

Undergraduate - College of Arts and Sciences

Paul H. Benson, Dean
 Donald L. Pair, Associate Dean
 Donald J. Polzella, Associate Dean
 Cynthia T. Shafer, Assistant Dean
 Kimberly A. Trick, Assistant Dean
 Timothy A. Wilbers, Assistant Dean

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 6

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. 119)
- Art History (p. 264)
- Chemistry (p. 134)
- Communication (p. 142)
- Criminal Justice Studies (p. 151)
- Economics (p. 155)
- English (p. 158)
- French (p. 172)
- German (p. 173)
- History (p. 182)
- Human Rights Studies (p. 233)
- International Studies (p. 188)
- Languages (p. 173)
- Mathematics (p. 195)
- Music (p. 203)
- Philosophy* (p. 222)
- Political Science (p. 233)
- Psychology (p. 243)
- Religious Studies (p. 247)
- Sociology* (p. 254)
- Spanish (p. 174)
- Theatre (p. 260)
- Visual Arts (p. 263)
- Women's and Gender Studies (p. 276)

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

The Bachelor of Science is offered in:

- Applied Mathematical Economics (p. 197)
- Biochemistry (p. 135)
- Biology (p. 125)
- Chemistry (p. 134)
- Computer Information Systems (p. 147)
- Computer Science (p. 148)
- Environmental Biology (p. 127)
- Environmental Geology (p. 166)
- Geology (p. 168)
- Mathematics (p. 195)
- Medicinal-Pharmaceutical Chemistry (p. 138)
- Physical Science (p. 228)
- Physics (p. 229)
- Physics-Computer Science (p. 230)
- Pre dentistry (p. 240)
- Pre medicine (p. 242)
- Psychology (p. 245)

Other programs leading to the bachelor's degree:

- Visual Arts Education (B.F.A.) (p. 266)
- Fine Arts (B.F.A.) (p. 267)

- General Studies (B.G.S.) (p. 165)
- Graphic Design (B.F.A.) (p. 268)
- Music Composition (B.Mus.) (p. 208)
- Music Education (B.Mus.) (p. 203)
- Music Performance (B.Mus.) (p. 212)
- Music Therapy (B.Mus.) (p. 214)
- Photography (B.F.A.) (p. 269)

Established Interdisciplinary Majors

American Studies (p. 119), Criminal Justice Studies (p. 151), International Studies (p. 188), Premedicine (p. 242), Pre dentistry (p. 240), and Women's and Gender Studies (p. 276) 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.

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.¹

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.²

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.³
- 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.³

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 sem. hrs. of accompanying laboratories in lieu of the Integrated Natural Science Sequence.

¹ 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 English	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 322	Masterpieces of World Literature	3
ENG 323	Literature of the Christian Tradition	3
ENG 324	The Novel	3
ENG 325	Science Fiction	3
ENG 326	Sport & Literature	3
ENG 327	Studies in Popular Fiction	3
ENG 328	American Nobel Authors	3
ENG 329	Short Story	3
ENG 330	Development of Drama	3
ENG 332	Studies in Literature & Film	3
ENG 333	Images of Women in Literature	3
ENG 334	Modern Men -- Images	3
ENG 335	African American Literature	3
ENG 336	Gender in Fiction	3
ENG 337	Studies in Folklore	3
ENG 338	Images of Business	3

ENG 339	American Indian Literature	3
ENG 340	The Prison in Literature	3
ENG 343	Literature of the Fifties	3
ENG 344	Literature of the Sixties	3
ENG 345	Colonial & Postcolonial Literature	3
ENG 348	Modern Irish Literature	3
ENG 350	European Literature of Antiquity	3
ENG 351	European Literature of Middle Ages	3
ENG 353	Literature of the Renaissance	3
ENG 354	Literature of the Enlightenment	3
ENG 355	Literature of the Romantic Age	3
ENG 356	European Literature of the 19th Century	3
ENG 357	European Literature of the Early 20th Century	3
ENG 358	Contemporary Literature of Europe	3
ENG 362	Shakespeare	3
ENG 363	Shakespeare's Worlds	3
ENG 380	Studies in Literature	1-6
ENG 383	Tragic Dilemma	3
ENG 384	Christianity & Modern Poetry	3
ENG 385	Religion & Literature	3
ENG 405	Chaucer	3
ENG 407	Medieval English Literature	3
ENG 410	Early Renaissance Literature	3
ENG 414	Later Renaissance Literature	3
ENG 431	Milton	3
ENG 433	Studies in Neo-Classical Literature	3
ENG 438	English Romanticism	3
ENG 444	Studies in 19th Century English Literature	3
ENG 448	20th Century British Literature	3
ENG 451	American Romanticism	3
ENG 453	American Realism & Naturalism	3
ENG 455	20th Century American Literature	3
ENG 482	Modern Poetry	3
FRN 350	French Literature in Translation	3
FRN 352	Old World Meets New (ENG)	3
FRN 360	Explication De Textes	3
FRN 361	Survey of French Literature I	3
FRN 362	Survey of French Literature II	3
FRN 381	History of French Cinema	3
FRN 450	French Literature	3
FRN 452	Old World Meets New (FRN)	3
GER 350	German Literature & Civilization	3
GER 361	Survey of German Literature I	3
GER 362	Survey of German Literature II	3
GER 450	German Literature	3
ITA 361	Survey of Italian Literature I	3
ITA 362	Survey of Italian Literature II	3
SPN 350	Hispanic Literature in Translation	3
SPN 361	Survey of Spanish Literature I	3
SPN 362	Survey of Spanish Literature II	3
SPN 363	Survey of Spanish-American Literature I	3
SPN 364	Survey of Spanish-American Literature II	3

SPN 450	Topics in Spanish Literature	3
SPN 451	Topics in Spanish-American Literature	3
SPN 471	Topics in Spanish-American Literature of the Twentieth Century	3
SPN 472	Topics in Spanish-American Literature of the Twentieth Century II	3

² Courses for Creative and Performing Arts are as follows:

ASI 214	Dramatic Kinesics in a Foreign Language	1
ASI 341	Special Topics in Arts Study	1-3
CMM 311	Studies in Oral Performance	3
CMM 331	Feature Writing	3
CMM 332	Publication Design	3
CMM 333	Free Lance Writing	3
CMM 341	Audio Production	3
CMM 342	Fundamentals of Video Production	3
CMM 343	Scriptwriting for Electronic Media	3
CMM 344	Multimedia Design & Production I	3
CMM 351	Public Speaking	3
CMM 442	Advanced Television Production	3
CMM 444	Multimedia Design & Production II	3
CMM 449	Topics in Electronic Media	3
ENG 282	Introduction to Writing Poetry	3
ENG 284	Introduction to Writing Fiction	3
ENG 286	Introduction to Writing Drama	3
ENG 308	Intermediate Poetry Workshop	3
ENG 310	Intermediate Fiction Workshop	3
ENG 312	Advanced Writing of Drama	3
ENG 331	Studies in Film	3
ENG 382	Mozart's Operas	3
MUS 110	Fundamentals of Music	2
MUS 111	Theory of Music I	2
MUS 112	Theory of Music II	2
MUS 113	Aural Skills I	2
MUS 114	Aural Skills II	2
MUS 115	Music in Theory & Practice	3
MUS 116	Music in Theory & Practice	3
MUS 191	Voice Class	2
MUS 195	Beginning Guitar Class I	1
MUS 196	Group Piano I	1
MUS 201	Music In Concert	3
MUS 203	Sights & Sounds of Music	3
MUS 205	Music, Instruments & Technology	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 Music of the World	3
MUS 304	History 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	Operal 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	Symponic Wind Ensemble	1
MUS 493	University Chorale	1
MUS 499	Performance Studies	4
THR 100	Theatre Laboratory	1-3
THR 105	Introduction to Theatre	3
THR 201	Basic Dance for the Performing Artist	2-3
THR 202	Stage Makeup	2
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 301	Intermediate Dance for the Performing Artist	2
THR 303	Scene Painting	3
THR 305	Theatre Stagecraft	3
THR 307	Theatre Lighting	3
THR 310	Acting I	3
THR 312	Film & Television Acting	3
THR 320	Movement & Voice for the Stage	3
THR 323	Acting II	3
THR 325	Theory & Criticism of the Stage I	3
THR 326	Theory & Criticism of the Stage II	3
THR 330	Concepts of Scene Design	3
THR 344	Acting/Directing for Musical Theatre	3
THR 351	Intermediate Jazz Dance	2
THR 361	Intermediate Jazz Dance	2
THR 371	Intermediate Ballet	2
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 226	Painting I	3
VAF 228	Watercolor I	3
VAF 232	Sculpture I	3
VAF 240	Ceramics I	3
VAF 253	Printmaking I	3
VAF 304	Drawing III	3
VAF 325	Figure Painting	3
VAF 326	Painting II	3
VAF 328	Watercolor II	3
VAF 332	Scripture II	3
VAF 342	Ceramics III	3
VAF 353	Printmaking II	3
VAH 101	Introduction to the Visual Arts	3
VAH 201	Survey of Art I	3
VAH 202	Survey of Art II	3
VAH 203	Survey of Art III	3
VAH 350	Western Architecture	3

VAH 360	Art History & Feminism	3
VAH 370	Nineteenth Century Art I	3
VAH 382	History of Photography II	3
VAH 383	History of Graphic Desing	3
VAP 101	Foundation Photography	3
VAP 201	Photography II	3
VAR 210	Visual Journal	3
VAR 220	Visual Resources	3

³ 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	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	Medieval 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	Modern Germany	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 415	History of the Theatre I	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 415	History of the Theatre I	3
THR 425	History of Theatre II	3

Hindi (HND)

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

THR 415	History of the Theatre I	3
Italian (ITA)		
ANT 315	Language & Culture	3
CMS 316	Intercultural Communication	3
CMS 414	Global Communication	3
ENG 353	Literature of the Renaissance	3
THR 415	History of the Theatre I	3
VAH 450	Italian Renaissance Art	3

Latin (LAT)

HST 220	Survey of Ancient History	3
HST 303	History of the Roman Republic & Empire	3
PHL 351	Medieval Philosophy	3
THR 415	History of the Theatre I	3
THR 425	History of Theatre II	3

Russian (RUS)

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

Spanish (SPN)

ANT 315	Language & Culture	3
ANT 352	Cultures of Latin America	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
SOC 368	Immigration & Immigrants	3

Summary of Requirements for the B.A.

Major	30-45
Liberal Studies Curriculum ¹	
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	

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

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

Degree Requirements

- 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.
- 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.
- 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.
- 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.
- 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 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 1xx.
- 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 Analyt. Geom. & Calc or MTH 207 Intro to Statistics, or earn appropriate transfer credit, for any one of the Common Academic Program mathematics courses.

MTH 114	Contemporary Math	3
MTH 129	Calculus for Business	3
MTH 137	Calculus I with Review	4
MTH 148	Introductory Calculus I	3
MTH 168	Analytic Geometry & Calculus I	4
MTH 205	Mathematical Concepts II	3
MTH 207	Introduction to Statistics	3

6. It is the responsibility of the student to file his or her Candidate for Graduation form.

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.

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.

Mini-Courses

Mini-courses are special, short-term, interdisciplinary credit courses developed by University faculty, (or sometimes by students with the advice and consent of a faculty member), to meet specific, highly current needs or interests not covered in the regular curricula. They are free of charge to all full-time students, even if the course puts them over the full-time limit, and are open to part-time and non-UD students for credit or audit. The typical mini-course carries one semester hour of credit, or fifteen class hours. Classes can be in various sequences, extending over several weeks or concentrated within a few days. Some mini-courses take the form of workshops. Occurring at various times in the year, mini-courses are publicized throughout campus. They can be added to students schedules during the term. For a sample listing of mini-courses, click here (p. 58).

Special Programs and Continuing Education

To serve adults in the Dayton community, the University provides a variety of noncredit courses, many in the form of workshops, seminars, study tours, and conferences. These are planned to meet the educational and training needs of organizations and of the community and are held both on and off campus. This office also administers Elderhostel, OSHER Lifelong Learning Institute, Senior Fellows, and New Horizons Band, for persons fifty and over. Continuing Education Units (CEU) are awarded for a charge for some offerings.

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

B.A. or B.S. with Teacher Licensure

Students in the College of Arts and Sciences may be able to complete the requirements for a teaching license without transferring to the School of Education and Health Sciences. For additional information regarding this option consult the Dean's office in the College of Arts and Sciences.

Enrollment, continuation, and successful completion in this program are subject to the same admission requirements, advising, maintenance of a unified system of records, screening, and other professional expectations of students in the School of Education and Health Sciences working toward the B.S. in Education and Allied Professions.

In order to complete all requirements in four years, a student in the College of Arts and Sciences should process an application for admission to the appropriate licensure program during the second semester of enrollment to begin the professional education sequence. Screening will be completed by the SOEHS transfer official. The requirements for the College of Arts and Sciences, the School of Education and Health Sciences, and licensure program concentration courses must be completed in order to be eligible for licensure recommendation. It is

possible for students to earn dual degrees in the College of Arts and Sciences and School of Education and Health Sciences.

Programs of Study

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

- Africana Studies (p. 117)
- Air Force Aerospace Studies ROTC (p. 118)
- American Studies (p. 119)
- Arts Administration (p. 123)
- Biology (p. 124)
- Chemistry (p. 134)
- Communication (p. 142)
- Computer Science (p. 147)
- Criminal Justice Studies (p. 151)
- Economics (p. 155)
- English (p. 158)
- Family Development (p. 164)
- Film Studies (p. 165)
- General Studies (p. 165)
- Geology (p. 166)
- Global Languages and Cultures (p. 171)
- History (p. 182)
- International Studies (p. 188)
- Marianist Social Transformation (p. 194)
- Mathematics (p. 195)
- Military Science ROTC (p. 202)
- Music (p. 203)
- Philosophy (p. 222)
- Physics (p. 228)
- Political Science (p. 233)
- Prelaw (p. 239)
- Premedicine/ Pre dentistry (p. 240)
- Psychology (p. 243)
- Religious Studies (p. 247)
- Sociology, Anthropology, and Social Work (p. 253)
- Sustainability, Energy, and Environment (p. 259)
- Theatre (p. 260)
- Visual Arts (p. 263)
- Women's and Gender Studies (p. 276)

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), Randall (Law)

Minor in Africana Studies (AFS)

Africana Studies

Select four courses from at least three different disciplines: 12

EDT 340 (p. 117)	Educating Diverse Student Populations in Inclusive Settings
ENG 335 (p. 117)	African Amer Lit
HST 336 (p. 117)	Hst-Africa 19th Cn
HST 337 (p. 117)	Hst Afr-19th Cn-Pr
HST 383 (p. 117)	Hst of Caribbean
HST 385 (p. 117)	Atlantic World
HST 398 (p. 117)	Hs Blks-US 1526-1900
HST 399 (p. 117)	Hst Blks-US s/1900
HST 488 (p. 117)	Sem in African Hst
MUS 305 (p. 117)	Africn Amer Sac Mus
MUS 306 (p. 117)	History-Amer Jazz
MUS 390 (p. 117)	Ensembles
PHL 363 (p. 117)	African Philosophy
PHL 364 (p. 117)	Race, Gender&Phl
REL 329 (p. 117)	African Amer Rel
SOC 328 (p. 117)	Racial&Eth Minorities

Select one special topics course from: 3

MUS 360 (p. 117)	Special Topics-Music
REL 492 (p. 117)	Special Topics
VAH 490 (p. 117)	Special Problems

Special topics or independent studies course approved by committee

Total Hours

15

Air Force Aerospace Studies, ROTC (AES)

As a University of Dayton student, you have the opportunity to become an Air Force officer through a cooperative agreement with Wright State University's Department of Aerospace Studies. We offer the Air Force Reserve Officer Training Corps (ROTC) program to full-time University of Dayton students pursuing a baccalaureate degree. While all courses are taken through the University of Dayton, leadership laboratories and classes for junior and senior years are typically taught at Wright State University, the host site of the area Air Force ROTC detachment.

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. Air Force ROTC students have additional opportunities to participate in challenging and rewarding activities that include piloting a sail-plane, trips to air force bases, orientation flights, official military functions and ceremonies, and one on-one mentoring with an active duty Air Force officer.

This program is open to all majors. All Air Force ROTC students have the opportunity to apply for scholarships that pay partial or full tuition, books, and charges, plus a \$300 - \$500 monthly stipend depending 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
Website: <http://www.wright.edu/academics/prog/rotc/>

or

The University of Dayton Admissions Office
Phone: 1-937-229-1000
E-mail: 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 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 250. Independent Study. 1-3 Hours

Independent Study.

AES 270. Extended GMC Leadership Laboratory. 0 Hours

Extended GMC Leadership Laboratory.

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 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. 0 Hours

POC Leadership Laboratory.

AES 491. Independent Study. 1 Hour

Independent Study.

AES 493. Independent Study. 3 Hours

Independent Study.

