive justice and material equality, privacy and sexual equality, and the function and limits of punishment. Prerequisite(s): (ASI 110, ASI 120) or PHL 103.

### PHL 315. Medical Ethics. 3 Hours

Introduction to ethics in general and inquiry into the main ethical problems tied to medical practice and research, and the moral approaches for resolving them. Prerequisite(s): (ASI 110, ASI 120) or PHL 103.

### PHL 316. Engineering Ethics. 3 Hours

Introduction to ethical issues in engineering by developing theories of moral justification and codes of ethics for engineers, and by applying these theories and codes to moral issues in engineering. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

### PHL 317. Ethics & Modern War. 3 Hours

Study in applied ethics focusing on the implications of power politics and militarism; various ethical approaches used to evaluate wars, terrorism and violence; and an overview of some alternatives to war. Prerequisite(s): PHL 103 or ASI 120 or equivalent.



**PHL 318. Family Ethics. 3 Hours**

Introduction to the development of the concept of a family in the tradition of Western philosophy and the philosophic analysis of contemporary ethical problems in marriage and in parenthood. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 319. Information Ethics. 3 Hours**

Examination of ethical principles, codes, cases, incidents, and issues in the design, implementation, and use of computerized information systems. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 320. Philosophy of Art. 3 Hours**

This course will critically evaluate advanced philosophical and art-historical texts pertaining to understanding and appreciating such arts as painting, sculpture, architecture, comedy, literature, theatre, music, dance, and street art. Prerequisite(s): (ASI 110, ASI 120) or PHL 103.

**PHL 321. Environmental Ethics. 3 Hours**

Study of the principal ethical perspectives on the treatment of animals and nature including such issues as agriculture, energy, pollution, and economics; assessment of political responses to current environmental problems. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 322. Philosophy and Theatre/Dance: Performing Human Identity. 3 Hours**

An interdisciplinary and advanced philosophy course with two components: 1) theoretical, focusing on the philosophy of dance or theatre and the philosophy of human identity, and 2) dance or theatre, where students will learn to use dance or theatre to express personal identity. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 323. Philosophy & Literature. 3 Hours**

Critical examination of philosophical concepts in selected literary masterpieces, ancient and modern. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 324. Philosophy & Film. 3 Hours**

This course will critically evaluate texts in philosophy, film criticism, popular culture and other areas that are related to the philosophical study of movies and film. Prerequisite(s): (ASI 110, ASI 120) or PHL 103.

**PHL 325. Philosophy of Music. 3 Hours**

Examination of theories on the meaning of music; experiencing music as composer, performer, and listener; aesthetic criteria; moral effect of music. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 327. Philosophy of Peace. 3 Hours**

Examination of human violence and ethical justifications for war and exploration of resolutions for human conflict in processes such as pacifism, peacemaking, democratic world governance, nonviolent caring, and a sustainable economy. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 328. Philosophy of Punishment. 3 Hours**

Critical examination of punishment, through an analysis of various forms of punishment and what they imply about human nature, power, social norms, and moral principles. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 330. Philosophy of Science. 3 Hours**

Critical examination of the underpinnings of scientific knowledge, and how it differs from other systems of belief and knowledge, through an analysis and evaluation of various scientific concepts such as scientific laws, explanation, observation, and theory, with an exploration of the methods, presuppositions, and biases of scientific knowledge claims. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 331. Science, Objectivity & Values. 3 Hours**

Study of three interrelated issues: the limits of scientific methodology; science as a social institution; and science and human values. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 332. Technology & Values. 3 Hours**

Study of the social impact of technology-scientists' responsibility; technological change and social change; the 'technological fix'; democracy and the new technological elite; counter-culture critiques of technology. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 333. Philosophy & Cognitive Science. 3 Hours**

Philosophical introduction to recent research in cognitive psychology, artificial intelligence, and neuroscience regarding human, animal, and machine intelligence; the relation between mind, brain, and personhood; and the biology of conscious states. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 334. Philosophy & Ecology. 3 Hours**

An examination of the epistemological, methodological, ontological, and value issues of ecology, with a focus on how these issues affect the debates in philosophy of science. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 340. Special Problems in Philosophy. 1-3 Hours**

Examination of perennial and contemporary problems of philosophy. May be repeated when topic changes. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 345. Philosophy Scholars' Seminar. 3 Hours**

Study and seminar discussion of selected major philosophical works and the analysis, interpretation, and criticism of these works. Open by permission only to students in the Berry Scholars Program. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 350. Classical Greek Philosophy. 3 Hours**

The Greek origins of Western scientific, philosophical, and political thought; relationships to current thoughts; ideas of the pre-Socratics, Plato, and Aristotle in their cultural contexts. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 351. Jewish, Christian, and Islamic Philosophy. 3 Hours**

A critical examination of theological arguments by major thinkers representing the Jewish, Christian, and Islamic traditions in the Middle Ages, with close attention to common philosophical underpinnings, and the cross-fertilization of ideas. Prerequisite(s): (ASI 110, ASI 120) or PHL 103.

**PHL 352. Modern Philosophy. 3 Hours**

Survey of developments of Natural Philosophy in the seventeenth and eighteenth centuries and how strands of Christian and Jewish religious traditions influenced the philosophical beginnings of modern science. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 353. Kant & Nineteenth-Century Philosophy. 3 Hours**

Development of philosophy beginning with Kant through the nineteenth century including Kant and philosophers such as Fichte, Schelling, Hegel, Schopenhauer, Nietzsche, James, Peirce, and Frege. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 354. Twentieth-Century Philosophy. 3 Hours**

Study of some of the major philosophical movements in the twentieth century including phenomenology, existentialism, critical theory (Frankfurt School), hermeneutics, and analytic philosophy. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 355. Asian Philosophy. 3 Hours**

Introduction to Asian philosophy through the study of philosophers, texts, philosophical schools and concepts that have their origins in Asia. Comparisons of various Asian philosophies with each other as well as with western traditions. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 356. Christian Philosophy. 3 Hours**

An examination of the underlying philosophical issues of selected topics in the Christian faith to deepen the students' understanding of the faith in its historical and intellectual contexts. Prerequisite(s): (ASI 110, ASI 120) or PHL 103.

**PHL 357. Radical Philosophy. 3 Hours**

Study of major attempts to develop a critical understanding of society; analysis of theories such as socialism, anarchism, feminism, critical theory, and critical race theory. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 358. Marxist Philosophy. 3 Hours**

Introduction to the thought of Karl Marx through a study of the historical setting of the man and his writings, along with recent interpretations of his thought. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 360. Existentialism. 3 Hours**

This course examines the body of philosophic thought known as Existentialism: its genesis within Kierkegaard's analysis of faith; its reaction to 19th century philosophy; its maturation in 20th century; and its absorption and extension into Christian Existentialism, religious inquiry, the arts, literature, social thinking and freedom movements of today. Primary foci of this course revolve around the themes of Faith as a lived experience, Human Reasoning and the Human Condition, Self and Others, Freedom and Morality. This course directs virtually all of its textual materials and discursive development toward the question "What does it mean to be human?" and in light of that, "What then shall we do?" Prerequisite(s): (ASI 110, ASI 120) or PHL 103.

**PHL 361. Philosophies of Change in U.S. History. 3 Hours**

Study of philosophies of change emerging within U.S. history. It will examine 1) Philosophies arising from interactions and tensions among Indigenous, European, African, Latin American, and Asian cultural groups, and 2) American Pragmatism as articulating processes of change rather than seeking universal truths. Prerequisite(s): ASI 120 or PHL 103.

**PHL 362. Philosophy of Language. 3 Hours**

Theories of meaning and reference and their philosophical significance. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 363. African Philosophy. 3 Hours**

Introduction to African world views, ethical notions, and social ideas using analytical and comparative approaches; examination of concepts of human diversity and universality; analysis of the transition of traditional African culture to modernity. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 364. Race, Gender and Philosophy. 3 Hours**

Investigation of how the intersections of race and gender shape our identity and the organization of local and global spaces. To this end the course considers questions about the metaphysical and epistemological dimensions of raced and gendered identity. Attention will be given to ethical and political analyses of racial patriarchy and in the course students will think through the most effective ways of reaching racial and gender justice. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 365. Islamic Philosophy & Culture. 3 Hours**

Examination of selected Islamic thinkers and philosophical traditions, from the period of the Ummayyad Caliphate to the postcolonial era, and their influence on Christian and Jewish thought. Islamic conceptions of law, political society, ethics, hermeneutics, science, revelation, and reality. Special emphasis upon the role of the arts in shaping Islamic philosophy. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 370. Political Philosophy. 3 Hours**

The course analyzes the evolution of political theories through a study of representative ancient and modern works of political philosophy. It also studies political changes and contemporary political ideas and practices in relation to diverse cultural contexts. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 371. Philosophy & Human Rights. 3 Hours**

Examination of the nature and philosophical foundations of universal moral (human) rights; and application of human rights theory to issues and cases involving civil and political rights, and rights to equality, security, subsistence, education, welfare, employment, and health care. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 372. Values & Economics. 3 Hours**

An inquiry into the impact of values and beliefs on the generation of modern economic forces. Analyzing capitalism as a system of validation of beliefs and values, the course relates underdevelopment with the conflict between tradition and modernity. It then reflects on the conditions of change liable to promote global expansion. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 373. Philosophy & Cultural Diversity. 3 Hours**

Philosophical investigation into historical, social, and political dimensions of human diversity in its various manifestations. Topics include colonialism, racism, multiculturalism, nationalism, and democracy.

**PHL 374. Philosophy and the City. 3 Hours**

By studying philosophical questions as they apply to the local community, students will deepen their understanding both of philosophical theory and Dayton. This class may be taken multiple times for credit. Prerequisite(s): PHL 103 or ASI 110 or ASI 120.

**PHL 375. Ethical Theory. 3 Hours**

An examination of the significant ethical theories offered by historically significant philosophers along with some contemporary critiques of these theories. The theories examined will include virtue, deontological, and utilitarian approaches. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 376. Philosophy & Revolution. 3 Hours**

No description available.

**PHL 377. Philosophy & Mass Media. 3 Hours**

No description available.

**PHL 378. The Self Concept: Reality or Social Construct?. 3 Hours**

The concept of a 'self' is one of the more elusive concepts in reflections on what it means to be human. Starting with (i) the Cartesian model of self as a metaphysically distinct, nonphysical entity, the course then explores (ii) Asian (particularly Buddhist) speculations on self as a linguistic fiction. Students are then introduced to (iii) recent cognitive science modeling of self and personal identity as instances of embodied/situated cognition, followed by contributions from the social sciences, including (iv) sociological theories of self as a social construct, as well as (v) clinical case studies of autistic, pathological, and fragmented selves. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 379. Latin American Philosophy. 3 Hours**

This course provides background to the history of philosophy that emerges in and from Latin America. Were the Indians human? Did they have souls? When, if at all, is war justified? Why is the U.S. rich and Latin America poor? How can poverty in Latin America be addressed? What could it mean for nations in Latin America to take small steps of self-determination and embark on a path of liberation? These questions and others are addressed by thinking through theory within the Latin American philosophical tradition. In the process students gain a sense of what it's like to philosophize from a Latin American perspective. PHL 103 or ASI 120 or equivalent.

**PHL 380. Language & Our World. 3 Hours**

No description available.

**PHL 381. Sexual Ethics. 3 Hours**

This course will cover various philosophical issues in sexual ethics, including the following: the proper meaning and role of sex within human life; the existence and content of any "natural law(s)" governing sexual activity; the relations between sex, love, and marriage; the meaning and value of sexual freedom; the moral status of homosexuality and same-sex marriage; the meaning and importance of sexual consent; sexual objectification; and the commodification of sex and (mostly) women's bodies in prostitution and pornography. Special attention will be devoted both to Catholic perspectives and to contemporary feminist perspectives on sexual ethics.

**PHL 382. Culture, Modernization, and Multiple Modernities. 3 Hours**

The course surveys representative and contending theories of modernization with the view of unraveling the role of values and beliefs in the modernization process. It reexamines the role of culture in light of the emergence of a globalized world and the associated rise of diverse modernities. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 383. Ethics of Scientific Research. 3 Hours**

Inquiry into the main ethical problems of scientific research and the moral principles for resolving them. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 440. Seminar - Advanced Problems in Philosophy. 3 Hours**

Detailed examination of some of the more technical problems of philosophy as well as those problems that arise in interdisciplinary settings upon which philosophers have brought their technical skills to bear. May be repeated when topic varies. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 451. Seminar - Individual Philosophers. 3 Hours**

Detailed examination of the thought of an individual philosopher (e.g., Aquinas, Kant, Rawls, Quine) who is of sufficient importance to warrant special study. May be repeated when topic varies. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 461. Seminar - Contemporary Epistemology. 3 Hours**

Study of recent philosophical work in the theory of knowledge inclusive of scepticism, knowledge and belief, evidence and justification, theories of perception and knowledge, human interests and valuation. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 462. Seminar - Contemporary Ethics. 3 Hours**

Study of recent philosophical work in ethics inclusive of an analysis of ethical concepts, theories of normative ethics, theories of human action, and moral justification. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 463. Seminar - Contemporary Metaphysics. 3 Hours**

Study of recent work in metaphysics inclusive of the nature of metaphysics, causality, free will and determinism, personal identity and the theory of mind and body. Prerequisite(s): PHL 103 or ASI 120 or equivalent.

**PHL 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**PHL 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**PHL 490. Directed Readings. 1-4 Hours**

Guided independent study primarily for philosophy majors but open to students who have completed twelve semester hours in philosophy. Normally three semester hours but in certain cases the chairperson may approve one, two, or four semester hours. May be repeated when topic changes. Prerequisite(s): PHL 103 or ASI 120 or equivalent; permission of department chairperson and instructor.

**PHL 492. Directed Research. 3 Hours**

Faculty-directed research for philosophy majors who have completed all 300-level requirements and at least one 400-level seminar. Students will write a substantial paper in relation to this research. Prerequisite(s): PHL 103 or ASI 120 or equivalent; permission of department chairperson and instructor.

**PHL 495. Internship. 1-3 Hours**

Supervised practical and professional experience related to philosophy for philosophy majors who have completed prescribed course work. May be repeated to a maximum of three semester hours. Grading Option Two only. Prerequisite(s): PHL 103 or ASI 120, PHL 302, PHL 350, PHL 352; one 400-level seminar; permission of department chairperson.

## Physics

- Bachelor of Science, Physical Science
- Bachelor of Science, Physics
- Bachelor of Science, Physics-Computer Science

### Minor

- Physics

The program leading to the Bachelor of Science with a major in physics is designed to provide a strong yet versatile basis for a subsequent scientific career or advanced study. Minimum requirements for all majors are listed below, but students planning for graduate work in physics or an allied area are advised to select additional mathematics and physics courses. A physics major must complete all 300-400-level courses with a 2.0 minimum grade-point average.

Students have the option of adding a multidisciplinary concentration in electro-optics to their physics degree. The concentration is appropriate for physics majors who wish to pursue possible careers in photonics or graduate degrees in the area of optics.

PHY, PSC, and PCS majors are required to attain a grade of C- or better in all physics and math courses that are prerequisite courses for physics courses required of majors.

A minor in physics consists of twelve semester hours.

### Faculty

John E. Erdei, Chairperson

Distinguished Service Professor: O'Hare

Professors Emeriti: Berney, Graham, Kepes, Miner, O'Hare, Yaney

Professors: Brecha, Elhamri, Ewvaraye, Pedrotti

Associate Professors: Ahoujja, Craver, J. Erdei, Smith

Assistant Professors: Agha, Chong, Mathews, Sudakov, Zhao

Lecturers: Kariyawasam, Merithew

Lab Instructors: Ballard, L. Erdei, Schaurer

## Bachelor of Science, Physical Science (PSC) minimum 120 hours

The Physical Science Program is administered by the Department of Physics. It provides a broad training in the physical sciences that is desirable for one who plans to pursue a goal built on a composite science background. The physical science major combines adequate physics, chemistry, geology, and mathematics to provide a sound working knowledge of physical science. Since the program is less specialized than one in a single science, it has provision for adequate course selections and sufficient electives to provide the opportunity for concentrated study in a discipline chosen to meet the career objectives of the individual student.

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103    West and the World	
REL 103    Introduction to Religious and Theological Studies	
PHL 103    Intro To Philosophy	
ENG 100    Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200    Writing Seminar II	
Oral Communication	3
CMM 100    Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200    Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit

Philosophy and/or Religious Studies

Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- Completed with ASI 110 and ASI 120.
- Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- Completed with ENG 200H or ASI 120.
- Must include two different disciplines and accompanying lab.

### Science Breadth Requirements

CPS 132 or CPS 150	Computer Programming for Engineering & Science Algorithms & Programming I	3
MTH 168	Analytic Geometry & Calculus I (Satisfies CAP Mathematics)	4
MTH 169	Analytic Geometry & Calculus II	4
MTH 218	Analytic Geometry & Calculus III	4
MTH 219	Applied Differential Equations	3

### Major Requirements

		54
(Satisfies CAP Natural Science)		
CHM 123 & 123L	General Chemistry and General Chemistry Laboratory	4
CHM 124 & 124L	General Chemistry and General Chemistry Laboratory	4
GEO 115 & 115L	Physical Geology and Physical Geology Laboratory	4
GEO 116 & 116L	Geological History of the Earth and Geological History of the Earth Laboratory	4
PHY 206	General Physics I - Mechanics	3
PHY 207	General Physics II - Electricity & Magnetism	3
PHY 208	General Physics III - Mechanics of Waves	3
PHY 210L	General Physics Laboratory I	1
PHY 211L	General Physics Laboratory II	1
PHY 480	Physics Capstone (Satisfies CAP Major Capstone)	1
Physical science courses (300/400 level) <sup>1</sup>		26

### Breadth

ASI 150	Introduction to the University Experience	1
Social and Behavioral Sciences (includes CAP Social Science)		6
Total Hours to total at least		120

- At least twelve semester hours in physics.

## Bachelor of Science, Physics (PHY) minimum 120 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		12
HST 103    West and the World		
REL 103    Introduction to Religious and Theological Studies		
PHL 103    Intro To Philosophy		
ENG 100    Writing Seminar I <sup>2</sup>		
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200    Writing Seminar II		



Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

<sup>1</sup> Completed with ASI 110 and ASI 120.

<sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.

<sup>3</sup> Completed with ENG 200H or ASI 120.

<sup>4</sup> Must include two different disciplines and accompanying lab.

#### Science Breadth Requirements

CHM 123 & 123L	General Chemistry and General Chemistry Laboratory (Applies to CAP Natural Science)	4
CHM 124 & 124L	General Chemistry and General Chemistry Laboratory	4
CPS 132 or CPS 150	Computer Programming for Engineering & Science (Applies to CAP Natural Science) Algorithms & Programming I	3
MTH 168	Analytic Geometry & Calculus I (Satisfies CAP Mathematics)	4
MTH 169	Analytic Geometry & Calculus II	4
MTH 218	Analytic Geometry & Calculus III	4
MTH 219	Applied Differential Equations	3
MTH 310	Linear Algebra & Matrices	3

#### Major Requirements

Select one concentration from:

<b>General Physics Concentration</b>	37	
PHY 206	General Physics I - Mechanics	3
PHY 207	General Physics II - Electricity & Magnetism	3
PHY 208	General Physics III - Mechanics of Waves	3
PHY 210L	General Physics Laboratory I	1
PHY 211L	General Physics Laboratory II	1
PHY 301	Thermal Physics	3
PHY 303	Intermediate Mechanics I	3
PHY 333	Digital & Analog Electronics for Scientists	3
PHY 390	Introduction to Quantum Mechanics	3
PHY 408	Intermediate Electricity & Magnetism I	3

PHY 430	Advanced Lab I	2
PHY 431	Advanced Lab II	2
PHY 480	Physics Capstone (Satisfies CAP Major Capstone)	1
PHY electives (300/400 level)		6

#### Physics and Electro-Optics Concentration

ECE 443	Introduction to Electro-Optics	3
PHY 206	General Physics I - Mechanics (Applies to Cap Natural Science)	3
PHY 207	General Physics II - Electricity & Magnetism	3
PHY 208	General Physics III - Mechanics of Waves	3
PHY 210L	General Physics Laboratory I	1
PHY 211L	General Physics Laboratory II	1
PHY 301	Thermal Physics	3
PHY 303	Intermediate Mechanics I	3
PHY 333	Digital & Analog Electronics for Scientists	3
PHY 390	Introduction to Quantum Mechanics	3
PHY 404	Physical Optics	3
PHY 408	Intermediate Electricity & Magnetism I	3
PHY 430	Advanced Lab I	2
PHY 431	Advanced Lab II	2
PHY 480	Physics Capstone (Satisfies CAP Major Capstone)	1
Select two courses from:		6

EOP 501	Geometric Optics	
EOP 502	Optical Radiation & Matter	
EOP 505	Introduction to Lasers	
EOP 506	Electro-Optical Devices & Systems	
or ECE 573	Electro-Optical Devices & Systems	
EOP 514	Guided-Wave Optics	
or ECE 574	Guided Wave Optics	

#### Breadth

ASI 150	Introduction to the University Experience	1
Social Science and Behavioral Science (Includes CAP Social Science)		6
Total Hours to total at least		120

## Bachelor of Science, Physics-Computer Science (PCS) minimum 120 hours

This combined program in physics and computer science leading to the Bachelor of Science with a major in Physics-Computer Science emphasizes the use of computer software in scientific applications and at the same time gives a foundation in the scientific disciplines of physics and computer science. Minimum requirements for the degree are listed below. Students are advised to select additional computer science, mathematics, and physics courses as electives. For further information contact the Physics Department.

#### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	



Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

1 Completed with ASI 110 and ASI 120.  
 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.  
 3 Completed with ENG 200H or ASI 120.  
 4 Must include two different disciplines and accompanying lab.

<b>Major Requirements</b>	72
(Satisfies CAP Mathematics and CAP Natural Science)	
<b>Computer Science</b> <sup>1</sup>	26
CPS 150 Algorithms & Programming I	
CPS 151 Algorithms & Programming II	
CPS 250 Computer Organization and Architecture	
CPS 346 Operating Systems I	
CPS 350 Data Structures & Algorithms	
Three CPS courses (340 level or above)	
<b>Mathematics</b>	18
MTH 168 Analytic Geometry & Calculus I	
MTH 169 Analytic Geometry & Calculus II	
MTH 218 Analytic Geometry & Calculus III	
MTH 219 Applied Differential Equations	
MTH 310 Linear Algebra & Matrices	
<b>Physics</b>	28-30
PHY 206 General Physics I - Mechanics	
PHY 207 General Physics II - Electricity & Magnetism	
PHY 208 General Physics III - Mechanics of Waves	
PHY 210L General Physics Laboratory I	
PHY 211L General Physics Laboratory II	
PHY 323 Computational Physics	
PHY 333 Digital & Analog Electronics for Scientists	
PHY 480 Physics Capstone (Satisfies CAP Major Capstone)	
Four PHY courses (300/400 level)	

**Breadth Requirements**

ASI 150 Introduction to the University Experience	1
Social and Behavioral Sciences (includes CAP Social Science)	6
<b>Total Hours to total at least</b>	<b>120</b>

<sup>1</sup> Additional numerical analysis courses are recommended.