American Studies

- Bachelor of Arts, American Studies (p. 120)

In this interdisciplinary program, students take courses in their choice of eleven fields, thereby learning the skills of integrating, coordinating and making connections. The program, one of over three hundred

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 with a Major in American Studies (AMS) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

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

AMS 300 American Cultures (Satisfies CAP Inquiry) (p. 119)	3
AMS 301 Interps of Amer Cult (p. 119)	3

AMS 400 Interdisc Research (Satisfies CAP Major (p. 119) Capstone)	3
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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-American Lit (p. 119)	
ENG 317 Contemporary Poetry ¹ (p. 119)	
ENG 319 Contemporary Fiction ¹ (p. 119)	
ENG 320 Contemporary Drama ¹ (p. 119)	
ENG 325 Science Fiction (p. 119)	
ENG 327 Studies-Populr Fictn (p. 119)	
ENG 329 Short Story ¹ (p. 119)	
ENG 331 Studies in Film ¹ (p. 119)	
ENG 332 Studies-Lit & Film ¹ (p. 119)	
ENG 335 African Amer Lit (p. 119)	
ENG 337 Studies-Folklore (p. 119)	
ENG 339 American Indian Lit (p. 119)	
ENG 380 Studies in Lit ¹ (p. 119)	
ENG 383 Tragic Dilemma ¹ (p. 119)	
ENG 451 American Romanticism (p. 119)	
ENG 453 Amer Realism&Natrlsm (p. 119)	
ENG 455 20th Centruy Amer Lit (p. 119)	
ENG 468 Intro to Linguistics (p. 119)	
ENG 490 Seminar ¹ (p. 119)	
MUS 304 History of American Music (p. 119)	
MUS 305 Africn Amer Sac Mus (p. 119)	
MUS 306 History-Amer Jazz (p. 119)	

MUS 307 (p. 119)	Dev Amer Poplr Song	HST 377 (p. 119)	Contemporary Amer Hst
MUS 327 (p. 119)	Music in Film	HST 378 (p. 119)	Hst Globl Immgnrs-US
MUS 328 (p. 119)	Hst-Amer Musical	HST 380 (p. 119)	Native Amer History
MUS 404 (p. 119)	20th Century Music ¹	HST 385 (p. 119)	Atlantic World
VAH 370 (p. 119)	American Art	HST 391 (p. 119)	Amr Arch Hst&Prsrvt
VAH 480 (p. 119)	20th Century Art I	HST 398 (p. 119)	Hs Blks-US 1526-1900
VAH 482 (p. 119)	Hst-Photography II	HST 399 (p. 119)	Hst Blks-US s/1900
VAH 483 (p. 119)	20th Century Art II	HST 490 (p. 119)	Sem in Hstrgrphy
VAH 490 (p. 119)	Special Problems ¹	HST 495 (p. 119)	Internship
Group B		HST 499 (p. 119)	Topics in History ¹
(May include CAP Advanced Study in History, Philosophy and Religious Studies)		PHL 307 (p. 119)	Philosophy and Women
HST 342 (p. 119)	Environ Hst Americas	PHL 310 (p. 119)	Social Philosophy
HST 344 (p. 119)	Hst-Sci,Tch&Mod Crp	PHL 311 (p. 119)	Phl of Religion
HST 346 (p. 119)	Hist of Aviation	PHL 314 (p. 119)	Philosophy of Law
HST 347 (p. 119)	Sex,Race & Sience	PHL 317 (p. 119)	Ethics&Modern War
HST 351 (p. 119)	Women Gender Am	PHL 318 (p. 119)	Family Ethics
HST 352 (p. 119)	Hst of Amer Family	PHL 320 (p. 119)	Philosophy of Art
HST 355 (p. 119)	American Urban Hst	PHL 323 (p. 119)	Phl & Literature
HST 360 (p. 119)	US Legl/Const Hst I	PHL 331 (p. 119)	Sci, Objtvt & Values
HST 361 (p. 119)	US Legl/Const Hst II	PHL 332 (p. 119)	Technology&Values
HST 365 (p. 119)	Amer Films as Hst	PHL 340 (p. 119)	Special Problems ¹
HST 369 (p. 119)	Civil War & Recnstr	PHL 361 (p. 119)	American Philosophy
HST 370 (p. 119)	Eco & Bus Hst-US	REL 326 (p. 119)	Protestant Christnty
HST 372 (p. 119)	Hst-Rel in US	REL 327 (p. 119)	US Religious Expr
HST 373 (p. 119)	American Mil Hst	REL 328 (p. 119)	US Cath Experience
HST 374 (p. 119)	Ireland & America	REL 364 (p. 119)	Current Moral Issues
HST 375 (p. 119)	US Foreign Relations	REL 367 (p. 119)	Chr Ethics&Hlth Care
HST 376 (p. 119)	Soc & Cult Hst of US	REL 372 (p. 119)	Religion & Film

REL 373 (p. 119)	Religion&Literature
REL 375 (p. 119)	Religion & Science,Religion and Science
REL 376 (p. 119)	Theol&Soc Sciences
REL 485 (p. 119)	Lay Ministry
Group C	
(May include CAP Components)	
ANT 315 (p. 119)	Language and Culture
ANT 335 (p. 119)	Urban Anthropology
ANT 449 (p. 119)	Anthrop Field Work
ECO 346 (p. 119)	Intrmd MicroEco Anly
ECO 347 (p. 119)	Intrmd MacroEco Anly
ECO 390 (p. 119)	Antitrust Economics
ECO 435 (p. 119)	Eco of Environmnt
ECO 441 (p. 119)	Econometrics
ECO 442 (p. 119)	Money and Banking
ECO 445 (p. 119)	Public Finance
ECO 460 (p. 119)	Eco Develop & Growth
ECO 461 (p. 119)	International Econ
ECO 471 (p. 119)	Labor Economics
ECO 485 (p. 119)	Urban&Regional Econ
POL 301 (p. 119)	Amer Judicl Process
POL 303 (p. 119)	State & Local Govt
POL 310 (p. 119)	Pol Prts, Cmpns&Eltns
POL 311 (p. 119)	Pub Opin & Pol Bhvr
POL 313 (p. 119)	American Presidency
POL 314 (p. 119)	Interest Group Pols
POL 316 (p. 119)	American Pol Thought
POL 335 (p. 119)	US Natnl Sec Policy
POL 350 (p. 119)	Legislative Politics

POL 360 (p. 119)	Urban Politics
POL 408 (p. 119)	Amer Foreign Policy
POL 411 (p. 119)	Constitutional Law
POL 413 (p. 119)	Polts-Bureau&Regln
POL 450 (p. 119)	Civil Liberties
PSY 334 (p. 119)	Industrial Psycholgy
PSY 341 (p. 119)	Social Psychology
PSY 351 (p. 119)	Child Psychology
PSY 361 (p. 119)	Personality
PSY 363 (p. 119)	Abnormal Psychology
PSY 443 (p. 119)	Psychology of Women
PSY 461 (p. 119)	Curr Impl-Drug Depnd
PSY 462 (p. 119)	Human Sexuality
PSY 471 (p. 119)	Hst of Psychology
SOC 321 (p. 119)	Soc of Work&Occuptns
SOC 328 (p. 119)	Racial&Eth Minorities
SOC 337 (p. 119)	Political Sociology
SOC 339 (p. 119)	Social Inequality
SOC 341 (p. 119)	Self & Society
SOC 343 (p. 119)	Mass Comm-Mdrn Socty
SOC 351 (p. 119)	Urban Sociology
SOC 352 (p. 119)	Community
SOC 435 (p. 119)	Soc of Globalization

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

Breadth

ASI 150 (p. 119)	Intr to the Univ Exp	1
Total Hours to total at least		124

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.

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 nineteen semester hours, including seven semester hours of core interdisciplinary courses.

Arts Administration Committee

Sharon Gratto (Music), Coordinator
Darrell Anderson (Theatre), Judith Huacuja (Visual Arts), 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 (p. 123)	Intro to Arts Admin	3
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AAD 498 (p. 123)	Arts Admin Internshp	1-3
ACC 200 (p. 123)	Intro to Accounting	3
ECO 203 (p. 123)	Prin of Microecon	3
Select two courses from:		6
FIN 301 (p. 123)	Intro to Financial Mgt	
MGT 201 (p. 123)	Legal Envirnmnt-Bus	
MKT 300 (p. 123)	Survey of MKT	
OPS 300 (p. 123)	Intro-Oper&Supply Mgt	
Total Hours		16-18

Arts Administration - Track B (required for business majors)

AAD 301 (p. 123)	Intro to Arts Admin	3
AAD 498 (p. 123)	Arts Admin Internshp	1-3
Select three courses from two areas:		9

Music ¹

MUS 201 (p. 123)	Music in Concert	
MUS 202 (p. 123)	Prof Dev Workshops	
MUS 302 (p. 123)	Mus Hist & Lit II	
MUS 303 (p. 123)	Intro World Music	

Theatre/Dance

THR 105 (p. 123)	Intro to Theatre	
THR 415 (p. 123)	Hst of the Theatre I	
THR 425 (p. 123)	Hst of Theatre II	

Visual Arts

VAH 101 (p. 123)	Introduction to Visual Arts	
VAH 201 (p. 123)	Survey of Art I	
VAH 202 (p. 123)	Survey of Art II	
VAH 203 (p. 123)	Survey of Art III	

Select courses from performance or creative arts: 3

MUS 191 (p. 123)	Voice Class	
MUS 195 (p. 123)	Beg Guitar Class I	
MUS 196 (p. 123)	Group Piano I	

MUS 295 (p. 123)	Beg Guitar Class II
MUS 296 (p. 123) & MUS 297 (p. 123)	Func Keybd Skls I and Func Keybd Skls II
MUS 390 (p. 123)	Ensembles
MUS 399 (p. 123)	Performance Studies
MUS 491 (p. 123)	University Orchestra
MUS 492 (p. 123)	Symphonic Wind Ens
MUS 493 (p. 123)	University Chorale
THR 100 (p. 123)	Theatre Lab
THR 201 (p. 123)	Basic Dance
THR 251 (p. 123)	Beginning Tap Dance
THR 261 (p. 123)	Beginning Jazz Dance
THR 271 (p. 123)	Beginning Ballet
THR 305 (p. 123)	Theatre Stagecraft
THR 307 (p. 123)	Theatre Lighting
THR 310 (p. 123)	Acting I
THR 312 (p. 123)	Acting-Film & TV
THR 320 (p. 123)	Stage Mvmt & Voice
THR 330 (p. 123)	Concepts Scene Desgn
VAD 215 (p. 123)	Computr Appl-Desgn
VAD 218 (p. 123)	Computr Appl-Illust
VAD 220 (p. 123)	Design Processes I
VAF 104 (p. 123)	Foundation Drawing
VAF 112 (p. 123)	Foundation 2-D Dsgn
VAP 101 (p. 123)	Foundatn Photogrphy
Total Hours	

16-18

¹ 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 (p. 125)
- Bachelor of Science, Environmental Biology (p. 127)

Minor:

- Biology (p. 130)

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:

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

Environmental/ecological science course offerings include:

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

In addition, advanced undergraduates may enroll in graduate courses for undergraduate credit with the consent of the 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 twenty semester hours.

Faculty

Jayne B. Robinson, Chairperson

Distinguished Service Professor: Noland

Professors Emeriti: Chantell, Geiger, Ramsey

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

Associate Professors: Friese, Krane, Nielsen, Singh, D. Wright, S. Wright

Assistant Professors: Benbow, Hansen, Kango-Singh, McEwan, Pitychoutis, T. Williams

Lecturers: Dillon, Kavanaugh, Klco, Nickell

Adjunct Faculty: Allan, Craver, Del Rio-Tsonis, Fetherson, Hussain,

Joseph, Rhoads, Stull, Wolters, Yingling

Bachelor of Science with a Major in Biology (bio) Minimum 120 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

Science Breadth Requirements

(Satisfies CAP Mathematics and CAP Natural Science)

CHM 123 (p. 124) & 123L (p. 124)	General Chemistry and Gen Chemistry Lab	4
CHM 124 (p. 124) & 124L (p. 124)	General Chemistry and Gen Chemistry Lab	4
CHM 313 (p. 124) & 313L (p. 124)	Organic Chemistry and Organic Chemistry Lab	4
CHM 314 (p. 124) & 314L (p. 124)	Organic Chemistry and Organic Chem Lab	4
PHY 201 (p. 124) & 201L (p. 124)	General Physics and General Physics Lab	4
PHY 202 (p. 124) & 202L (p. 124)	General Physics and General Physics Lab	4

Select one mathematics sequence from: 6-8

MTH 116 (p. 124) & MTH 148 (p. 124)	Precalculus Math and Introductory Calc I	
MTH 148 (p. 124) & MTH 149 (p. 124)	Introductory Calc I and Introductory Calc II	
MTH 168 (p. 124) & MTH 169 (p. 124)	Any Geom & Calc I and Any Geom & Calc II	

Major Requirements ^{1, 6} 44

BIO 151 (p. 124) & 151L (p. 124)	Concepts of Bio I and Concepts-Bio Lab I	4
BIO 152 (p. 124) & 152L (p. 124)	Concepts of Bio II and Concepts-Bio Lab II	4
BIO 299 (p. 124)	Biology Seminar	1

BIO 310 (p. 124)	Ecology	3
BIO 312 (p. 124)	General Genetics	3
BIO 420 (p. 124)	Seminar (Satisfies Cap Major Capstone)	1
Select two environmental/ecological courses from: ^{2, 6}		7
BIO 301 (p. 124)	Evolution	
BIO 309 (p. 124) & 309L (p. 124)	Comp Anat Vertebrts and Comp Anatomy Lab	
BIO 310L (p. 124)	Ecology Lab	
BIO 311 (p. 124)	Intro Entomology	
BIO 312L (p. 124)	Genetics Lab	
BIO 314 (p. 124) & 314L (p. 124)	Plant Biology and Plant Bio Lab	
BIO 320 (p. 124) & 320L (p. 124)	Marine Biology and Marine Biology Lab	
BIO 340 (p. 124) & 340L (p. 124)	Clttr Biodiv&Res Mgt and Clttr Biodiv&Res Lab	
BIO 359 (p. 124)	Sustainable Biosphre	
BIO 360 (p. 124) & 360L (p. 124)	Island Environ Bio and Island Environ Lab	
BIO 370 (p. 124)	Conservatn Biology	
BIO 402 (p. 124) & 402L (p. 124)	Vertebrate Zoology and Vertbrate Zoolgy Lab	
BIO 407 (p. 124) & 407L (p. 124)	Plant Div & Ecol and Plant Div & Ecol Lab	
BIO 409 (p. 124) & 409L (p. 124)	Ecol Restoration and Ecol Restoration Lab	
BIO 411 (p. 124) & 411L (p. 124)	General Microbiology and Gen Microbiology Lab	
BIO 421 (p. 124)	Biological Problems ⁴	

BIO 435 (p. 124) & 435L (p. 124)	Microbial Ecology and Microbial Ecolgy Lab	
BIO 439 (p. 124)	Analysis Biol Data	
BIO 441 (p. 124)	Envirn Plant Bio	
BIO 445 (p. 124)	Evolution&Devlpmnt	
BIO 450 (p. 124) & 450L (p. 124)	Comp Animal Physiol and Comp Animal Phys Lab	
BIO 452 (p. 124) & 452L (p. 124)	Bio Rivers & Lakes and Bio River&Lake Lab	
BIO 459 (p. 124) & 459L (p. 124)	Envirnmntl Ecology and Envirnmntl Eco Lab	
BIO 460 (p. 124)	Intro Bioinformatics	
BIO 461 (p. 124) & 461L (p. 124)	Invertebrate Zoology and Invertbrt Zoology Lab	
BIO 465 (p. 124)	Disease Ecology	
BIO 480 (p. 124) & 480L (p. 124)	Prin of Microscopy and Microscopy Lab	
BIO 489 (p. 124)	Mycology	
Select two basic biomedical courses from: ^{3, 6}		7
BIO 301 (p. 124)	Evolution	
BIO 309 (p. 124) & 309L (p. 124)	Comp Anat Vertebrts and Comp Anatomy Lab	
BIO 311 (p. 124)	Intro Entomology	
BIO 312L (p. 124)	Genetics Lab	
BIO 403 (p. 124) & 403L (p. 124)	Physiology I and Physiology Lab	
BIO 404 (p. 124)	Physiology II	
BIO 411 (p. 124) & 411L (p. 124)	General Microbiology and Gen Microbiology Lab	

BIO 412 (p. 124)	Genetics Human Dis
BIO 415 (p. 124)	Neurobiology
BIO 421 (p. 124)	Biological Problems ⁴
BIO 427 (p. 124)	Immunology
BIO 439 (p. 124)	Analysis Biol Data
BIO 440 (p. 124) & 440L (p. 124)	Cell Biology and Cell Bio Lab
BIO 442 (p. 124) & 442L (p. 124)	Developmental Bio and Devlpmntl Bio Lab
BIO 445 (p. 124)	Evolution&Devlpmnt
BIO 460 (p. 124)	Intro Bioinformatics
BIO 461 (p. 124) & 461L (p. 124)	Invertebrate Zoology and Invertbrt Zoology Lab
BIO 462 (p. 124)	Molecular Biology
BIO 465 (p. 124)	Disease Ecology
BIO 466 (p. 124)	Bio-Infectious Dis
BIO 470 (p. 124)	Cancer Biology
BIO 475 (p. 124) & 475L (p. 124)	Human Anatomy and Human Anatomy Lab
BIO 480 (p. 124) & 480L (p. 124)	Prin of Microscopy and Microscopy Lab
BIO 489 (p. 124)	Mycology
CHM 420 (p. 124)	Biochemistry

Select four electives, two with accompanying labs, from the group above. ^{5, 6} 14

Breadth ⁷

ASI 150 (p. 124)	Intr to the Univ Exp	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 (p. 124) and BIO 152L (p. 124) 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 (p. 124) 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 (p. 124), CHM 302 (p. 124), CHM 303 (p. 124), CHM 420 (p. 124), MTH 367 (p. 124), CPS 107 (p. 124), CPS 111 (p. 124), CPS 132 (p. 124), GEO 208 (p. 124), GEO 308 (p. 124), GEO 401 (p. 124), 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 (p. 124), HST 341 (p. 124) or HST 342 (p. 124) are highly recommended.

Bachelor of Science with a Major in 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 ¹	12
HST 103	The West & the World

REL 103	Introduction to Religious & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

Science Breadth Requirements

(Satisfies CAP Mathematics and CAP Natural Science)

CHM 123 (p. 124) & 123L (p. 124)	General Chemistry and Gen Chemistry Lab	4
CHM 124 (p. 124) & 124L (p. 124)	General Chemistry and Gen Chemistry Lab	4
CHM 313 (p. 124) & 313L (p. 124)	Organic Chemistry and Organic Chemistry Lab	4
CHM 314 (p. 124) & 314L (p. 124)	Organic Chemistry and Organic Chem Lab	4
GEO 115 (p. 124) & 115L (p. 124)	Physical Geology and Physical Geology Lab	4
GEO 116 (p. 124) & 116L (p. 124)	Geolgl Hst-Earth and Geolgl Hst-Earth Lb	4
MTH 367 (p. 124)	Statistical Meth I ²	3
PHY 201 (p. 124) & 201L (p. 124)	General Physics and General Physics Lab	4

PHY 202 (p. 124) & 202L (p. 124)	General Physics and General Physics Lab	4
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Select one sequence from: 6-8

MTH 148 (p. 124) & MTH 149 (p. 124)	Introductory Calc I and Introductory Calc II	
MTH 168 (p. 124) & MTH 169 (p. 124)	Anly Geom & Calc I and Anly Geom & Calc II ¹	

Select one course from: 3-4

GEO 307 (p. 124)	Geomorphology	
GEO 308 (p. 124)	Probs-Envrmntl Geo	
GEO 309 (p. 124)	Surf&Groundwtr Hydr	
GEO 450 (p. 124)	Applied GIS	

Major Requirements ³

BIO 151 (p. 124) & 151L (p. 124)	Concepts of Bio I and Concepts-Bio Lab I	4
BIO 152 (p. 124) & 152L (p. 124)	Concepts of Bio II and Concepts-Bio Lab II	4
BIO 299 (p. 124)	Biology Seminar	1
BIO 310 (p. 124) & 310L (p. 124)	Ecology and Ecology Lab	4
BIO 312 (p. 124)	General Genetics	3
BIO 420 (p. 124)	Seminar (Satisfies CAP Major Capstone)	1
BIO 459 (p. 124)	Envirmntl Ecology	3
BIO 479L (p. 124)	Envir Instr Lab	2
BIO 499 (p. 124)	Env Bio Internship	3

Select three field oriented courses from: ^{3, 4} 11

BIO 301 (p. 124)	Evolution	
BIO 311 (p. 124)	Intro Entomology	
BIO 312L (p. 124)	Genetics Lab	
BIO 320 (p. 124) & 320L (p. 124)	Marine Biology and Marine Biology Lab	

BIO 340 (p. 124) & 340L (p. 124)	Citr Biodiv&Res Mgt and Citr Biodiv&Res Lab
BIO 359 (p. 124)	Sustainable Biosphre
BIO 360 (p. 124) & 360L (p. 124)	Island Environ Bio and Island Environ Lab
BIO 370 (p. 124)	Conservatn Biology
BIO 402 (p. 124) & 402L (p. 124)	Vertebrate Zoology and Vertbrate Zoolgy Lab
BIO 407 (p. 124) & 407L (p. 124)	Plant Div & Ecol and Plant Div & Ecol Lab
BIO 409 (p. 124) & 409L (p. 124)	Ecol Restoration and Ecol Restoration Lab
BIO 421 (p. 124)	Biological Problems ⁶
BIO 439 (p. 124)	Analysis Biol Data
BIO 441 (p. 124)	Envirn Plant Bio
BIO 450 (p. 124) & 450L (p. 124)	Comp Animal Physiol and Comp Animal Phys Lab
BIO 452 (p. 124) & 452L (p. 124)	Bio Rivers & Lakes and Bio River&Lake Lab
BIO 459L (p. 124)	Envirmntl Eco Lab
BIO 465 (p. 124)	Disease Ecology
BIO 489 (p. 124)	Mycology