**Minor in Physics (PHY)**

<b>Physics</b>	12
Select four PHY courses (300/400 level)	

<b>Total Hours</b>	<b>12</b>
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- Bachelor of Science, Physical Science
- Bachelor of Science, Physics
- Bachelor of Science, Physics- Computer Science

**Bachelor of Science, Physical Science**

First Year	Hours Spring	Hours
<b>Fall</b>		
ASI 150	1 PHY 207 & PHY 211L	4
PHY 206 & PHY 210L	4 CHM 124 & 124L	4
MTH 168	4 MTH 169	4
CPS 150	4 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
ENG 100 (CAP Writing Seminar)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
	<b>16</b>	<b>18</b>
<b>Second Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
PHY 208	3 GEO 116 & 116L	4
GEO 115 & 115L	4 PHY elective	3
MTH 218	4 MTH 219	3
REL 103, PHL 103, or HST 103 (CAP Humanities)	3 CMM 100 (CAP Communication)	3
ENG 200 (CAP Writing Seminar)	3 SSC 200 (CAP Social Science)	3
	<b>17</b>	<b>16</b>
<b>Third Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
CPS 132 or 150	3-4 PHY elective	3
PHY elective	3 PHY elective	3
PHY elective	3 Social Science	3
Arts	3 Adv HST	3
Adv PHL/REL (PEA/FT)	3 Adv PHL/REL (PEA/FT)	3
	<b>15-16</b>	<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
PHY 480 (capstone)	1 PHY elective	3

PHY elective	3	PHY elective	3
PHY elective		2 Integrative	3
Inquiry		3 Diversity and Social Justice	3
General Elective		1 General Elective (optional)	3
General Elective (optional)	3		
General Elective (optional)	3		
	<b>16</b>		<b>15</b>

Total credit hours: 128-129

## Bachelor of Science, Physics

### First Year

Fall	Hours	Spring	Hours
ASI 150		1 PHY 207 & PHY 211L	4
PHY 206 & PHY 210L	4	4 CHM 124 & 124L	4
CHM 123 & 123L	4	4 MTH 169	4
MTH 168	4	4 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
ENG 100 (CAP Writing Seminar)	3	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
	<b>16</b>		<b>18</b>

### Second Year

Fall	Hours	Spring	Hours
PHY 208	3	3 PHY 303	3
CPS 132 or 150	3	3-4 MTH 219	3
MTH 218	4	4 CMM 100 (CAP Communication)	3
REL 103, PHL 103, or HST 103 (CAP Humanities)	3	3 SSC 200 (CAP Social Science)	3
ENG 200 (CAP Writing Seminar)	3	3 Arts	3
	<b>16-17</b>		<b>15</b>

### Third Year

Fall	Hours	Spring	Hours
PHY 301	3	3 PHY 408	3
PHY 333	3	3 PHY elective	3
PHY 390	3	3 Social Science	3
MTH 310	3	3 Adv HST	3
Adv PHL/REL (PEA/FT)	3	3 Adv PHL/REL (PEA/FT)	3
	<b>15</b>		<b>15</b>

### Fourth Year

Fall	Hours	Spring	Hours
PHY 480 (capstone)	1	1 PHY 431	2
PHY 430	2	2 PHY elective	3
Inquiry	3	3 Integrative	3
General Elective	3	3 Diversity and Social Justice	3
General Elective	3	3 General Elective (optional)	3

General Elective	3	General Elective (optional)	3
	<b>15</b>		<b>17</b>

Total credit hours: 127-128

## Bachelor of Science, Physics-Computer Science

### First Year

Fall	Hours	Spring	Hours
ASI 150		1 PHY 207 & PHY 211L	4
PHY 206 & PHY 210L	4	4 CPS 151	4
CPS 150	4	4 MTH 169	4
MTH 168	4	4 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
ENG 100 (CAP Writing Seminar)	3	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
	<b>16</b>		<b>18</b>

### Second Year

Fall	Hours	Spring	Hours
PHY 208	3	3 PHY 323	3
MTH 218	4	4 CPS 350	3
CPS 250	3	3 MTH 219	3
REL 103, PHL 103, or HST 103 (CAP Humanities)	3	3 CMM 100 (CAP Communication)	3
ENG 200 (CAP Writing Seminar)	3	3 Arts	3
	<b>16</b>		<b>15</b>

### Third Year

Fall	Hours	Spring	Hours
PHY 333	3	3 CPS 346	3
MTH 310	3	3 PHY elective	3
CPS elective	3	3 CPS elective	3
PHY elective	3	3 Social Science	3
SSC 200 (CAP Social Science)	3	3 Adv PHL/REL (PEA/FT)	3
	<b>15</b>		<b>15</b>

### Fourth Year

Fall	Hours	Spring	Hours
PHY 480	1	1 PHY elective	3
CPS elective	3	3 Adv PHL/REL (PEA/FT)	3
PHY elective	3	3 Integrative	3
Adv HST	3	3 Diversity and Social Justice	3
Inquiry	3	3 General Elective (optional)	3
General Elective (optional)	3		
	<b>16</b>		<b>15</b>

Total credit hours: 126

## Courses

### PHY 100. Seminar. 0 Hours

Opportunity to become acquainted with the broad spectrum of modern science through periodic meetings with the entire department. Invited speakers, films, student presentations, book reviews, and informal discussions. For all physics, physical science, and physics-computer science majors.

### PHY 105. Physical Science - Energy & the Environment. 3 Hours

General introduction to principles of physics including motion, energy, thermodynamics, electricity and magnetism, and nuclear physics. Applications of these principles to non-renewable and renewable energy systems and the climate. Intended for business students.

### PHY 108. Physical Science of Light & Color. 3 Hours

Treatment of physical science with emphasis on light, color, and the interaction of light with materials. For nonscience students.

### PHY 108L. Light & Color Laboratory. 1 Hour

Laboratory experiences to accompany PHY 108. Corequisite(s): PHY 108.

### PHY 201. College Physics I. 3 Hours

Topics from mechanics, thermal and mechanical properties of matter, wave motion, and sound without the formalism of calculus.

### PHY 201L. College Physics Laboratory I. 1 Hour

Algebra-based introductory laboratory. Experimental scientific techniques and the use of standard laboratory equipment. One two-hour period each week. Corequisite(s): PHY 201 or PHY 206.

### PHY 202. General Physics. 3 Hours

Continuation of PHY 201 with a treatment of electricity and magnetism, wave motion and properties of light, atomic and nuclear physics. Second term, each year. Prerequisite(s): PHY 201.

### PHY 202L. General Physics Laboratory. 1 Hour

Experimental scientific techniques and the use of standard laboratory equipment. One two-hour period per week. Second term, each year. Prerequisite(s): PHY 201L.

### PHY 203. Modern Technical Physics. 3 Hours

Introduction to selected topics in modern physics without the formalism of calculus. For engineering technology students. Prerequisite(s): College algebra, trigonometry, and introductory statics and dynamics.

### PHY 203L. Technical Physics Laboratory. 1 Hour

Laboratory experiences to accompany PHY 203.

### PHY 206. General Physics I - Mechanics. 3 Hours

Calculus-based introductory course in mechanics. Three lectures, one recitation each week. Corequisite(s): MTH 138, MTH 148 or MTH 168.

### PHY 207. General Physics II - Electricity & Magnetism. 3 Hours

The basic principles of electricity and magnetism. Three lectures, one recitation each week. Prerequisite(s): PHY 201 or PHY 206. Corequisite(s): MTH 149 or MTH 169.

### PHY 208. General Physics III - Mechanics of Waves. 3 Hours

Introduction to wave phenomena (including sound, light, and matter waves) leading to basic concepts in modern physics. Prerequisite(s): (MTH 149; PHY 202) or (MTH 169; PHY 207).

### PHY 210L. General Physics Laboratory I. 1 Hour

Introduction to laboratory methods, handling of data, and analysis of results. Experiments appropriate to the background of students with an interest in mathematical and physical sciences. Two hours laboratory, one hour recitation each week. Corequisite(s): PHY 206.

### PHY 211L. General Physics Laboratory II. 1 Hour

Laboratory methods, data handling, and analysis of results. Experiments appropriate to the background of students with an interest in mathematical and physical sciences. Two hours laboratory, one hour recitation each week. Prerequisite(s): PHY 210L. Corequisite(s): PHY 207.

### PHY 220. Energy & Environmental Physics. 3 Hours

Introduction to the physical basis of energy systems and the climate. Topics covered will include thermodynamics, planetary radiation balance, heat transfer, basic atmospheric and ocean physics, nuclear energy, renewable energy, modeling of carbon emissions from fossil fuels, simple climate models, monitoring climate change, and mitigation strategies. Prerequisite(s): PHY 206.

### PHY 232. The Physics of Waves. 3 Hours

Physical concept and mathematical relations describing wave phenomena in a variety of physical systems. Topics include oscillation in mechanical and electrical systems, mechanical and electromagnetic waves, geometrical and physical optics and matter waves. Designed for electrical and computer engineering students, but open to all meeting the prerequisites. Prerequisite(s): PHY 206; MTH 169 (may be taken as a corequisite).

### PHY 250. Descriptive Astronomy. 3-4 Hours

Descriptive survey for students who have had little or no previous exposure to astronomy; material from ancient times to present, including pulsars and quasi-stellar objects.

### PHY 295. Research Participation I. 1 Hour

No description available.

### PHY 301. Thermal Physics. 3 Hours

Thermodynamical descriptions of many particle systems obtained from microscopic statistical considerations; laws of thermodynamics, kinetic theory of dilute gases, and Fermi-Dirac and Bose-Einstein statistics. Prerequisite(s): PHY 208 or PHY 232. Corequisite(s): MTH 219.

### PHY 303. Intermediate Mechanics I. 3 Hours

The fundamental concepts of mechanics: virtual work, kinematics, special theory of relativity, Lagrange's equation-and central forces, particle dynamics. Prerequisite(s): PHY 208 or PHY 232. Corequisite(s): MTH 219.

### PHY 321. Atomic & Nuclear Physics. 3 Hours

Concepts and models of the structure of matter; atoms, ions, electrons and nuclei, radioactivity, interactions of radiation with matter, particle detection, accelerators, nuclear models, nuclear reactions and processes, and fundamental particles. Prerequisite(s): (PHY 208 or PHY 232) or permission of instructor.

### PHY 323. Computational Physics. 3 Hours

The course will explore how computers are used in physics. Topics will include simulations of physical systems, numerical analysis, and the use of mathematical analysis packages (MATHCAD, for example.) Programming will be done in True BASIC and MATHCAD. Prerequisite(s): MTH 218; (PHY 208 or PHY 232).

**PHY 333. Digital & Analog Electronics for Scientists. 3 Hours**

Basic concepts of digital and analog integrated circuit electronics are developed as a way to understand modern microcomputer based instrumentation. A microcomputer based data collection and analysis system is used to study binary data input and output, analog to digital conversion (ADC) devices, digital to analog conversion (DAC) devices, and other digital integrated circuits and concepts. The analog electronics part of the course begins with a study of discrete analog devices and ends with operational amplifiers and their application. Two hours lecture and two hour laboratories each week. Prerequisite(s): (PHY 202L or PHY 211L) or equivalent.

**PHY 390. Introduction to Quantum Mechanics. 3 Hours**

Basic postulates of quantum mechanics with applications made to atomic physics. Prerequisite(s): MTH 219; (PHY 208 or PHY 232). Corequisite(s): MTH 310.

**PHY 395. Research Participation I. 1-6 Hours**

Individual projects conducted as part of the physics Undergraduate Research Participation program to encourage involvement of students with faculty researchers. Projects must be arranged in advance with faculty research directors.

**PHY 399. Special Problems in Physics. 1-4 Hours**

Special topical courses, laboratory, tutorial, or library work in areas of current interest. Students should consult the composite.

**PHY 403. Intermediate Mechanics II. 3 Hours**

Emphasis on solving physical problems; noninertial coordinate systems, rigid body motion, rotating systems, coupled systems, introductory fluid statics and dynamics, normal coordinates, and the descriptions of mechanics appropriate for the transition to wave mechanics. Prerequisite(s): PHY 303.

**PHY 404. Physical Optics. 3 Hours**

The electromagnetic wave theory of light, propagation of waves, reflection, refraction, dispersion, polarization, dichroism, birefringence, superposition of waves, interference, diffraction, Fourier optics. Prerequisite(s): MTH 219; (PHY 208 or PHY 232).

**PHY 408. Intermediate Electricity & Magnetism I. 3 Hours**

Electrostatics, Coulomb's law, Gauss's law, potential, dielectric materials, electrostatic energy, solutions to Laplace's and Poisson's equations, Biot-Savart law, Faraday induction law, magnetization, and Maxwell's equations. Prerequisite(s): MTH 219; (PHY 208 or PHY 232).

**PHY 409. Intermediate Electricity & Magnetism II. 3 Hours**

Further study of electric and magnetic fields with emphasis on solving problems; Maxwell's equations, propagation of electromagnetic waves, electromagnetic radiation. Prerequisite(s): PHY 408.

**PHY 411. Topics in Modern Physics. 3 Hours**

Elements of modern optics, solid state and other selected subjects. Consult chairperson for details. Prerequisite(s): PHY 390 or equivalent.

**PHY 420. Introduction to Solid State. 3 Hours**

Classification of solids, crystals and crystal structures, survey of lattice properties, free electron theory, band theory of solids, semi-conductors, and crystal imperfections. Prerequisite(s): MTH 219; (PHY 208 or 232); PHY 390.

**PHY 430. Advanced Lab I. 2 Hours**

No description available.

**PHY 431. Advanced Lab II. 2 Hours**

No description available.

**PHY 440. Quantum Mechanics II. 3 Hours**

Study of selected principles in quantum mechanics. Prerequisite(s): PHY 390.

**PHY 450. Senior Project. 3 Hours**

The senior project is a capstone experience for senior physics majors. It will consist of a research project of the student's choosing and will require both an oral and written report. The nature and scope of the project will be chosen in consultation with the student's advisor. Permission of the department chairperson is required. Senior physics majors only.

**PHY 460. Seminar. 1 Hour**

Presentation of papers by undergraduate students, faculty, and a guest lecturers on topics of concern to the modern physicist. Reviews of books and films appropriate to the group.

**PHY 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**PHY 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**PHY 480. Physics Capstone. 1 Hour**

This seminar course is the capstone for all physics majors. Students will complete an independent research project and present their results in written form and in a presentation. Students will learn about the variety of career paths available after completing an undergraduate physics degree, and how to engage in these career paths in an ethical manner.

**PHY 495. Research Participation II. 1-6 Hours**

Individual projects conducted as part of the physics Undergraduate Research Participation program to encourage involvement of students with faculty researchers. Projects must be arranged in advance with faculty research directors.

**PHY 499. Special Problems in Physics. 1-6 Hours**

Laboratory, tutorial, or library work in one of such selected topics as solid state physics, polymers, atomic and nuclear physics, modern optics, theoretical physics, surface physics, or general physics. Prerequisite(s): Permission of department chairperson.

## Political Science

Majors:

- Bachelor of Arts, Human Rights Studies
- Bachelor of Arts, Political Science

Minors:

- Human Rights Studies
- Political Science

The Department of Political Science offers a Bachelor of Arts with a major in Political Science and a Bachelor of Arts with a major in Human Rights Studies. Minors in political science and human rights studies are also offered.

- A major in political science requires 39 semester hours of political science courses.
- A major in human rights studies requires 45 to 57 semester hours of courses in the humanities and the social sciences.
- A minor in political science consists of 15 semester hours. Courses selected by students should strengthen academic or career objectives.
- A minor in human rights studies consists of 18 semester hours. Courses selected should strengthen academic or career objectives.

## Minors and Teacher Licensure

A student majoring in political science can acquire teacher licensure through the dual-degree B.A. and B.S.E. program conducted in conjunction with the Department of Teacher Education in the School of Education and Health Sciences, or minor in any related discipline within the College of Arts and Sciences. The student must consult with the department administering the discipline for the particular requirements of a minor.

### Faculty

Grant W. Neeley, Chairperson

Director of Human Rights Studies Program: Natalie Hudson

Director of Master of Public Administration: Michelle Pautz

Director of Graduate Certificate in Nonprofit & Community Leadership:

Steve Neiheisel

Professors Emeriti: Ahern, Fogel, Inscho, Karns, Lapitan, Nelson

Professors: Ingram, Pierce

Associate Professors: Bilocerkowycz, Ensalaco, Ghery, Hudson, Miller, Neeley, Pautz

Assistant Professors: Ambrosius, Pruce, Watkins

Lecturers: Birdsong, Neiheisel, Talbott

## Bachelor of Arts, Human Rights Studies (HRS) minimum 124 hours

The Bachelor of Arts in Human Rights Studies is an integrated pre-professional degree firmly grounded in the traditional liberal arts. Students, faculty, and staff participating in the program enter into it guided by their fundamental commitment to respect and promote the dignity of each human person. The degree is intended to produce intellectually adept students who are capable of performing rigorous research and conducting high quality analysis of critical questions in the area of human rights studies. It is equally intended to produce thoughtful and transformational servant-leaders who will apply the knowledge and skills obtained in the program to contemporary human rights issues and situations both domestically and internationally. Through the integration of liberal and pre-professional education, the interdisciplinary program prepares distinctive graduates who intend to pursue advanced study and training in the field of human rights, or careers in human rights advocacy and humanitarian assistance. Those graduates will possess the values, knowledge and skills necessary for effective public service in:

- Government agencies
- Non-governmental organizations
- International aid agencies
- Non-profit groups in human rights or humanitarian assistance

Courses taken for the major may also count toward completion of the Common Academic Program and the Liberal Studies Curriculum.

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

<sup>1</sup> Completed with ASI 110 and ASI 120.

<sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.

<sup>3</sup> Completed with ENG 200H or ASI 120.

<sup>4</sup> Must include two different disciplines and accompanying lab.

### Liberal Studies Curriculum

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English) <sup>1</sup>	0-11
Literature (May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Sciences)	11
Social Sciences (Includes CAP Social Science)	12

**Major Requirements <sup>2</sup>** 45

ASI 397	Capstone Seminar on Human Rights Advocacy (Satisfies CAP Major Capstone)	3
CMM 355	Rhetoric of Social Movements	3
HST 312	Age of Democratic Revolutions	3
PHL 371	Philosophy & Human Rights	3
POL 305	Introduction to Public Administration	3
POL 333	Politics of Human Rights	3
POL 334	Politics of Human Rights II	3



POL 406	International Law & Organization	3
REL 363	Faith & Justice	3
SOC 371	Sociology of Human Rights	3
Select one course from:		3
CMM 412	Research Methods in Communication	
HST 301	Research Methods Seminar	
POL 207	Political Analysis	
SOC 208	Social Research Methods	
Select one course from three different concentrations:		9
<b>Anthropology</b>		
ANT 360	Cultures of South Asia	
<b>Criminal Justice Studies</b>		
CJS 336	Comparative Criminal Justice	
<b>Economics</b>		
ECO 460	Economic Development & Growth	
<b>History</b>		
HST 334	History of the Palestinian-Israeli Conflict	
HST 337	History of Africa - 19th Century to the Present	
HST 356	Comparative History of Women in the Third World	
HST 361	U.S. Legal & Constitutional History II	
HST 399	History of Blacks in the United States Since 1900	
<b>Philosophy</b>		
PHL 314	Philosophy of Law	
PHL 317	Ethics & Modern War	
PHL 327	Philosophy of Peace	
PHL 370	Political Philosophy	
PHL 372	Values & Economics	
<b>Political Science</b>		
POL 300	Political Issues <sup>3</sup>	
POL 319	Twentieth-Century Political Thought	
POL 331	Nationalism & Ethnopolitics (Satisfies CAP Social Science)	
POL 361	Leadership in Nongovernmental Organizations	
POL 450	Civil Liberties	
POL 452	Political Violence	
<b>Religious Studies</b>		
REL 358	Liberation Theologies	
REL 360	Christian Ethics	
REL 366	The Holocaust: Theological & Religious Responses	
<b>Sociology</b>		
SOC 326	Law & Society	
SOC 328	Racial & Ethnic Relations	
SOC 339	Social Inequality	
SOC 345	Sociology of Extremism	
SOC 368	Immigration & Immigrants	
SOC 435	Economy & Society	
<b>Spanish</b>		
SPN 380	Spanish & Ibero-American Cinema	
SPN 480	Spanish & Ibero-American Cinema	
<b>Experiential or Research Requirement</b>		3-6
Select one course (for a total of 3 semester hours):		

CMM 390	Independent Study	
HST 496	Independent Study	
PHL 492	Directed Research	
POL 431	Independent Study & Research	
POL 495	Internship	
SOC 409	Senior Project	
SOC 498	Independent Study	
Or complete an Honors Thesis (for a total of 6 semester hours):		
CMM 477 & CMM 478	Honors Thesis Project and Honors Thesis Project	
HST 477 & HST 478	Honors Thesis Project and Honors Thesis Project	
PHL 477 & PHL 478	Honors Thesis Project and Honors Thesis Project	
POL 477 & POL 478	Honors Thesis Project and Honors Thesis Project	
REL 477 & REL 478	Honors Thesis Project and Honors Thesis Project	
SOC 477 & SOC 478	Honors Thesis Project and Honors Thesis Project	

**Breadth**

ASI 150	Introduction to the University Experience	1
Total Hours to total at least		124

- 1 Majors must demonstrate proficiency in a foreign language by passing a University proficiency examination or by completing a language course at the 141 level or higher with a minimum grade of C in one of the following languages:
  - Arabic
  - French
  - German
  - Italian
  - Mandarin Chinese
  - Russian
  - Spanish
- 2 May include CAP Components.
- 3 This course can only be counted when taught as International Political Economy.

## Bachelor of Arts, Political Science (POL) minimum 124 hours

**Common Academic Program (CAP)**

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3

SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

- <sup>1</sup> Completed with ASI 110 and ASI 120.
- <sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- <sup>3</sup> Completed with ENG 200H or ASI 120.
- <sup>4</sup> Must include two different disciplines and accompanying lab.

**Liberal Studies Curriculum**

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences, excluding POL courses (Includes CAP Social Science)	12

**Major Requirements**

POL 200	Introduction to Political Science	3
POL 201	The American Political System	3
POL 202	Introduction to Comparative Politics	3
or POL 214	Introduction to International Politics	
POL 207	Political Analysis	3
POL 316	American Political Thought	3
or POL 317	Development of Political Theory	
or POL 319	Twentieth-Century Political Thought	
POL 499	Political Science Capstone	3
Select seven POL courses (May include CAP Components) <sup>1, 2</sup>		21

**Breadth**

ASI 150	Introduction to the University Experience	1
Total Hours to total at least		124

- <sup>1</sup> Including twenty-one semester hours at the 300/400 level.
- <sup>2</sup> Students earning the B.A. in Political Science may count no more than six semester hours earned on internships (POL 495) toward the fulfillment of the degree requirements in POL. Students may, however, take additional hours of internship credit (POL 495) and count them toward the necessary 124 hours needed for graduation.

**Minor in Human Rights Studies (HRS)**

The interdisciplinary minor in Human Rights Studies provides students an opportunity to address issues related to human rights from various

disciplinary approaches. The universal nature of human rights issues may directly relate to a major, while in other cases this minor will provide an opportunity for broadening one's exposure to these important topics.

The Human Rights Studies minor requires 18 semester hours. It is recommended that the required course be taken in the sophomore year. Students should consult with the Director of Human Rights Studies to ensure that the courses selected from the elective pool display a significant degree of coherence. Courses taken from this minor may be applied to other minors and to breadth and general education requirements.