Select three laboratory oriented courses from: ^{3, 5}

10

BIO 309 (p. 124) & 309L (p. 124)	Comp Anat Vertebrts and Comp Anatomy Lab
BIO 311 (p. 124)	Intro Entomology
BIO 312L (p. 124)	Genetics Lab
BIO 314 (p. 124) & 314L (p. 124)	Plant Biology and Plant Bio Lab

BIO 402 (p. 124) & 402L (p. 124)	Vertebrate Zoology and Vertbrate Zoolgy Lab
BIO 403 (p. 124) & 403L (p. 124)	Physiology I and Physiology Lab
BIO 411 (p. 124) & 411L (p. 124)	General Microbiology and Gen Microbiology Lab
BIO 415 (p. 124)	Neurobiology
BIO 421 (p. 124)	Biological Problems ⁶
BIO 435 (p. 124) & 435L (p. 124)	Microbial Ecology and Microbial Ecolgy Lab
BIO 439 (p. 124)	Analysis Biol Data
BIO 440 (p. 124) & 440L (p. 124)	Cell Biology and Cell Bio Lab
BIO 441 (p. 124)	Envirn Plant Bio
BIO 442 (p. 124) & 442L (p. 124)	Developmental Bio and Devlpmntl Bio Lab
BIO 445 (p. 124)	Evolution&Devlpmnt
BIO 450 (p. 124) & 450L (p. 124)	Comp Animal Physiol and Comp Animal Phys Lab
BIO 460 (p. 124)	Intro Bioinformatics
BIO 461 (p. 124) & 461L (p. 124)	Invertebrate Zoology and Invertbrt Zoology Lab
BIO 462 (p. 124)	Molecular Biology
BIO 465 (p. 124)	Disease Ecology
BIO 470 (p. 124)	Cancer Biology
BIO 475 (p. 124) & 475L (p. 124)	Human Anatomy and Human Anatomy Lab
BIO 480 (p. 124) & 480L (p. 124)	Prin of Microscopy and Microscopy Lab

BIO 489 Mycology
(p. 124)

Breadth

ASI 150 (p. 124)	Intr to the Univ Exp	1
Social and Behavioral Sciences (PSY 101 satisfies CAP Social Science)		6
ANT 150 (p. 124) or PSY 101 (p. 124)	Cultural Anthropolgy Introductory Psych	
Elective		
Total Hours to total at least		120

- 1 MTH 168 (p. 124) - MTH 169 (p. 124) by placement.
- 2 Other appropriate statistics courses may be substituted with the approval of the department chairperson.
- 3 A minimum grade of C- is required.
- 4 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 (p. 124) requires the permission of the EVB Program Director.
- 5 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 (p. 124) requires the permission of the EVB Program Director.
- 6 By permission only. Qualifies only as a laboratory elective.

Minor in Biology (bio)**Biology**

BIO 151 (p. 124) & 151L (p. 124)	Concepts of Bio I and Concepts-Bio Lab I	4
BIO 152 (p. 124) & 152L (p. 124)	Concepts of Bio II and Concepts-Bio Lab II	4
BIO 310 (p. 124)	Ecology	3
BIO 312 (p. 124)	General Genetics	3
Select two BIO courses (300/400 level)		6
Total Hours		20

Courses**BIO 101. General Biology I. 3 Hours**

Study of the more important biological processes and principles through analysis and synthesis, dealing primarily with the organizational aspects of living things. For the nonscience major.

BIO 101L. General Biology Laboratory I. 1 Hour

Examination of biological concepts using basic biological techniques and stressing an investigational and experimental approach. One two-hour laboratory per week. 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 critical discussion and evaluation of current global environmental issues including food production, human population growth, role of humans and pollution in environmental degradation, and conservation of agricultural, forest and other natural resources. No science credit for biology majors. Prerequisite(s): BIO 101 or SCI 190.

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 (p. 134)
- Bachelor of Science, Biochemistry (p. 135)
- Bachelor of Science, Chemistry (p. 137)
- Bachelor of Science, Medicinal-Pharmaceutical Chemistry (p. 138)

Minor:

- Chemistry (p. 139)

The B.S. program in chemistry is approved by the American Chemical Society for the training of professional chemists. Students in the B.S. program in chemistry may choose to conduct an original research project which normally begins with the selection of a research professor and project during the first term of the junior year. The research project may be conducted over the entire senior year, and normally requires two work periods of three to four hours each a week. Alternatively, it may be conducted over a ten-week period during the summer following the junior year. In either case, the project culminates in the final term of 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 that the work extends beyond two semesters.

The B.S. program in biochemistry follows a curriculum which satisfies the needs of students who anticipate careers in the life sciences. Students in the B.S. program in biochemistry may choose 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 B.S. in chemistry above.

The B.S. program in medicinal-pharmaceutical chemistry is designed to serve students who desire a more focused preparation in the analysis and synthesis of compounds of pharmacological significance. The program also provides a solid foundation for further studies in medicine, pharmacy or forensic chemistry. Students in the B.S. program in medicinal and pharmaceutical chemistry may choose 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 B.S. in chemistry above.

The B.A. program in chemistry provides a curriculum which prepares students for a wide range of interdisciplinary professions. The traditional B.S. curriculum has been modified in the B.A. program, most notably in mathematics, physics, and advanced chemistry. The program is sufficiently flexible to afford a wide selection of courses in the humanities. Science courses may be chosen to provide a preparation for professions such as medicine, dentistry, optometry, veterinary medicine, biochemistry, education, and law, as well as for employment in many other areas which require a background in science.

A minor in chemistry consists of twenty semester hours.

Faculty

Mark B. Masthay, Chairperson
 Professors Emeriti: Fratini, Keil, Knachel, Morrow, Singer
 Associate Professors: Benin, Church, Johnson, Lopper, Masthay, S. Swavey
 Assistant Professors: Crosson, Mammana
 Visiting Assistant Professor: Trohalaki, Turner
 Lecturer: Trick
 Lab Instructors: Eckerle, Hils, Piepgrass, R. Swavey

Bachelor of Arts with a major in Chemistry (chm) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

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 (p. 134) & MTH 149 (p. 134)	Introductory Calc I and Introductory Calc II	
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MTH 367
(p. 134)

Statistical Meth I

Natural Sciences (Applies to CAP Natural Science) 8

PHY 201
(p. 134)
& 201L
(p. 134)

General Physics
and General Physics Lab

PHY 202
(p. 134)
& 202L
(p. 134)

General Physics
and General Physics Lab

Social Sciences (Includes CAP Social Science) 12

Major Requirements¹ 36

(CHM 123 applies to CAP Natural Science)

CHM 123
(p. 134)
& 123L (p. 134)

General Chemistry
and Gen Chemistry Lab

4

CHM 124
(p. 134)
& 124L (p. 134)

General Chemistry
and Gen Chemistry Lab

4

CHM 201
(p. 134)
& 201L (p. 134)

Quantitative Anal
and Quant Analysis Lab

4

CHM 302
(p. 134)

Physical Chemistry

3-6

or CHM 303
(p. 134)
& CHM 304
(p. 134)

Physical Chemistry
and Physical Chemistry

CHM 313
(p. 134)
& 313L (p. 134)

Organic Chemistry
and Organic Chemistry Lab

4

CHM 314
(p. 134)
& 314L (p. 134)

Organic Chemistry
and Organic Chem Lab

4

CHM 496
(p. 134)

Prof Practice Seminar (Satisfies CAP Major
Capstone)

0

Select four courses from:² 10-13

CHM 317
(p. 134)

Spectro Idn-Org Cmpd

CHM 341
(p. 134)

Environmental Chem

CHM 404
(p. 134)

Topics-Physical Chm

CHM 412
(p. 134)

Intermed Organic Chm

CHM 415
(p. 134)

Analytical Chemistry

CHM 415L
(p. 134)

Analytical Chem Lab

CHM 417
(p. 134)

Inorganic Chemistry

CHM 418L
(p. 134)

Inorganic Chem Lab

CHM 420
(p. 134)

Biochemistry

CHM 426
(p. 134)

Biosynthetic Org Chm

CHM 427
(p. 134)

Medicinal Chemistry

CHM 451
(p. 134)

Gen Biochemistry I

CHM 452
(p. 134)

Gen Biochemistry II

CHM 462L
(p. 134)

Biochemistry Lab

CHM 477
(p. 134)

Honors Thesis

CHM 478
(p. 134)

Honors Thesis

CHM 497
(p. 134)
& CHM 498
(p. 134)

Research Seminar
and Research & Thesis

CHM 499
(p. 134)

Research & Thesis

Breadth

ASI 150
(p. 134)

Intr to the Univ Exp

1

Total Hours to total at least 124

¹ Advanced placement is permitted.

² May substitute two upper level courses from other science departments with permission of chairperson.

Bachelor of Science with a major in Biochemistry (bcm) Minimum 120 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons¹ 12

HST 103

The West & the World

REL 103

Introduction to Religious & Theological Studies

PHL 103

Introduction to Philosophy

ENG 100

Writing Seminar I²

Second-Year Writing Seminar³ 0-3

ENG 200

Writing Seminar II

Oral Communication 3

CMM 100

Principles of Oral Communication

Mathematics 3

Social Science 3

Arts 3

Natural Sciences 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.

Science Breadth Requirements

CPS 132 (p. 134)	Progrmmng-Engr & Sci	3
MTH 168 (p. 134)	Anly Geom & Calc I (Satisfies CAP Mathematics)	4
MTH 169 (p. 134)	Anly Geom & Calc II	4
MTH 218 (p. 134)	Anly Geom & Calc III	4
PHY 206 (p. 134)	Gen Physics I Mech	3
PHY 207 (p. 134)	Gen Phy II Ele & Mag	3
PHY 201L (p. 134)	General Physics Lab	1
Select courses from:		10
BIO 312 (p. 134)	General Genetics	
BIO 314 (p. 134)	Plant Biology	
BIO 403 (p. 134)	Physiology I	
BIO 404 (p. 134)	Physiology II	
BIO 411 (p. 134)	General Microbiology	
BIO 427 (p. 134)	Immunology	
BIO 440 (p. 134)	Cell Biology	
BIO 462 (p. 134)	Molecular Biology	
BIO 466 (p. 134)	Bio-Infectious Dis	
CHM 404 (p. 134)	Topics-Physical Chm	
CHM 412 (p. 134)	Intermed Organic Chm	
CHM 415 (p. 134) & 415L (p. 134)	Analytical Chemistry and Analytical Chem Lab	

CHM 417 (p. 134)	Inorganic Chemistry	
CHM 418L (p. 134)	Inorganic Chem Lab	
CHM 426 (p. 134)	Biosynthetic Org Chm	
CHM 427 (p. 134)	Medicinal Chemistry	
CHM 497 (p. 134) & CHM 498 (p. 134)	Research Seminar and Research & Thesis	
CHM 499 (p. 134)	Research & Thesis	

Major Requirements ¹ 45

Satisfies CAP Natural Science		
Year 1		
BIO 151 (p. 134) & 151L (p. 134)	Concepts of Bio I and Concepts-Bio Lab I	4
BIO 152 (p. 134)	Concepts of Bio II	3
CHM 123 (p. 134) & 123L (p. 134)	General Chemistry and Gen Chemistry Lab	4
CHM 124 (p. 134) & 124L (p. 134)	General Chemistry and Gen Chemistry Lab	4
Year 2		
CHM 201 (p. 134) & 201L (p. 134)	Quantitative Anal and Quant Analysis Lab	4
CHM 313 (p. 134) & 313L (p. 134)	Organic Chemistry and Organic Chemistry Lab	4
CHM 314 (p. 134) & 314L (p. 134)	Organic Chemistry and Organic Chem Lab	4
BIO Elective and Laboratory		
Year 3		
CHM 303 (p. 134) & 303L (p. 134)	Physical Chemistry and Physical Chem Lab	4
CHM 304 (p. 134)	Physical Chemistry	3
CHM 451 (p. 134)	Gen Biochemistry I	3
CHM 452 (p. 134)	Gen Biochemistry II	3
CHM 462L (p. 134)	Biochemistry Lab	1
CHM 495 (p. 134)	Intro-Resrch Seminar	0
Year 4		

CHM 496 (p. 134)	Prof Practice Seminr (Satisfies CAP Major Capstone)	0
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Breadth

ASI 150 (p. 134)	Intr to the Univ Exp	1
Foreign Language		6-8
Social and Behavioral Sciences (Includes CAP Social Science)		6
Total Hours to total at least		120

¹ Advanced placement is permitted.

Bachelor of Science with a major in Chemistry (chm) Minimum 120 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religioius & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

Science Breadth Requirements

Mathematics, Computer Sciences ¹	15
CPS 132 (p. 134)	Progrmmng-Engr & Sci
MTH 168 (p. 134)	Anly Geom & Calc I (Satisfies CAP Mathematics)

MTH 169 (p. 134)	Anly Geom & Calc II	
MTH 218 (p. 134)	Anly Geom & Calc III	
PHY 206 (p. 134)	Gen Physics I Mech (Applies to CAP Natural Science)	3
PHY 207 (p. 134)	Gen Phy II Ele & Mag	3
PHY 208 (p. 134)	Gen Phy III Mec Wavs	3
PHY 210L (p. 134)	Gen Physics Lab I	1
PHY 211L (p. 134)	Gen Physics Lab II	1

Major Requirements ² 49

Year 1		
CHM 123 (p. 134)	General Chemistry and Gen Chemistry Lab (Applies to CAP Natural Science)	4
CHM 124 (p. 134)	General Chemistry and Gen Chemistry Lab & 124L (p. 134)	4
Year 2		
CHM 201 (p. 134)	Quantitative Anal and Quant Analysis Lab & 201L (p. 134)	4
CHM 313 (p. 134)	Organic Chemistry and Organic Chemistry Lab & 313L (p. 134)	4
CHM 314 (p. 134)	Organic Chemistry and Organic Chem Lab & 314L (p. 134)	4
Year 3		
CHM 303 (p. 134)	Physical Chemistry and Physical Chem Lab & 303L (p. 134)	4
CHM 304 (p. 134)	Physical Chemistry and Physical Chem Lab & 304L (p. 134)	4
CHM 317 (p. 134)	Spectro Idn-Org Cmpd	1
CHM 417 (p. 134)	Inorganic Chemistry	3
CHM 418L (p. 134)	Inorganic Chem Lab	1
CHM 495 (p. 134)	Intro-Resrch Seminar	0
Year 4		
CHM 415 (p. 134)	Analytical Chemistry and Analytical Chem Lab & 415L (p. 134)	4
CHM 420 (p. 134)	Biochemistry	3

or CHM 451 (p. 134) & CHM 452 (p. 134)	Gen Biochemistry I and Gen Biochemistry II	
CHM 496 (p. 134)	Prof Practice Seminr (Satisfies CAP Major Capstone)	0
Select three courses from: ³		9
CHM 404 (p. 134)	Topics-Physical Chm	
CHM 412 (p. 134)	Intermed Organic Chm	
CHM 426 (p. 134)	Biosynthetic Org Chm	
CHM 427 (p. 134)	Medicinal Chemistry	
CHM 462L (p. 134)	Biochemistry Lab	
CHM 477 (p. 134)	Honors Thesis	
CHM 478 (p. 134)	Honors Thesis	
CHM 497 (p. 134) & CHM 498 (p. 134)	Research Seminar and Research & Thesis	
CHM 499 (p. 134)	Research & Thesis	

Breadth

ASI 150 (p. 134)	Intr to the Univ Exp	1
Foreign Language		6-8
Social and Behavioral Sciences (Includes CAP Social Science)		6
Total Hours to total at least		120

¹ Should be completed during the first two years.

² Advanced placement is permitted.

³ May substitute one approved science course from another department.

Bachelor of Science in Medicinal- Pharmaceutical Chemistry (mcm) Minimum 120 hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religious & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3

CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

Science Breadth Requirements

Satisfies CAP Mathematics and CAP Natural Science

BIO 151 (p. 134) & 151L (p. 134)	Concepts of Bio I and Concepts-Bio Lab I	4
BIO 152 (p. 134) & 152L (p. 134)	Concepts of Bio II and Concepts-Bio Lab II	4
MTH 148 (p. 134) & MTH 149 (p. 134)	Introductory Calc I and Introductory Calc II	6
MTH 367 (p. 134)	Statistical Meth I	3
PHY 201 (p. 134) & 201L (p. 134)	General Physics and General Physics Lab	4
PHY 202 (p. 134) & 202L (p. 134)	General Physics and General Physics Lab	4

Major Requirements ^{2, 3} 53

Year 1		
CHM 123 (p. 134) & 123L (p. 134)	General Chemistry and Gen Chemistry Lab	4
CHM 124 (p. 134) & 124L (p. 134)	General Chemistry and Gen Chemistry Lab	4
Year 2		
CHM 201 (p. 134) & 201L (p. 134)	Quantitative Anal and Quant Analysis Lab	4

CHM 313 (p. 134) & 313L (p. 134)	Organic Chemistry and Organic Chemistry Lab	4
CHM 314 (p. 134) & 314L (p. 134)	Organic Chemistry and Organic Chem Lab	4
Year 3		
CHM 302 (p. 134) & 302L (p. 134)	Physical Chemistry and Physical Chem Lab ¹	4
CHM 317 (p. 134)	Spectro Idn-Org Cmpd	1
CHM 420 (p. 134)	Biochemistry ⁴	3
CHM 462L (p. 134)	Biochemistry Lab	1
CHM 495 (p. 134)	Intro-Resrch Seminar	0
Year 4		
CHM 319L (p. 134)	Adv Org Synthesis Lab	1
CHM 426 (p. 134)	Biosynthetic Org Chm	3
CHM 427 (p. 134)	Medicinal Chemistry	3
CHM 454 (p. 134)	Rational Drug Design	3
CHM 463L (p. 134)	Bioanalytical Chem Lab	1
CHM 496 (p. 134)	Prof Practice Seminr (Satisfies CAP Major Capstone)	0
Science Requirements		13

Select six semester hours from: ⁵

CHM 412 (p. 134)	Intermed Organic Chm	
CHM 415 (p. 134) & 415L (p. 134)	Analytical Chemistry and Analytical Chem Lab	
CHM 417 (p. 134)	Inorganic Chemistry	
CHM 418L (p. 134)	Inorganic Chem Lab	
CHM 497 (p. 134) & CHM 498 (p. 134)	Research Seminar and Research & Thesis	

Select two lecture courses and one laboratory from:

BIO 403 (p. 134) & 403L (p. 134)	Physiology I and Physiology Lab	
BIO 411 (p. 134) & 411L (p. 134)	General Microbiology and Gen Microbiology Lab	

BIO 440 (p. 134) & 440L (p. 134)	Cell Biology and Cell Bio Lab	
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Breadth ⁶

ASI 150 (p. 134)	Intr to the Univ Exp	1
Social and Behavioral Sciences (Includes CAP Social Science)		6
Total Hours to total at least		120

- ¹ Substitution of more advanced courses is possible upon consultation with the Department of Chemistry chairperson.
- ² Consult General Requirements for all Bachelor of Science programs and the Common Academic Program requirements.
- ³ Advanced placement is permitted.
- ⁴ Biochemistry courses CHM 451 and CHM 452 may be substituted, with CHM 452 counting as a general elective.
- ⁵ Chemistry graduate courses or advanced electives from other departments may be selected with the permission of the Department of Chemistry chairperson.
- ⁶ If composition requirement is waived, the student should seek the English elective. Advanced writing courses are recommended.