**Human Rights Studies**

POL 333	Politics of Human Rights	3
POL 334	Politics of Human Rights II	3
Select one course from:		3
PHL 371	Philosophy & Human Rights	
REL 363	Faith & Justice	
Select one course from:		3
ANT 325	Anthropology of Human Rights	
SOC 371	Sociology of Human Rights	
Select two courses from: <sup>1, 2</sup>		6
ANT 325	Anthropology of Human Rights	
ANT 360	Cultures of South Asia	
ANT 368	Immigration & Immigrants	
CJS 336	Comparative Criminal Justice	
CMM 355	Rhetoric of Social Movements	
ECO 460	Economic Development & Growth	
HST 312	Age of Democratic Revolutions	
HST 334	History of the Palestinian-Israeli Conflict	
HST 337	History of Africa - 19th Century to the Present	
HST 356	Comparative History of Women in the Third World	
HST 361	U.S. Legal & Constitutional History II	
HST 399	History of Blacks in the United States Since 1900	
PHL 314	Philosophy of Law	
PHL 317	Ethics & Modern War	
PHL 327	Philosophy of Peace	
PHL 370	Political Philosophy	
PHL 371	Philosophy & Human Rights	
PHL 372	Values & Economics	
POL 300	Political Issues <sup>3</sup>	
POL 305	Introduction to Public Administration	
POL 319	Twentieth-Century Political Thought	
POL 331	Nationalism & Ethnopolitics	
POL 406	International Law & Organization	
POL 450	Civil Liberties	
POL 452	Political Violence	
REL 358	Liberation Theologies	
REL 360	Christian Ethics	
REL 363	Faith & Justice	
REL 366	The Holocaust: Theological & Religious Responses	
SOC 326	Law & Society	
SOC 328	Racial & Ethnic Relations	
SOC 339	Social Inequality	

SOC 345	Sociology of Extremism
SOC 368	Immigration & Immigrants
SOC 371	Sociology of Human Rights
SOC 435	Economy & Society

- At least one course must be from CMM, HST, PHL, or REL.
- Select any course that has not been already used to fulfill other Human Rights Studies Minor requirements.
- This course can only be counted when the topic is relevant to human rights.

## Minor in Political Science (POL)

### Political Science

POL 201	The American Political System	3
Select four POL courses (300/400 level)		12
Total Hours		15

- Bachelor of Arts, Human Rights
- Bachelor of Arts, Political Science

## Bachelor of Arts, Human Rights

### First Year

Fall	Hours Spring	Hours
ASI 150	1 REL 103 (CAP Humanities)	3
HST 103 (CAP Humanities)	3 ENG 100 (CAP Writing Seminar)	3
PHL 103 (CAP Humanities)	3 CMM 100 (CAP Communication )	3
MTH 114 or 207	3 SCI 190	3
POL 101	3 SCI 190L	1
Language 101	4 Language 141	4
	<b>17</b>	<b>17</b>

### Second Year

Fall	Hours Spring	Hours
ENG 200 (CAP Writing Seminar)	3 SCI 230 or 240	3
SCI 210 or 220	3 HST 312 (or Adv HST)	3
SCI 210L or 220L	1 CMM 355	3
ANT 150	3 PHL 371 (or Adv REL or HST)	3
Arts	3 POL 305	3
Language 201 or contextual course	3	
	<b>16</b>	<b>15</b>

### Third Year

Fall	Hours Spring	Hours
POL 333	3 ANT 360	3
POL 334	3 HST 334	3
REL 363 (or Adv REL or PHL)	3 POL 300	3
SOC 371	3 SSC 200 (CAP Social Science)	3
POL 207 or SOC 208	3 Literature	3
	<b>15</b>	<b>15</b>

### Fourth Year

Fall	Hours Spring	Hours
POL 406	3 ASI 397	3
POL 495	3 Faith traditions	3
Practical Ethical Action	3 Diversity and Social Justice	3
Integrative	3 Inquiry	3
General elective	3 General elective	3
	<b>15</b>	<b>15</b>

Total credit hours: 125

## Bachelor of Arts, Political Science

### First Year

Fall	Hours Spring	Hours
ASI 150	1 POL 201	3
POL 200	3 MTH 114	3
CMM 100 (CAP Communication)	3 PHL 103 (CAP Humanities)	3
HST 103 (CAP Humanities)	3 ENG 100 (CAP Writing Seminar)	3
REL 103 (CAP Humanities)	3 Language 141	4
Language 101	4	
	<b>17</b>	<b>16</b>

### Second Year

Fall	Hours Spring	Hours
SCI 190	3 POL elective	3
SCI 190L	1 Upper level SOC, PSY, or ECO	3
Language 201 or contextual course	3 SCI 210 or 220	3
POL 202 or 214	3 SCI 210L or 220L	1
POL 207	3 ENG 200 (CAP Writing Seminar)	3
PSY 101, SOC 101, or SOC 204	3 SSC 200 (CAP Social Science)	3
	<b>16</b>	<b>16</b>

### Third Year

Fall	Hours Spring	Hours
POL 316, 317, or 319	3 Social Science (non-POL)	3
POL elective	3 POL elective	3
Adv REL or PHL	3 Inquiry	3
Diversity or Social Justice	3 Adv REL or PHL	3
SCI 230 or 240	3 Practical Ethical Action	3
	<b>15</b>	<b>15</b>

### Fourth Year

Fall	Hours Spring	Hours
POL 499	3 POL elective	3
POL elective	3 POL elective	3
Integrative	3 Adv HST	3
Social Science	3 Arts	3
Literature	3 Faith Tradition	3

POL elective	3	
	18	15
Total credit hours: 128		

## Courses

### **POL 101. Global Politics. 3 Hours**

Examination of major problems and trends in world politics such as ethnic and religious conflict, economic integration and inequality, democratization and security issues, as well as the role of regional and international organizations.

### **POL 200. Introduction to Political Science. 3 Hours**

Study of the dominant theoretical approaches, central questions and concepts, and history of political science. Political Science majors only.

### **POL 201. The American Political System. 3 Hours**

Study of the American political system, its attitudinal and constitutional base, its structure and processes.

### **POL 202. Introduction to Comparative Politics. 3 Hours**

Analysis of major concepts and approaches in the study of comparative government and politics.

### **POL 207. Political Analysis. 3 Hours**

Introduction to the basic concepts and processes of research in political science.

### **POL 214. Introduction to International Politics. 3 Hours**

Analysis of the dynamic forces of conflict and cooperation in world politics.

### **POL 300. Political Issues. 3 Hours**

Introductory examination of contemporary political issues selected by the instructor, such topics as welfare, political morality, political campaigns, institutional reform, and political economy.

### **POL 301. The American Judicial Process. 3 Hours**

Study of the judicial process as part of the political system. Focus on the participants (police, lawyers, judges, interest groups, litigants, jurors) and the process (criminal, civil, and appellate proceedings).

### **POL 303. State & Local Government. 3 Hours**

Comparative study of the political institutions, processes, and systems of the fifty states and their effect on the content and administration of selected public policies, programs, and services.

### **POL 305. Introduction to Public Administration. 3 Hours**

Basic principles of organization and management in executive departments of government at all levels; questions of planning, leadership, and control.

### **POL 306. Public Policy Analysis. 3 Hours**

Introduction to public policy-making systems and the methodology of policy analysis; theories of policy formulation, the policy-making process, means for measuring policy effectiveness, analysis of proposals for policy change.

### **POL 307. The Politics of Bureaucracy & Regulation. 3 Hours**

Examination of the nature and meaning of bureaucracy in contemporary American society, its relationship to the private sector, and the devices for its evaluation and control.

### **POL 308. Morality Policy. 3 Hours**

Introduction to the morality-based public policy debate with comparison of morality policy (e.g. abortion, drugs, gay rights, pornography) and traditional forms of public policy; study of the moral basis underlying current political topics and debate.

### **POL 310. Political Parties, Campaigns & Elections. 3 Hours**

Analysis of the history, nature, and function of political parties and their role in the political system in both a domestic and comparative context.

### **POL 311. Public Opinion & Political Behavior. 3 Hours**

The formation, maintenance, change, and impact of public opinion on the American political system; the role of theory and analysis of data in understanding public and political behavior.

### **POL 313. The American Presidency. 3 Hours**

Study of the American presidency, the development of presidential powers, and its leadership role in the political system.

### **POL 314. Interest Group Politics. 3 Hours**

Exploration of the role of interest groups in the American political system through an examination of their internal organization and their roles in the electoral and policy making processes at the national, state and local levels. Prerequisite(s): POL 201.

### **POL 316. American Political Thought. 3 Hours**

An exploration and critical investigation of selected actors, thinkers, texts, ideas and movements in American political thought and theory from the colonial period to the present. Topics may include the founding, the age of Jackson, the Civil War, Progressivism, Women's Suffrage, the New Deal, the Cold War, the Civil Rights Movement, the 1960s, and others.

### **POL 317. Development of Political Theory. 3 Hours**

Analysis of selected theorists and political doctrines forming the tradition of Western thought on politics. Theorists including Plato, Aristotle, the Stoics, Augustine, Aquinas, Machiavelli, Hobbes, Locke, Rousseau, Mill, Marx, Spencer, Lenin, Gasset, and Camus presented in their historical and socio-political contexts.

### **POL 318. Public Integrity & Political Leadership. 3 Hours**

Analysis of contemporary leadership issues related to integrity and values in political office-holding, public service, and global governance contexts. Prerequisite(s): CMM 201 or (POL 201 or POL 202 or POL 214) or permission of instructor.

### **POL 319. Twentieth-Century Political Thought. 3 Hours**

Analysis of selected political theorists, concepts, and movements from the late nineteenth century to the present. Thinkers and concepts may include Marx, Nietzsche, Sartre, Camus, Freud, Arendt, Strauss, the Frankfurt School, Fanon, Foucault, Rawls, Rorty, existentialism, feminism, colonialism, post-modernity, liberalism, neo-conservatism among others.

### **POL 320. Comparative Politics: Western Europe. 3 Hours**

Analysis of governmental institutions and political processes of Western Europe.

### **POL 321. Comparative Politics: Russia & the New States. 3 Hours**

Analysis of governmental institutions and political processes of Russia and the New States.

### **POL 323. Comparative Politics: Latin America. 3 Hours**

Analysis of governmental institutions and political processes of Latin America.

### **POL 331. Nationalism & Ethnopolitics. 3 Hours**

An analysis of the politics of nationalism and ethnicity and their impact on social justice. Diverse case studies (US, Russia, Northern Ireland, Israeli-Palestinian) and institutions (European Community, United Nations) will be explored.

**POL 333. Politics of Human Rights. 3 Hours**

Examines the evolution of international human rights norms and the creation of the institutions for the protection and promotion of human rights, and case material relating to each category of internationally recognized human rights.

**POL 334. Politics of Human Rights II. 3 Hours**

This research seminar examines select topics related to the protection and promotion of human rights. This course is required for all Human Rights Studies majors. The research seminar adopts a case-study approach that enables students to analyze the complex social, economic, cultural, and political factors that impede the full realization of internationally recognized human rights, and to critically evaluate the effectiveness of the advocacy strategies used by inter-governmental human rights bodies and non-governmental human rights organizations. Thus, this seminar is designed to enable students to connect human rights theory and practice. Part I (Overview) provides a more in-depth examination of the material covered in POL 333 (the Politics of Human Rights I). Part II (Case Studies) examines critical contemporary issues and covers the full range of civil, political, economic, social, and cultural rights. Students will collaborate on team research projects and produce a final Human Rights Report containing an analysis of a specific situation of the violation of human rights, findings of fact, and recommendations aimed at rectifying the situation. Students will present and defend their team reports and present in class at the end of the semester. Prerequisite(s): POL 333.

**POL 335. United States National Security Policy. 3 Hours**

Analysis of various political, economic, and military issues and problems relating to U.S. national security.

**POL 336. United Nations System: Theory and Practice. 3 Hours**

Introduction to the United Nations system with detailed case studies of specific countries, issues, and policies. Course also serves to prepare students for participation in the National Model United Nations Conference. Prerequisite(s): SSC 200.

**POL 340. Gender & International Relations. 3 Hours**

An examination of feminist approaches to the study of international politics and the influence of gender roles on notions of international peace, security, power, development, democracy, human rights, transnational advocacy, and conflict resolution. Prerequisite(s): (POL 101 or POL 214) or permission of instructor.

**POL 341. Power, Gender & Performance. 3 Hours**

Consideration of performances of identity and advocacy at the intersection of political power and gender as constructive responses to gender inequality. Performance protests for gender equality, and cultural performances of gender are examined in historical case studies and current events.

**POL 350. Legislative Politics. 3 Hours**

Study of the U.S. Congress, its organization and procedures, and its powers and influence in the political system.

**POL 360. Urban Politics & Policy. 3 Hours**

Study of the nature of urban political systems in the U.S. with emphasis on explanation of differences in their policy responses.

**POL 361. Leadership in Nongovernmental Organizations. 3 Hours**

Examination of management skills required of professionals in various types of nongovernmental organizations (NGOs) and how leaders integrate agency values and management processes to promote rights-related missions. HRS and POL majors or minors only or permission of the department chairperson.

**POL 365. Disaster Policy & Administration. 3 Hours**

Exploration of policy approaches and administrative response strategies related to various phases of disasters and security crises in the U.S. and international settings with attention to human rights issues. Prerequisite(s): POL 201 or permission of instructor.

**POL 371. Environmental Policy. 3 Hours**

Examination of environmental public policymaking and implementation in the United States. Students will apply knowledge of government and policy processes to specific environmental issues, analyze governmental response, and consider how action on those issues may be pursued.

**POL 404. United States - Latin American Relations. 3 Hours**

This course examines the foreign relations of the United States with other countries of the Western hemisphere. Political, economic and security issues are examined from both theoretical and historical perspectives. Prerequisite(s): (POL 210 or POL 214) or permission of instructor.

**POL 406. International Law & Organization. 3 Hours**

Study of rules governing the community of nations; their nature, sources, and development; the international agencies responsible for their development, interpretation, and administration. Prerequisite(s): POL 214 or permission of instructor.

**POL 408. American Foreign Policy. 3 Hours**

Critical study of the American foreign policy process and evaluation of the sources of American foreign policy. Prerequisite(s): (POL 201, POL 214) or permission of instructor.

**POL 409. Russian Foreign Policy. 3 Hours**

Analysis of the internal and external factors shaping the foreign policies of Russia and the independent republics.

**POL 410. Comparative Foreign Policy. 3 Hours**

Comparative analysis of the foreign policies of major states with emphasis on the process of policy development and on the national and international determinants of policy behaviors. Prerequisite(s): (POL 202 or POL 217) or permission of instructor.

**POL 411. Constitutional Law. 3 Hours**

Analysis of the role of the U.S. Supreme Court in its interpretation of the Constitution. Emphasis on the various methods of judicial interpretation as they affect such provisions as the commerce clause, the taxing and spending powers, due process, the dimensions of presidential and congressional authority, and the doctrine of judicial review. Prerequisite(s): POL 301 or permission of instructor.

**POL 412. Comparative Law. 3 Hours**

Explores how foreign judicial systems protect and promote civil and political rights through different constitutional designs. Prerequisite(s): POL 301.

**POL 413. The Politics of Bureaucracy & Regulation. 3 Hours**

Examination of the nature and meaning of bureaucracy in contemporary American society and the devices for its evaluation and control.

**POL 421. Seminar in Political Science. 3 Hours**

Seminar on current problems and issues in political science. May be taken more than once when content changes. Prerequisite(s): Political Science major; completed POL core courses.

**POL 426. Leadership in Building Communities. 3 Hours**

Investigation of the processes by which urban neighborhoods develop themselves from the inside out. Students cultivate their own interdisciplinary appreciation of urban communities through extensive interaction with one neighborhood's visioning process. Topics include asset-based community development, social capital, citizenship, adaptive leadership, and community building strategies and tools.



**POL 431. Independent Study & Research. 1-3 Hours**

Individual reading and research on selected topics under faculty direction. Recommended for seniors only. Prerequisite(s): Permission of instructor or department chairperson.

**POL 450. Civil Liberties. 3 Hours**

Analytical examination of civil liberties in the U.S. with emphasis on the Supreme Court as arbiter in the endless conflict between the demand for individual liberty and the needs of constitutional authority. Prerequisite(s): (POL 301 or POL 411) or permission of instructor.

**POL 452. Political Violence. 3 Hours**

Consideration of theoretical approaches to understanding violent change in political institutions; the continuum between violence and nonviolence; revolution, revolt, campus dissent, and political assassination. Prerequisite(s): (POL 202 or POL 333) or permission of instructor.

**POL 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**POL 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**POL 479. Selected Topics in Public Policy. 3 Hours**

Intensive examination of policy process, outcomes, and impact in an area or areas of American public policy selected by the instructor; such topics as transportation, education, welfare, national defense, urban and community development, civil rights, and science and technology. May be repeated once when topic changes.

**POL 495. Internship. 1-9 Hours**

Supervised experience in government agencies and programs. Prelaw students are assigned to law firms and judicial chambers. Prerequisite(s): Permission of supervising professor.

**POL 497. Service Learning Experience. 1 Hour**

Supervised community research or service experience that complements a specific upper division course in Political Science. Repeatable up to three semester hours. No more than three semester hours of Social Science 497 credits can count toward graduation. Prerequisite(s): Permission of instructor. Corequisite(s): A 300-400 Political Science course.

**POL 499. Political Science Capstone. 3 Hours**

Project and presentation in the scholarship, activity and/or practice related to the major. Students will present their work in a forum appropriate to the major.

## Prelaw

Minor:

- Prelaw

The Prelaw Program, designed to serve students from all areas of the University, provides undergraduates and alumni interested in law school with opportunities to acquire the knowledge and skills necessary for a successful legal career through both the Prelaw Studies minor as well as through an extensive variety of preprofessional services and resources designed to help students plan an intentionally developmental undergraduate academic path. While students interested in careers in law should choose undergraduate majors to match their interests and abilities, they should also contact and stay engaged with the Prelaw Program as early in their undergraduate careers as possible so they can receive effective prelaw advice.

Students can take advantage of one or both paths through the Prelaw Program. The interdisciplinary Prelaw Studies minor enhances the preparation of students planning to seek admission to law school by promoting both the development of skills considered essential by both law schools and legal professionals -- critical reasoning, writing, and analytical skills -- and professional skills. The Prelaw Program, i.e., the Director, together with fifteen additional prelaw faculty advisors, provides students with curriculum guidance for developing the skills set needed for success in their future legal education and career, with law school admissions fairs, with aid in preparing for the Law School Admission Test (LSAT), including simulated tests and prep workshops, and with individual assistance in law school selection and law school applications. Moreover, the Program has a legal internship program and a Mock Trial team, both of which offer students valuable experiential learning, an undergraduate chapter of Phi Alpha Delta, a Prelaw Club, and other opportunities for development based on the individual student's talents, interests, and goals.

For further information concerning the Prelaw Program at the University of Dayton, students should contact the Prelaw Program in Alumni Hall, Room 117; phone (937) 229-4229 or at [prelaw@udayton.edu](mailto:prelaw@udayton.edu).

### Prelaw Committee

Laura H. Hume (History), Director  
Alakkad (Engineering), Bednarek (History), Berry (Psychology), Bresnahan (Philosophy), Carlson (International Studies), Hoepf (Business Administration), Hudson (Human Rights Studies), Ingram (Political Science), Jipson (Criminal Justice Studies), Kimbrough (English), Lau (Management), Longazel (Sociology), Neeley (Political Science), Parsons (Communication), Shafer (College of Arts and Sciences)

## Minor in Prelaw (PLW)

PreLaw		20-22
Core Courses		
PLW 200	Legal Careers & Professional Development	1
PHL 302	Symbolic Logic	3
POL 301	The American Judicial Process	3
Additional Essential Skills Courses (13-15 hours)		
Writing Skills - select one course from:		3
ENG 316	Elements of Style	
ENG 370	Report & Proposal Writing	
ENG 371	Technical Communication	
ENG 372	Business and Professional Writing	
ENG 474	Argument and Style	
Quantitative Analysis Skills - select one from: <sup>1</sup>		3
ACC 207	Introduction to Financial Accounting	

ACC 208	Introduction to Managerial Accounting	
CMM 412	Research Methods in Communication	
DSC 210	Statistics for Business I	
DSC 211	Statistics for Business II	
ECO 203	Principles of Microeconomics	
MTH 148	Introductory Calculus I	
MTH 207	Introduction to Statistics	
PSY 216	Elementary Statistics	
SOC 308	Data Analysis	
Written Research Skills - select one from: <sup>2</sup>		3
CJS 447	Senior Seminar in Criminal Justice Studies	
ENG 490	Research Seminar-Literature	
HST 301	Research Methods Seminar	
HST 498	History Capstone Seminar	
INS 499	Senior Capstone Seminar	
PHL 492	Directed Research	
Legal Vocabulary and Concepts - select one from:		3
CJS 305	Criminal Law	
CJS 315	Criminal Procedure	
MGT 201	Legal Environment of Business	
PHL 314	Philosophy of Law	
POL 411	Constitutional Law	
SOC 326	Law & Society	
Experiential Learning - complete 1-3 hours from the following: <sup>3</sup>		1-3
CJS 495	Internship in Criminal Justice I	
POL 495	Internship	
PLW 301	Mock Trial I <sup>4</sup>	
PLW 302	Mock Trial II <sup>4</sup>	
PLW 495	Legal Internship	

- <sup>1</sup> Other MTH courses may also apply with permission of program coordinator.
- <sup>2</sup> May be completed with an Honors Thesis course in any academic department or with permission of the program coordinator any other course not listed that both teaches research methods and requires the student to research and write a substantial paper (12-page minimum length) will also fulfill this requirement.
- <sup>3</sup> Other internships may also apply with permission of program coordinator.
- <sup>4</sup> Must complete sequence in consecutive semesters over the course of one academic year.

## Courses

### PLW 200. Legal Careers & Professional Development. 1 Hour

Introduction to careers in various legal practice fields and the different employment options students will have with a law degree. Emphasis is on exploring personal motives and strengths as students consider preparing for law school and a legal career. Includes academic planning and professional behaviors development.

### PLW 301. Mock Trial I. 1 Hour

Practice and performance of attorney and witness roles for Mock Trial National Competition case. Repeatable up to four semester hours.

### PLW 302. Mock Trial II. 1 Hour

Practice and performance of attorney and witness roles for Mock Trial Regional and National competitions. Repeatable up to four semester hours. Prerequisite(s): PLW 301; invitation by mock trial coaches.

### PLW 495. Legal Internship. 1-3 Hours

Supervised legal work experience with an approved law or law-related office, organization or program.

## Premedicine/Predentistry

Majors:

- Bachelor of Science, Predentistry
- Bachelor of Science, Premedicine

Minor:

- Medical Humanities

The Bachelor of Science with a major in premedicine (MED) or predentistry (DEN) is an interdisciplinary curriculum of study. It is distinctively designed to provide a science-based, diverse education as a preparation for admission to any of the health professional schools including medical, dental, physician assistant, optometry, pharmacy, veterinary, and chiropractic. Courses in biology, chemistry, mathematics, and physics comprise the science core of the major. A substantial complement of humanities and social sciences courses are also required. Within this framework the curriculum is flexible and can be tailored to suit personal interests. During the first two years, students enroll in courses appropriate for entry into professional schools while they also fulfill basic University requirements.

Admission to professional schools depends upon many factors in addition to the curriculum or major. Academic standing, performance on standardized examinations, practical experience relevant to the profession of interest, and adherence to application procedures are all important. The Premedical Programs Office addresses these factors through a comprehensive approach to pre-health care education.

Along with the administration of the DEN and MED majors, the Premedical Programs office acts as the focal point for all matters related to admission to any allied health care professional school. It is an information clearing house, functions as a liaison with professional schools, and coordinates the application process. The Premedical Programs Office also coordinates a number of internships, health related student organizations, and community based clinical opportunities for students. Students in any major planning to apply to professional schools are urged to maintain a close relationship with this office.

The University automatically enrolls entering premedical or predental majors into special orientation classes, and identifies them to the Premedical Programs office. Members of the Premedical/Predental Advisory Committee advise these students. However, advising services are available to all preprofessional students regardless of their major. Students in other majors may elect to have committee members serve as their secondary advisors; such students should identify themselves to the Premedical Programs office.

In addition to providing counseling, Premedical Programs offers a seminar series, joint programs with medical schools, grants for health care related experiences, and scholarships. Since admission to professional schools is highly selective, the program monitors the academic progress of MED/DEN majors, and provides feedback at the end of the first and second year. Transfers to other majors, particularly to

science majors, can usually be accommodated during the first two years without affecting normal progress towards graduation.

### Premedical/Pre dental Advisory Committee

Kathleen C. Scheltens, Director

Julie Simon (Mathematics), Assistant Director

Ahoujja (Physics), Burky (Biology), Hansen (Biology), Johnson (Chemistry), Kango-Singh (Biology), Kearns (Biology), Krane (Biology), Lopper (Chemistry), Mammana (Chemistry), Nickell (Biology), Nielsen (Biology), Pitychoutis (Biology), Smith (Physics), Singh (Biology), S. Swavey (Chemistry), T. Williams (Biology), S. Wright (Biology)

## Bachelor of Science, Pre dentistry (DEN) minimum 120 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

<sup>1</sup> Completed with ASI 110 and ASI 120.

<sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.

<sup>3</sup> Completed with ENG 200H or ASI 120.

<sup>4</sup> Must include two different disciplines and accompanying lab.

### Major Requirements 63

Satisfies CAP Mathematics and CAP Natural Science	
BIO 151 & 151L	Concepts of Biology I: Cell & Molecular Biology and Concepts of Biology Laboratory I: Cell & Molecular Biology 4

BIO 152 & 152L	Concepts of Biology II: Evolution & Ecology and Concepts of Biology Laboratory II: Evolution & Ecology 4
CHM 123 & 123L	General Chemistry and General Chemistry Laboratory 4
CHM 124 & 124L	General Chemistry and General Chemistry Laboratory 4
CHM 313 & 313L	Organic Chemistry and Organic Chemistry Laboratory 4
CHM 314 & 314L	Organic Chemistry and Organic Chemistry Laboratory 4
CHM 420	Biochemistry 3
CHM 462L	Biochemistry Laboratory 1
MTH 148 & MTH 149	Introductory Calculus I and Introductory Calculus II 6
or MTH 168 & MTH 169	Analytic Geometry & Calculus I and Analytic Geometry & Calculus II
PHY 201 & PHY 202	College Physics I and General Physics <sup>2</sup> 6
or PHY 206 & PHY 207 & PHY 208	General Physics I - Mechanics and General Physics II - Electricity & Magnetism and General Physics III - Mechanics of Waves
PHY 201L	College Physics Laboratory I <sup>2</sup> 1
PHY 202L	General Physics Laboratory 1
MED 480	Pre-Medicine Capstone (Satisfies CAP Major Capstone) 1
Select one course from:	3
CPS 111	Introduction to Personal Computers
MTH 207	Introduction to Statistics
MTH 367	Statistical Methods I
Select five science courses, two with accompanying laboratories, from: <sup>3</sup>	17
BIO 309 & 309L	Comparative Anatomy of the Vertebrates and Comparative Anatomy Laboratory
BIO 312 & 312L	General Genetics and Genetics Laboratory
BIO 403 & 403L	Physiology I and Physiology Laboratory I
BIO 404	Physiology II
BIO 411 & 411L	General Microbiology and General Microbiology Laboratory
BIO 415	Neurobiology
BIO 427	Immunology
BIO 439	Analysis & Interpretation of Biological Data
BIO 440 & 440L	Cell Biology and Cell Biology Laboratory
BIO 442 & 442L	Developmental Biology and Developmental Biology Laboratory
BIO 445	Evolution & Development
BIO 460	Introduction to Bioinformatics
BIO 462	Molecular Biology
BIO 466	Biology of Infectious Disease
BIO 470	Cancer Biology
BIO 475 & 475L	Human Anatomy and Human Anatomy Laboratory

BIO 480 & 480L	Principles of Microscopy and Principles of Microscopy Laboratory	
CHM 201 & 201L	Quantitative Analysis and Quantitative Analysis Laboratory	
CHM 302	Physical Chemistry	
CHM 427	Medicinal Chemistry	
CHM 451	General Biochemistry I	
CHM 452	General Biochemistry II	

**Breadth**

ASI 150	Introduction to the University Experience	1
Electives <sup>4, 5</sup>		10
ENG Elective <sup>6</sup>		3
Select one course from: (Satisfies CAP Practical Ethical Action and Adv Studies in PHL or REL)		3
PHL 312	Ethics	
PHL 315	Medical Ethics	
REL 365	Christian Ethics & the Environment	
REL 367	Christian Ethics & Health Care Issues	
Social and Behavioral Sciences (Includes CAP Social Science)		12
Total Hours to total at least		120

1 Well qualified students are advised to take MTH 168-MTH 169.

2 Well qualified students are strongly advised to take PHY 206-PHY 207-PHY 208 lecture sequence with PHY 201L and PHY 202L.

3 The elective courses must be directly related to the primary field of interest.

4 Only general elective courses can be taken under Grading Option Two.

5 Courses in graphic design, studio art, or performing arts are recommended.

6 Select ENG elective from among ENG 203, ENG 204, ENG 205, ENG 272, ENG 316, or any 300-level Common Academic Program ENG elective. ENG 373, when content is Medical Writing, is recommended.

## Bachelor of Science, Premedicine (MED) minimum 120 hours

**Common Academic Program (CAP)**

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3

Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

1 Completed with ASI 110 and ASI 120.

2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.

3 Completed with ENG 200H or ASI 120.

4 Must include two different disciplines and accompanying lab.

**Major Requirements** 63

Satisfies CAP Mathematics and Natural Science		
BIO 151 & 151L	Concepts of Biology I: Cell & Molecular Biology and Concepts of Biology Laboratory I: Cell & Molecular Biology	4
BIO 152 & 152L	Concepts of Biology II: Evolution & Ecology and Concepts of Biology Laboratory II: Evolution & Ecology	4
CHM 123 & 123L	General Chemistry and General Chemistry Laboratory	4
CHM 124 & 124L	General Chemistry and General Chemistry Laboratory	4
CHM 313 & 313L	Organic Chemistry and Organic Chemistry Laboratory	4
CHM 314 & 314L	Organic Chemistry and Organic Chemistry Laboratory	4
CHM 420	Biochemistry	3
CHM 462L	Biochemistry Laboratory	1
MTH 148 & MTH 149	Introductory Calculus I and Introductory Calculus II	6
or MTH 168 & MTH 169	Analytic Geometry & Calculus I and Analytic Geometry & Calculus II	
PHY 201 & PHY 202	College Physics I and General Physics <sup>2</sup>	6
or PHY 206 & PHY 207 & PHY 208	General Physics I - Mechanics and General Physics II - Electricity & Magnetism and General Physics III - Mechanics of Waves	
PHY 201L	College Physics Laboratory I <sup>2</sup>	1
PHY 202L	General Physics Laboratory	1
MED 480	Pre-Medicine Capstone (Satisfies CAP Major Capstone)	1
Select one course from:		3
CPS 111	Introduction to Personal Computers	
MTH 207	Introduction to Statistics	
MTH 367	Statistical Methods I	

Select five science courses, two with accompanying laboratories, from:<sup>3</sup> 17

BIO 309 & 309L	Comparative Anatomy of the Vertebrates and Comparative Anatomy Laboratory	
BIO 312 & 312L	General Genetics and Genetics Laboratory	
BIO 403 & 403L	Physiology I and Physiology Laboratory I	
BIO 404	Physiology II	
BIO 411 & 411L	General Microbiology and General Microbiology Laboratory	
BIO 415	Neurobiology	
BIO 427	Immunology	
BIO 439	Analysis & Interpretation of Biological Data	
BIO 440 & 440L	Cell Biology and Cell Biology Laboratory	
BIO 442 & 442L	Developmental Biology and Developmental Biology Laboratory	
BIO 445	Evolution & Development	
BIO 460	Introduction to Bioinformatics	
BIO 462	Molecular Biology	
BIO 466	Biology of Infectious Disease	
BIO 470	Cancer Biology	
BIO 475 & 475L	Human Anatomy and Human Anatomy Laboratory	
BIO 480 & 480L	Principles of Microscopy and Principles of Microscopy Laboratory	
CHM 201 & 201L	Quantitative Analysis and Quantitative Analysis Laboratory	
CHM 302	Physical Chemistry	
CHM 427	Medicinal Chemistry	
CHM 451	General Biochemistry I	
CHM 452	General Biochemistry II	

**Breadth**

ASI 150	Introduction to the University Experience	1
Electives <sup>4</sup>		10
ENG Elective <sup>5</sup>		3
Select one course from: (Satisfies CAP Practical Ethical Action and Adv Studies in PHL or REL)		3
PHL 312	Ethics	
PHL 315	Medical Ethics	
REL 365	Christian Ethics & the Environment	
REL 367	Christian Ethics & Health Care Issues	
Social and Behavioral Sciences (Includes CAP Social Science)		12
Total Hours to total at least		120

- Well qualified students are advised to take MTH 168-MTH 169.
- Well qualified students are strongly advised to take PHY 206-PHY 207-PHY 208 lecture sequence with PHY 201L and PHY 202L.
- The elective courses must be directly related to the primary field of interest.
- Only general elective courses can be taken under Grading Option Two.

5 Select ENG elective from among ENG 203, ENG 204, ENG 205, ENG 272, ENG 316, or any 300-level Common Academic Program ENG elective. ENG 373, when content is Medical Writing, is recommended.

**Minor in Medical Humanities (MHM)**

Select 5 courses from:<sup>1</sup> 15

ANT 336	Epidemics, Power & the Human Condition
CMM 411	Health Communication
ENG 373	Writing in the Health Professions
PHL 315	Medical Ethics
PSY 366	Health Psychology
REL 367	Christian Ethics & Health Care Issues
SWK 330	Perspectives on Aging
SWK 331	Death, Dying and Suicide

<sup>1</sup> Additional courses may be approved by the Program Director.

- Bachelor of Science, Predentistry
- Bachelor of Science, Premedicine

**Bachelor of Science, Predentistry**

**First Year**

Fall	Hours Spring	Hours
ASI 150	1 BIO 152 & 152L	4
BIO 151 & 151L (Satisfies CAP Natural Science)	4 CHM 124 & 124L	4
CHM 123 & 123L (Satisfies CAP Natural Science)	4 MTH 149	3
MTH 148 (Satisfies CAP Mathematics)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
ENG 100 (CAP Writing Seminar)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3
REL 103, PHL 103, or HST 103 (CAP Humanities)	3	17

**Second Year**

Fall	Hours Spring	Hours
CHM 313 & 313L	4 CHM 314 & 314L	4
PHY 201 & 201L	4 PHY 202 & 202L	4
ENG 200 (CAP Writing Seminar)	3 Arts	3
CMM 100 (CAP Communication)	3 PHL 312, 315, REL 365, or REL 367 (Satisfies CAP Practical Ethical Action)	3
SSC 200 (CAP Social Science)	3 Social Science	3
	17	17

**Third Year**

Fall	Hours Spring	Hours
CHM 420	3 Science elective w/lab	4



CHM 462L	1 Science elective	3	
MTH 207, 367, or CPS 111	3 Adv REL or PHL (Satisfies CAP Faith Traditions)	3	
Science elective	3 Integrative	3	
Inquiry	3 Social Science	3	
General Elective	2		
	<b>15</b>	<b>16</b>	
<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	
Science elective w/lab	4 MED 480	1	
Diversity and Social Justice	3 Science elective	3	
Adv HST	3 English elective	3	
Social Science	3 General elective (optional)	3	
General elective (optional)	3 General elective (optional)	3	
	General elective (optional)	3	
	<b>16</b>	<b>16</b>	

Total credit hours: 132

## Bachelor of Science, Premedicine

<b>First Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	
ASI 150	1 BIO 152 & 152L	4	
BIO 151 & 151L (satisfies CAP Natural Science)	4 CHM 124 & 124L	4	
CHM 123 & 123L (satisfies CAP Natural Science)	4 MTH 149	3	
MTH 148 (satisfies CAP Mathematics)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3	
ENG 100 (CAP Writing Seminar)	3 REL 103, PHL 103, or HST 103 (CAP Humanities)	3	
REL 103, PHL 103, or HST 103 (CAP Humanities)	3		
	<b>18</b>	<b>17</b>	
<b>Second Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	
CHM 313 & 313L	4 CHM 314 & 314L	4	
PHY 201 & 201L	4 PHY 202 & 202L	4	
ENG 200 (CAP Writing Seminar)	3 Arts	3	
CMM 100 (CAP Communication)	3 PHL 312, 315, REL 365, or REL 367 (satisfies CAP Practical Ethical Action)	3	

SSC 200 (CAP Social Science)	3 Social Science	3	
	<b>17</b>	<b>17</b>	
<b>Third Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	
CHM 420	3 Science elective w/lab	4	
CHM 462L	1 Science elective	3	
MTH 207, 367, or CPS 111	3 Adv REL or PHL (Faith Traditions)	3	
Science elective	3 Integrative	3	
Inquiry	3 Social Science	3	
General elective	2		
	<b>15</b>	<b>16</b>	
<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	
Science elective w/lab	4 MED 480 (capstone)	1	
Diversity and Social Justice	3 Science elective	3	
Adv HST	3 English elective	3	
Social Science	3 General elective (optional)	3	
General elective (optional)	2 General Elective (optional)	3	
	General Elective (optional)	3	
	<b>15</b>	<b>16</b>	

Total credit hours: 131

## Courses

### MED 477. Honors Thesis Project. 3 Hours

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

### MED 478. Honors Thesis Project. 3 Hours

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

### MED 480. Pre-Medicine Capstone. 1 Hour

No description available.

# Psychology

## Majors:

- Bachelor of Arts, Psychology
- Bachelor of Science, Psychology

## Minor:

- Psychology

Psychology is the scientific study of behavior, and as such is a diverse field that touches all aspects of human endeavor.

The Department of Psychology offers a Bachelor of Arts (B.A.) and a Bachelor of Science (B.S.) in Psychology. The department encourages students who are interested in preparation for graduate school or a career in a particular area of psychology to consult with their faculty advisor as well as the University of Dayton's Psychology Department webpage for a listing of courses that would be recommended for preparation in that area. Some examples of such areas include clinical psychology, developmental psychology, cognitive psychology, and social psychology.

Each psychology major must complete: PSY 101, PSY 201, PSY 216, and PSY 217 early in his or her academic career. Specifically, PSY 101 is required prior to taking any other psychology course. Further, students can take no more than 6 credit hours prior to enrolling in PSY 216, and no more than 15 hours before enrolling in PSY 217. The remaining requirements are stated in the outline below. Exceptions to these requirements must be approved by the department chairperson.

Psychology majors are required to attain grades of C- or better in PSY 101, PSY 201, PSY 216, and PSY 217. Further, completion of PSY 101 and PSY 216 with a C- or better is required to transfer into the major. Students who do not earn a C- or better in PSY 216 after two attempts will be required to meet with the department chairperson.

Psychology majors are required to attain grades of C- or better in the following courses:

PSY 101	Introductory Psychology	3
PSY 201	Sophomore Seminar: Psychology as a Science and Profession	1
PSY 216	Elementary Statistics	3
PSY 217	Experimental Psychology	3

and any two courses from each of the two core groupings:

PSY 321	Cognitive Processes	3
PSY 322	Learning	3
PSY 323	Psychology of Perception	3
PSY 422	Physiological Psychology	3
PSY 341	Social Psychology	3
PSY 351	Child Psychology	3
PSY 361	Personality	3
PSY 363	Abnormal Psychology	3

If a C- or better is not attained, courses will have to be retaken if they are used to satisfy the psychology major.

A minor in psychology consists of eighteen semester hours, including PSY 101, one course from each of the core groupings, and three electives.

## Faculty

Keri Brown Kirschman, Chairperson

Professors Emeriti: Allik, Bauer, Biers, Butter, DaPolito, Eggemeier, Korte, Kuntz, Moroney, Polzella

Professors: Reeb, Zois

Associate Professors: Crutcher, Dixon, Elvers, Katsuyama, Kirschman, Montoya, Roecker Phelps

Assistant Professors: Burmeister, Butler, Davis, Fuhs, Goodnight, Kunz, O'Mara, Walsh-Messinger

Visiting Assistant Professor: Berry

Lecturers: Engle, Farnsworth, Layman-Guadalupe, Rodriguez

## Bachelor of Arts, Psychology (PSY) minimum 124 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

<sup>1</sup> Completed with ASI 110 and ASI 120.

<sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.

<sup>3</sup> Completed with ENG 200H or ASI 120.

<sup>4</sup> Must include two different disciplines and accompanying lab.

### Liberal Studies Curriculum

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics (Satisfies CAP Mathematics)	6-8
Select one mathematics sequence from:	

MTH 116 & MTH 137	Precalculus Math and Calculus I with Review	
MTH 128 & MTH 129	Finite Mathematics and Calculus for Business	
MTH 148 & MTH 149	Introductory Calculus I and Introductory Calculus II	
MTH 168 & MTH 169	Analytic Geometry & Calculus I and Analytic Geometry & Calculus II	
Natural Sciences (Satisfies CAP Natural Sciences)		11
BIO 151	Concepts of Biology I: Cell & Molecular Biology	
BIO 151L	Concepts of Biology Laboratory I: Cell & Molecular Biology	
BIO 152	Concepts of Biology II: Evolution & Ecology	
BIO 152L	Concepts of Biology Laboratory II: Evolution & Ecology	
CAP Natural Science lecture (specified for science majors, excluding BIO)		
Social Sciences, excluding PSY courses (Includes CAP Social Science)		12
<b>Major Requirements</b>		37
PSY 101	Introductory Psychology	3
PSY 201	Sophomore Seminar: Psychology as a Science and Profession	1
PSY 216	Elementary Statistics	3
PSY 217	Research Methods	3
Select two courses from:		6
PSY 321	Cognition	
PSY 322	Learning	
PSY 323	Psychology of Perception	
PSY 422	Biopsychology	
Select two courses from:		6
PSY 341	Social Psychology	
PSY 351	Child Psychology	
PSY 361	Personality	
PSY 363	Abnormal Psychology	
Select one course from: (Satisfies CAP Major Capstone)		3
PSY 471	History of Psychology	
PSY 480	Senior Seminar in Psychology	
PSY 478	Honors Thesis Project	
PSY 499	Independent Research Capstone	
PSY courses (300/400 level) <sup>1, 2</sup>		12-24
<b>Breadth</b>		
ASI 150	Introduction to the University Experience	1
Total Hours to total at least		124

<sup>1</sup> No more than a total of six hours of PSY 352, PSY 477, PSY 490, PSY 493, PSY 494 and/or PSY 497 may count toward the thirty-seven semester hours required in PSY for the major.

<sup>2</sup> May include CAP Components.

## Bachelor of Science, Psychology (PSY) minimum 120 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>		12
HST 103	West and the World	
REL 103	Introduction to Religious and Theological Studies	
PHL 103	Intro To Philosophy	
ENG 100	Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
SSC 200	Social Science Integrated	
Arts		3
Natural Sciences <sup>4</sup>		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable credit
Philosophy and/or Religious Studies		
Historical Studies		
Diversity and Social Justice		3
Major Capstone		0-3

<sup>1</sup> Completed with ASI 110 and ASI 120.

<sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.

<sup>3</sup> Completed with ENG 200H or ASI 120.

<sup>4</sup> Must include two different disciplines and accompanying lab.

### Science Breadth Requirements

Satisfies CAP Mathematics and CAP Natural Science

Mathematics <sup>1</sup> 6-8

Select one mathematics sequence from:

MTH 137 & MTH 138	Calculus I with Review and Calculus I with Review	
MTH 148 & MTH 149	Introductory Calculus I and Introductory Calculus II	
MTH 168 & MTH 169	Analytic Geometry & Calculus I and Analytic Geometry & Calculus II	
Natural Sciences <sup>2</sup>		17

**Major Requirements** 37

PSY 101	Introductory Psychology	3
PSY 201	Sophomore Seminar: Psychology as a Science and Profession	1
PSY 216	Elementary Statistics	3

PSY 217	Research Methods	3
Select two courses from:		6
PSY 321	Cognition	
PSY 322	Learning	
PSY 323	Psychology of Perception	
PSY 422	Biopsychology	
Select two courses from:		6
PSY 341	Social Psychology	
PSY 351	Child Psychology	
PSY 361	Personality	
PSY 363	Abnormal Psychology	
Select one course from: (Satisfies CAP Major Capstone)		3
PSY 471	History of Psychology	
PSY 480	Senior Seminar in Psychology	
PSY 478	Honors Thesis Project	
PSY 499	Independent Research Capstone	

PSY courses (300/400 level) <sup>3</sup> 12-24

**Breadth**

ASI 150	Introduction to the University Experience	1
Social and Behavioral Science, excluding PSY courses (Includes CAP Social Science)		12
Total Hours to total at least		120

- The Mathematics requirement may also be satisfied by taking MTH 207 and one calculus course: MTH 137, or MTH 148, or MTH 168.
- Bio 151 and Bio 152 with accompanying labs are required. The remaining 9 hours may be fulfilled by courses in BIO, CHM, GEO, PHY, and CPS courses as well as by MTH courses beyond the departmental MTH requirement.
- No more than a total of six hours of PSY 352, PSY 477, PSY 490, PSY 493, PSY 494 and/or PSY 497 may count toward the thirty-seven semester hours required in PSY for the major.

**Minor in Psychology (PSY)**

**Psychology**

PSY 101	Introductory Psychology	3
Select one course from:		3
PSY 321	Cognition	
PSY 322	Learning	
PSY 323	Psychology of Perception	
PSY 422	Biopsychology	
Select one course from:		3
PSY 341	Social Psychology	
PSY 351	Child Psychology	
PSY 361	Personality	
PSY 363	Abnormal Psychology	
Select three PSY courses (300/400 level) <sup>1</sup>		9
Total Hours		18

<sup>1</sup> Only three semester hours of PSY 352, PSY 490, PSY 493, PSY 494, and/or PSY 497 may count toward the minor.