Minor in Chemistry (chm)

Chemistry

CHM 123 (p. 134) & 123L (p. 134)	General Chemistry and Gen Chemistry Lab	4
CHM 124 (p. 134) & 124L (p. 134)	General Chemistry and Gen Chemistry Lab	4
CHM 302 (p. 134)	Physical Chemistry	3
or CHM 303 (p. 134)	Physical Chemistry	

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

- ¹ In consultation with the chairperson.

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 (p.)

Concentrations:

- Communication Management
- Communication Studies
- Electronic Media
- Journalism
- Public Relations
- Theatre

Minors:

- Communication (p. 144)
- Political Journalism (p. 144)

The course requirement for communication majors is thirty-nine semester hours. Teacher licensure through the E11A program is an option for communication majors. Consult department chairperson for details.

A minor in communication consists of fifteen semester hours.A minor in political journalism is available for political science majors. The political journalism minor consists of eighteen semester hours. The department also offers a Bachelor of Arts with a major in theatre. See Theatre (p. 260).

Faculty

Jonathan A. Hess, Chairperson
Professors Emeriti: Blatt, Gilvary, Harwood, Lain, Morlan
Professors: Cusella, Hess, Robinson, Skill, Thompson
Associate Professors: Anderson, Griffin, Han, Scantlin, Wallace, Watters, Yoder
Assistant Professors: Dunlevy, Langhorne, Peters, Taylor, Valenzano
Media Executive in Residence: Walters
Lecturers: Angel, Beran, Combs, Dickson, Flynn, Goode, Oh, Walter

Bachelor of Arts with a major in Communication (CMM) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected		
First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religioius & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	

Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

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

		39
CMM 100 (p. 142)	Principles of Oral Communication	3
CMM 201 (p. 142)	Foun-Mass Communcatn	3
CMM 202 (p. 142)	Foun-Com Thr&Rsrch	3
CMM 330 (p. 142)	Media Writing	3
CMM 480 (p. 142)	Comm Capstone (Satisfies CAP Major Capstone)	3
Select two courses in CMM or THR ³		6

Select one concentration from:

Communication Management (CMT)

CMM 320 (p. 142)	Interpersnal Commnctn	3
CMM 321 (p. 142)	Small Group Commnctn	3
CMM 412 (p. 142)	Statistcl Mthd-Comm	3

CMM 421 (p. 142)	Commnctn-Organztns	3
Select two courses from:		6
CMM 322 (p. 142)	Intervwng-Comm & Bus	
CMM 351 (p. 142)	Public Speaking	
CMM 352 (p. 142)	Persuasion	
CMM 413 (p. 142)	Comm in Infrmtn Age	
CMM 420 (p. 142)	Comm & Conflict Mgt	
CMM 498 (p. 142)	Communicatn Intrnshp	

Communication Studies (CSS)

Select nine courses from CMM or THR ^{2, 3}		18
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Electronic Media (RTV)

CMM 430 (p. 142)	Copyediting	3
CMM 343 (p. 142)	Scriptwrtng-Elec Med	3
CMM 397 (p. 142)	Communcatn Practicum ⁴	1-3
Select one course from:		3
CMM 341 (p. 142)	Audio Production	
CMM 342 (p. 142)	Fund-Video Productn	
CMM 344 (p. 142)	Multimda Dsgn/Prd I	

Select two courses from:		6
CMM 345 (p. 142)	Class Amer Film	
CMM 440 (p. 142)	Broadcast News	
CMM 442 (p. 142)	Adv Television Prod	
CMM 444 (p. 142)	Multimedia Dsn&Prd II	
CMM 446 (p. 142)	Electronic Media Mgt	
CMM 449 (p. 142)	Top-Electronic Media	
CMM 498 (p. 142)	Communicatn Intrnshp	
CMS 414 (p. 142)	Global Communication	

Journalism (JRN)

CMM 331 (p. 142)	Feature Writing	3
CMM 430 (p. 142)	Copyediting	3

CMM 431 (p. 142)	Public Affairs Reporting	3
CMM 432 (p. 142)	Law & News Media	3
Select two courses from:		6
CMM 332 (p. 142)	Publication Design	
CMM 333 (p. 142)	Free Lance Writing	
CMM 334 (p. 142)	Sportswriting	
CMM 412 (p. 142)	Statistcl Mthd-Comm	
CMM 416 (p. 142)	Devlpmnt-Mass Media	
CMM 439 (p. 142)	Spec Topics-Journalism	
CMM 498 (p. 142)	Communicatn Intrnshp	
CMS 414 (p. 142)	Global Communication	

Public Relations (PUB)

CMM 360 (p. 142)	Prin of Pub Reltns	3
CMM 412 (p. 142)	Statistcl Mthd-Comm	3
CMM 460 (p. 142)	Public Rel Writing	3
CMM 461 (p. 142)	Pub Rel Campaigns	3
Select two courses from:		6
CMM 331 (p. 142)	Feature Writing	
CMM 332 (p. 142)	Publication Design	
CMM 421 (p. 142)	Commnctn-Organztns	
CMM 430 (p. 142)	Copyediting	
CMM 469 (p. 142)	Spe Top-Pub Relatns	
CMM 498 (p. 142)	Communicatn Intrnshp	

Theatre (CTR)

THR 203 (p. 142)	Technical Productn	3
THR 310 (p. 142)	Acting I	3
THR 340 (p. 142)	Director-Theatre	3
THR 415 (p. 142)	Hst of the Theatre I	3
Select two courses from:		6
THR 305 (p. 142)	Theatre Stagecraft	

THR 307 (p. 142)	Theatre Lighting	
THR 323 (p. 142)	Acting II	
THR 325 (p. 142)	Thry&Crtcsm Stage: I	
THR 326 (p. 142)	Thry&Crtcsm stage:II	
THR 330 (p. 142)	Concepts Scene Desgn	
THR 424 (p. 142)	Play Directing	

Breadth

ASI 150 (p. 142)	Intr to the Univ Exp	1
Supporting Area of Study ⁵		12
Total Hours to total at least		124

- At least twenty-four of the required thirty-nine semester hours in all communication concentrations must be 300-400 level. No more than six total semester hours of CMM 390 (p. 142), CMM 397 (p. 142) and CMM 498 (p. 142) may be applied toward the thirty-nine semester hour requirement.
- Approved program of study by advisor and department chair must be submitted prior to completion of eighteen semester hours.
- Dance courses in the theatre program: THR 201 (p. 142), THR 251 (p. 142), THR 261 (p. 142), THR 271 (p. 142), THR 301 (p. 142), THR 351 (p. 142), THR 361 (p. 142), THR 371 (p. 142) do not count toward the thirty-nine semester hour requirement.
- Flyer TV or WUDR.
- Twelve semester hours from one discipline or approved minor or area of study: (at least six semester hours at the 300/400 level)

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Minor in Communication (CMM)

Communication

CMM 110 (p. 142)	Group Dec-Making	1
CMM 111 (p. 142)	Inform Public Sp	1
or CMM 112 (p. 142)	Persuasive Public Sp	
CMM 113 (p. 142)	Interviewing	1
Select four CMM courses (300/400-level) ¹		12
Total Hours		15

- In consultation with the chairperson.

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Minor in Political Journalism (POJ)

Political Journalism ¹

CMM 201 (p. 142)	Foun-Mass Communcatn	3
CMM 330 (p. 142)	Media Writing	3
Select four courses from:		12
CMM 331 (p. 142)	Feature Writing	
CMM 354 (p. 142)	Pol Campaign Comm	
CMM 355 (p. 142)	Rhetoric-Soc Movements	
CMM 431 (p. 142)	Public Affairs Reporting	
CMM 432 (p. 142)	Law & News Media	
Total Hours		18

- Available only to political science majors.

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 110. Group Decision Making. 1 Hour

Communication processes for small decision-making groups. Focus is on the development of general competencies in leadership, group roles, conflict management, agenda setting, problem analysis and research, decision making and critical thinking.

CMM 111. Informative Public Speaking. 1 Hour

Communication processes for presenting information in a public speaking context. Focus is on the development of general competencies in development and organization of ideas, research, adaptation to an audience, use of PowerPoint, and delivery.

CMM 112. Persuasive Public Speaking. 1 Hour

Communication processes for persuading listeners in a public speaking context. Focus is on the development of general competencies in the construction and organization of persuasive strategies, critical evaluation of arguments and evidence, research, adaptation to an audience, use of PowerPoint, and delivery.

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

Survey of theory and research in nonverbal behavior. Examination of the influence of environmental factors, physical behavior, and vocal cues on human communication.

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 113.

CMM 330. Media Writing. 3 Hours

Developing and practicing writing skills for journalism, public relations, and electronic media. Study and practice of ethics in determining news values, gathering information, and communicating clearly and accurately for mass audiences. AP style 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 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. Scriptwriting for Electronic Media. 3 Hours

Study of concrete approaches to and practice with the kinds of writing being done professionally in all program types on television and radio including corporate media writing. Prerequisite(s): CMM 330 or permission of instructor.

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. 3-6 Hours

Topics course surveying the artistic evolution of American film. Includes the analysis of styles of producing, scripting, acting, directing, lighting, sound, cinematography, set design and editing through viewing of classic American films and selected international films that have influenced the art of American filmmaking. 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 effective speaking to specific audiences and occasions. Delivery of informational, problem-solving, and special-occasion speeches. Prerequisite(s): CMM 111 or CMM 112.

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. 1-3 Hours

Contracted participation in an approved on-campus communication organization. One semester hour per term to a maximum of three semester hours. Grading Option Two only.

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. Statistical Methods in Communication. 3 Hours

Study of data gathering methods in communication. Practice in sampling, survey methods, questionnaire development, and experimental design. Emphasis on the use of logic to interpret data and to support claims.

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 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. The Law & News Media. 3 Hours

Exploration of the free press clause of the First Amendment, as defined by the courts and media practice. Study of First Amendment core values and theories. Investigation into law on libel, privacy, censorship, access to information, and copyright, as well as regulation of broadcast, cable and new electronic media. Prerequisite(s): Junior standing.

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 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 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 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. Public Relations Writing. 3 Hours

Study, development and application of public relations strategies.

Emphasis on strategically effective, factually accurate and grammatically sound written communications for organizational and mass audiences.

Prerequisite(s): CMM 330, CMM 360.

CMM 461. Public Relations Campaigns. 3 Hours

Students plan and carry out a public relations program for an established professional organization, work out solutions to communication and public relations problems, and prepare written campaign materials and handbooks. Prerequisite(s): CMM 330, CMM 360, CMM 460; senior standing.

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 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 (p. 147)
- Bachelor of Science, Computer Science (p. 148)

Minors:

- Computer Information Systems (p. 149)
- Computer Science (p. 149)

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 the same 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, and computer architecture. Each student must take appropriate upper-level electives to ensure depth in at least three of the core subject areas of data structures, software design, programming language concepts and architecture as arranged with the student's advisor.

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.

These B.S. programs provide a foundation for students to embark on successful careers in a variety of computing disciplines, including software development, system design, database management, artificial intelligence, 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 twenty semester hours. A minor in computer information systems consists of twenty-three semester hours.

Faculty

Mehdi Zargham, Chairperson

Professors Emeriti: Kester, Lang, Winslow

Professor: Sritharan

Associate Professors: Buckley, Courte, Gowda, Perugini

Assistant Professor: Yao

Lecturer: Sanyal

Bachelor of Science with a major in Computer Information Systems (cis) Minimum 120 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹

12

HST 103 The West & the World

REL 103 Introduction to Religious & Theological Studies

PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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
Major Requirements		57
CPS 150 (p. 147)	Algorithm&Progrm I (Applies to CAP Natural Science)	4
CPS 151 (p. 147)	Algorithm&Progrm II	4
CPS 242 (p. 147)	User Interface Desgn	3
CPS 250 (p. 147)	Intro-Comptr Org	3
CPS 310 (p. 147)	Systems Analysis	3
CPS 312 (p. 147)	Systems Design	3
CPS 341 (p. 147)	Discrete Structures	3
CPS 346 (p. 147)	Operating Systems I	3
CPS 350 (p. 147)	Data Struct&Algorithm	3
CPS 490 (p. 147)	Senior Capstone (Satisfies CAP Major Capstone)	1
Select four CPS courses (310 level or above)		12
Concentration: courses below or an approved minor		15-27
ACC 207 (p. 147)	Intro-Financial Acc	
ACC 208 (p. 147)	Intro-Managerial Acc	

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.

ECO 203 (p. 147)	Prin of Microecon
ECO 204 (p. 147)	Prin of Macroecon
MGT 301 (p. 147)	Organiztnl Behavior
MKT 300 (p. 147)	Survey of MKT

Bachelor of Science with a major in Computer Science (cps) Minimum 120 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religioius & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

Major Requirements		45
CPS 150 (p. 147)	Algorithm&Progrm I (Applies to CAP Natural Science)	4
CPS 151 (p. 147)	Algorithm&Progrm II	4
CPS 242 (p. 147)	User Interface Desgn	3
CPS 250 (p. 147)	Intro-Comptr Org	3

CPS 341 (p. 147)	Discrete Structures	3
CPS 346 (p. 147)	Operating Systems I	3
CPS 350 (p. 147)	Data Struct&Algorithm	3
CPS 387 (p. 147)	Comp System Desgn I	3
CPS 490 (p. 147)	Senior Capstone (Satisfies CAP Major Capstone)	1
Select six CPS courses (300/400 level) ³		18

Minor in Computer Information Systems (cis)

Computer Information Systems

CPS 150 (p. 147)	Algorithm&Progrm I	4
CPS 151 (p. 147)	Algorithm&Progrm II	4
CPS 242 (p. 147)	User Interface Desgn	3
CPS 310 (p. 147)	Systems Analysis	3
CPS 312 (p. 147)	Systems Design	3
Select two CPS courses (320 level or above)		6
Total Hours		23

Minor in Computer Science (cps)

Computer Science

CPS 150 (p. 147)	Algorithm&Progrm I	4
CPS 151 (p. 147)	Algorithm&Progrm II	4
CPS 350 (p. 147)	Data Struct&Algorithm	3
Select three CPS courses (320 level or above, excluding CPS 437)		9
Total Hours		20

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 150. Algorithms & Programming I. 4 Hours

Algorithms, programs, and computers. Algorithm development, basic programming and programming structure. Debugging and program verification. Data representation. Computer solutions to numeric and non-numeric problems using a compiler language.

CPS 151. Algorithms & Programming II. 4 Hours

Continuation of CPS 150. Emphasis on program design, development and style, string processing, data structures, program modularity, and abstract data type, using a compiler language. Prerequisite(s): CPS 150.

CPS 242. User Interface Design. 3 Hours

The importance and challenges of user interface design in software development are discussed and Graphical User Interfaces (GUI) are developed using an appropriate programming language. Reading assignments cover interface design issues and programming assignments focus on event-driven programming, exception handling, GUI development, web and multi-media applications, and data persistence. Prerequisite(s): CPS 151.

CPS 250. Introduction to Computer Organization. 3 Hours

Computer organization and architecture are studied from a software perspective. Data representation, program translation and execution are examined in the context of the classic von Neumann architecture. Programming projects involving both a higher-level language and an assembly language reinforce the architecture concepts. 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 producing software, software development life cycles, top-down approach, data flow diagram, data dictionary, mini-specifications, in/output design, E-R diagrams, normalization, introduction to object oriented analysis. Prerequisite(s): CPS 151 or CPS 225.

CPS 312. Systems Design. 3 Hours

Structured design, tools of structured design, coupling and cohesion of modules, transform and transaction analyses, packaging, optimization, data-oriented and object oriented design methodologies, automated design tools. Prerequisite(s): CPS 310.

CPS 341. Discrete Structures. 3 Hours

Logic and proofs, sets and counting, Boolean algebra, graph theory, directed graphs, mathematical machines, formal languages and grammars. 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

Advanced concepts of linear data structures, stacks, queues, and abstract data types. Basic and advanced concepts of trees, graphs, hash tables, heaps, algorithm design and analysis techniques. Prerequisite(s): CPS 151.

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 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 415. Software Testing. 3 Hours

Detailed examination of the software testing process and its role in the software lifecycle. Topics include functional testing, structural testing, methods for designing, generating and evaluating test data, coverage hierarchies, theoretical and practical limitations of testing, testability measures, regression testing, and specialized testing such as methods for testing object oriented software, graphical user interfaces. Prerequisite(s): (CPS 310 or CPS 418); CPS 341, CPS 350.

CPS 420. Object Oriented Systems Development. 3 Hours

An overview of object-oriented analysis and design methodologies and Unified Modeling Language (UML), Use Case Model, Logical Model, Component Model, Deployment Model and Design Patterns. The course will involve a team project using a state-of-the-art Computer Aided Software Engineering (CASE) tool. Prerequisite(s): CPS 310, CPS 350.

CPS 422. Software Project Management. 3 Hours

An overview of software project management tasks, software development methodologies, project planning techniques, algorithmic cost estimation models, Function Point Estimation, risk management, prototyping, management of software reuse, software maintenance, quality assurance, configuration management, Capability Maturity Model (CMM), and evaluation of CASE tools. Prerequisite(s): CPS 310 or CPS 418.

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 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. Systems Programming I. 3 Hours

Analysis of compilers and their construction; programming techniques discussed in the current literature; advanced computer applications in mathematical and nonnumeric areas. Prerequisite(s): CPS 346, CPS 350.

CPS 460. Computer Graphics. 3 Hours

Introduction to graphics devices and software graphic primitives (points, lines, characters), two-dimensional transformations, clipping, survey of display devices and methods. Graphic input devices, representation of curves and surface in space. Prerequisite(s): CPS 350.

CPS 470. Data Communications. 3 Hours

Basic hardware and software architectural components for computer communications. Analysis of communication protocol layers with respect to performance, error handling and control functions. Switching, routing, multiprocessing and distributed processing. Case studies of existing networks and network architectures. Prerequisite(s): CPS 350.

CPS 472. Computer Networking. 3 Hours

Continuation of CPS 470. Concepts and analysis of computer networks. Network applications, security and network management. Network topologies and case studies. Prerequisite(s): CPS 346, CPS 470.

CPS 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.

CPS 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.

CPS 480. Artificial Intelligence. 3 Hours

Basic concepts and techniques of intelligent systems. Emphasis on representations, problem solving, search strategies, expert systems, mVgic systems, and AI programming. Design and implementation of AI applications. Prerequisite(s): CPS 350.

CPS 481. Advanced Artificial Intelligence. 3 Hours

An examination of several advanced sub-disciplines of Artificial Intelligence including areas such as speech recognition, planning, machine learning, advanced multiple agent systems and related topics. An exploration of underlying theoretical issues as well as the status of current problems and applications. Prerequisite(s): CPS 480.

CPS 482. Automata Theory. 3 Hours

Finite automata, sequential machines, survey of formal languages, introduction to computability, recursive functions, and Turing machines. Prerequisite(s): CPS 341.

CPS 490. Senior Capstone Project & Presentation. 1 Hour

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.