- Bachelor of Arts, Psychology
- Bachelor of Science, Psychology

**Bachelor of Arts, Psychology**

First Year		Hours Spring	Hours
<b>Fall</b>			
ASI 150		1 PSY 216	3
PSY 101		3 ENG 100 (CAP Writing Seminar)	3
MTH 207		3 REL 103 (CAP Humanities)	3
BIO 151 & 151L		4 BIO 152 & 152L	4
Language 101		4 Language 141	4
		<b>15</b>	<b>17</b>
<b>Second Year</b>			
<b>Fall</b>		<b>Hours Spring</b>	<b>Hours</b>
HST 103 (CAP Humanities)		3 PSY 341, 351, 361, or 363	3
PSY 217		3 PHL 103	3
Language 201 in contextual course		3 CMM 100 (CAP Communication)	3
MTH 137, 148, or 168		3-4 SSC 200 (CAP Social Science)	3
ENG 200		3 Science course	3
PSY Sophomore Seminar		1	
		<b>16-17</b>	<b>15</b>
<b>Third Year</b>			
<b>Fall</b>		<b>Hours Spring</b>	<b>Hours</b>
PSY 341, 351, 361, or 363		3 Literature course	3
PSY 321, 322, 323, or 422		3 PSY 321, 322, 323, or 422	3
Social Science (Intro Level)		3 PSY at 300 or 400 level	3
Arts		3 Advanced REL or PHL	3
Faith Tradition		3 Advanced HST	3
		PSY mini course	1
		<b>15</b>	<b>16</b>
<b>Fourth Year</b>			
<b>Fall</b>		<b>Hours Spring</b>	<b>Hours</b>
PSY at 300 or 400 level		3 PSY Capstone	3
PSY at 300 or 400 level		3 Inquiry	3
Social Science (Intro Level)		3 Diversity and Social Justice	3
Integrative		3 PSY at 300 or 400 level	3
Practical Ethical Adv PHL or REL		3 Social Science at 300 or 400 level	3
		<b>15</b>	<b>15</b>

Total credit hours: 124-125

## Bachelor of Science, Psychology

### First Year

Fall	Hours	Spring	Hours
ASI 150	1	MTH 149	3
BIO 151 & 151L	4	BIO 152 & 152L	4
MTH 148	3	PSY 216	3
ENG 100 (CAP writing seminar)	3	REL 103 (CAP humanities)	3
HST 103 (CAP Humanities)	3	PHL 103 (CAP humanities)	3
PSY 101	3		
	<b>17</b>		<b>16</b>

### Second Year

Fall	Hours	Spring	Hours
Natural Science elective	3	Natural Science elective	3
PSY 217	3	PSY 321, 322, 323, or 422	3
PSY 341, 351, 361, or 363	3	PSY 341, 351, 361, or 363	3
ENG 200 (CAP Writing Seminar)	3	SSC 200 (CAP Social Science)	3
CMM 100 (CAP Communication)	3	Arts Study	3
PSY Sophomore seminar	1		
	<b>16</b>		<b>15</b>

### Third Year

Fall	Hours	Spring	Hours
Natural Science elective	3	PSY at 300 or 400 level	3
PSY 321, 322, 323, or 422	3	PSY at 300 or 400 level	3
Faith Tradition or Adv REL	3	Inquiry	3
Practical Ethical Action	3	Adv REL or PHL	3
Social Science	3	Adv HST	3
	<b>15</b>		<b>15</b>

### Fourth Year

Fall	Hours	Spring	Hours
PSY Capstone	3	General elective	3
PSY at 300 or 400 level	3	PSY at 300 or 400 level	3
Social Science	3	Diversity and Social Justice	3
Integrative	3	General elective	3
General elective	3	Social Science	3
	<b>15</b>		<b>15</b>

Total credit hours: 124

## Courses

### PSY 101. Introductory Psychology. 3 Hours

Study of human behavior including development, motivation, emotion, personality, learning, perception; general application of psychological principles to personal, social, and industrial problems. Students must participate in departmental research.

### PSY 201. Sophomore Seminar: Psychology as a Science and Profession. 1 Hour

Introduction to the science and profession of psychology including the nature and breadth of psychological study and career exploration. Prerequisite(s): PSY 101.

### PSY 216. Elementary Statistics. 3 Hours

Basic probability and applied statistics: measures of central tendency and dispersion, sampling, estimation, hypothesis testing, tests between means, linear regression, correlation, and ANOVA. Prerequisite(s): MTH 102 or higher; PSY 101.

### PSY 217. Experimental Psychology. 3 Hours

Basic concepts of scientific methods as applied to psychological problems. Experiments to familiarize students with application of scientific methodology to study of human psychological processes. Required of all psychology majors. Prerequisite(s): PSY 101, PSY 216.

### PSY 251. Human Growth & Development. 3 Hours

Focuses on stages of human development from infancy through the aging adult. Emphasis is on various theoretical approaches and the development associated with each stage. Psychology majors may not take for credit toward major. Prerequisite(s): PSY 101.

### PSY 317. Advanced Research Methods. 3 Hours

Advanced application of statistical and research methods learned in PSY 216 and PSY 217 to the design, analysis, and write-up of an original empirical study. Research area will vary according to instructor expertise. Prerequisite(s): PSY 217.

### PSY 321. Cognitive Processes. 3 Hours

Information-processing approach to attention, perception, memory, imagery, and thought. Theoretical structures including neuron modeling of higher cognitive and experimental processes. Prerequisite(s): PSY 101.

### PSY 321L. Cognitive Processes Laboratory. 1 Hour

In-depth discussion of seminal research in cognition. Collection, analysis, and interpretation of data. Prerequisite(s): (PSY 101, PSY 216, PSY 217, PSY 321) or permission of instructor.

### PSY 322. Learning. 3 Hours

Foundations of the learning process. Classical and instrumental paradigms and variants of each considered in preparation for investigations of complex learning. Prerequisite(s): PSY 101.

### PSY 323. Psychology of Perception. 3 Hours

Introduction to major theoretical and experimental work in perception, including visual, auditory, proprioceptive, and other sensory systems. Prerequisite(s): PSY 101.

### PSY 333. Psychological Tests & Measurements. 3 Hours

Survey of major tests of intelligence, aptitude, interest, and personality presently used in clinics, schools, personnel offices, and research settings. Emphasis on evaluation and comparison, rationale of construction, ethical considerations. Prerequisite(s): (PSY 101, PSY 216) or equivalent.



**PSY 334. Industrial Psychology. 3 Hours**

Introduction to modern efforts to improve human performance in industrial organizations and society; selection and placement of employees, morale, training, and incentives. Prerequisite(s): PSY 101.

**PSY 341. Social Psychology. 3 Hours**

Survey of major theoretical and experimental work in the field; attitudes, conformity, emotions, group dynamics.

**PSY 344. Interpersonal Relationships. 3 Hours**

Social psychological research in nonverbal behavior, social exchange, self-disclosure, and interpersonal attraction and how these are related to developing relationships. Prerequisite(s): PSY 101.

**PSY 351. Child Psychology. 3 Hours**

Study of psychological processes from the developmental point of view; changes in perception, cognition, emotion, and social behavior from infancy to adolescence. Prerequisite(s): PSY 101.

**PSY 352. Field Experience in Child Psychology. 1 Hour**

Practical experience with a community agency providing instructional, recreational, or therapeutic services. Volunteer four to five hours weekly. Prerequisite(s): PSY 101; PSY 351 (may be taken as a corequisite).

**PSY 353. The Psychology of Adult Development & Aging. 3 Hours**

Provides a general introduction to the multi-disciplinary field of adulthood and aging with a specific focus on aspects of interest to psychologists: cognitive, intellectual, personality, and biological changes across adult development. Prerequisite(s): PSY 101.

**PSY 355. Developmental Psychopathology. 3 Hours**

Survey of developmental theory and research related to the psychopathology of infants, children, and adolescents. Focus is on etiology, identification, and intervention. Prerequisite(s): (PSY 101, PSY 351) or permission of instructor.

**PSY 361. Personality. 3 Hours**

Introduction to the study of personality through analysis of such major theories as those of Freud, Skinner, Maslow, and Rogers. The development of personality and the stability of personality characteristics over time. Review of clinical and experimental findings. Prerequisite(s): PSY 101.

**PSY 363. Abnormal Psychology. 3 Hours**

Patterns of disordered behavior; social, psychological, and physiological factors; theoretical explanations of abnormal behavior. Prerequisite(s): PSY 101.

**PSY 364. Psychotherapy. 3 Hours**

Survey of current types of psychotherapy. Emphasis on similarities and differences in underlying theories of behavioral change and associated techniques. Prerequisite(s): PSY 101.

**PSY 366. Health Psychology. 3 Hours**

Explores psychological research, theory, and techniques in health-related areas, such as health promotion, the identification of contributors to illness, illness prevention, stress and coping, stress management, changing health beliefs and behavior, pain and its management, and the management of chronic and terminal illnesses.

**PSY 368. Community Psychology. 3 Hours**

The application of psychological principles to the understanding and prevention of prevalent community problems including teen pregnancy, school violence, mental illness, substance abuse, homelessness and poverty. Prerequisite(s): PSY 101.

**PSY 375. Psychology of the Arts. 3 Hours**

Explores the psychological experiences associated with the creation and appreciation of music, art, and literature. Course content is presented in terms of the theories, methods, and research findings in the fields of perception, cognition, and development.

**PSY 410. Questionnaire Design. 3 Hours**

Students will learn about critical issues in questionnaire design and use, the advantages/disadvantages of questionnaires, types of questionnaires, questionnaire development strategies, scale selection, and how to evaluate questionnaires. Students will develop, test and evaluate a questionnaire in a domain of interest to them. Depending on the size of the effort, students may work in teams.

**PSY 422. Physiological Psychology. 3 Hours**

Neurophysiological analysis of attention, sensation, perception, emotion, motivation, and learning. Electrophysiological methods are discussed. Prerequisite(s): PSY 101.

**PSY 431. Interviewing & Counseling. 3 Hours**

Integrated approach to the theory, techniques, skills, and values of interviewing and counseling. Practice through written assignments, self study, classroom exercises, and role-playing. Prerequisite(s): PSY 101.

**PSY 435. Human Factors. 3 Hours**

Students learn methods to improve the interface between humans and their environment. Human characteristics are studied to determine the best way to design the task, product, workstation, or other environmental features to accommodate the human. Students in the School of Engineering must have junior or senior status.

**PSY 443. Psychology of Women. 3 Hours**

Survey of topics related to the psychology of women, such as gender identity and roles, theories of female development, relationships, achievement, language, health issues, spirituality, sexuality, and violence. Prerequisite(s): PSY 101.

**PSY 444. Environmental Psychology. 3 Hours**

Study of the effects of the physical and social environment on human behaviors, attitudes, and affective responses. Prerequisite(s): (PSY 101, PSY 341) or permission of instructor.

**PSY 445. Technology, Environment & Behavior. 3 Hours**

Examines the cultural bases for the individual and societal choices which humans make about their use of technology. Technology is broadly defined to include human-machine systems.

**PSY 450. Psychology for Ministry. 3 Hours**

Human development and adjustment, interpersonal communication, and the psychology of religion. Prerequisite(s): Acceptance into the Lay Ministry Program or permission of instructor.

**PSY 451. Psychology of Religion. 3 Hours**

Addresses the psychological study of the nature of religion and religious experience; explores the development of internalized beliefs, attitudes, and values and the effect they have on individual functioning. An introductory course in psychology is highly recommended. Prerequisite(s): Junior or senior standing.

**PSY 452. Cognitive Development in Children. 3 Hours**

Major approaches to the study of cognitive development; attentional and mediational development in children's learning, memory, and problem solving; language development and Piaget's theory. Prerequisite(s): (PSY 101, PSY 351) or permission of instructor.

**PSY 457. Television & Its Effects on Children. 3 Hours**

Readings in psychological research on the broad effects of television on children. Emphasis on analyzing and evaluating the research. Prerequisite(s): PSY 101.

**PSY 461. Current Implications of Drug Dependency. 3 Hours**

Survey of effects, symptoms, treatment, causalities, and myths associated with drug use and abuse. Emphasis on existing treatment methods and psychological implications of drug dependency. Prerequisite(s): PSY 101.

**PSY 462. Human Sexuality. 3 Hours**

Psychological factors in human sexuality including developmental, biological, and social perspectives. Such topics as sexual orientation, gender identity and roles, sexual relationships, sexual dysfunction, power and violence, and commercialization.

**PSY 471. History of Psychology. 3 Hours**

The evolution of psychology from its origins in philosophy, science, clinical, and applied settings. Emphasis on integrating these systems and schools of thought with modern psychology. Prerequisite(s): PSY 101 or permission of instructor.

**PSY 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**PSY 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**PSY 480. Senior Seminar in Psychology. 3 Hours**

Advanced exploration of the meaning of scholarship to the vocation of psychology. Students will engage in critical review of readings in psychology and develop a scholarly project consistent with discipline standards and suited to the professional goals of the student. Prerequisite(s): PSY 217.

**PSY 490. Internship in Psychology. 1-6 Hours**

Supervised experience arranged on an individual basis in appropriate settings. For junior or senior psychology majors who have completed prescribed course work only. Consult internship director for details. May be repeated up to six semester hours. Grade Option Two only.

**PSY 493. Independent Study. 1-6 Hours**

Problems of special interest investigated under faculty direction. Area and criteria for evaluation to be specified prior to registration. May be repeated up to six semester hours. Prerequisite(s): Permission of instructor.

**PSY 494. Readings in Psychology. 1-6 Hours**

Directed reading in a specific area of interest, under faculty supervision. Topic and criteria for evaluation to be specified prior to registration. May be repeated up to six semester hours. Prerequisite(s): Permission of instructor.

**PSY 495. Special Topics in Psychology. 1-3 Hours**

Topics of special interest to faculty and students; intensive critical evaluation of appropriate literature. Prerequisite(s): Permission of instructor.

**PSY 497. Service Learning Experience. 1 Hour**

Supervised community research or service experience that complements a specific upper division course in Psychology. Repeatable up to three semester hours. Corequisite(s): A 300-400 level Psychology course.

**PSY 499. Independent Research Seminar Capstone. 3 Hours**

Project and presentation of special interest investigated under faculty direction.

## Religious Studies

Major:

- Bachelor of Arts, Religious Studies

Minors:

- Religious Studies
- Religious Studies- Catechesis

The Department of Religious Studies sees itself as a community of scholars serving the University community and the local community by teaching, research, criticism, and action. The main concern of the department is an understanding and elucidation of the Judaeo-Christian religious experience as it is exemplified in the Roman Catholic tradition. This implies not only a deep investigation of the Roman Catholic position but also a dialogue with other Christian traditions and with other world religions.

Students majoring in religious studies ordinarily follow one of five tracks in the major:

- Students preparing for ministry in a Christian church (e.g., pastoral associates, youth ministry, parish religious educators) follow the "Ministry" track.
- Students preparing to teach religion in elementary or secondary schools follow the "Catholic Schools" track.
- Students preparing for graduate study in Christian theology, systematics, church history, ethics, etc., follow the "Graduate School Preparation" track.
- Students preparing for graduate study of religions other than Christianity and/or interested in world religions follow the "World Religions" track.
- Students wishing to study religion as a way of broadening their horizons or who are interested in religious studies as an undergraduate major follow the "General" track.

All religious studies majors must show basic practical communicative proficiency in one foreign language.

A minor in religious studies consists of 18 semester hours, which includes REL 103 or REL 198 or ASI 110. At least three semester hours are to be at the 400-level.

A minor in Catechesis consists of 19 semester hours, not including REL 103 or REL 198 or ASI 110.

### Faculty

Daniel Speed Thompson, Chairperson

Professors Emeriti: Anderson, Buby, Burns, Friedland, Hater, L'Heureux, Martin, Roberts, Thimmes

Professors: Barnes, Branick, Doyle, Groppe, Inglis (Philosophy), Kallenberg, Miller, Portier, Trollinger (History), Zukowski  
 Associate Professors: Bennett, Bunta, Johnson, Johnston, Kozar, Moore, Orji, Smith, Thompson, Yocum  
 Assistant Professors: DeAnda, Henning, Salih  
 Lecturer: Ryan

## Bachelor of Arts, Religious Studies (REL) minimum 124 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- Completed with ASI 110 and ASI 120.
- Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- Completed with ENG 200H or ASI 120.
- Must include two different disciplines and accompanying lab.

### Liberal Studies Curriculum

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12
<b>Major Requirements</b> <sup>1, 2, 3</sup>	36
REL 103 Introduction to Religious and Theological Studies	3-7

or ASI 110	The Roots and Development of Western Culture in a Global Context	
REL 490	Capstone Seminar (Satisfies CAP Major Capstone)	3

### Select one track from:

<b>Ministry</b>		30
REL 315	The Gospels	
REL 323	History of Christianity I	
or REL 324	History of Christianity II	
REL 360	Christian Ethics	
REL 437	Significance of Jesus	
REL 440	The Church	
REL 443	The Sacraments	
REL 485	Lay Ministry	

Select one course in each: Old Testament, world religions, religion and culture

### Catholic Schools 30

REL 323	History of Christianity I	
or REL 324	History of Christianity II	
REL 327	United States Religious Experience	
or REL 328	United States Catholic Experience	
or REL 329	African-American Religion	
REL 360	Christian Ethics	
REL 383	Philosophy of Religious Education	
or REL 487	Religious Education- Theory & Practice	

Select one course in each: Old Testament, New Testament, world religions, religion and culture; two courses in systematic theology

### Graduate School Preparation 30

REL 323	History of Christianity I	
REL 324	History of Christianity II	
REL 437	Significance of Jesus	
REL 440	The Church	
or REL 443	The Sacraments	

Select one course in each: Old Testament, New Testament, ethics, world religions, religion and culture, systematic theology

### World Religions 30

REL 323	History of Christianity I	
or REL 324	History of Christianity II	
Select three courses from:		
REL 304	Hinduism	
REL 305	Eastern Orthodoxy	
REL 306	Buddhism	
REL 307	Judaism	
REL 308	Islam	

Select one course in each: Old Testament, New Testament, ethics, systematic theology, religion and culture

REL elective

### General 30

Select one course in each: Old Testament, New Testament, world religions, church history, systematic theology, ethics, religion and culture

REL elective

**Breadth**

ASI 150	Introduction to the University Experience	1
Total Hours to total at least		124

- 1 Includes CAP Components.
- 2 Six semester hours in addition to REL 490 must be at the 400-level.
- 3 REL courses are not applicable to CAP Advanced Studies.

**Minor in Religious Studies (REL)**

**Religious Studies**

Select eighteen REL semester hours <sup>1</sup>	18
Total Hours	18

- 1 At least three semester hours at the 400 level.

**Minor in Religious Studies-Catechesis (CTE)**

The Minor in Religious Studies - Catechesis (CTE) offers students an excellent opportunity to prepare to teach religion (catechesis) in Catholic schools, or parish ministry today. The minor is grounded in the official principles of catechesis required by the United States Conference of Catholic Bishops. The minor incorporates the basic courses required by most dioceses across the country for achieving diocesan certification in content, methodology, and praxis experiences. It is open to all students who desire to engage in a religion teaching ministry either on a full-time professional or a volunteer basis following graduation.

**Religious Studies - Catechesis <sup>1</sup>**

REL 328	United States Catholic Experience <sup>2</sup>	3
Forum for Young Catechetical Leaders		4
REL 281	Forum for Catechetical Leaders I	
REL 282	Forum for Catechetical Leaders II	
REL 283	Forum for Catechetical Leaders III	
REL 284	Forum for Catechetical Leaders IV	
Select one Liturgy course from:		3
REL 356	The Christian Tradition of Prayer	
REL 383	Philosophy of Religious Education	
REL 443	The Sacraments	
REL 446	Christian Liturgy	
REL 488	Spirituality & Religious Education	
Select one Scripture course from:		3
REL 310	The Pentateuch	
REL 311	The Prophets	
REL 315	The Gospels	
REL 318	Studies in Paul	
Select one Morality or Ethics course from:		3
REL 360	Christian Ethics	
REL 363	Faith & Justice	
REL 364	Current Moral Issues	
Select one Ecclesiology or Church History course from:		3
REL 323	History of Christianity I	
REL 324	History of Christianity II	
REL 440	The Church	
Total Hours		19

- 1 These hours are in addition to REL 103 (or REL 198 or ASI 110), which is usually taken in the student's first year.
- 2 Or equivalent.

**First Year**

Fall	Hours	Spring	Hours
ASI 150		1 ASI 120	8
ASI 110		7 Language 141	4
CMM 100 (CAP Communication)		3 MTH (CAP Mathematics)	3
Language 101		4	
		<b>15</b>	<b>15</b>

**Second Year**

Fall	Hours	Spring	Hours
SSC 200 (CAP Social Science)		3 CAP Arts	3
INSS (CAP Natural Science)		4 INSS (CAP Natural Science)	4
Literature		3 REL Major elective	3
Language 201 or contextual course		3 REL Major elective	3
REL Major Elective		3 Social Science	3
		<b>16</b>	<b>16</b>

**Third Year**

Fall	Hours	Spring	Hours
Creative & Performing Arts		3 Adv HST	3
INSS (CAP Inquiry)		3 Adv PHL	3
REL Major		3 REL Major	3
REL Major (CAP Faith Trad)		3 REL Major	3
Social Science		3 Social Science	3
		<b>15</b>	<b>15</b>

**Fourth Year**

Fall	Hours	Spring	Hours
Adv PHL (CAP Practical Ethical Action)		3 Diversity and Social Justice	3
CAP Integrative		3 REL Major	3
REL Major		3 REL 490	3
REL Major		3 General elective	3
General elective		3 General elective	3
General elective		2	
		<b>17</b>	<b>15</b>

Total credit hours: 124

**Courses**

**REL 103. Introduction to Religious and Theological Studies. 3 Hours**

This course introduces students to two academic disciplines: the study of religions as historical and embodied realities, and theology as faith seeking understanding. By learning about these two disciplines, students will gain a critical self-awareness of the ways in which the modern context shapes their engagement with religion. The course emphasizes learning how to read Scripture and other primary religious sources, and to learning how the Catholic intellectual tradition addresses the question of God, the meaning of human life, and the significance of human diversity.

**REL 198. Religious Studies Scholars' Seminar. 3 Hours**

Study and seminar discussion of major types of religions in history and some of their practices, values, beliefs, historical development, and theological reflection, including Catholic tradition; review of major theories on the nature, origin, and function of religion in human life. Open by permission only to first-year students in the Berry Scholars Program.

**REL 210. Introduction to Scripture. 1 Hour**

An introductory overview of Christian scripture that is foundational for Old and New Testament online courses.

**REL 211. Introduction to the Old Testament. 1 Hour**

Study of contemporary Old Testament studies to learn how to read a biblical text in terms of its literary qualities and cultural influences on interpretations.

**REL 212. Introduction to the New Testament. 1 Hour**

Introduction to the New Testament with a focus on the text's cultural contexts, literary composition, theological themes, and pastoral applications.

**REL 214. Magic, Medicine, or Miracles: Disability in the Ancient World, the Bible, and Today. 3 Hours**

Exploration of ancient attitudes towards sickness and healing including the practices observed in Greek and Roman medical authors, ancient inscriptions, the Bible, and other ancient Jewish and Early Christian texts. Study of these ancient perspectives in relation to contemporary attitudes toward disability. Prerequisite(s): (ASI 110 or ASI 120 or equivalent) or (REL 103 or REL 198).

**REL 260A. Catholic Social Teaching I. 1 Hour**

The first of two courses that provide background on Catholic social teaching as articulated in the Catechism of the Catholic Church and Episcopal documents.

**REL 260B. Catholic Social Teaching II. 1 Hour**

The second of two courses that provide background on Catholic social teaching as articulated in the Catechism of the Catholic Church and Episcopal documents. Prerequisite(s): REL 260A.

**REL 281. Forum for Catechetical Leaders I. 1 Hour**

Study of key themes of The National Directory for Catechesis regarding 'The Tasks of Catechesis and Faith Formation'. Themes include (a) Introduction to the Catechetical Ministry of the Church, (b) The Vocation of the Catechist, (c) Faith Formation, and (d) Fundamentals for Designing Catechetical Plans. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 282. Forum for Catechetical Leaders II. 1 Hour**

Study of key themes of The National Directory for Catechesis regarding 'The Art of Communicating Faith: Scripture and Tradition'. Themes include (a) Effective Catechesis, (b) Four Pillars of Our Catholic Faith, (c) Integrating Scripture in Catechetical Ministry, and (d) Integrating Liturgy and Liturgical Experiences in Catechetical Ministry. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 283. Forum for Catechetical Leaders III. 1 Hour**

Study of key themes of The National Directory for Catechesis regarding 'Liturgy, Popular Devotions, Literature and the Religious Imagination'. Themes include (a) Storytelling, (b) Popular Devotions and Faith Experiences, (c) Role of Mary in Catechesis, and (d) Diverse Religious Traditions and the Quest for God. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 284. Forum for Catechetical Leaders IV. 1 Hour**

Study of key themes of The National Directory for Catechesis regarding: 'Discipleship (Catholic Moral Life), Catholic Social Teachings and Catechetical Planning'. Themes include (a) Developing a Pastoral Catechetical Plan, (b) Call and Challenge of Discipleship, (c) Catholic Social Teachings, and (d) Communications Technology and Catechesis. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 300. Rel of the East. 3 Hours**

Course description is currently unavailable.