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 such areas as advanced artificial intelligence, computer architecture, information retrieval, microprogramming, multiprogramming techniques, numerical analysis, graphics, data communications, parallel processing, software development, distributed computing, multimedia computing. By arrangement. May be taken more than once. Prerequisite(s): Permission of department chairperson.

Criminal Justice Studies

Major:

- Bachelor of Arts, Criminal Justice (p. 151)

Minor:

- Criminal Justice (p. 154)

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 critical theory of criminal justice/criminology and
2. Requisite 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; and

3. Preparation for pursuing advanced study in a criminological graduate program or law school.

In addition to courses in criminal justice studies, students take courses in political science, psychology, sociology, and social work.

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 here 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 eighteen semester hours.

Students intending to major or minor in CJS should consult with the program director to begin planning their CJS 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 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), Ghery (Political Science), Ingram (Political Science), Longazel (Sociology), Majka, L. (Sociology), Majka, T. (Sociology), Martorano Miller (Political Science), Neeley (Political Science), Pierce (Political Science), Reeb (Psychology), Thompson-Miller (Sociology)

Bachelor of Arts with a major in 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 ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

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) ¹	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

Major Requirements ^{2, 3}

CJS 101 (p. 151)	Intro to CJS	3-4
CJS 207 (p. 151)	Resrch Mthds in CJS ^{1, 4}	3
CJS 347 (p. 151)	Sr Project Design	1
CJS 447 (p. 151)	Senior Project-CJS (Satisfies CAP Major Capstone)	3
SOC 305 (p. 151)	Criminological Thry	3

Select two behavior courses from: 6

PSY 363 (p. 151)	Abnormal Psychology
PSY 461 (p. 151)	Curr Impl-Drug Depnd
SOC 325 (p. 151)	Deviant Behavior
SOC 327 (p. 151)	Criminology
SOC 410 (p. 151)	Victimology
SWK 325 (p. 151)	Child Abuse

Select two institutions courses from: 6

CJS 303 (p. 151)	Corrections
POL 303 (p. 151)	State & Local Govt
POL 305 (p. 151)	Intro To Public Adm

POL 360 (p. 151)	Urban Politics
SOC 323 (p. 151)	Juvenile Justice
SWK 305 (p. 151)	Soc Ser Health Field

Select two law courses from: 6

CJS 305 (p. 151)	Criminal Law
CJS 315 (p. 151)	Criminal Procedure
POL 301 (p. 151)	Amer Judicl Process
POL 411 (p. 151)	Constitutional Law
POL 450 (p. 151)	Civil Liberties
SOC 326 (p. 151)	Law & Society

Select two social structure courses from: 6

CJS 322 (p. 151)	Policing & Society
CJS 336 (p. 151)	Comp Crim Jus Systms
SOC 328 (p. 151)	Racial&Eth Minorties
SOC 339 (p. 151)	Social Inequality
SOC 351 (p. 151)	Urban Sociology

Breadth

ASI 150 (p. 151)	Intr to the Univ Exp	1
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Total Hours to total at least 124

- ¹ CJS 207 (p. 151), Research Methods in Criminal Justice Studies, requires as a prerequisite MTH 207 (p. 151) or PSY 216 (p. 151) or SOC 308 (p. 151). Neither PSY 216 (p. 151) nor SOC 308 (p. 151) fills the three semester hours mathematics requirement for graduation.
- ² 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 (p. 151) Criminal Justice Studies Career Development, CJS 399 (p. 151), Special Topics in Criminal Justice Studies and CJS 497 (p. 151), 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.
- ³ May include CAP components.
- ⁴ May substitute SOC 208 (p. 151), POL 207 (p. 151), or PSY 217 (p. 151).

Bachelor of Arts with a major in 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 ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

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) ¹	3
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences (Includes CAP Social Science)	12

Major Requirements ^{2, 3, 4, 5}

CJS 207 (p. 151)	Resrch Mthds in CJS ¹	3
CJS 347 (p. 151)	Sr Project Design	1
CJS 447 (p. 151)	Senior Project-CJS (Satisfies CAP Major Capstone)	3
SOC 305 (p. 151)	Criminological Thry	3

Select one behavior course from:

PSY 363 (p. 151)	Abnormal Psychology	3
PSY 461 (p. 151)	Curr Impl-Drug Depnd	
SOC 325 (p. 151)	Deviant Behavior	
SOC 327 (p. 151)	Criminology	
SOC 410 (p. 151)	Victimology	
SWK 325 (p. 151)	Child Abuse	

Select one institutions course from:

CJS 303 (p. 151)	Corrections	3
POL 303 (p. 151)	State & Local Govt	
POL 305 (p. 151)	Intro To Public Adm	
POL 360 (p. 151)	Urban Politics	
SOC 323 (p. 151)	Juvenile Justice	
SWK 305 (p. 151)	Soc Ser Health Field	

Select one law course from:

CJS 305 (p. 151)	Criminal Law	3
CJS 315 (p. 151)	Criminal Procedure	
POL 301 (p. 151)	Amer Judicl Process	
POL 411 (p. 151)	Constitutional Law	
POL 450 (p. 151)	Civil Liberties	
SOC 326 (p. 151)	Law & Society	

Select one social structure course from:

CJS 322 (p. 151)	Policing & Society	3
CJS 336 (p. 151)	Comp Crim Jus Systms	
SOC 328 (p. 151)	Racial&Eth Minorties	
SOC 339 (p. 151)	Social Inequality	
SOC 351 (p. 151)	Urban Sociology	

Breadth

ASI 150 (p. 151)	Intr to the Univ Exp	1
ENG 316 (p. 151)	Elements of Style	3

ENG 370 (p. 151)	Rprt&Proposal Wrtn (Satisfies CAP Inquiry)	3
or ENG 372 (p. 151)	Business Communicatn	
or ENG 474 (p. 151)	Argument and Style	
Total Hours to total at least		124

- ¹ CJS 207 (p. 151), Research Methods in Criminal Justice Studies, require as a prerequisite MTH 207 (p. 151) or PSY 216 (p. 151) or SOC 308 (p. 151). Neither PSY 216 (p. 151) nor SOC 308 (p. 151) fills the three semester hours mathematics requirements for graduation. May substitute SOC 208 (p. 151), POL 207 (p. 151), PSY 217 (p. 151) for CJS 207 (p. 151).
- ² 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.
- ³ 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 (p. 151) Criminal Justice Studies Career Development, CJS 399 (p. 151), Special Topics in Criminal Justice Studies and CJS 497 (p. 151), 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.
- ⁴ To be considered a viable candidate for graduation, a student must have completed a minimum of 124 semester hours with accepted transfer credits.
- ⁵ May include CAP components.

Minor in Criminal Justice Studies (cjs)

Criminal Justice Studies

CJS 101 (p. 151)	Intro to CJS	3-4
SOC 305 (p. 151)	Criminological Thry	3
Select four CJS courses (300/400 level) ¹		12
Total Hours		18-19

- ¹ One course from each of the four areas involving behavior, institutions, law, and social structure.

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 (p. 155)

Minor:

- Economics (p. 156)

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 thirty semester hours of courses in economics: ECO 203, 204, 346, 347, 490, and five elective courses in economics.

A minor in economics is also available, requiring eighteen 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

Edmund B. O'Leary Chair in Economics: John Ruggiero

Professors: Caporale, Frasca, Ruggiero

Associate Professors: Collier, Gustafson, Poitras

Lecturer: John

Bachelor of Arts with a Major in Economics (ECO) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

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) ^{1, 2}	6-9
MTH 138 Calc I with Review ³ (p. 155) or MTH 148 Introductory Calc I (p. 155) MTH 207 Intro to Statistics ⁴ (p. 155)	
Natural Sciences (Satisfies CAP Natural Science)	11
Social Sciences, excluding ECO courses (Includes CAP Social Science)	12
Course List	
Major Requirements	30
ECO 203 (https://nextcatalog.udayton.edu/courseleaf/js/fckeditor/editor/fckeditor.html?InstanceName=atl) Prin of Microecon ⁵	3
ECO 204 (https://nextcatalog.udayton.edu/courseleaf/js/fckeditor/editor/fckeditor.html?InstanceName=attr_text&Toolbar=PageWizard) Prin of Macroecon ⁵	3
ECO 346 (https://nextcatalog.udayton.edu/courseleaf/js/fckeditor/editor/fckeditor.html?InstanceName=atl) Intrmd MicroEco Anly ⁶	3
ECO 347 (https://nextcatalog.udayton.edu/courseleaf/js/fckeditor/editor/fckeditor.html?InstanceName=attr_text&Toolbar=PageWizard) Intrmd MacroEco Anly	3
ECO 490 (https://nextcatalog.udayton.edu/courseleaf/js/fckeditor/editor/fckeditor.html?InstanceName=atl) Sr Sem-Applied Eco (Satisfies CAP Major Capstone)	3
ECO electives (300/400 level)	
Breadth	
ASI 150 Intr to the Univ Exp (p. 155)	1
Total Hours to total at least	124

¹ In addition, MTH 149 (p. 155) strongly recommended.

² CAP Mathematics is satisfied with MTH 129 (p. 155), MTH 148 (p. 155), MTH 168 (p. 155), or MTH 207 (p. 155).

³ MTH 168 (p. 155) or MTH 128 (p. 155)-MTH 129 (p. 155) may be substituted with permission of department chairperson.

⁴ May substitute DSC 210 (p. 155)-DSC 211 (p. 155).

⁵ Minimum C grade

⁶ ECO 340 (p. 155) may be substituted for ECO 346 (p. 155) with permission of the department chairperson.

Minor in Economics (ECO)

Economics

ECO 203 (p. 155)	Prin of Microecon ¹	3
ECO 204 (p. 155)	Prin of Macroecon ¹	3
ECO 346 (p. 155)	Intrmd MicroEco Anly ²	3
ECO 347 (p. 155)	Intrmd MacroEco Anly	3
Select two ECO courses (300/400 level)		6
Total Hours		18

¹ ECO 300 and an upper level ECO course can substitute for ECO 203 and ECO 204.

² ECO 340 may be substituted for ECO 346 with permission of department chairperson.

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. 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. 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. Prerequisite(s): ECO 204; ECO 203 recommended.

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; differential calculus and basic statistics) or permission of instructor.

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; (DSC 211 or MTH 207) or equivalent.

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; (DSC 211 or MTH 207); ECO 346 recommended.

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

Economic analysis applied in an area of topical interest chosen by the instructor; includes the application of theoretical, mathematical, and statistical methods mastered in previous economics courses. This capstone course provides students an opportunity to extend their proficiency in economic analysis through application and discussion in a small group setting. Typically offered during the spring semester. Economics or Business Economics majors only. Prerequisite(s): Twelve semester hours in Economics.

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 (p. 158)

Minor:

- English (p. 159)

The University requirement in English composition is satisfied by the completion of (or 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 thirty-six semester hours of English courses, including first-year composition, and at least twenty-four semester hours at the 300/400 level.

A minor in English consists of twelve semester hours beyond the composition requirement.

Students in B.A. programs can pursue State of Ohio teacher licensing in Integrated Language Arts through the Teacher Licensure Program conducted in conjunction with the Department of Teacher Education. 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 eighteen semester hours of approved writing and writing-related courses, including at least twelve semester hours of upper-divisional (300-400) courses, and who pass a final examination including an impromptu writing task. The English department also offers a writing internship program. For details on these advanced writing opportunities, consult the department chairperson.

Faculty

Sheila Hassell Hughes, Chairperson

R. Andrew Slade, Director of Graduate Studies

Ann Biswas, Director of Writing Programs

Professors Emeriti: August, Henninger, Labadie, L. Marre, H. Martin, Means, Murphy, Palumbo, Patrouch, Stockum, Youngkin

Professors: Farrelly, Hughes, Kimbrough, K. Marre, McCombe, Pici, Strain, Wilhoit

Associate Professors: Bardine, Boehnlein, Carrillo, Krummel, Morgan, Potter, Slade, Trollingier, Vorachek

Assistant Professors: Friedlander, Haan, Li, Szeghi, Thomas

Lecturers: Adams, Biswas, Burnside, DeAloia, Doench, Getrost, Keane-Sexton, MacKay, MacLeod, E. Martin, Stephens, Taaffe

Bachelor of Arts with a major in English (eng) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

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 ^{1, 2, 3} 36

ENG 100 (p. 158) & ENG 200 (p. 158)	Writing Seminar I and Writing Seminar II
or ENG 200H (p. 158)	Writing Seminar II

or ASI 120 (p. 158)	Dev West Global Ctxt	
ENG 300 (p. 158)	Lit Anl&Rsrch-Poetry	
ENG 301 (p. 158)	Survey-Early Eng Lit	
ENG 302 (p. 158)	Survey-Later Eng Lit	
ENG 305 (p. 158)	Survey-American Lit	
ENG 362 (p. 158)	Shakespeare	
ENG 476 (p. 158)	Composition Theory ⁴	
or ENG 488 (p. 158)	Literary Theory	
or ENG 489 (p. 158)	Rhetorical Criticism	
ENG 490 (p. 158)	Seminar (Satisfies CAP Major Capstone)	
Select one writing course (300/400 level)		3
ENG electives		6-12
Breadth		
ASI 150 (p. 158)	Intr to the Univ Exp	1
Total Hours to total at least		124

- ¹ Satisfies CAP First and Second-Year Writing Seminar.
- ² May include CAP Arts.
- ³ ENG 100A and 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 36 semester hours for the major.
- ⁴ ENG 476 is recommended for students who plan to teach English and writing; ENG 488 is recommended for students who plan to pursue graduate studies in literature; ENG 489 is appropriate as a primary theory course for students who do not plan to teach and/or those who may pursue law or graduate study in rhetoric-related fields.

Minor in English (eng)

English

Select four ENG courses (300/400 level) ¹	12
Total Hours	12

- ¹ In addition to the composition requirement.

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.

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. 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. 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 ENG 101) 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 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. Prerequisite(s): ENG 100 or (ENG 100A, ENG 100B); sophomore standing or placement as determined by the Office of the Dean.

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. 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or equivalent.

ENG 210. Poetry. 3 Hours

Study of representative examples of a major literary genre. Prerequisite(s): ((ENG 100 or ENG 100B or ENG 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 282. Introduction to Writing Poetry. 3 Hours

Beginning course in analyzing and writing poetry. Prerequisite(s): ((ENG 100 or ENG 100B or ENG 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or equivalent.

ENG 302. Survey of Later English. 3 Hours

Survey of English literature from the beginning of the Romantic period to the present. Prerequisite(s): ((ENG 100 or ENG 100B or ENG 200 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 ASI120.

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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or equivalent.

ENG 331. Studies in Film. 3 Hours

Analysis of selected films to show developments in film technique or criticism. Prerequisite(s): ((ENG 100 or ENG 100B or ENG 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or equivalent.

ENG 333. Images of Women in Literature. 3 Hours

Examination of significant literary works 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or equivalent.

ENG 336. Gender in Fiction. 3 Hours

Study of major works of American and British male and female authors from different periods, analyzing the authors, their principal characters, themes, and narrative technique as they reflect different aspects of the issue of gender in literature. Prerequisite(s): ((ENG 100 or ENG 100B or ENG 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or equivalent.

ENG 340. The Prison in Literature. 3 Hours

Survey of prison literature from the rise of the modern prison in the late eighteenth century through the contemporary period. Prerequisite(s): ((ENG 100 or ENG 100B or ENG 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or equivalent.

ENG 362. Shakespeare. 3 Hours

Study of selected plays and poems of Shakespeare. Prerequisite(s): ((ENG 100 or ENG 100B or ENG 200 or ENG 200H) or ASI 110) or 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 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. Medical Writing. 3 Hours

Intensive practice in reading and writing for the healthcare professions. Designed for pre-medicine, pre-dentistry, pre-veterinary, and pre-physical therapy students. Practice in research and workplace writing, uses of narrative in medicine, the personal essay, and MCAT essay. Prerequisite(s): ((ENG 200 or ENG 200H) or ASI 120) or equivalent; junior or senior standing.

ENG 375. Rhetoric of the World Wide Web. 3 Hours

Analysis and production of textual and visual elements common to the World Wide Web. Emphasis on rhetoric of electronic communication, usability, audience analysis, and integrating text and graphics. Basic web development techniques will be covered, but previous experience is helpful. Knowledge of HTML, XML, and style sheets is helpful but not required. 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 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or 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): ((ENG 100 or ENG 100B or ENG 200 or ENG 200H) or ASI 110) or 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 200 or ENG 200H) or ASI 110) or equivalent.

ENG 387. Literature & Ethics. 3 Hours

No description available.

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): 200- or 300-level English course excluding ENG 200, ENG 200H.

ENG 407. Medieval English Literature. 3 Hours

Study of the dominant types in the literature of England from the beginning to 1500. Prerequisite(s): 200- or 300-level English course excluding ENG 200, ENG 200H.

ENG 410. Early Renaissance Literature. 3 Hours

Survey of the literature of the sixteenth century from Thomas More to Sidney and Spenser. Prerequisite(s): 200- or 300-level English course excluding ENG 200, ENG 200H.

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): 200- or 300-level English course excluding ENG 200, ENG 200H.

ENG 431. Milton. 3 Hours

Study of the major and minor poems and selected prose of Milton. Prerequisite(s): 200- or 300-level English course excluding ENG 200, ENG 200H.

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): 200- or 300-level English course excluding ENG 200, ENG 200H.

ENG 438. English Romanticism. 3 Hours

Study of the major poets and critics of the Romantic Age. Prerequisite(s): 200- or 300-level English course excluding ENG 200, ENG 200H.

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): 200- or 300-level English course excluding ENG 200, ENG 200H.

ENG 448. 20th Century British Literature. 3 Hours

Study of significant developments in modern British literature. Prerequisite(s): 200- or 300-level English course excluding ENG 200, ENG 200H.

ENG 451. American Romanticism. 3 Hours

Study of significant developments in American literature of the mid-19th century. Prerequisite(s): 200- or 300-level English course excluding ENG 200, ENG 200H.

ENG 453. American Realism & Naturalism. 3 Hours

Study of representative writers from the post-Civil War period in American literature. Prerequisite(s): 200- or 300-level English course excluding ENG 200, ENG 200H.

ENG 455. 20th Century American Literature. 3 Hours

Study of significant developments in American literature of the twentieth century. Prerequisite(s): 200- or 300-level English course excluding ENG 200, ENG 200H.

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 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 102 or 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 102 or 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 102 or ENG 200 or ENG 200H) or ASI 120) or equivalent; junior or senior standing or permission of department chairperson.

ENG 474. Argumentation. 3 Hours

Intensive study of argumentative writing. Theories and principles of argument and persuasion. Emphasis on formal arguments. Prerequisite(s): ((ENG 102 or ENG 200 or ENG 200H) or ASI 120) or equivalent; junior or senior standing or permission of department chairperson.

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): 200- or 300-level English course excluding ENG 200, ENG 200H.

ENG 485. Internshp 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. Seminar. 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 300, ENG 301, ENG 302, ENG 305, (ENG 476 or ENG 488 or ENG 489).

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.

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 sixteen semester hours, including ASI 448, SOC 331 and twelve 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 (p. 164)	Sem-Family Development	1
SOC 331 (p. 164)	Marriage & Family	3
Select four courses from three different disciplines:		12
ANT 320 (p. 164)	Anthro of Childhoods	

CMM 410 (p. 164)	Family Communication
CMM 499 (p. 164)	Sp Top-Communication
CMS 415 (p. 164)	Women & Communication
HST 351 (p. 164)	Women Gender Am
HST 352 (p. 164)	Hst of Amer Family
HST 353 (p. 164)	Hst-Wom in Eurp Soc
HST 354 (p. 164)	Hst-Women Mid East
PHL 318 (p. 164)	Family Ethics
PSY 251 (p. 164)	Hum Growth & Develop
PSY 351 (p. 164)	Child Psychology
PSY 353 (p. 164)	PSY Adult Dev/Aging
PSY 355 (p. 164)	Devlp Psychpath
PSY 443 (p. 164)	Psychology of Women
PSY 457 (p. 164)	Tv/Effects on Chldr
PSY 462 (p. 164)	Human Sexuality
REL 344 (p. 164)	Christian Marriage
REL 362 (p. 164)	Chr Famly Values&TV
SOC 322 (p. 164)	Sex Roles & Society
SOC 323 (p. 164)	Juvenile Justice
SOC 330 (p. 164)	Perspctves-Agng
SOC 333 (p. 164)	Soc of Sexualities
SOC 355 (p. 164)	Families&The Economy
SWK 325 (p. 164)	Child Abuse
SWK 327 (p. 164)	Parentng:Soc Welfare
SWK 330 (p. 164)	Perspectives on Aging
SWK 331 (p. 164)	Death, Dying and Suicide
Total Hours	

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Film Studies

The interdisciplinary minor in film studies (FLM) provides students an opportunity to explore one of the most popular and influential media of the twentieth century. 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 thirteen semester hours, including ASI 350 and twelve semester hours from approved courses. The total semester hours for the minor must come from at least three different academic disciplines.

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 (p. 165)	Interdisp Film Study ¹	1
Select four courses from: ²		12
CMM 345 (p. 165)	Class Amer Film	
ENG 331 (p. 165)	Studies in Film	
ENG 332 (p. 165)	Studies-Lit & Film	
MUS 327 (p. 165)	Music in Film	
PHL 324 (p. 165)	Philosophy & Film	
REL 372 (p. 165)	Religion & Film	
Total Hours		13

¹ Capstone course taken after all elective courses have been completed.

² Or other courses with permission of the committee.

General Studies

- Bachelor of General Studies (p. 166)

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 thirty 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 thirty 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 fifty-four semester hours of courses at the 300-400 level with a grade point average of 2.0 or better,
5. Not more than thirty 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.

A Bachelor of General Studies requires at least 120 semester hours of credit.

Geology

Majors:

- Bachelor of Science, Environmental Geology (p. 166)
- Bachelor of Science, Geology (p. 168)

Minor:

- Geology (p. 169)

Geology is the study of the Earth, past and present. It incorporates many aspects of our complex planet including its composition, structure, environment, dynamic and hazardous 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 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 twelve semester hours.

Faculty

Daniel Goldman, Chairperson

Professor Emeritus: Ritter

Professors: Pair, Sandy

Associate Professors: Goldman, Koziol, A. McGrew, Wu

Assistant Professor: Haritashya

Lecturer: Bedaso

Lab Coordinator: Schoenenberger

Bachelor of Science with a major in 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 ¹	12
HST 103	The West & the World
REL 103	Introduction to Religioius & Theological Studies
PHL 103	Introduction to Philosophy

ENG 100	Writing Seminar I ²		Year 2		
Second-Year Writing Seminar ³		0-3	GEO 201 (p. 166) & 201L (p. 166)	Mineralogy and Mineralogy Lab	4
ENG 200	Writing Seminar II		GEO 208 (p. 166)	Environmentl Geology	3
Oral Communication		3	Year 3		
CMM 100	Principles of Oral Communication		GEO 301 (p. 166) & 301L (p. 166)	Structural Geology and Structural Geo Lab	4
Mathematics		3	GEO 307 (p. 166) & 307L (p. 166)	Geomorphology and Geomorphology Lab	4
Social Science		3	GEO 310 (p. 166) & 310L (p. 166)	Stratigraphy and Stratigraphy Lab	4
Arts		3	Year 4		
Natural Sciences		7	GEO 308 (p. 166)	Probs-Envrmntl Geo	3
Crossing Boundaries		variable credit	GEO 309 (p. 166) & 309L (p. 166)	Surf&Groundwtr Hydr and Surf&Groundwtr Hy Lb	4
Faith Traditions			GEO 479L (p. 166)	Environmntl Inst Lab	2
Practical Ethical Action			Select one from: (Satisfies CAP Major Capstone)		4-6
Inquiry			GEO 477 (p. 166) & GEO 478 (p. 166)	Honors Thesis and Honors Thesis	
Integrative			GEO 480 (p. 166)	Senior Capstone	
Advanced Study		variable credit	GEO 498 (p. 166)	Research&Thesis	
Philosophy and/or Religious Studies			Select GEO electives from:		4
Historical Studies			GEO 302 (p. 166) & 302L (p. 166)	Glacial Geology and Glacial Geology Lab	
Diversity and Social Justice		3	GEO 303 (p. 166)	Field Geology	
Major Capstone		0-3	GEO 401 (p. 166) & 401L (p. 166)	Paleontology and Paleontology Lab	
¹ Completed with ASI 110 and ASI 120.			GEO 403 (p. 166) & 403L (p. 166)	Sedimentology and Sedimentology Lab	
² Or ENG 100A and ENG 100B, or ENG 200H, by placement.			GEO 404 (p. 166)	Problems in Geology	
³ Completed with ENG 200H or ASI 120.			GEO 411 (p. 166) & 411L (p. 166)	Petrology and Petrology Lab	
Science Breadth Requirements			GEO 412 (p. 166) & 412L (p. 166)	Intro Geochemistry and Intro Geochemstry Lab	
(Satisfies CAP Mathematics and CAP Natural Science)					
BIO 151	Concepts of Bio I	3			
(p. 166)					
BIO 152	Concepts of Bio II	3			
(p. 166)					
CHM 123	General Chemistry and Gen Chemistry Lab	4			
(p. 166) & 123L (p. 166)					
CHM 124	General Chemistry and Gen Chemistry Lab	4			
(p. 166) & 124L (p. 166)					
MTH 168	Anly Geom & Calc I ¹	4			
(p. 166)					
MTH 169	Anly Geom & Calc II ¹	4			
(p. 166)					
PHY 206	Gen Physics I Mech ²	3			
(p. 166)					
PHY 207	Gen Phy II Ele & Mag ²	3			
(p. 166)					
Major Requirements					
61					
Year 1					
GEO 115	Physical Geology and Physical Geology Lab	4			
(p. 166) & 115L (p. 166)					
GEO 116	Geolgcl Hst-Earth and Geolgcl Hst-Earth Lb	4			
(p. 166) & 116L (p. 166)					

GEO 450 (p. 166)	Applied GIS	
Select six science electives from:		17
BIO 310 (p. 166) & 310L (p. 166)	Ecology and Ecology Lab	
BIO 350 (p. 166) & 350L (p. 166)	Applied Microbiology and Applied Microbio Lab	
BIO 452 (p. 166) & 452L (p. 166)	Bio Rivers & Lakes and Bio River&Lake Lab	
BIO 459 (p. 166) & 459L (p. 166)	Environmntl Ecology and Environmntl Eco Lab	
CEE 312 (p. 166) & 312L (p. 166)	Geotechnical Engr and Geotechncl Engr Lab	
CEE 390 (p. 166)	Envr Pollutn Cntrl	
CEE 434 (p. 166) & 434L (p. 166)	Water & Waste Engr and Watr&Waste Engr Lab	
CHM 201 (p. 166) & 201L (p. 166)	Quantitative Anal and Quant Analysis Lab	
CHM 302 (p. 166)	Physical Chemistry	
CHM 313 (p. 166) & 313L (p. 166)	Organic Chemistry and Organic Chemistry Lab	
CHM 341 (p. 166) & 341L (p. 166)	Environmental Chem and Environmntl Chm Lab	
CPS 132 (p. 166)	Progrmmng-Engr & Sci	
CPS 144 (p. 166)	Intro-Computr Progrm	
MTH 218 (p. 166)	Anly Geom & Calc III	
MTH 219 (p. 166)	Appl Diff Equations	
MTH 367 (p. 166)	Statistical Meth I	
MTH 368 (p. 166)	Statistical Meth II	

Breadth

ASI 150 (p. 166)	Intr to the Univ Exp	1
Social and Behavioral Sciences (Includes CAP Social Science)		6
Total Hours to total at least		120

- May substitute MTH 148 (p. 166)-MTH 149 (p. 166) with permission of department chairperson.
- May substitute PHY 201 (p. 166)-PHY 202 (p. 166) with permission of department chairperson.

Bachelor of Science with a major in Geology (GEO) Minimum 120 HOURS

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religioius & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

Science Breadth Requirements

(Satisfies CAP Mathematics and CAP Natural Sciences)		
CHM 123 (p. 166) & 123L (p. 166)	General Chemistry and Gen Chemistry Lab	4
CHM 124 (p. 166) & 124L (p. 166)	General Chemistry and Gen Chemistry Lab	4

MTH 168 (p. 166)	Anly Geom & Calc I ¹	4
MTH 169 (p. 166)	Anly Geom & Calc II ¹	4
PHY 206 (p. 166)	Gen Physics I Mech ²	3
PHY 207 (p. 166)	Gen Phy II Ele & Mag ²	3

Major Requirements 54

Year 1

GEO 115 (p. 166) & 115L (p. 166)	Physical Geology and Physical Geology Lab	4
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GEO 116 (p. 166) & 116L (p. 166)	Geolcl Hst-Earth and Geolcl Hst-Earth Lb	4
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Year 2

GEO 201 (p. 166) & 201L (p. 166)	Mineralogy and Mineralogy Lab	4
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Year 3

GEO 301 (p. 166) & 301L (p. 166)	Structural Geology and Structural Geo Lab	4
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GEO 307 (p. 166) & 307L (p. 166)	Geomorphology and Geomorphology Lab	4
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Year 4

GEO 303 (p. 166)	Field Geology	6
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GEO 310 (p. 166) & 310L (p. 166)	Stratigraphy and Stratigraphy Lab	4
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GEO 401 (p. 166) & 401L (p. 166)	Paleontology and Paleontology Lab	4
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GEO 403 (p. 166) & 403L (p. 166)	Sedimentology and Sedimentology Lab	4
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Select one from: (Satisfies CAP Major Capstone) 2-6

GEO 477 (p. 166) & GEO 478 (p. 166)	Honors Thesis and Honors Thesis	
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GEO 480 (p. 166)	Senior Capstone	
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GEO 498 (p. 166)	Research&Thesis	
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Select GEO electives from: 4

GEO 302 (p. 166) & 302L (p. 166)	Glacial Geology and Glacial Geology Lab	
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GEO 308 (p. 166) & 308L (p. 166)	Probs-Envrmntl Geo and Probs in Env Geo Lab	
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GEO 309 (p. 166) & 309L (p. 166)	Surf&Groundwtr Hydr and Surf&Groundwtr Hy Lb	
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GEO 404 (p. 166)	Problems in Geology	
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GEO 411 (p. 166) & 411L (p. 166)	Petrology and Petrology Lab	
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GEO 412 (p. 166) & 412L (p. 166)	Intro Geochemistry and Intro Geochmstry Lab	
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GEO 450 (p. 166)	Applied GIS	
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GEO 477 (p. 166)	Honors Thesis	
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Science electives and laboratories where applicable from: 8

BIO, CHM, CPS, GEO, MTH, PHY, Engineering ³

Breadth

ASI 150 (p. 166)	Intr to the Univ Exp	1
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Social and Behavioral Sciences (Includes CAP Social Science) 6

Total Hours to total at least 124

¹ May substitute MTH 148 (p. 166)-MTH 149 (p. 166) with permission of department chairperson.

² May substitute PHY 201 (p. 166)-PHY 202 (p. 166) with permission of department chairperson.

³ With permission of department chairperson.

Minor in Geology (GEO)

Geology

Select four GEO courses (300/400 level) ¹ 12

Total Hours 12

¹ Appropriate prerequisites must be completed.

Courses

GEO 103. Principles of Physical Geography. 3 Hours

Analysis of the physical factors of the earth's environment: weather, climate, land forms, oceans.

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. General Geology. 3 Hours

Introduction to the earth as a planet, its composition, structure, and evolutionary development; a brief consideration of the life of the past. For the nonscience major. May be taken without laboratory.

GEO 109L. General Geology Laboratory. 1 Hour

Course to accompany GEO 109. Two hours each week.

GEO 115. Physical Geology. 3 Hours

Introductory course in geologic principles; the composition and structure of the earth, its land forms, and the agencies active in their production. Laboratory optional for nonmajors.

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

Study of the relationship of geologic factors to the problems of water supply, pollution, erosion, land use, and earth resources. Laboratory optional. Prerequisite(s): (GEO 109 or GEO 115) or permission of instructor.

GEO 208L. Environmental Geology Laboratory. 1 Hour

Course to accompany GEO 208. Two hours each week.

GEO 218. Engineering Geology. 3 Hours

Comprehensive study of geologic principles applicable to civil engineering practices.

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). Prerequisite(s): CHM 123, CHM 124. Corequisite(s): GEO 208.

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 (p. 172)
- Bachelor of Arts, German (p. 173)
- Bachelor of Arts, Languages (p. 173)
- Bachelor of Arts, Spanish (p. 174)

Minors:

- French (p. 175)
- German (p. 175)
- Italian (p. 175)
- Spanish (p. 175)

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.

Each summer, faculty members in the Department of Global Languages and Cultures direct one-month language-immersion study programs in China, France, Germany, Italy, and Latin America or Spain (alternate years) 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 E6 or E11A programs (see EDT). 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.

Students may choose a major (twenty-five semester hours at the 300-level or higher) in a single language (French, German, or Spanish) or a composite major in two languages (one of which may be Italian). Many students combine a major in the department with a major in another discipline.

A minor in French, German, Italian, or Spanish consists of twelve semester hours at the 300-level or higher.

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, O'Meara, Romaguera

Professors: Castro, Peñas-Bermejo

Visiting Professor: Wang

Associate Professors: Espinoza, Krugh, Mosher

Assistant Professors: Costales, Ventura, Work

Lecturers: Figueroa, Navarro, Schellhammer, Tanova, Tello-Sánchez, Williams

Bachelor of Arts with a major in French (frn) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

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 25

FRN 311 French Conversatn I (p. 171)	3
or FRN 312 Frnch Conversatn II (p. 171)	
FRN 321 Frn Composition I (p. 171)	3
or FRN 322 Frn Composition II (p. 171)	
LNG 495 Lang in Careers (Satisfies CAP Major Capstone) (p. 171)	1
Select two courses from: (at least one must be in literature)	6

FRN 341 Frn Culture & Civ (p. 171)	
FRN 360 Explicatn De Textes (p. 171)	
FRN 361 Survey-French Lit I (p. 171)	
FRN 362 Survey-French Lit II (p. 171)	
FRN 381 History-Frn Cinema (p. 171)	
FRN 450 French Literature (p. 171)	
FRN 452 Old Wrld Meets New (p. 171)	

Select four FRN courses (300/400 level) ¹ 12

Breadth

ASI 150 Intr to the Univ Exp (p. 171)	1
Total Hours to total at least	124

- ¹ 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 with a major in German (ger) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

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

GER 311 Ger Conversation I (p. 171)	3
or GER 312 Ger Conversation II (p. 171)	
GER 321 Ger Composition I (p. 171)	3

or GER 322 Ger Composition II (p. 171)

LNG 495 Lang in Careers (Satisfies CAP Major Capstone) (p. 171) 1

Select two courses from: (at least one must be in literature) 6

GER 341 Ger Culture&Civilzn (p. 171)	
GER 361 Survey of Ger Lit I (p. 171)	
GER 362 Survey of Ger Lit II (p. 171)	
GER 450 German Literature (p. 171)	

Select four GER courses (300/400 level) ¹ 12

Breadth

ASI 150 Intr to the Univ Exp (p. 171) 1

Total Hours to total at least 124

- ¹ 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 with a major in Languages (Ing) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	

Second-Year Writing Seminar ³ 0-3

ENG 200 Writing Seminar II

Oral Communication 3

CMM 100 Principles of Oral Communication

Mathematics 3

Social Science 3

Arts 3

Natural Sciences 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.

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 ¹ 25

LNG 495	Lang in Careers (Satisfies CAP Major Capstone)	1
(p. 171)		
Composite major in Language	²	24

Breadth

ASI 150	Intr to the Univ Exp	1
(p. 171)		
Total Hours to total at least		124

- ¹ 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.
² Upper-level courses to total twenty-four semester hours distributed between two languages. Courses must include at least one three-semester-hour literature course, not including literature in translation. (Only one literature in translation may count toward the major.)

Bachelor of Arts with a major in Spanish (spn) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons	¹	12
HST 103	The West & the World	
REL 103	Introduction to Religious & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I	²
Second-Year Writing Seminar	³	0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

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 25

LNG 495	Lang in Careers (Satisfies CAP Major Capstone)	1
(p. 171)		
SPN 311	Spn Conversation I	3
(p. 171)		
or SPN 312	Spn Conversation II	
(p. 171)		
SPN 321	Spn Composition I	3
(p. 171)		
or SPN 322	Spn Composition II	
(p. 171)		
Select two courses from: (at least one must be in literature)		6
SPN 341	Spanish Cult&Civ	
(p. 171)		
SPN 342	Ibero-Amer Cult & Civ	
(p. 171)		
SPN 361	Survvy-Spanish Lit I	
(p. 171)		
SPN 362	Survvy-Spanish Lit II	
(p. 171)		
SPN 363	Surv Spn Am Lit I	
(p. 171)		
SPN 364	Surv Spn Am Lit II	
(p. 171)		
SPN 450	Spanish Literature	
(p. 171)		
SPN 451	Spn-Amer Literature	
(p. 171)		
SPN 471	TP:Spn Lit-20th Cent	
(p. 171)		
SPN 472	Spn Lit-20th Cent II	
(p. 171)		
Select four SPN courses (300/400 level)	¹	12

Breadth

ASI 150	Intr to the Univ Exp	1
(p. 171)		
Total Hours to total at least		124

- ¹ 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

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. Study Abroad. 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 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): CMM 110 or equivalent; ENG 102 or equivalent.

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-American 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 II. 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 (p. 182)

Minor:

- History (p. 183)

History critically studies the past and those key values which have shaped society. History also provides students with a sense of perspective and with the ability to make critical judgments. 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 helps to make the world comprehensible. 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. Thus all totalitarian societies have stringently controlled the study and writing of history. They recognize that a free mind needs to know its past, to debate and discuss how the world came to be as it is, in order to know what to defend and what to change and how to resist imposed ideologies.

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 goals. Examples of areas of concentration are:

- Pre-law
- Business
- International Affairs
- Historical Administration
- Preservation
- Archival Management

History majors should consult the department chairperson for a departmental advising brochure and further details. History majors pursue professions in numerous fields including:

- Education
- Law and Government
- International Affairs
- Archives and Museums
- Communications
- Business

Students in B.A. programs can acquire teacher licensure through the E11A program (See EDT). For details, consult the department chairperson.

A history minor consists of eighteen semester hours.