**REL 304. Hinduism. 3 Hours**

Study of the world's oldest living religion. Examines the historical development of major Hindu teachings, texts, practices and paths from ancient times to present, including forms of Hinduism taking root in the West today. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 305. Eastern Orthodoxy. 3 Hours**

Exploration of the history and theology of the Eastern Orthodox Church, from the Apostles to Byzantium to Russia and the United States. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 306. Buddhism. 3 Hours**

Exploration of the 2,500-year-old Buddhist tradition - the life of its founder, development of its teachings, rituals, and meditation techniques. Survey of the spread of Buddhism to the West in the twentieth century. Parallels and contrasts with the Christian tradition. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 307. Judaism. 3 Hours**

Basic introduction to Judaism: its history, its faith, its worship. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 308. Islam. 3 Hours**

Exploration of the Islamic religious traditions: the life of Islam's founder, the development of its teaching and ritual, its spread from North Africa into Europe, Asia, Oceania, its influence on culture and its contemporary resurgence. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 309. Afro-Latin Religions. 3 Hours**

The study of Voodoo, Santeria and other religions which arose when the religious traditions of West Africa were transplanted to the Americas and the Caribbean where practitioners encountered Christianity. These religions' historical and contemporary forms as well as issues of syncretism and church-state relations are considered. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 310. The Pentateuch. 3 Hours**

Examination of the first five books of the Hebrew Bible, known as the Torah or Pentateuch, emphasizing the traditions that relate primeval beginnings, ancestral history, the exodus, wilderness wanderings, and the legal codes. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 311. The Prophets. 3 Hours**

The prophetic texts of the Old Testament studied as reformulations of ancient religious traditions to meet new historical situations. The relevance of the prophets to contemporary life and throughout. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 312. The Psalms & the Wisdom Literature. 3 Hours**

Critical examination of the biblical books of Psalms, Proverbs, Job, Ecclesiastes, and Ben Sira and of related literature within the historical context in which they arose. The contemporary relevance of this literature. Prerequisite(s): REL 103 or ASI 110 or equivalent.



**REL 315. The Gospels. 3 Hours**

With the Gospel of Mark as a point of departure, comparison of the Markan, Matthean, and Lukan narratives for an understanding of the various conceptions of Jesus found in these Gospels. The course includes historical-critical study of the Gospel to John, its text, literary techniques, structure and theology. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 316. New Testament Theologies. 3 Hours**

Survey of New Testament writings with a focus on the religious ideas specific to each; special attention to authors' christology, eschatology, and soteriology; exploration of relevance of the New Testament message to Christian faith today. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 318. Studies in Paul. 3 Hours**

Detailed examination of the letters of Paul, stressing the historical circumstances affecting their composition as well as the main religious ideas of Paul that govern their content. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 319. The Book of Revelation. 3 Hours**

Detailed critical analysis of various biblical apocalyptic texts as found in Judaism and early Christianity. Focus on the Book of Revelation against the background of other biblical and intertestamental apocalyptic texts. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 323. History of Christianity I. 3 Hours**

Study of important events movements, ideas, and people in the development of Christianity to the year 1100 including the formation of the Canon, early Church councils, Augustine, Gregory the Great, monasticism, the rise of Islam, Eucharistic and other controversies, and the Gregorian Reform. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 324. History of Christianity II. 3 Hours**

Study of important events, movements, ideas, and people in the development of Christianity from 1100 to the present, including the separation of the Churches of the East and West, rise of the mendicant orders, Scholasticism, key themes and figures of the Reformation, Vatican I, Modernist crisis, ecumenism, and Vatican II. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 326. Protestant Christianity. 3 Hours**

Survey of the development of Protestant thought from the Reformation. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 327. United States Religious Experience. 3 Hours**

Study of a variety of religious traditions in their engagement with and influence within the U.S. social and cultural context including the effects of pluralism, religious liberty, secularization, and consumer capitalism. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 328. United States Catholic Experience. 3 Hours**

The growth and development of Catholic christianity in the U.S.; its interaction with America, its culture, and its people. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 329. African-American Religion. 3 Hours**

An exploration of the history and theology of African-American religious traditions and how African-American religion has influenced African-American social, political, economic, and cultural movements from the time of slavery to the present. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 330. Faith of Immigrants. 3 Hours**

This course will examine the faith traditions of all those people who came to the united States, either voluntarily or involuntarily, and the changes that they made upon those who were there before them, the changes in their own faith, and the effect upon other faith traditions. Prerequisites: REL 103 or ASI 110 or equivalent.

**REL 344. Christian Marriage. 3 Hours**

Analysis of the sanctifying dignity of Christian marriage as a sacrament and commitment to share in the divine creative plan. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 352. Understanding Sacred Music in Worship in the Local Church. 3 Hours**

Focus on the important relationship between music and worship in the life of the church with an emphasis on major contemporary trends in sacred music and work. An historical overview of music and worship with biblical foundations for both are provided. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 356. The Christian Tradition of Prayer. 3 Hours**

Study of several types and forms of Christian prayer from various periods in Church history. The meaning of the act of faith expressed in prayer and its relationship to belief. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 358. Liberation Theology. 3 Hours**

Historical-critical analysis and study of the theology of liberation and its specific expression among theologians of the Third World, particularly Latin America. Prerequisite(s): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

**REL 360. Christian Ethics. 3 Hours**

Introduction to the reflection upon Christian morality; discussion of various approaches in Christian ethics, the elements of ethical judgments, and some specific ethical issues. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 362. Christian Family Values & Television. 3 Hours**

Comparative study of the criteria and rationale for family life in various Christian pronouncements with present values and practices in society as reflected in and promoted by current television programming. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 363. Faith & Justice. 3 Hours**

This course explores the history, development, and basic principles of Catholic social teaching as well as other approaches to faith and justice. Issues of economic justice will receive special emphasis. In addition to church documents, the life and work of religious thinkers and activists will be examined. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 364. Current Moral Issues. 3 Hours**

An examination of one or more issues (individual and/or social) in contemporary reflection on Christian moral life. May be repeated when topic changes. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 365. Christian Ethics & the Environment. 3 Hours**

Christian ethic of relationality and responsibility. Explores various approaches and related values found in society; elements of ethical judgments; and specific ethical issues resulting from ecofeminist, technological, and ecological awareness. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 366. The Holocaust: Theological & Religious Responses. 3 Hours**

Examination of the religious and theological literature of the Holocaust, focusing especially on Jewish and Christian responses. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 367. Christian Ethics & Health Care Issues. 3 Hours**

Study of, and reflection upon, the principles of Christian ethics as these relate to the health care professions. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 368. Christian Ethics & the Business World. 3 Hours**

Study of, and reflection upon, the principles of Christian ethics as these relate to the business world. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 369. Ethics by Design: Theological Ethics and Engineering. 3 Hours**

Study in theological virtue ethics using engineering design as the paradigm for practical reasoning in both technology and everyday life. Practice in formulating proper ethical arguments using standard notions of claim, grounds, warrant and backing. Course culminates in design teams constructing proper ethical argument (claim, grounds, warrants, backing) over some contemporary engineering artifact, process or issue. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 372. Religion & Film. 3 Hours**

Study of issues common to narrative films and religious thought; the power of various film techniques, dominant models in religious and film reflection, the similar roles imagination plays in film and religious thought. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 373. Religion & Literature. 3 Hours**

Joint study of literature and religion, seeking the sacred in the secular, discussing the doctrines of humans and of God in major modern writings, especially those of current collegiate interest. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 374. Religion & the Arts. 3 Hours**

Investigation of the religious interpretation of various art forms and the process by which the aesthetic experience assists in theological perception and construction. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 375. Religion & Science. 3 Hours**

Surveys of the ways science has affected religion on specific doctrines, methods of knowing what is true, and general world views; study of religious response to these. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 376. Theology & the Social Sciences. 3 Hours**

Exploration of developments in Christian theology that have paralleled the rise of the human sciences, in particular of concepts of God, humanity, Church, sacraments, sin, and salvation in the light of history, anthropology, psychology, and sociology. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 377. The Inner Journey in Myth, Bible & Literature. 3 Hours**

Study of stories of heroic figures in the Bible and in other literature as patterns of personal and spiritual development. Throughout, efforts to relate the material to the needs of contemporary persons. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 378. Rel,Soc,Global Cinema. 3 Hours**

This course introduces students to the post-World War II film movement of Italian neorealism and its influence in global cinema. It examines neorealism as a significant cinema of moral, religious and social thought that has influenced 20th and 21st-century global culture. Prerequisite: REL 103 or ASI 110 or equivalent.

**REL 383. Philosophy of Religious Education. 3 Hours**

An attempt to construct a philosophy of religious education, various contemporary theoretical models, dimensions of teaching religion in a pluralistic society, the polarization generated. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 399. Readings in Religious Studies. 1-3 Hours**

Directed readings in a specific area of interest under the supervision of a staff member. May be taken more than once. By permission only. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 425. Augustine. 3 Hours**

The life and work of Augustine of Hippo (354-430), a major theologian of Western Christianity. His influence is strongly felt in both Protestant and Catholic traditions in areas of sexual ethics, church-state relations, Trinitarian and sacramental theology. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 429. Modern Catholicism. 3 Hours**

An examination of Modern Catholicism based on a close study of the context, process, decisions, implementation, and challenges of Vatican II in the Roman Catholic Church. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 437. Significance of Jesus. 3 Hours**

Emphasis on the identity of Jesus and on the significance that his ministry, death, and resurrection have for the salvation of humankind. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 440. The Church. 3 Hours**

Biblical and theological study of the meaning of the Church which explores the relationship between Christ and the Church, the various models for understanding the Church, and the mission of the Church. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 441. Theology of Mary. 3 Hours**

Study of the place of the Mother of God in the great truths of faith in the light of chapter eight of the Constitution on the Church. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 442. God & Atheism. 3 Hours**

Study of some recent contributions made by theology, philosophy, psychology, and the humanities to the current discussion of God's existence, nature, and relationship to humanity. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 443. The Sacraments. 3 Hours**

Study of the meaning of sacramentality. The sacraments in the context of Christ as the sacrament of the human encounter with God and in the context of the Church as the sacrament of Christ. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 444. God in Christian Tradition. 3 Hours**

Review of theologies of God in Christian tradition, from biblical through contemporary sources, especially as these theologies have affected overall Catholic thought and spirituality. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 446. Christian Liturgy. 3 Hours**

Study of the basic principles of liturgy, the development of some of the basic forms of liturgy, and applications of the principles within current rites. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 447. Selected Catholic Doctrines. 3-4 Hours**

Detailed study of several important current theological questions primarily from a Catholic systematic and historical perspective. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 449. Aquinas. 3 Hours**

Theology of Aquinas including: Trinity, human nature, providence, grace, virtue, Christ, and sacraments. Some attention given to historical context and contemporary interpretation, but the main focus will be reading and understanding the Summa. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 471. Women & Religion. 3 Hours**

Examination of the impact of the women's movement on Judaism, Christianity, and other major world religions. Survey of traditional religious attitudes toward women. Relevance of feminist approaches to scripture, ethics, spirituality, and ministry in understanding contemporary global issues. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 472. Ecology & Religion. 3 Hours**

Examination of the relationship between religion and ecology; bridges the contributions of traditional theological inquiry and modern scientific insights and offers an enlarged vision of ecological concerns. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 474. Women & the Global Church. 3 Hours**

An exploration of the intersection between faith communities, traditional and non-traditional, and particular cultures in the lives of contemporary women. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**REL 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**REL 484. Practicum. 3 Hours**

Supervised in-service experience in an area of religious education chosen by the student. By permission only. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 485. Lay Ministry. 3 Hours**

Critical examination of lay ministry and its theological basis, in light of Vatican II and recent trends in the world and Church. Special topics: family ministry, ministry in the marketplace, leadership, evangelization, catechesis, women, social justice. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 487. Religious Education- Theory & Practice. 3 Hours**

Study of theory and practice of religious education for those who will be teaching religion in the school and parish. Various models and methods. Emphasis on process and religious education as developmental. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 488. Spirituality & Religious Education. 3 Hours**

Exploration of impact of liturgy and spirituality on contemporary models of religious education; study of interrelationship between faith experience and religious content; basic principles for developing practical programs. Prerequisite(s): REL 103 or ASI 110 or equivalent.

**REL 490. Capstone Seminar. 3 Hours**

Study of a particular topic in religion or theology that draws upon a variety of resources in the fields. This course provides an integrative academic experience. Topic varies from semester to semester. Required of all majors, open to minors. May be repeated. Prerequisite(s): REL 103 or ASI 110 or equivalent' junior or senior standing.

**REL 492. Special Topics. 1-3 Hours**

Concentrated study of issues and subjects pertinent to religion. May be repeated when topic changes. Prerequisite(s): REL 103 or ASI 110 or equivalent.

## Sociology, Anthropology, and Social Work

Major:

- Bachelor of Arts, Sociology

Minors:

- Sociology
- Anthropology
- Social Work

Sociology is the scientific study of all levels of society, that is, people in groups. The discipline's unique insight is that people are who they are largely because of their social experiences and interactions with others. "The sociological imagination" enables us to understand the relationship between our individual experiences and the broader social context, from the local to the global. Beyond various aspects of social behavior, sociologists study the nature and causes of social problems such as poverty, racism, family instability, and crime. Sociologists strive to apply their understanding in ever more constructive ways for the improvement of society and the common good.

Students intending to major or minor in sociology should consult with the department chairperson to plan their program of courses. The requirements for majoring in sociology are stated in the outline below. Criminal justice studies is also one of the majors listed in this department. View CJS program requirements. (<http://catalog.udayton.edu/undergraduate/collegeofartsandsciences/programsofstudy/criminaljusticestudies>)

The minors in sociology, anthropology, and social work consist of 15 semester hours. The minor in criminal justice studies consists of 18 semester hours.

### Faculty

Leslie Picca, Chairperson

Professors: Curran, Davis-Berman, Donnelly, T. Majka

Associate Professors: Becker, Cassiman, Dasgupta, Forbis, Jipson, Leming, Picca

Assistant Professors: Hallett, Holcomb, Longazel, Small, Thompson-Miller

Lecturers: Gibbs, Litka

## Bachelor of Arts, Sociology (SOC) minimum 124 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- Completed with ASI 110 and ASI 120.
- Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- Completed with ENG 200H or ASI 120.
- Must include two different disciplines and accompanying lab.

### Liberal Studies Curriculum

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences, excluding SOC courses (Includes CAP Social Science)	12

### Major Requirements <sup>1</sup> 37

SOC 101 Principles of Sociology	3
or SOC 204 Modern Social Problems	
SOC 208 Social Research Methods	3
SOC 303 Modern Social Theory	3
SOC 308 Data Analysis	3
SOC 351 Urban Sociology	3

SOC 408 Senior Project Design	1
SOC 409 Senior Project (Satisfies CAP Major Capstone)	3
Select six SOC courses (May include CAP Components) <sup>2</sup>	18

### Breadth

ASI 150 Introduction to the University Experience	1
Total Hours to total at least	124

- May include CAP Components.
- A total of no more than six semester hours of field experience or internship from SOC 495, SOC 497, SWK 401, SWK 497, ANT 449, or ANT 497 may count toward the required thirty-seven semester hours for a sociology major. Up to nine hours total may be taken in anthropology and/or social work for a sociology major. These hours may also be used toward the completion of a minor.

## Minor in Anthropology (ANT)

Anthropology is the study of people at all times and places. It emphasizes understanding total cultural systems. A minor in anthropology consists of 15 semester hours. Students intending to minor in anthropology should consult with the department chairperson to plan their selection of courses.

### Anthropology

ANT 150 Cultural Anthropology	3
Select four ANT courses (300/400 level)	12
Total Hours	15

## Minor in Social Work (SWK)

Social work is the profession sanctioned by society to provide social services. It is the professional activity of helping individuals, groups, or communities to enhance or restore their capacity for social functioning. The profession also engages in activities aimed at facilitating societal conditions that enhance and/or restore social functioning.

A minor in social work consists of 15 semester hours.

### Social Work <sup>1</sup>

Select fifteen SWK semester hours <sup>2</sup>	15
Total Hours	15

- No more than six semester hours of field experience credit can be accepted toward the minor. The field experience course requires students to take or have taken SWK 201, Social Work Practice.
- At least twelve semester hours at the 300/400 level.

## Minor in Sociology (SOC)

### Sociology

Select fifteen SOC semester hours <sup>1</sup>	15
Total Hours	15

- At least twelve semester hours at the 300/400 level.

## Bachelor of Arts, Sociology

First Year	Hours	Spring	Hours
Fall			
ASI 150	1	1 SOC elective	3

SOC 101	3	ENG 100 (CAP Writing Seminar)	3
HST 103 (CAP Humanities)	3	MTH 114 or 207	3
PHL 103 (CAP Humanities)	3	REL 103 (CAP Humanities)	3
CMM 100 (CAP Communication)	4	SCI 210 & 210L	4
SCI 190 & 190L	4		
	<b>17</b>		<b>16</b>
<b>Second Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
SOC 351	3	SOC 308	3
SSC 200 (CAP Social Science)	3	SOC Elective	3
SOC 208	3	ENG 200	3
ANT 150	3	SCI 230	3
Language 101	4	Language 141	4
	<b>16</b>		<b>16</b>
<b>Third Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
SOC 303	3	SOC elective	3
SOC elective	3	SOC elective	3
SOC elective	3	Inquiry	3
Arts Study	3	Diversity and Social Justice	3
Language 201 or contextual course	3	POL 101	3
		SOC 408	1
	<b>15</b>		<b>16</b>
<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
SOC 409	3	POL or ANT at 300 or 400 level	3
Faith Tradition	3	Advanced PHL or REL	3
Practical Ethical Action	3	Advanced HST	3
Integrative	3	Literature	3
Advanced REL or PHL	3	General elective	3
	<b>15</b>		<b>15</b>

Total credit hours: 126

## Anthropology Courses

### ANT 150. Cultural Anthropology. 3 Hours

Basic principles of cultural anthropology. Survey of human adaptation to and adjustment of the environment by means of culture; comparison of ways of life among peoples of the world for inferences toward understanding human behavior. Required for anthropology minors.

### ANT 300. Evolution of People & Culture. 3 Hours

Survey of human biological and cultural evolution from prehuman ancestors to settled city-states. Consideration of contemporary peoples at various levels of social complexity.

### ANT 306. Culture & Power. 3 Hours

Exploration of how culture and power are intertwined in the process of transformation of cultural beliefs and practices around the world. Focus on the ways in which anthropologists have studied modern state formation, and the attendant cultural politics, in local, regional, national, and global contexts. Prerequisite(s): SSC 200.

### ANT 310. Culture & Personality. 3 Hours

Survey of studies investigating the relationship between cultural environment and the individual. Material drawn from both literate and nonliterate societies.

### ANT 315. Language & Culture. 3 Hours

Students examine the relationship between language, thought, and behavior centering on human interaction and social justice in a variety of cultural contexts.

### ANT 320. Anthropology of Childhoods. 3 Hours

Survey of anthropology research on issues related to children and childhood. Cross-cultural comparison of changing conceptions and varied experiences of the developmental stage known singularly as 'childhood', with a special emphasis on children as social agents and childhoods as lived experiences. Prerequisite(s): ANT 150.

### ANT 325. Anthropology of Human Rights. 3 Hours

An overview of anthropological approaches to human rights, weighing human rights universals against situations of cultural particularity. Prerequisite(s): ANT 150.

### ANT 335. Urban Anthropology. 3 Hours

Survey of anthropology research on urban issues. Considers how cities arose and how urban people make a living, organize, and think. Considers urban futures.

### ANT 336. Epidemics, Power & the Human Condition. 3 Hours

Epidemics, Power and the Human Condition.

### ANT 350. Anthropology of Tourism. 3 Hours

Students examine the study of tourism as an academic discipline, including its historical development, current sub-fields and theoretical approaches, and the future of this industry in the globalized world.

### ANT 352. Cultures of Latin America. 3 Hours

Origin and development of ancient civilizations including the Aztec, the Maya, and the Inca. Survey of contemporary cultures, with special emphasis on peasant life.

### ANT 356. Cultures of Africa. 3 Hours

Examination of Africa through the lens of anthropology. Exploration of late colonial and postcolonial eras, with a focus on gender, kinship, ethnicity, politics, religion, and prospects for the future. Consideration of the production of knowledge about and dominant representations of Africa. Prerequisite(s): ANT 150.

### ANT 360. Cultures of South Asia. 3 Hours

Examination of South Asia through the lens of anthropology. Explores the postcolonial era, South Asia's dynamic religious traditions, the study of caste, 'Bollywood' and popular cultures, Hindu nationalism, and the South Asian diaspora in the West.

### ANT 368. Immigration & Immigrants. 3 Hours

Perspectives on immigration and ethnicity. Studies of social and economic adaptation of new immigrants and the second generation in communities, cities, and societies. Ethnic change, conflict, and contemporary national and international issues, with an emphasis on human rights. (Same as SOC 368.) Prerequisite(s): (SOC 101 or SOC 204) or ANT 150.



**ANT 392. Special Topics in Anthropology. 1-6 Hours**

Intensive examination of current thematic, theoretical, or methodological issues from the viewpoint of anthropology. May be repeated as topics change. Prerequisite(s): ANT 150; permission of instructor.

**ANT 449. Anthropological Field Work. 3 Hours**

Students learn anthropological methods of data collection (participant observations, interviews, questionnaires, focus groups, archives, scholarly research) and analysis. Prerequisite(s): ENG 200; SSC 200.

**ANT 477. Honors Thesis. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**ANT 478. Honors Thesis. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**ANT 497. Service Learning Experience. 1 Hour**

Supervised community research or service experience that complements a specific upper division course in Anthropology. Repeatable up to three semester hours. Prerequisite(s): Permission of instructor. Corequisite(s): A 300-400 level Anthropology course.

**ANT 498. Independent Study. 1-6 Hours**

Research problems or readings of special interest investigated under the guidance of an anthropology staff member. Prerequisite(s): Permission of department chairperson.

**Social Work Courses****SWK 201. Social Work Practice & Profession. 3 Hours**

Study of the historical and theoretical underpinnings of the social work profession. Study of social work practice theory and technique.

**SWK 303. Community Practice & Research. 3 Hours**

Study of the design and implementation of community research, including needs assessment and program evaluation in the social service system. (Same as SOC 309.) Prerequisite(s): SOC 101 or SOC 204; permission of instructor.

**SWK 305. Social Services in the Health Field. 3 Hours**

The role of social services in health care facilities and governmental health programs. U.S. health care policies and programs; methods of social work intervention in medical settings.

**SWK 307. Mental Health Services. 3 Hours**

Study of historical perspectives, deinstitutionalization, the community mental health movement, inpatient care, and innovative approaches. Policy and practice implications are examined. This course is normally taken in the Junior or Senior year.

**SWK 310. Law & Human Services. 3 Hours**

Orientation to the legal system as it affects the provision of human services and the profession; social legislation and court decisions as they affect child welfare, public assistance, mental health, housing, and probation and parole services.

**SWK 325. Child Abuse. 3 Hours**

Comprehensive study of child abuse: its history, scope, causal factors, indicators for detection, treatment resources and modalities, and community responsibility.

**SWK 327. Parenting: Social Welfare Role. 3 Hours**

Comprehensive study of historical and contemporary perspectives on parenting, future of parenting (assessing trends and choices in family structure and function), cross-cultural comparisons, policy and legal aspects of parenting, societal influences on parenting.

**SWK 330. Perspectives on Aging. 3 Hours**

An introduction to the field of gerontology. Focus on the major physical, psychological, and social dynamics of aging. Selected issues will be highlighted. This course is normally taken in the Junior or Senior year (Same as SOC 330.).