Faculty

Juan Santamarina, Chairperson
Distinguished Service Professor: Palermo
Professors Emeriti: Alexander, Eid, Palermo, Taylor
Professors: Amin, Bednarek, Heitmann, Morman, Schweikart, Trollinger
Associate Professors: Agnew, Cadegan, Carlson, Carter, Darrow, Fleischmann, Flockerzie, Hume, Merithew, Santamarina
Assistant Professors: Borbonus, Reid, Roy
Lecturers: Bartley, Jaffe, Sextro, Sutherland, Uhlman, Washington

Bachelor of Arts with a major in History (HSt) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected		
First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religioius & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	

Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

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 ¹

HST 103 West and the World (p. 182)	3
HST 150 Introduction to the Historian's Craft (p. 182)	3
HST 251 Amer Hst to 1865 ² (p. 182)	3
or HST 252 Amer Hst Since 1865 (p. 182)	
HST 300 Career Dev-History (p. 182)	1
HST 301 Research Seminar (p. 182)	3
HST 498 History Capstone Seminar (Satisfies CAP Major Capstone) (p. 182)	3
Select two courses from:	6
HST 220 Ancient History (p. 182)	
HST 260 Asian History (p. 182)	

HST 280 Middle East History (p. 182)	
Select 4 HST courses (300 level) ³	12
Select one HST seminar (400 level) ⁴	3
Breadth	
ASI 150 Intr to the Univ Exp (p. 182)	1
Total Hours to total at least	124

¹ Includes CAP components.

² 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.

³ 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.

⁴ 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 (p. 182)	3
HST 251 Amer Hst to 1865 (p. 182)	3
or HST 252 Amer Hst Since 1865 (p. 182)	
Select two courses in American history (300/400 level)	6
Select two courses in Non-American history (300/400 level)	6
Total Hours	18

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 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, Middle Eastern, and Chinese history with emphasis on the interaction among these regions and the overall impact of antiquity. Prerequisite(s): HST 103 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 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 equivalent.

HST 260. Survey of Asian History. 3 Hours

Historical survey of the cultures and states of Asia, from the origins of agricultural civilization to the modern period. Prerequisite(s): HST 103 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 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. Prerequisite(s): (HST 103 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 equivalent.

HST 302. History of Ancient Greece. 3 Hours

Survey of Greek history and culture from the Bronze Age to Alexander the Great. Prerequisite(s): HST 103 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 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 equivalent.

HST 305. Medieval Europe. 3 Hours

European history from the fourth to the fifteenth century, including birth of Middle Ages; development of Christianity; Byzantine, Islamic, and Carolingian Empires; feudalism; Crusades; rise of universities; birth of national cultures. Prerequisite(s): HST 103 or equivalent.

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 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 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 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 developments in France and Europe. Prerequisite(s): HST 103 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 equivalent.

HST 314. Modern Europe in Decline 1890-1945. 3 Hours

Historical study of the decline and fall of European civilization from the eve of World War I to the end of World War II, including an examination of political, economic, social, and cultural conditions. Prerequisite(s): HST 103 or equivalent.

HST 315. Europe in the Postwar Era 1945-Present. 3 Hours

Historical survey of domestic and foreign politics, economics, society, and culture in postwar Europe (East and West) from 1945 to the present. Prerequisite(s): HST 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 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 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 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 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 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 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 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 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 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 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 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 equivalent.

HST 332. Modern Germany. 3 Hours

Study of the economic, political, social, and cultural developments of modern China and Japan from the eighteenth century to the present. Prerequisite(s): HST 103 or equivalent.

HST 333. Modern Middle East. 3 Hours

Survey of the Ottoman Empire, Iran, Egypt, and the modern states of the Middle East, emphasizing the development of nationalism and the area's role in international politics. Prerequisite(s): HST 103 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 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 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 equivalent.

HST 337. History of Africa - 19th Century to Present. 3 Hours

Emphasis: colonialism and its impact, the growth of nationalism and the problems of contemporary Africa. Prerequisite(s): HST 103 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 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 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 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 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 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 equivalent.

HST 346. History of American Aviation. 3 Hours

This course will examine the influence of aviation on the American culture, economy, and military. It will also highlight the development of aviation/aerospace technology. Prerequisite(s): HST 103 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 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 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 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.

HST 351. American Women's & Gender History. 3 Hours

Historical study of the changing roles of women in American society, including examination of men's and women's gender roles and the ways in which social, cultural, political, economic, legal, and political factors shape and change gender roles. Prerequisite(s): HST 103 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 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 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 equivalent.

HST 355. American Urban History. 3 Hours

Historical analysis of community life in American society: the nature and development of small towns, cities, and suburbs; communal experience, social organizations, and political culture. Prerequisite(s): HST 103 or equivalent.

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 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 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 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 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 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 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 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 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 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 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 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 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 equivalent.

HST 375. History of United States Foreign Relations. 3 Hours

Foundations of 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. Prerequisite(s): HST 103 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 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 equivalent.

HST 378. History of Global Immigrants to the United States. 3 Hours

Survey of the impact immigrants have had on the social, political, cultural, and economic life in the United States from the colonial period to the present. Prerequisite(s): HST 103 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 equivalent.

HST 382. History of Mexico. 3 Hours

Survey of Mexican history from pre-Columbian civilization to the present. Prerequisite(s): HST 103 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 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 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 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 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 equivalent.

HST 398. History of Blacks in the United States, 1526-1900. 3 Hours

Study of the saga of black people in the U.S. from 1526 until 1900. Prerequisite(s): HST 103 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 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 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 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 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 equivalent; HST 301 or permission of department chairperson.

HST 490. Seminar in Histography. 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 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. Prerequisite(s): HST 301.

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. Prerequisite(s): HST 301.

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 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 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 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 equivalent.

HST 498. History Capstone Seminar. 3 Hours

This seminar, required for all senior history majors, will explore the perspective and practices of the professional historian. To accomplish this 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): ASI 110, HST 103, 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 equivalent.

International Studies

Bachelor of Arts, International Studies

Concentrations:

- Cooperation and Change in the New Europe (p. 189)
- Global Economic Development (p. 190)
- Global Environmental Sustainability (p. 190)
- International Business (p. 191)
- International Journalism (p. 191)
- Migration (p. 192)
- Peace and Global Security (p. 192)

Minor:

- International Studies (p. 193)

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 twenty-one semester hours.

International Studies Committee

Marybeth Carlson, Director

Agnew (History), Bilocerkowycz (Political Science), Brecha (Physics), Carlson (History), Dasgupta (Anthropology), Fleischmann (History), Forbis (Sociology), Goldman (Geology), Hudson (Political Science), Krugh (Languages), MacLachlan (Music), Poe (Philosophy)

Bachelor of Arts with a major in International Studies (INS) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

Liberal Studies Curriculum

Creative and Performing Arts (May include CAP Arts)	3
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 ¹ 65

Includes CAP Components	
ANT 150 Cultural Anthropology (p. 188)	3
ANT 306 Culture and Power (p. 188)	3
ECO 203 Prin of Microecon (p. 188)	3
ECO 204 Prin of Macroecon (p. 188)	3
INS 250 INS Research Methods ² (p. 188)	1
INS 395 Interntl Experience ³ (p. 188)	1
or INS 495 Interntl Internship (p. 188)	
INS 499 INS Senior Capstone (Satisfies CAP Major Capstone) (p. 188)	3
POL 202 Intro Comp Politics (p. 188)	3
REL 363 Faith & Justice (p. 188)	3
Select one course from:	3
ASI 110 The Roots and Development of Western Culture in a Global Context (p. 188)	
HST 103 West and the World (p. 188)	
Select one course from:	3
PHL 358 Marxist Philosophy (p. 188)	

PHL 370 (p. 188)	Political Philosophy	
Select one course from:		3
POL 101 (p. 188)	Global Politics	
POL 214 (p. 188)	Intro-Intrntl Poltcs	
Select one course from:		3
HST 375 (p. 188)	US Foreign Relations	
POL 408 (p. 188)	Amer Foreign Policy	
Select one course from: ⁴		3
FRN 341 (p. 188)	Frn Culture & Civ	
FRN 361 (p. 188)	Survey-French Lit I	
FRN 362 (p. 188)	Survey-French Lit II	
FRN 381 (p. 188)	History-Frn Cinema	
FRN 450 (p. 188)	French Literature	
FRN 452 (p. 188)	Old Wrld Meets New	
GER 351 (p. 188)	German Film	
GER 361 (p. 188)	Survey of Ger Lit I	
GER 362 (p. 188)	Survey of Ger Lit II	
GER 450 (p. 188)	German Literature	
ITA 361 (p. 188)	Survey-Italn Lit I	
ITA 362 (p. 188)	Survey-Italn Lit II	
RUS 361 (p. 188)	Survey-Russian Lit	
SPN 361 (p. 188)	Survey-Spanish Lit I	
SPN 362 (p. 188)	Survey-Spanish Lit II	
SPN 363 (p. 188)	Surv Spn Am Lit I	
SPN 364 (p. 188)	Surv Spn Am Lit II	
SPN 380 (p. 188)	Spn&Ibero-Amr Cinema	
SPN 450 (p. 188)	Spanish Literature	
SPN 451 (p. 188)	Spn-Amer Literature	
SPN 471 (p. 188)	TP:Spn Lit-20th Cent	

SPN 472 (p. 188)	Spn Lit-20th Cent II	
SPN 480 (p. 188)	Spn&Ibero-Amr Cinema	
Foreign language appropriate to concentration ⁵		6

Select one concentration from:

Concentration: Cooperation and Change in the New Europe

HST 315 (p. 188)	Europe 1945-Present	3
POL 320 (p. 188)	Western Europe	3
POL 321 (p. 188)	Russia&New States	3
Select three courses from:		9
HST 313 (p. 188)	Europe 1815-1914	
HST 314 (p. 188)	Europe 1890-1945	
HST 321 (p. 188)	Modern France	
HST 322 (p. 188)	History of England	
HST 326 (p. 188)	Hst-Sov Un 1860-Pr	
HST 327 (p. 188)	Natnl Cult-Sov Union	
HST 353 (p. 188)	Hst-Wom in Eurp Soc	
POL 331 (p. 188)	Ntlsm & Ethno Poltcs	
REL 366 (p. 188)	The Holocaust	
SOC 435 (p. 188)	Soc of Globalization	

Select one course from:		3
PHL 352 (p. 188)	Modern Philosophy	
PHL 353 (p. 188)	Kant&19th Cent Phl	
PHL 354 (p. 188)	20th Century Phl	
PHL 358 (p. 188)	Marxist Philosophy ⁷	
PHL 360 (p. 188)	Existentialism	
PHL 370 (p. 188)	Political Philosophy ⁷	
POL 319 (p. 188)	20th Cent Pol Thgt	
Select one course from:		3
VAH 203 (p. 188)	Survey of Art III	
VAH 450 (p. 188)	Itl Renaissance Art	

VAH 480 (p. 188)	20th Century Art I	
VAH 483 (p. 188)	20th Century Art II	

Concentration: Global Economic Development

ECO 460 (p. 188)	Eco Develop & Growth	3
ECO 461 (p. 188)	International Econ	3
PHL 372 (p. 188)	Values & Economics	3
SOC 339 (p. 188)	Social Inequality	3
SOC 435 (p. 188)	Soc of Globalization	3
Select one course from:		3
ANT 320 (p. 188)	Anthro of Childhoods	
POL 333 (p. 188)	Pol of Human Rghts	
SOC 371 (p. 188)	Soc of Human Rights	
Select one course from:		3
PHL 355 (p. 188)	Asian Philosophy	
PHL 363 (p. 188)	African Philosophy	
PHL 365 (p. 188)	Islamic Phl & Culture	
REL 304 (p. 188)	Hinduism	
REL 305 (p. 188)	Eastern Orthodoxy	
REL 306 (p. 188)	Buddhism	
REL 308 (p. 188)	Islam	
Select one course from:		3
ANT 356 (p. 188)	Cultures of Africa	
HST 326 (p. 188)	Hst-Sov Un 1860-Pr	
HST 330 (p. 188)	Hst E Asia to 1800	
HST 332 (p. 188)	Modern China&Japan	
HST 333 (p. 188)	Hst of Mode Mdle East	
HST 337 (p. 188)	Hst Afr-19th Cn-Pr	
HST 354 (p. 188)	Hst-Women Mid East	
HST 356 (p. 188)	Women in Third World	

HST 357 (p. 188)	Latin Amer-20th Cen	
HST 382 (p. 188)	History of Mexico	
HST 383 (p. 188)	Hst of Caribbean	
HST 386 (p. 188)	China in Revolution	
POL 321 (p. 188)	Russia&New States	

Concentration: Global Environmental Sustainability

ASI 320 (p. 188)	Cities and Energy	3
ECO 435 (p. 188)	Eco of Environmnt	3
ENG 342 (p. 188)	Literature and the Environment	3
HST 342 (p. 188)	Environ Hst Americas	3
POL 371 (p. 188)	Environmental Policy	3
Select one course from:		3
BIO 359 (p. 188)	Sustainable Biosphre ⁷	
BIO 360 (p. 188)	Island Environ Bio ⁸	
BIO 395 (p. 188)	Global Envr Biology	
Select one course from:		3
PHL 331 (p. 188)	Sci, Objtvtty & Values	
REL 365 (p. 188)	Chr Ethics&Environ	
REL 472 (p. 188)	Ecology & Religion	
Select one course from:		3
ANT 356 (p. 188)	Cultures of Africa	
HST 326 (p. 188)	Hst-Sov Un 1860-Pr	
HST 330 (p. 188)	Hst E Asia to 1800	
HST 332 (p. 188)	Modern China&Japan	
HST 333 (p. 188)	Hst of Mode Mdle East	
HST 337 (p. 188)	Hst Afr-19th Cn-Pr	
HST 357 (p. 188)	Latin Amer-20th Cen	
HST 382 (p. 188)	History of Mexico	
HST 383 (p. 188)	Hst of Caribbean	

HST 386 (p. 188)	China in Revolution	
POL 320 (p. 188)	Western Europe	
POL 321 (p. 188)	Russia&New States	
SOC 435 (p. 188)	Soc of Globalization	

Concentration: International Business⁹

INB 302 (p. 188)	Survey of Intl Bus	3
INB 450 (p. 188)	Capstone Intrnl Bus	3
Select three courses from:		9

ACC 207 (p. 188)	Intro-Financial Acc	
ECO 460 (p. 188)	Eco Develop & Growth	
ECO 461 (p. 188)	International Econ	
FIN 450 (p. 188)	Interntl Bus Finance	
MGT 403 (p. 188)	Cross-Cult Managemnt	
MKT 440 (p. 188)	Global Marketing	

Select three courses from: 9

ANT 356 (p. 188)	Cultures of Africa	
HST 315 (p. 188)	Europe 1945-Present	
HST 326 (p. 188)	Hst-Sov Un 1860-Pr	
HST 330 (p. 188)	Hst E Asia to 1800	
HST 332 (p. 188)	Modern China&Japan	
HST 333 (p. 188)	Hst of Mode Mdle East	
HST 334 (p. 188)	Hst Pal-Isrl Cflct	
HST 337 (p. 188)	Hst Afr-19th Cn-Pr	
HST 353 (p. 188)	Hst-Wom in Eurp Soc	
HST 354 (p. 188)	Hst-Women Mid East	
HST 356 (p. 188)	Women in Third World	
HST 357 (p. 188)	Latin Amer-20th Cen	
HST 382 (p. 188)	History of Mexico	
HST 383 (p. 188)	Hst of Caribbean	

HST 386 (p. 188)	China in Revolution	
POL 320 (p. 188)	Western Europe	
POL 321 (p. 188)	Russia&New States	
SOC 435 (p. 188)	Soc of Globalization	

Concentration: International Journalism¹⁰

CMM 330 (p. 188)	Media Writing	3
CMM 331 (p. 188)	Feature Writing	3
CMM 350 (p. 188)	Propaganda Analysis	3
CMM 355 (p. 188)	Rhetoric-Soc Movements	3
CMS 414 (p. 188)	Global Communication	3
SOC 343 (p. 188)	Mass Comm-Mdrn Socty	3
Select one course from:		3

ANT 356 (p. 188)	Cultures of Africa	
HST 326 (p. 188)	Hst-Sov Un 1860-Pr	
HST 330 (p. 188)	Hst E Asia to 1800	
HST 332 (p. 188)	Modern China&Japan	
HST 333 (p. 188)	Hst of Mode Mdle East	
HST 334 (p. 188)	Hst Pal-Isrl Cflct	
HST 337 (p. 188)	Hst Afr-19th Cn-Pr	
HST 353 (p. 188)	Hst-Wom in Eurp Soc	
HST 354 (p. 188)	Hst-Women Mid East	
HST 356 (p. 188)	Women in Third World	
HST 357 (p. 188)	Latin Amer-20th Cen	
HST 382 (p. 188)	History of Mexico	
HST 383 (p. 188)	Hst of Caribbean	
HST 386 (p. 188)	China in Revolution	
POL 320 (p. 188)	Western Europe	
POL 321 (p. 188)	Russia&New States	

SOC 435 (p. 188)	Soc of Globalization	
Select one course from:		3
PHL 355 (p. 188)	Asian Philosophy	
PHL 363 (p. 188)	African Philosophy	
PHL 365 (p. 188)	Islamic Phil& Culture	
REL 304 (p. 188)	Hinduism	
REL 305 (p. 188)	Eastern Orthodoxy	
REL 306 (p. 188)	Buddhism	
REL 307 (p. 188)	Judaism	
REL 308 (p. 188)	Islam	

Concentration: Migration

ANT/SOC 368 (p. 188)	Immigration	3
HST 378 (p. 188)	Hst Globl Immgnets-US	3
POL 333 (p. 188)	Pol of Human Rghts	3
SOC 328 (p. 188)	Racial&Eth Minorities	3
Select one course from:		3

POL 334 (p. 188)	Pol-Human Rights II	
SOC 371 (p. 188)	Soc of Human Rights	

Select one course from:		3
PHL 355 (p. 188)	Asian Philosophy	
PHL 363 (p. 188)	African Philosophy	
PHL 365 (p. 188)	Islamic Phil& Culture	
REL 304 (p. 188)	Hinduism	
REL 305 (p. 188)	Eastern Orthodoxy	
REL 306 (p. 188)	Buddhism	
REL 307 (p. 188)	Judaism	
REL 308 (p. 188)	Islam	

Select two courses from:		6
ANT 356 (p. 188)	Cultures of Africa	
HST 326 (p. 188)	Hst-Sov Un 1860-Pr	

HST 327 (p. 188)	Natnl Cult-Sov Union	
HST 330 (p. 188)	Hst E Asia to 1800	
HST 332 (p. 188)	Modern China&Japan	
HST 333 (p. 188)	Hst of Mode Mdle East	
HST 334 (p. 188)	Hst Pal-Isrl Cflct	
HST 337 (p. 188)	Hst Afr-19th Cn-Pr	
HST 353 (p. 188)	Hst-Wom in Eurp Soc	
HST 354 (p. 188)	Hst-Women Mid East	
HST 356 (p. 188)	Women in Third World	
HST 357 (p. 188)	Latin Amer-20th Cen	
HST 382 (p. 188)	History of Mexico	
HST 383 (p. 188)	Hst of Caribbean	
POL 320 (p. 188)	Western Europe	
POL 321 (p. 188)	Russia&New States	
POL 331 (p. 188)	Ntlsm & Ethno Poltcs	

Concentration: Peace and Global Security

POL 335 (p. 188)	US Natnl Sec Policy	3
POL 406 (p. 188)	Internatnl Law&Organ	3
POL 452 (p. 188)	Political Violence	3
SOC 435 (p. 188)	Soc of Globalization	3

Select one course from:		3
HST 349 (p. 188)	Tech&Culture-War	
HST 373 (p. 188)	American Mil Hst	
HST 386 (p. 188)	China in Revolution	

Select one course from:		3
PHL 317 (p. 188)	Ethics&Modern War	
PHL 327 (p. 188)	Philosophy of Peace	

Select one course from:		3
ANT 320 (p. 188)	Anthro of Childhoods	

ANT 356 (p. 188)	Cultures of Africa
HST 324 (p. 188)	Comp Nationalism
HST 326 (p. 188)	Hst-Sov Un 1860-Pr
HST 327 (p. 188)	Natnl Cult-Sov Union
HST 332 (p. 188)	Modern China&Japan
HST 333 (p. 188)	Hst of Mode Mdle East
HST 334 (p. 188)	Hst Pal-Isrl Cflct
HST 337 (p. 188)	Hst Afr-19th Cn-Pr
HST 357 (p. 188)	Latin Amer-20th Cen
POL 320 (p. 188)	Western Europe
POL 321 (p. 188)	Russia&New States
POL 331 (p. 188)	Ntlsm & Ethno Poltcs

Select one course from:

3

PHL 355 (p. 188)	Asian Philosophy
PHL 363 (p. 188)	African Philosophy
PHL 365 (p. 188)	Islamic Phl& Culture
REL 304 (p. 188)	Hinduism
REL 305 (p. 188)	Eastern Orthodoxy
REL 306 (p. 188)	Buddhism
REL 307 (p. 188)	Judaism
REL 308 (p. 188)	Islam

Breadth

ASI 150 (p. 188)	Intr to the Univ Exp	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 May substitute CMM 412 (p. 188), HST 301 (p. 188), POL 207 (p. 188), SOC 208 (p. 188), or another approved research methods course.
- 3 Students unable to satisfy this requirement with a study abroad experience because of other commitments (e.g. ROTC members) must fulfill this requirement with an internationally oriented internship.