**SWK 331. Death, Dying and Suicide. 3 Hours**

Applied study of the phenomena of death and dying. The role and responsibility of the professional in working with the dying and their survivors. Study of suicide in contemporary U.S. society. This course is normally taken in the Junior or Senior year.

**SWK 335. Social Work & Environmental Justice. 3 Hours**

Study of the impact of environmental degradation upon individuals and communities and the role of social work in advocating for environmental justice. Topics include health, disasters, environmental degradation, human rights, and advocacy.

**SWK 360. International Social Work. 3 Hours**

Study of the role of social workers in international contexts. Topics include migration, globalization, development, conflict, and the ethical implications of social workers practicing internationally.

**SWK 370. Social Welfare Policy. 3 Hours**

Study of U.S. social welfare policy and its impact upon populations of interest to social workers and other helping professionals. Topics include history of social welfare policy, ideologies that inform social welfare policy, attention to the gendered nature of social policy, international social welfare policy, contemporary policy debates and the role of social workers and allies in the policy arena.

**SWK 392. Special Topics. 1-3 Hours**

Exploration of special topics related to the field of human services. Assessment of appropriate literature and research. May be repeated as topics change.

**SWK 401. Community Field Experience. 5 Hours**

Supervised field experience for students working in a micro or macro practice setting. Concurrent seminar includes intensive basic communication and interviewing skill development. Students spend 150 hours in the agency. Prerequisite(s): SWK 201; permission of instructor.

**SWK 465. Independent Study. 1-3 Hours**

Individual research, study, and readings on specific topics and/or projects of importance to social work. Under individual faculty direction. Prerequisite(s): Permission of instructor.

**SWK 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with department chairpersons. Prerequisite(s): Approval of University Honors Program.

**SWK 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**SWK 497. Service Learning Experience. 1 Hour**

Supervised community research or service experience that complements a specific upper division course in Social Work. Repeatable up to three semester hours. Prerequisite(s): Permission of instructor. Corequisite(s): A 300-400 level Social Work course.

**Sociology Courses****SOC 101. Principles of Sociology. 3 Hours**

Study of social groups, social processes, and society; the individual's relationship to society, social structure, social inequality, ethnic minorities, cities and human populations, and social institutions such as the family, education, religion, and government.

**SOC 204. Modern Social Problems. 3 Hours**

Course to familiarize nonsociology majors with contemporary problems in society; historical development, current status, and analysis of problems, using modern social theories. Content may vary from section to section.

**SOC 208. Social Research Methods. 3 Hours**

Study of the logic of research design, data-gathering strategies, types of measurement, and sampling techniques. Both inductive and deductive approaches. Participation in research projects. Prerequisite(s): SOC 101 or SOC 204.

**SOC 303. Modern Social Theory. 3 Hours**

Consideration of the works of modern theorists and major trends in the history of social thought. Prerequisite(s): SOC 101 or SOC 204.

**SOC 305. Criminological Theory. 3 Hours**

Study of the major theories of crime; consideration of the implications of theory for the criminal justice system. Prerequisite(s): SOC 101 or SOC 204.

**SOC 308. Data Analysis. 3 Hours**

The analysis and interpretation of both quantitative and qualitative social science data. Prerequisite(s): SOC 208. Corequisite(s): SOC 308L.

**SOC 308L. Data Analysis Laboratory. 1 Hour**

Training in appropriate computer programs and computer analysis of social science data. Prerequisite(s): SOC 208. Corequisite(s): SOC 308.

**SOC 309. Community Practice & Research. 3 Hours**

Study of the design and implementation of community research, including needs assessment and program evaluation in the social service system. (Same as SWK 303.) Prerequisite(s): SOC 101 or SOC 204; permission of instructor.

**SOC 310. Perspectives on Education & Social Justice. 3 Hours**

Exploration of research paradigms representing the different disciplines in relation to current educational issues from a social justice perspective. The educational issues will be critically explored from diverse perspectives or domains, and the skills learned will be transferable to the multiple disciplines. The primary student learning outcome (SLO) for the course will be: practical wisdom, as the students will address real problems/issues in P-12 education, drawing upon the knowledge, values and skills embedded within their specific discipline.

**SOC 321. The Sociology of Work & Occupations. 3 Hours**

Survey of the major features of work and occupations in industrial society. The meaning of work, occupational choice and recruitment, occupational socialization, career patterns, and occupational rewards. Unemployment, underemployment, sex-typing, automation and alienation.

**SOC 322. Sex Roles & Society. 3 Hours**

Research findings and major analytical approaches to study social and cultural influences on the development of personal sexual identity and relationships between men and women. Major social issues concerning human sexuality.

**SOC 323. Juvenile Justice. 3 Hours**

The environmental and internal factors that influence or determine delinquent behavior; roles of individual juvenile offenders, parents or guardians, school, church, police, business community, community agencies, and the juvenile justice and correctional system in preventing and treating delinquent behavior. Prerequisite(s): SOC 101 or SOC 204.

**SOC 325. Deviant Behavior. 3 Hours**

Description of various types of deviant behavior; for example, mental illness, alcoholism, drug addiction, the professional criminal. Study of explanations for the consequences and the role of deviant behavior in modern society. Prerequisite(s): SOC 101 or SOC 204.

**SOC 326. Law & Society. 3 Hours**

Study of the legal system and practices from a sociological point of view; the historical origin and role of the law in society, issues relating to the law as an instrument of social control and/or social change; analysis of the legal profession.

**SOC 327. Criminology. 3 Hours**

Social and cultural nature, origin, and development of law; criminal behavior; crime control. The influence of society in the creation and organization of legal and crime control systems. Biological, psychological, and sociological factors leading to criminal behavior. Prerequisite(s): SOC 101 or SOC 204.

**SOC 328. Racial & Ethnic Relations. 3 Hours**

Study of the historical and contemporary experiences of racial and ethnic groups in the United States and globally. Examines how racial and ethnic relations function in the political, social, legal, and economic systems, and how this impacts privilege, oppression, and resistance.

**SOC 330. Perspectives on Aging. 3 Hours**

An introduction to the field of gerontology. Focus on the major physical, psychological, and social dynamics of aging. Selected issues will be highlighted. (Same as SWK 330.)

**SOC 331. Marriages & Families. 3 Hours**

The course focuses on patterns of family formation and contemporary trends in family life. Topics covered include gender, sexuality, dating, mate selection, singlehood, marriage, reproduction, work and families, divorce, remarriage, and families in later life. Prerequisite(s): ENG 100, HST 103, PHL 103, REL 103 or equivalent.

**SOC 332. Sociology of Women. 3 Hours**

Cross-societal analysis of the position of women, with emphasis on industrialized and developing societies. The social positions of women and men in the family, work, politics, and the legal system. Consideration of theories of the biological, psychological, and sociological bases for the behavior and characteristics of women in the context of societal institutions.

**SOC 333. Sociology of Sexualities. 3 Hours**

Examination of theoretical and conceptual issues, empirical research and social policies germane to the sociological study of human sexuality. Topics include: sexual identity and orientation; sexuality throughout the life-course; sexual assault and coercive sexuality; social control of sexuality; social locations (race, class, and gender) and sexuality; and the relationship between sexuality and the socio-political process. Prerequisite(s): SOC 101 or SOC 204.

**SOC 334. Religion & Society. 3 Hours**

Definitions of religion and its role in society. Traditional and nontraditional expressions of religious life from the viewpoint of society. Varieties of religious experience and the interrelations between religious phenomena and other social institutions and societal behavior. Prerequisite(s): SOC 101 or SOC 204.

**SOC 336. Organizations in Modern Society. 3 Hours**

Analysis of the dynamics of organizations in modern industrial society. Organizational social psychology, organizational structure and process, and organization-community relations. Prerequisite(s): SOC 101 or SOC 204.

**SOC 337. Political Sociology. 3 Hours**

Study of political power. Political influence by economic elites, impact of bureaucracies, competing ideologies, alienation and nonvoting, and social movements as challenges to power structures. Prerequisite(s): SOC 101 or SOC 204.

**SOC 339. Social Inequality. 3 Hours**

Study of the historical and contemporary experiences of groups in society in terms of social inequality. Examines social structures and how they contribute to social hierarchy and inequality. The students will examine the wealthy, middle class, and the poor in society. Emphasis on the processes that divide people into unequal groups based on wealth, income, status, and power. The effects of social inequality on an individuals' life chances will be examined in this course.

**SOC 340. Social Psychology in Society. 3 Hours**

Survey of the basic principles, concepts, theories, and methods of social psychology from the sociological perspective. Prerequisite(s): SOC 101 or SOC 204.

**SOC 341. Self & Society. 3 Hours**

Study of the relationship between self and others. Socialization, self conceptions, deviant behavior, social influence, and social control.

**SOC 342. Collective Behavior. 3 Hours**

Study of social protest, crowds, social movements, revolution, fads, fashion, public opinion processes, propaganda, and political and social responses to these phenomena. Prerequisite(s): SOC 101 or SOC 204.

**SOC 343. Mass Communication in Modern Society. 3 Hours**

Social-psychological analysis of the structure and processes of mass communication related to advertising, patterns of social behavior, social change, propaganda, censorship, media control, and social institutions.

**SOC 344. Interaction Processes. 3 Hours**

Study of the interaction processes of social life. Bargaining and negotiation, cooperation, social influence, solidarity, competition, and conflict. Prerequisite(s): SOC 101 or SOC 204.

**SOC 345. Sociology of Extremism. 3 Hours**

Study of the social understanding and social construction of identity, otherness, difference, and extremism in such cases as the development of white racial extremism in the United States. Prerequisite(s): SOC 101 or SOC 204.

**SOC 348. Crime, Film & Society. 3 Hours**

This course will examine the portrayal of crime and justice in feature length films and how these films influence how our society views issues related to crime. The primary focus will be on the American criminal justice system (law enforcement, courts, and corrections) and the broader topic of justice. Prerequisite(s): (SOC 101 or SOC 204) or CJS 101 or permission of instructor.

**SOC 350. Art and Social Practice. 3 Hours**

Exploration of varying modes of collaborative art production, for both artists and non-art students, towards the end of understanding and organizing for effective social change and/or inquiry within studio and community settings. Students organize, produce and exhibit an interdisciplinary group project developed utilizing a sociological lens in an off-campus or social media space.

**SOC 351. Urban Sociology. 3 Hours**

The study of the development of urban life from ancient times to the present, with an emphasis on contemporary urban population characteristics, social-economic-political structure, and problems. Prerequisite(s): SOC 101 or SOC 204.

**SOC 352. Community. 3 Hours**

Study of the interaction of groups and individuals related by common situations, problems and intentions; creation, maintenance, eclipse, and restoration of close social ties in urban neighborhoods, small towns, and groups with similar interests and lifestyles.

**SOC 353. Internet Community. 3 Hours**

No description available.

**SOC 354. Perspective on Childhood. 3 Hours**

No description available.

**SOC 355. Families & the Economy. 3 Hours**

The relationship between families and their socio-economic environment. Consideration of public issues including family policy and government programs to assist families. Prerequisite(s): SOC 101 or SOC 204.

**SOC 360. Sport and Bodies. 3 Hours**

Critical examination of the historical and contemporary ways in which the human body is altered/modified, displayed/portrayed, valued/devalued, and included/excluded in terms of gender, race, social class, and ability status within sports. This course will examine how sport and bodies function in the political, social, and economic systems of the U.S. and globally. Using the perspectives of health and sport sciences and sociology, this course examines sport and bodies from macro and micro perspectives.

**SOC 368. Immigration & Immigrants. 3 Hours**

Perspectives on immigration and ethnicity. Studies of social and economic adaptation of new immigrants and the second generation in communities, cities, and societies. Ethnic change, conflict, and contemporary national and international issues, with an emphasis on human rights. (Same as ANT 368.) Prerequisite(s): (SOC 101 or SOC 204) or ANT 150.

**SOC 371. Sociology of Human Rights. 3 Hours**

Study of the sociological theories and research about human rights violations in the United States as well as globally. The course examines economic, cultural, social, health, and political rights. Human Rights are examined as gendered, racialized, and sexualized.

**SOC 388. Social Theory. 3 Hours**

Consideration of the works of classical and modern theorists and major trends in historical and contemporary social thought. Prerequisite(s): SOC 101 or SOC 204.

**SOC 392. Selected Topics in Sociology. 1-6 Hours**

Examination of a current topic of general interest in sociology. Majors and nonmajors may enroll. Consult composite for topics. May be repeated as topic changes. Prerequisite(s): SOC 101 or SOC 204.

**SOC 394. Popular Culture in Society. 3 Hours**

Introduction to an understanding of the collective behavior and structured activities of the popular culture and entertainment industry, the nature of musical choice, television, radio, Internet, genres and styles, distribution, performance, and the social construction of culture from a sociological perspective. Prerequisite(s): SOC 101 or SOC 204.

**SOC 398. Social Science Scholars' Seminar. 3 Hours**

Study and seminar discussion of selected sociological writings and the analysis, interpretation and criticism of these works. Open only to students in the Berry Scholars Program. Prerequisite(s): ENG 198; HST 198.

**SOC 408. Senior Project Design. 1 Hour**

Preparation for sociology capstone course with a focus on a workable research topic, literature review, and research methods design. Required for Sociology majors. Prerequisite(s): SOC 303, SOC 308.

**SOC 409. Senior Project. 3 Hours**

Capstone experience for sociology majors consisting of a seminar on research and writing in sociology, an empirical research project of the student's choosing, and a written and oral presentation of the research. Prerequisite(s): SOC 408.

**SOC 410. Victimology. 3 Hours**

The study of victimization including the relationships between victims and offenders, the interactions of victims and the criminal justice system and other social groups and institutions. Prerequisite(s): SOC 101 or SOC 204; 12 hours of course work in the social sciences.

**SOC 426. Leadership in Building Communities. 3 Hours**

Investigation of the processes by which urban neighborhoods develop themselves from the inside out. Students cultivate their own interdisciplinary appreciation of urban communities through extensive interaction with one neighborhood's visioning process. Topics include asset-based community development, social capital, citizenship, adaptive leadership, and community building strategies and tools. Same as POL 426. Prerequisite(s): Junior standing.

**SOC 432. Structure of Privilege. 3 Hours**

Study of the theoretical and conceptual issues, empirical research, and social policies germane to the sociological analysis of privilege. Topics include whiteness, men and masculinities, class-privilege, heterosexuality and heterosexism, and intersectionality. Prerequisite(s): SOC 101 or SOC 204.

**SOC 435. Economy & Society. 3 Hours**

Sociological analysis of modern economic institutions, with an emphasis on classical themes. Topics include capitalism, industrialism and social consequences of contemporary economic trends. Empirical research will be required. Prerequisite(s): SOC 101 or SOC 204; permission of instructor.

**SOC 437. Marx & Sociology. 3 Hours**

Study of Marx's writings on topics relevant to the social sciences. Comparison of contemporary Marxian scholarship in such areas as social inequality, political structures, urban change, ideology and consciousness, and models for the future. Prerequisite(s): SOC 101 or SOC 204; junior or senior standing.

**SOC 438. Urban Poverty. 3 Hours**

Study of the social factors that contribute to poverty in cities. Consideration of the social effects of government and other programs to alleviate poverty. Prerequisite(s): SOC 101 or 204.

**SOC 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**SOC 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**SOC 492. Special Topics in Sociology. 1-6 Hours**

Intensive examination of current theoretical or methodological issues; faculty-advised research project or library work. Consult composite for topics. May be repeated as topic changes. Prerequisite(s): SOC 101 or SOC 204; permission of instructor.

**SOC 495. Sociology Internship. 1-6 Hours**

Supervised work experience related to course work in sociology in appropriate government, social service, and private organizations. May be repeated to a maximum of six semester hours. Prerequisite(s): Permission of department chairperson.

**SOC 497. Service Learning Experience. 1 Hour**

Supervised community research or service experience that complements a specific upper division course in Sociology. Repeatable up to three semester hours. Prerequisite(s): Permission of instructor. Corequisite(s): A 300-400 level Sociology course.

**SOC 498. Independent Study. 1-6 Hours**

Research or special readings on problems of interest to the student under the guidance of sociology staff member. Prerequisite(s): Permission of department chairperson.

## Sustainability, Energy, and Environment

The minor in Sustainability, Energy and the Environment (SEE) is a multidisciplinary effort to encourage students to explore complex societal sustainability issues that do not fit easily into one traditional academic discipline. The genesis of this program lies in the realization that a scientific and technical knowledge of environmental, ecological, and energy system challenges will not be sufficient to develop viable answers. Many disciplines at the University make contributions to these issues, ranging from ethical, spiritual, and artistic, to economic, political, and



sociological approaches. Students will be introduced to the minor through a seminar-style course, will take at a minimum two further team-taught and interdisciplinary courses, and will gain experience in interdisciplinary research.

Students desiring to minor in sustainability, energy, and environment should notify the program coordinator.

### Sustainability, Energy, and Environment Advisory Committee

Robert Brecha (Physics), Coordinator  
Bednarek (History), Bohrer (Fitz Center), Cuy Castellanos (Dietetics), Fouke (Philosophy), Hallinan (Mechanical Engineering), Hoffmann (Facilities Management), Jablonski (Marianist Environmental Education Center and Religious Studies), Jennings (Art and Design), King (Rivers Institute), McEwan (Biology), Pautz (Political Science), Potter (English), Wu (Geology)

## Minor in Sustainability, Energy, and Environment (SEE)

### Sustainability, Energy and Environment <sup>1</sup>

SEE 250	Introduction to Sustainability, Energy & the Environment	3
SEE Core		6-9
Select one or two courses (3-6 hours) from:		
ASI 320	Cities & Energy	
ASI 322	Cities & Suburbs: The Influence of Place (Social Science)	
or ASI 323	Cities & Suburbs: The Influence of Place (Philosophy)	
or ASI 324	Cities & Suburbs: The Influence of Place (Religious Studies)	
SEE 303	Constructions of Place	
Select no more than one course (0-3 hours) from: <sup>2</sup>		
SEE 301	Global Change & Earth Systems	
BIO 359	Sustainability & the Biosphere	
BIO 395	Global Environmental Biology	
GEO 208	Environmental Geology	
CHM/GEO 234	Energy Resources	
SEE Depth		6-9
(one course with experiential or research component) <sup>3</sup>		
SEE 401 & SEE 402	Sustainability Research I and Sustainability Research II (SEE Depth Courses)	
SEE 477 & SEE 478	Sustainability, Energy & Environment Honors Thesis Project and Sustainability, Energy & Environment Honors Thesis Project	
ASI 345	Special Topics in Social Science	
ECO 435	Economics of the Environment	
ENG 342	Literature and the Environment	
HST 342	Environmental History of the Americas	
PHL 321	Environmental Ethics	
PHL 334	Philosophy & Ecology	
POL 371	Environmental Policy	
REL 472	Ecology & Religion	

### SWK 335 Social Work & Environmental Justice

Total Hours 18

- Students who wish to minor in Sustainability, Energy and Environment should contact the coordinator of the Sustainability, Energy and Environment minor.
- Students with a major not otherwise requiring a biology course must complete either SEE 301 (with its prerequisite) or BIO 359 or BIO 395.
- Additional courses may be approved by SEE coordinator.

## Courses

### SEE 250. Introduction to Sustainability, Energy & the Environment. 3 Hours

A multidisciplinary introduction to Sustainability, Energy and the Environment (SEE) and to the SEE minor. Emphasis on learning how to view complex issues from different disciplinary points of view, developing reading and critical thinking skills about current issues in sustainability, gaining an awareness of different ethical positions and how these influence the quest for solutions, and learning how scientific and sociopolitical processes work to investigate and address sustainability issues.

### SEE 301. Global Change & Earth Systems. 3 Hours

Multidisciplinary introduction to the science of the earth system. Focus is on the interrelatedness of geological, biological, chemical and physical processes, and on methods used to understand both the past natural history and potential future scenarios for change in the earth system. Corequisite(s): BIO 101, SCI 230, or equivalent.

### SEE 303. Constructions of Place. 3 Hours

Multidisciplinary, arts-based course that explores the complex connections between our sense of place and the physical and environmental conditions that influence landscapes and communities.

### SEE 401. Sustainability Research I. 3 Hours

Interdisciplinary exploration of the issues of sustainability. The scientific, moral, spiritual, social, political, historical, ethical and economic dimensions of sustainability will be explored. Exploration of the foundations of ethical theory and their application to environmental issues. Students will pursue a research project with the primary focus on sustainability on campus. Prerequisite(s): PHL 103 or ASI 112 or ASI 120; completion of General Education Natural Science or CAP Natural Science Requirements: junior or senior standing.

### SEE 402. Sustainability Research II. 3 Hours

An interdisciplinary exploration of the issues of sustainability as they affect the Dayton community. Course will also explore political philosophy and the ethical foundations of public policy. Students will choose an in-depth community-based research project. Prerequisite(s): PHL 103 or ASI 112 or ASI 120; completion of General Education Natural Science or CAP Natural Science Requirements; junior or senior standing.



**SEE 477. Sustainability, Energy & Environment Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with department chairpersons. Prerequisite(s): Approval of University Honors Program.

**SEE 478. Sustainability, Energy & Environment Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**Theatre**

Major:

- Bachelor of Arts, Theatre

Minor:

- Theatre

A major in Theatre (THR), offered by the Department of Communication, provides an academic foundation plus the experience of working in a wide range of theatre productions, including mainstage productions in the Boll Theatre as well as experimental work in the Studio Theatre.

Theatre majors are required to audition for roles and participate in each mainstage production, for which they receive credit in THR 300.

A minor in theatre consists of 21 semester hours. Courses in dance are not included.

The Department of Communication also offers a concentration in Theatre (CTR (p. 145)).

**Faculty**

Jonathan A. Hess, Chairperson, Department of Communication  
 Michelle Hayford, Program Director  
 Professor Emeritus: Gilvary  
 Associate Professor: Hayford  
 Assistant Professor: Dunlevy  
 Lecturers: Beran, Evans

**Bachelor of Arts, Theatre (THR) minimum 124 hours**

**Common Academic Program (CAP)**

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3

ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

- 1 Completed with ASI 110 and ASI 120.
- 2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.
- 3 Completed with ENG 200H or ASI 120.
- 4 Must include two different disciplines and accompanying lab.

**Liberal Studies Curriculum**

L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

**Major Requirements**

THR 105 Introduction to Theatre	3
THR 307 Light Design	3
THR 310 Acting I	3
THR 330 Set Design	3
THR 424 Directing	3
THR 425 History of Theatre II	3
Select one from: (Satisfies CAP Major Capstone)	3
THR 370 Special Topics	
THR 490 Independent Study	
THR Laboratories <sup>1</sup>	4
THR 300 Theatre Laboratory	
THR electives <sup>2</sup>	13

**Breadth**

ASI 150 Introduction to the University Experience	1
Total Hours to total at least	124

<sup>1</sup> A minimum of four semester hours of THR 300 are required for the degree program.

<sup>2</sup> THR electives may include no more than three additional hours of THR 300 .

## Minor in Theatre (THR)

### Theatre

THR 105	Theatre Appreciation	3
THR 425	Theatre Theory & History	3
Select fifteen THR semester hours <sup>1</sup>		15
Total Hours		21

<sup>1</sup> Nine semester hours must be at the 300/400 level. Elected coursework in dance within the minor is limited to one two-semester hour course. Coursework in THR 300 is limited to a maximum of three semester hours within the minor.

#### First Year

Fall	Hours	Spring	Hours
ASI 150		1 ENG 100 (CAP Writing Seminar)	3
THR 105		3 HST 103, PHL 103, or REL 103 (CAP Humanities)	3
HST 103, PHL 103, or REL 103 (CAP Humanities)		3 THR 310	3
HST 103, PHL 103, or REL 103 (CAP Humanities)		3 Language 141	4
CMM 100 (CAP Communication)		3 MTH (CAP Mathematics)	3
Language 101		4	
		<b>17</b>	<b>16</b>

#### Second Year

Fall	Hours	Spring	Hours
ENG 200 (CAP Writing Seminar)		3 SSC 200 (satisfies CAP Social Science)	3
THR 330		3 THR elective	3
THR Elective		3 INSS (CAP Natural Science)	4
INSS (CAP Natural Science)		4 General elective	3
Language 201 or contextual course		3 General elective	2
		<b>16</b>	<b>15</b>

#### Third Year

Fall	Hours	Spring	Hours
THR 300		1 THR 300	1
THR 307		3 THR 424	3
THR elective		3 THR 425	3
INSS (CAP Inquiry)		3 Adv HST	3
Literature		3 Social Science	3
Social Science		3 General elective	3
		<b>16</b>	<b>16</b>

#### Fourth Year

Fall	Hours	Spring	Hours
THR 300		1 THR 300	1

THR elective	1 THR 440 or 490 (Capstone)	3
Adv PHL/REL (PEA/FT)	3 THR elective	3
CAP Integrative	3 Adv PHL/REL (PEA/FT)	3
Social Science	3 Diversity and Social Justice	3
General elective	3 General elective	1
	<b>14</b>	<b>14</b>

Total credit hours: 124

## Courses

### THR 105. Introduction to Theatre. 3 Hours

Analysis of the nature of theatre, its origin and development from the standpoint of the play, the physical theatre, and its place in our culture. Required of all majors. Open to all University students.

### THR 203. Technical Production. 3 Hours

Introductory survey of scene design, construction, painting, and lighting. Current theory will be examined along with practical applications and techniques.

### THR 251. Beginning Tap Dance. 2 Hours

Beginning course in the theory and practice of tap dance.

### THR 261. Beginning Jazz Dance. 2-3 Hours

Beginning course in the theory and practice of jazz dance.

### THR 271. Beginning Ballet. 2-3 Hours

Beginning course in the theory and practice of classical ballet technique.

### THR 300. Theatre Laboratory. 1-3 Hours

The third and fourth-year level of credit allowance for role playing and/or play production. Requirements and registration same as for THR 100.

### THR 302. Stage Makeup. 2 Hours

An experiential course where students learn the basic principles of the art and technique of stage makeup so that they may use them in the design and execution of makeup applications. Open to all university students.

### THR 303. Scene Painting. 3 Hours

Basic principles of color paint theory and materials. Investigation of various scene-painting techniques. One three-hour class meeting weekly. Prerequisite(s): Permission of department chairperson.

### THR 304. Movement for Everyone. 3 Hours

Movement course for non-dancers, athletes, and dancers alike, to learn the theories and practices of bodily awareness, movement, dance, and strength. This course will enhance students' embodied communication, expressive agility, strength and endurance, while providing an engagement with the arts and aesthetics.

### THR 306. Stage Management. 3 Hours

Investigation of the techniques, communication methodology, resources, and practices for the stage manager. The course examines various activities performed by stage managers in musicals, plays, dance, and operas. Emphasis on organizational and management practices common to most theatres. Development of skills in applying methods of stage management. Prerequisite(s): THR 311, THR 308.

**THR 307. Light Design. 3 Hours**

A course in the art and practice of lighting design for the theatre. The course will include lighting equipment and control, elements of electricity, script analysis, design methodologies, additive and subtractive color theory, lighting for dance, musicals, plays and performance installations. Open to all university students. Prerequisite(s): THR 308, THR 311.

**THR 308. Engineering for the Performing Arts. 3 Hours**

Experiential course exploring the best practices and upcoming trends in the materials, methods, and procedures used in engineering scenic environments for the performing arts, through the integration of the technical Theatre and Engineering disciplines. This course will provide students with practical experience in working with performance technology industry partners through the testing of emergent performance technology for product development and the uses of this technology to help support arts education needs in our community. Open to all university students.

**THR 309. Sound Design. 3 Hours**

Study and application of designing sound for live theatrical productions. Through experiential learning, this course will cover the following principle areas: basic audio, theatrical recording techniques and equipment, musical and effects integration, theatre acoustics, designing sound, and sound reinforcement for live theatrical events. Open to all university students. Prerequisite(s): THR 308 and THR 311.

**THR 310. Acting I. 3 Hours**

The study and practice of basic techniques in rehearsal and performance. Emphasis on self-analysis and self-awareness. Development of basic skills in vocal, emotional, and mental interpretation of character. Required of all theatre majors.

**THR 311. Design Concepts. 3 Hours**

Survey of various backstage professional technical theatre positions in a theatrical production. Current theory is examined along with practical applications and techniques. Open to all university students. Prerequisite(s): THR 308.

**THR 312. Acting for the Camera. 3 Hours**

Study and practice of basic techniques of acting for the camera: multimedia platforms, film, and television. Emphasis on technical requirements of acting for the camera and the control of body and voice actors must exercise in these media. Prerequisite(s): THR 310.

**THR 313. Social Justice & Dramatic Literature. 3 Hours**

Survey of dramatic literature that engages issues pertaining to diversity and social justice. Survey may include domestic and global dramatic literatures that grapple with processes of identity, representation, and performing the "other."

**THR 314. Costumes & Textiles. 3 Hours**

Introduction to the process of costume and textile design for theatre. Open to all university students.

**THR 316. Performance Company. 0 Hours**

Weekly performance workshop. All Theatre, Dance, & Performance Technology majors and minors are required to attend. Workshops will be experiential, adapted to student interests/needs, and material to be covered will include a variety of topics in acting, applied theatre, dance, performance technology, and theatre studies. May be repeated. Prerequisite(s): Theatre majors and minors only.

**THR 320. Movement & Voice for the Stage. 3 Hours**

An integrated approach to the study of stage movement and voice production for the theatre.

**THR 322. Philosophy and Theatre/Dance: Performing Human Identity. 3 Hours**

An interdisciplinary and advanced philosophy course with two components: 1) theoretical, focusing on the philosophy of dance or theatre and the philosophy of human identity, and 2) dance or theatre, where students will learn to use dance or theatre to express personal identity. Prerequisite(s): PHL 103.

**THR 323. Acting II. 3 Hours**

Further study and practice of techniques introduced in Acting I. Emphasis on interaction, ensemble, group processes, and scene study. Prerequisite(s): (THR 105, 310) or permission of department chairperson.

**THR 330. Set Design. 3 Hours**

Introduction to the art and practice of set design for the theatre. Study and projects will involve the development of conceptual approaches, research, sketches, script analysis, presentation techniques, and design for dance, musicals, plays and performance installations. Open to all university students. Prerequisite(s): THR 311, THR 308.

**THR 341. Modern Dance. 2 Hours**

Study of the theory and practice of modern dance and technique. All levels welcome. Open to all students.

**THR 344. Acting/Directing for Musical Theatre. 3 Hours**

Study of performance and directing techniques for Musical Theatre.

**THR 345. Devising Performance. 3 Hours**

Applied theatre laboratory in devising performance techniques via in-class exercises to develop original ensemble-created performance. Prerequisite(s): THR 310.

**THR 350. Acting Styles. 3 Hours**

Advanced study and exploration of acting fundamentals as they apply to various styles or specific historical periods. Study and practice of plays, manners, customs, voice, and movement could encompass Greek, Elizabethan, French Neoclassicism, Restoration, Realism, or Post Realistic genres, among many others. Open to all university students. Prerequisite(s): THR 310.

**THR 351. Intermediate Tap Dance. 2 Hours**

Intermediate course in the theory and practice of tap dance.

**THR 352. Applied Theatre. 3 Hours**

Introduction to the practical applications of theatre and prepares the theatre practitioner to create performance for social justice, and engage in applied theatre work according to the best practices in applied theatre ethics. This course is a survey of theorists, theater ensembles, and performers who represent and create with communities in various contexts. This course will also put theory into practice as the student will engage in various applied theatre practices in collaboration with community partners.

**THR 354. Kinetic Forms. 3 Hours**

Exploration of movement and visual performance of kinetic forms through the design, construction, and manipulation of puppets, kinetic sculpture, and masks. Open to all university students.

**THR 361. Intermediate Jazz Dance. 2 Hours**

An intermediate course in the theory and practice of jazz dance and technique. Prerequisite(s): Permission of department chairperson.

**THR 370. Special Topics. 1-3 Hours**

Study of special topics or themes in theatre, performance technology, dance, and applied theatre. May be repeated as topics change.

**THR 371. Intermediate Ballet. 2 Hours**

Intermediate course in the theory and practice of classical ballet technique. Prerequisite(s): Permission of department chairperson.

**THR 372. Dance & Physical Theatre Styles. 1-3 Hours**

Special topics in dance and movement, varying between specific dance modes and movement practices drawn from physical theatre and dance modalities.

**THR 380. Power, Gender & Performance. 3 Hours**

Consideration of performances of identity and advocacy at the intersection of political power and gender as constructive responses to gender inequality. Performance protests for gender equality, and cultural performances of gender are examined in historical case studies and current events.

**THR 417. Theatre in Education. 3 Hours**

Theories and practices of educational drama and theatre as applied to content areas in the early, middle and secondary classroom. Attention given to the relationship of creative drama and applied theatre practices to speaking, thinking, writing, reading, history and other curricular subjects. Co-curricular and experiential immersion required.

**THR 424. Directing. 3 Hours**

Study of the evolution of the modern director. Script interpretation as a basis for the development and execution of the production concept, directing for devised works, and experiential learning with practical directing experience in class may be covered. Prerequisite(s): THR 310.

**THR 425. History of Theatre II. 3 Hours**

Continuance of 415 from the Italian Renaissance to the modern theatre. (THR 415 or THR 425 required of all majors.).

**THR 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

**THR 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

**THR 490. Independent Study. 1-6 Hours**

Individual research and report on topic of student's choice in the field of theatre and performance under direct supervision of faculty/staff. Repeatable for credit. Prerequisite(s): Permission of Program Director.

**THR 498. Internship. 1-6 Hours**

Theatre, dance, performance technology, or applied theatre work experience with an approved organization. Prerequisite(s): Permission of Program Director.

**THR 499. Creating New Works. 3 Hours**

Capstone course for all theatre, dance, and performance technology majors. Students will create an original work in an ensemble, taking on various roles of a creative team. The performance will be presented to the public, and documented for portfolio. Students will engage in professional development to prepare for entering various theatre, performance, dance, performance technology, entertainment, creative industry, and applied theatre fields.

## Women's and Gender Studies

Major:

- Bachelor of Arts, Women's and Gender Studies

Minor:

- Women's and Gender Studies

Women's and gender studies places the experiences and perspectives of women at the center of analysis and also considers how gender intersects with other factors, such as race and class, to shape all of our lives. Interdisciplinary in nature, and founded upon the integration of theory and practice, critique and imagination, women's and gender studies brings approaches from other disciplines and fields into conversation with each other and with critical theories about gender and power to address and improve the lives of women and, by extension, of children and men. Inspired by both feminist and Marianist traditions, the Women's and Gender Studies Program at UD seeks to promote:

- Integration, collaboration, and personal engagement in learning
- The development and dissemination of critical thinking for social justice
- The appreciation and protection of human dignity and diversity
- Leadership through responsibility and service to community

Students majoring in women's and gender studies must complete 34 semester hours, including at least ten semester hours in four core WGS courses and 24 semester hours of upper-division courses offered by other departments. For these additional 24 semester hours, students must complete nine semester hours in one area of concentration, six semester hours in each of two additional areas, and three semester hours in a fourth area.

The major also has a cultural diversity requirement of six semester hours. (These hours may be from courses that are also used to fulfill the area requirements.) Of the six hours, three must be from a course that emphasizes race, and/or that takes a multicultural approach, within a U.S. or European context; the other three must be from a course that focuses on a non-U.S./European context or that takes a comparative international approach.

Courses taken for the major may also count toward completion of the Liberal Studies Curriculum.

Students minoring in women's and gender studies must complete at least 15 semester hours, including one interdisciplinary core course (WGS 250 (<http://catalog.udayton.edu/undergraduate/collegeofartsandsciences/programsofstudy/womensandgenderstudies>), WGS 310 (<http://catalog.udayton.edu/undergraduate/collegeofartsandsciences/programsofstudy/womensandgenderstudies>) or WGS 350 (<http://catalog.udayton.edu/undergraduate/collegeofartsandsciences/programsofstudy/womensandgenderstudies>)) and twelve hours in approved upper-division courses (300-level or above) from at least three different disciplines. Alternatively, minors may take two of the interdisciplinary core courses, and nine hours in approved upper-division courses from three different disciplines.

### Women's and Gender Studies Committee

Rebecca Whisnant (Philosophy), Director  
 Bennett (Religious Studies), Damasco (Roesch Library), DesAutels (Philosophy), Fischer (Philosophy), Fleischmann (History), Hudson (Political Science), James (Philosophy), Laufer-Ukeles (Law), Leming (Sociology, Anthropology, and Social Work), Merithew (History), Picca

(Sociology, Anthropology, and Social Work), Rismiller (Women's Center), Watters (Communication)

## Bachelor of Arts, Women's and Gender Studies (WGS) minimum 124 hours

### Common Academic Program (CAP)

\*credit hours will vary depending on courses selected

First-Year Humanities Commons <sup>1</sup>	12
HST 103 West and the World	
REL 103 Introduction to Religious and Theological Studies	
PHL 103 Intro To Philosophy	
ENG 100 Writing Seminar I <sup>2</sup>	
Second-Year Writing Seminar <sup>3</sup>	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
SSC 200 Social Science Integrated	
Arts	3
Natural Sciences <sup>4</sup>	7
Crossing Boundaries	variable credit
Faith Traditions	
Practical Ethical Action	
Inquiry	
Integrative	
Advanced Study	variable credit
Philosophy and/or Religious Studies	
Historical Studies	
Diversity and Social Justice	3
Major Capstone	0-3

<sup>1</sup> Completed with ASI 110 and ASI 120.

<sup>2</sup> Or ENG 100A and ENG 100B, or ENG 200H, by placement.

<sup>3</sup> Completed with ENG 200H or ASI 120.

<sup>4</sup> Must include two different disciplines and accompanying lab.

### Liberal Studies Curriculum

Creative and Performing Arts (May include CAP Arts)	3
L2 Proficiency (Proficiency in a language other than English)	0-11
Literature (May include CAP Components)	3
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

### Major Requirements

(May include CAP Components)	34
WGS 250 Introduction to Women's and Gender Studies	3
or WGS 350 Feminist Social Change	
WGS 310 Feminist Theory & Methodology	3
WGS 390 Service Learning in Women's & Gender Studies	1-3

WGS 490 Senior Seminar in Women's & Gender Studies (Satisfies CAP Major Capstone)	3
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### First area courses:

Select nine semester hours from one area below	9
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### Second area courses:

Select six semester hours from a second area below	6
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### Third area courses:

Select six semester hours from a third area below	6
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### Fourth area courses: <sup>3</sup>

Select three semester hours from the final area below	3
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### Areas: <sup>4</sup>

#### Literature and Arts

CMS 415 Women & Communication	
ENG 333 Images of Women in Literature	
ENG 335 African American Literature	
ENG 336 Gender and Fiction	
ENG 345 Postcolonial Literature	
VAH 360 Art History & Feminism	

#### History

HST 347 Sex, Race & Science	
HST 350 Gay & Lesbian U.S. History	
HST 351 American Gender & Women's History	
HST 352 History of the American Family	
HST 353 History of Women in European Societies	
HST 354 History of Women & Gender in the Middle East	
HST 356 Comparative History of Women in the Third World	

#### Philosophy and Religious Studies

PHL 307 Philosophy & Women	
PHL 364 Race, Gender and Philosophy	
REL 471 Women & Religion	
REL 472 Ecology & Religion	
REL 474 Women & the Global Church	

#### Social Sciences <sup>3</sup>

ANT 306 Culture & Power	
HSS 325 Women in Sport	
POL 340 Gender & International Relations	
PSY 443 Psychology of Women	
PSY 462 Human Sexuality	
SOC 322 Sex Roles & Society	
SOC 330 Perspectives on Aging	
SOC 331 Marriages & Families	
SOC 332 Sociology of Women	
SOC 333 Sociology of Sexualities	
SOC 339 Social Inequality	
SOC 432 Structure of Privilege	
SWK 325 Child Abuse	
SWK 327 Parenting: Social Welfare Role	
SWK 330 Perspectives on Aging	
SWK 370 Social Welfare Policy	
UDI 341 Sexual Diversity	

#### Cultural Diversity Requirement <sup>5</sup>



Select one U.S./Europe Multicultural course from:	3
ENG 335 African American Literature	
HST 351 American Gender & Women's History	
HST 353 History of Women in European Societies	
PHL 364 Race, Gender and Philosophy	
SOC 432 Structure of Privilege	
Select one Global (non U.S./Europe) course from:	3
ANT 306 Culture & Power	
ENG 345 Postcolonial Literature	
HST 354 History of Women & Gender in the Middle East	
HST 356 Comparative History of Women in the Third World	
POL 340 Gender & International Relations	
REL 471 Women & Religion	
REL 474 Women & the Global Church	

**Breadth**

ASI 150 Introduction to the University Experience	1
Total hours to total at least	124

- 1 Restricted to students with no more than six semester hours applicable to a WGS major or minor. This course counts toward the WGS major only if taken before any other WGS core course.
- 2 A major who has taken WGS 250 may also take WGS 350 in lieu of one of the required disciplinary courses. WGS 350 will be counted toward the area requirement that most reflects the course's content during the relevant term.
- 3 In order to achieve some balance in approach, students must complete at least six semester hours each in both social sciences (anthropology, political science, psychology, sociology, and social work) and humanities (literature, arts, history, philosophy, and religious studies) courses. For this reason, social sciences must normally serve as the first, second, or third area, and not as the fourth.
- 4 Other courses may be counted toward the major, with approval of the program director, and depending on topic and content during a given semester.
- 5 This requirement may be satisfied with courses that are also used to fulfill the area requirements. Of the six semester hours, three must be from a course that emphasizes race, and/or that takes a multicultural approach, within a U.S. or European context; the other three must be from a course that focuses on a non-U.S./European context or that takes a comparative international approach.

## Minor in Women's and Gender Studies (WGS)

**Women's and Gender Studies**<sup>1</sup>

WGS 250 Introduction to Women's and Gender Studies	3
or WGS 310 Feminist Theory & Methodology	
or WGS 350 Feminist Social Change	
Select twelve semester hours from at least three different academic disciplines (300/400 level) <sup>2</sup>	12
Total Hours	15

<sup>1</sup> Students who wish to minor in Women's and Gender Studies should contact the director of the Women's and Gender Studies Program.

<sup>2</sup> A student may, alternatively, take two of the indicated WGS core courses (WGS 250 (<http://catalog.udayton.edu/undergraduate/collegeofartsandsciences/programsofstudy/womensandgenderstudies>), WGS 310 (<http://catalog.udayton.edu/undergraduate/collegeofartsandsciences/programsofstudy/womensandgenderstudies>), WGS 350 (<http://catalog.udayton.edu/undergraduate/collegeofartsandsciences/programsofstudy/womensandgenderstudies>)) and three upper-level courses from three different disciplines.

**First Year**

Fall	Hours Spring	Hours
ASI 150	1 CMM 100 (CAP Communication)	3
REL 103, HST 103, or PHL 103 (CAP Humanities)	3 SCI 190 & 190L	4
HST 103, PHL 103, or REL 103 (CAP Humanities)	3 ENG 100 (CAP Writing Seminar)	3
PSY 101	3 PHL 103, REL 103, or HST 103 (CAP Humanities)	3
MTH 114 (CAP Mathematics)	3 Language 141	4
Language 101	4	17

**Second Year**

Fall	Hours Spring	Hours
WGS 250 or 350	3 ENG 200 (CAP Writing Seminar)	3
SCI 210 or 220	3 PSY at 300 or 400 level	3
SCI 210L or 220L	1 PSY 443	3
Language 201 or contextual course	3 SCI 230 or 240	3
Arts Study	3 SSC 200 (CAP Social Science)	3
Social Science Intro	3 General elective	3
	16	18

**Third Year**

Fall	Hours Spring	Hours
ENG 333	3 ENG 336	3
REL 471 (or Adv REL or PHL)	3 HST 347	3
Arts Study	3 Integrative	3
General elective	3 PHL 307 (or Adv REL or PHL)	3
	HST 351 (or Adv HST)	3
	12	15

**Fourth Year**

Fall	Hours Spring	Hours
WGS 310	3 WGS 490	3
WGS 390	1 CMS 415	3
Inquiry	3 Diversity and Social Justice	3
Practical and Ethical Action	3 General elective	3

ANT 306	3 General elective	3
General Elective	3	15
<b>16</b>		<b>15</b>

Total credit hours: 126

## Courses

### **WGS 250. Introduction to Women’s and Gender Studies. 3 Hours**

Introduction to key concepts, themes, and debates in Women’s and Gender Studies. Intersectional (studying gender as it intersects with other social identity categories such as race, class, and sexuality), multi- or interdisciplinary, and multicultural in approach. Restricted to students with no more than six semester hours applicable to a WGS major or minor.

### **WGS 310. Feminist Theory & Methodology. 3 Hours**

Exploration of the intersections of feminist epistemology, methodology, politics, and ethics. Consideration and comparison of a range of theories about gender, power, and knowledge that have shaped the development of feminist and womanist thought, research, practice, and movement in the U.S. and in other parts of the world. Prerequisite(s): WGS 150 or six semester hours prior WGS credit.

### **WGS 350. Feminist Social Change. 3 Hours**

Exploration of the methods and priorities of feminist social change efforts in varying national, cultural, and/or religious contexts, including outside of the U.S. and Europe. Investigation of the nature, possibilities, and challenges of global/transnational feminist movement(s). Prerequisite(s): WGS 150 or six semester hours prior WGS credit.

### **WGS 380. Special Topics in Women’s & Gender Studies. 1-3 Hours**

Intensive examination of current thematic, theoretical, or methodological issues in the field of Women’s and Gender Studies. Consult composite for topics. May be repeated as topic changes. Prerequisite(s): WGS 150 or WGS 310 or WGS 350 or six semester hours prior WGS credit.

### **WGS 390. Service Learning in Women’s & Gender Studies. 1-3 Hours**

Individualized placements in community organizations that enable students to apply and enrich their formal studies by engaging in service work that addresses women’s needs and/or advances social justice in relation to gender. May be done as an independent or group study under the direction of a WGS faculty member. May also be done in conjunction with another course. May be repeated up to a maximum of three semester hours. Prerequisite(s): WGS 150 or WGS 310 or WGS 350; permission of program director.

### **WGS 477. Honors Thesis Project. 3 Hours**

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and departmental chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

### **WGS 478. Honors Thesis Project. 3 Hours**

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and departmental chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477 and approval of University Honors Program.

### **WGS 480. Independent Study in Women’s & Gender Studies. 3 Hours**

Individual investigations of special topics in the field of Women’s and Gender Studies under faculty direction. May be repeated under special circumstances. No more than six semester hours of WGS 480 may count toward the major. Prerequisite(s): WGS 150 or WGS 310 or WGS 350; approval of program director.

### **WGS 490. Senior Seminar in Women’s & Gender Studies. 3 Hours**

Concentration on a particular topic or problem in Women’s and Gender Studies, with focus on critical theories, methodologies, ethics and practices appropriate for advanced feminist research. Emphasis on integration (e.g. of feminist theory, methods, and practice) and interdisciplinarity. May require students either to work collaboratively on a single research project or to apply certain theories or methods central to the seminar in their exploration of individual projects. May be repeated as topics change. Prerequisite(s): WGS 150 or WGS 350, WGS 310.