- 4 Students studying a language for which a literature, culture, or film course does not currently exist must fulfill this requirement by taking ENG 205 (p. 188), ENG 322 (p. 188), or ENG 345 (p. 188).
- 5 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. Completion satisfies the L2 requirement.
- 6 This course can be taken for this requirement only if not taken to fulfill the foundation requirements.
- 7 This course counts for biology majors, but is accessible to non-majors as well.
- 8 This course is taught in Costa Rica. It counts for biology majors, but is open to non-majors as well.
- 9 Students pursuing this concentration must take into account prerequisites or class standing restrictions. Given the prerequisites, students are advised to follow an informal specialization. For finance or economics, take ACC 200 (p. 188), FIN 301 (p. 188), ECO 460 (p. 188), ECO 461 (p. 188) and FIN 450 (p. 188). For marketing or human resources, MGT 301 (p. 188), MKT 300 (p. 188), MGT 403 (p. 188) and MKT 440 (p. 188).
- 10 Students may substitute CMM 315 (p. 188), CMM 439 (p. 188), CMM 449 (p. 188), or a CMM course delivered in conjunction with a CMM summer education abroad program for one of the CMM or CMS courses when the topic has an international focus.

Minor in International Studies (ins)

International Studies

ECO 204 (p. 188)	Prin of Macroecon	3
POL 214 (p. 188)	Intro-Intrntl Poltcs	3
Select one LNG course (202 level or above)		3
Select four INS courses (300/400 level) ¹		12
Total Hours		21

- 1 Must be from at least three different disciplines, taken from International Studies core curriculum or concentrations.

Courses

INS 250. Research Methods. 1 Hour

An introduction to the practice of locating aids and source materials needed to conduct research on international topics. Prerequisite(s): Permission of program director.

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 of their own choosing. Prerequisite(s): INS 250; senior status; 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 two-hundred 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), K. 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	Spkrs Cath Socl Trad	1
(p. 194)		

MST 310	Read Signs Time	3
(p. 194)		
or MST 311	Read Signs Time	
(p. 194)		
or MST 312	Readng-Signs-Times	
(p. 194)		
Select one course from:		3
ASI 358	Chrstny,Ctzshp&Socty	
(p. 194)		
HST 372	Hst-Rel in US	
(p. 194)		
PHL 327	Philosophy of Peace	
(p. 194)		
PHL 356	Christian Philosophy	
(p. 194)		
REL 363	Faith & Justice	
(p. 194)		
Select two courses from two different disciplines:		6
ASI 357	Vocation & the Arts	
(p. 194)		
ASI 371	Prf Eth Glgl Cm-Bus	
(p. 194)		
ASI 372	Prf Eth Glgl Cm-Edu	
(p. 194)		
ASI 373	Prf Eth Glgl Cm-Egr	
(p. 194)		
ASI 374	Prf Eth Glgl Cm-Phl	
(p. 194)		
ASI 375	Prf Eth Glgl Cm-Rel	
(p. 194)		
EGR 330	Engr Dsgn & Appr Techq	
(p. 194)		
ENG 323	Lit-Christn Tradtn	
(p. 194)		
ENG 384	Chrstnty&Mod Poetry	
(p. 194)		
HST 305	Medieval Europe	
(p. 194)		
HST 307	Renaissance&Reformtn	
(p. 194)		
HST 311	Old Regime Europe	
(p. 194)		
HST 313	Europe 1815-1914	
(p. 194)		
HST 358	Soc&Cult Hst-Lat Am	
(p. 194)		
MUS 301	Mus Hist & Lit I	
(p. 194)		
MUS 305	Africn Amer Sac Mus	
(p. 194)		
MUS 350	Sacred Music Hst	
(p. 194)		
MUS 452	Contemp Litgcl Mus Rep	
(p. 194)		
PHL 307	Philosophy and Women	
(p. 194)		

PHL 311 (p. 194)	Phl of Religion
PHL 312 (p. 194)	Ethics
PHL 313 (p. 194)	Business Ethics
PHL 315 (p. 194)	Medical Ethics
PHL 316 (p. 194)	Engineering Ethics
PHL 319 (p. 194)	Information Ethics
PHL 351 (p. 194)	Medieval Philosophy
PHL 360 (p. 194)	Existentialism
POL 333 (p. 194)	Pol of Human Rghts
POL 426 (p. 194)	Ldrshp-Communities
PSY 451 (p. 194)	PSY of Religion
REL 323 (p. 194)	Hst-Christianity I
REL 324 (p. 194)	Hst-Christianity II
REL 358 (p. 194)	Liberation Theology
REL 367 (p. 194)	Chr Ethics&Hlth Care
REL 368 (p. 194)	Practical wisdom in the business world
REL 369 (p. 194)	Chrstrn Ethics & Engr
REL 471 (p. 194)	Women and Religion
REL 474 (p. 194)	Women-Global Church
SOC 334 (p. 194)	Religion & Society
SOC 339 (p. 194)	Social Inequality
SOC 426 (p. 194)	Ldrshp-Communities
VAH 450 (p. 194)	Itl Renaissance Art
VAH 460 (p. 194)	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 (p. 196)
- Bachelor of Science, Applied Mathematical Economics (p. 197)
- Bachelor of Science, Mathematics (p. 198)

Minors:

- Actuarial Science (p. 199)
- Mathematics (p. 199)

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 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 general education course for all mathematics majors.

A minor in mathematics consists of twelve 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, Kauflin, McCloskey, Mushenheim, Rice, Schleppi, Shaughnessy, R. Steinlage, Strange

Professors: Abueida, Eloie, Higgins, Islam, Mashburn, Raffoul
Associate Professors: Busch, Diestelkamp, Driskell, Gorton, Hovey, Krakowski, Liu, Usman

Assistant Professors: Keen, Kublik, Qumsiyeh, Ren, Yengulalp

Lecturers: Harrison, Ober, Saintignon, Simon, L. Steinlage

Bachelor of Arts with a major in Mathematics (mth) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3

ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

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 36

MTH 168 Any Geom & Calc I (Satisfies CAP Mathematics) (p. 195)	4
MTH 169 Any Geom & Calc II (p. 195)	4
MTH 218 Any Geom & Calc III (p. 195)	4
MTH 308 Fndtn & Discrete Mth (p. 195)	3
MTH 310 Lin Alg & Matrices (p. 195)	3
MTH 330 Intermed Analysis (p. 195)	3
MTH 361 Intro-Abstrct Algbra (p. 195)	3
MTH 411 Probabltly & Stat I (p. 195)	3
MTH 480 Math Capstone (Satisfies CAP Major Capstone) (p. 195)	3
Select two MTH courses (300/400 level)	6

Breadth

ASI 150	Intr to the Univ Exp	1
(p. 195)		
Total Hours to total at least		124

Bachelor of Science with a major in Applied Mathematical Economics (mte)

Minimum 120 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103	The West & the World
REL 103	Introduction to Religioius & Theological Studies
PHL 103	Introduction to Philosophy
ENG 100	Writing Seminar I ²
Second-Year Writing Seminar ³	0-3
ENG 200	Writing Seminar II
Oral Communication	3
CMM 100	Principles of Oral Communication
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

Science Breadth Requirements

Satisfies CAP Natural Science		
CPS 150 (p. 195)	Algorithm&Progrm I	4
CPS 151 (p. 195)	Algorithm&Progrm II	4
Select one natural sciences group from:		8

BIO 151
(p. 195)
& 151L
(p. 195)
& BIO 152
(p. 195)
& BIO 152L
(p. 195)

Concepts of Bio I
and Concepts-Bio Lab I
and Concepts of Bio II
and Concepts-Bio Lab II

CHM 123
(p. 195)
& 123L
(p. 195)
& CHM 124
(p. 195)
& CHM 124L
(p. 195)

General Chemistry
and Gen Chemistry Lab
and General Chemistry
and Gen Chemistry Lab

GEO 115
(p. 195)
& 115L
(p. 195)
& GEO 116
(p. 195)
& GEO 116L
(p. 195)

Physical Geology
and Physical Geology Lab
and Geolgcl Hst-Earth
and Geolgcl Hst-Earth Lb

PHY 206
(p. 195)
& PHY 207
(p. 195)
& PHY 210L
(p. 195)
& PHY 211L
(p. 195)

Gen Physics I Mech
and Gen Phy II Ele & Mag
and Gen Physics Lab I
and Gen Physics Lab II

Major Requirements

48

Mathematics		
MTH 168 (p. 195)	Any Geom & Calc I (Satisfies CAP Mathematics)	4
MTH 169 (p. 195)	Any Geom & Calc II	4
MTH 218 (p. 195)	Any Geom & Calc III	4
MTH 308 (p. 195)	Fndtn & Discrete Mth	3
MTH 310 (p. 195)	Lin Alg & Matrices	3
MTH 330 (p. 195)	Intermed Analysis	3
MTH 411 (p. 195)	Probabltly & Stat I	3
MTH 412 (p. 195)	Probabltly & Stat II	3
MTH 480 (p. 195)	Math Capstone (Satisfies CAP Major Capstone)	3
Economics		
ECO 203 (p. 195)	Prin of Microecon (Satisfies CAP Crossing Boundaries: Inquiry)	3
ECO 204 (p. 195)	Prin of Macroecon (Satisfies CAP Crossing Boundaries: Inquiry)	3

ECO 346 (p. 195)	Intrmd MicroEco Anly	3
ECO 347 (p. 195)	Intrmd MacroEco Anly	3
ECO 441 (p. 195)	Econometrics	3
Select one ECO course (300/400 level)		3

Breadth

ASI 150 (p. 195)	Intr to the Univ Exp	1
Social and Behavioral Sciences (Includes CAP Social Science)		6
Total Hours to total at least		120

Bachelor of Science with a major in Mathematics (mth) Minimum 120 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religioius & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

Science Breadth Requirements

Computer Science (CPS 150 applies to CAP Natural Sciences)		3-4
CPS 132 (p. 195)	Progrmmng-Engr & Sci	

or CPS 150 (p. 195)	Algorith&Progrm I	
Select one natural sciences group from: (Applies to CAP Natural Science)		8
BIO 151 (p. 195) & 151L (p. 195) & BIO 152 (p. 195) & BIO 152L (p. 195)	Concepts of Bio I and Concepts-Bio Lab I and Concepts of Bio II and Concepts-Bio Lab II	
CHM 123 (p. 195) & 123L (p. 195) & CHM 124 (p. 195) & CHM 124L (p. 195)	General Chemistry and Gen Chemistry Lab and General Chemistry and Gen Chemistry Lab	
GEO 115 (p. 195) & 115L (p. 195) & GEO 116 (p. 195) & GEO 116L (p. 195)	Physical Geology and Physical Geology Lab and Geolgcl Hst-Earth and Geolgcl Hst-Earth Lb	
PHY 206 (p. 195) & PHY 207 (p. 195) & PHY 210L (p. 195) & PHY 211L (p. 195)	Gen Physics I Mech and Gen Phy II Ele & Mag and Gen Physics Lab I and Gen Physics Lab II	
Select two courses acceptable for science majors		6
Major Requirements		45
MTH 168 (p. 195)	Anly Geom & Calc I (Satisfies CAP Mathematics)	4
MTH 169 (p. 195)	Anly Geom & Calc II	4
MTH 218 (p. 195)	Anly Geom & Calc III	4
MTH 219 (p. 195)	Appl Diff Equations	3
MTH 308 (p. 195)	Fndtn & Discrete Mth	3
MTH 310 (p. 195)	Lin Alg & Matrices	3
MTH 330 (p. 195)	Intermed Analysis	3
MTH 361 (p. 195)	Intro-Abstrct Algbra	3
MTH 430 (p. 195)	Real Analysis	3

MTH 480 (p. 195)	Math Capstone (Satisfies CAP Major Capstone)	3
Select four MTH courses (300/400 level) ¹		12
Breadth		
ASI 150 (p. 195)	Intr to the Univ Exp	1
Social and Behavioral Sciences (Includes CAP Social Science)		6
Total Hours to total at least		120

¹ 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 twenty-two 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 forty-six semester hours are required for the minor.

Actuarial Science

ACC 207 (p. 195)	Intro-Financial Acc	3
ECO 203 (p. 195)	Prin of Microecon ¹	3
ECO 204 (p. 195)	Prin of Macroecon ¹	3
ECO 410 (p. 195)	Bus&Eco Forecasting ²	3
FIN 301 (p. 195)	Intro to Financial Mgt ³	3
FIN 360 (p. 195)	Investments	3
FIN 470 (p. 195)	Fixed Inc Sec	3
FIN 480 (p. 195)	Optns&Futures Mkts	3
MTH 168 (p. 195)	Anly Geom & Calc I	4
MTH 169 (p. 195)	Anly Geom & Calc II	4
MTH 218 (p. 195)	Anly Geom & Calc III	4
MTH 229 (p. 195)	Theory of Interest	3
MTH 328 (p. 195)	Actuarial Prob Sem	1

MTH 411 (p. 195)	Probabltly & Stat I	3
MTH 412 (p. 195)	Probabltly & Stat II	3
Total Hours		46

¹ ECO 203 (p. 195) and ECO 204 (p. 195) together qualify for VEE Economics credit in Economics.

² VEE credit in Applied Statistics.

³ 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

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 Math. 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 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 course¹ (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 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-two day Leadership Development Assessment Course (LDAC), which allows them to apply the leadership and technical

training learned in the classroom. While at LDAC, students are paid half a second lieutenant's monthly salary or about \$1100.

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 Leader's Training Course (LTC), have been established to allow second-semester sophomores and juniors or seniors who will be going on to graduate school to participate in the military science program.

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.

¹ 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

LTC Daniel Redden, U.S. Army, Chairperson
Professor: Redden
Assistant Professors: Germanceri, McGough
Instructors: Perez, Siler

Minor in Military Science (mil)

Military Science, ROTC

MIL 301 (p. 202)	Ldng Sm Orgnzations I	3
MIL 302 (p. 202)	Ldng Sm Orgnztns II	3
MIL 401 (p. 202)	Leadrsdp Mgmt&Staff	3
MIL 402 (p. 202)	Appld Ldrshp & Mgmt	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 (p. 207)
- Bachelor of Arts, Music - Jazz Studies Concentration (p. 204)
- Bachelor of Arts, Music - Music Studies Concentration (p. 206)
- Bachelor of Music, Music Composition (p. 208)
- Bachelor of Music, Music Education - Instrumental Concentration (p. 209)
- Bachelor of Music, Music Education - Vocal Concentration (p. 211)
- Bachelor of Music, Music Performance (p. 212)
- Bachelor of Music, Music Therapy (p. 214)

Certificate:

- Church Music (p. 215)

Minor:

- Music (p. 216)
- Music Technology (p. 216)

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 the following:

- 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 21st 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
- Javanese Gamelan
- Flyer Pep Band
- Dayton Jazz Ensemble
- University Jazz Band
- Flyer Jazz Lab Band
- Early Music Ensemble
- Chamber music groups
- Jazz Combos

- Percussion Ensemble and Winter Drumline

The Department of Music offers the five degree programs listed below. Those majoring in the Bachelor of Arts with a major in Music (MUS) may choose from three concentration areas: Music Studies, Jazz Studies, or Ethnomusicology.

- Bachelor of Arts with a major in Music (MUS)
- Bachelor of Music with a major in Composition (MUC)
- Bachelor of Music with a major in Music Education (MUE)
- Bachelor of Music with a major in 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 the following:

1. Submission to the Department of Music two letters of recommendation from their high school music teachers and/or performance teachers and
2. Successful completion of a performance audition in person. Specific information regarding audition requirements and dates is available by calling the department office and visiting the department website (<http://www.udayton.edu/artssciences/music>).

The Department of Music offers a minor in music and a minor in music technology for non-music majors and a church music certificate.

Transfer students pursuing a major in MUC, MUP, or MUT must complete at least twenty-four 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 twenty 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 twelve 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: Morris, Reynolds

Assistant Professors: Daniel-Cox, Dorf, Jones, MacLachlan, Rush

Lecturers: Hiller, Lehman, Kim, Kizer

Artists-in-Residence: Benjamin, Farris, Leslie, McCutcheon, Sievers

Bachelor of Arts with a major in 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 ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

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

Major Requirements

MUS 200 Recital Attendance (7 semesters)	0
(p. 203)	
MUS 241 Keyboard Comp I	0
(p. 203)	
MUS 242 Keyboard Comp II	0
(p. 203)	
MUS 250 Second Year Review	0
(p. 203)	

MUS 480 Capstone Project Sem (With MUS 481, satisfies CAP Major Capstone)	1
(p. 203)	
MUS 481 Capstone Proj Pres	1
(p. 203)	
Ensembles	6
MUS 390 Ensembles ¹	
(p. 203)	
MUS 494 Dayton Jazz Ensemble	
(p. 203)	
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 Mus Hist & Lit I	
(p. 203)	
or MUS 302 Mus Hist & Lit II	
(p. 203)	
MUS 303 Intro World Music	
(p. 203)	
MUS 306 History-Amer Jazz	
(p. 203)	
Music Theory and Aural Skills	14
MUS 111 Theory of Music I	
(p. 203)	
MUS 112 Theory of Music II	
(p. 203)	
MUS 113 Aural Skills I	
(p. 203)	
MUS 114 Aural Skills II	
(p. 203)	
MUS 211 Theory of Music III	
(p. 203)	
MUS 212 Theory of Music IV	
(p. 203)	
MUS 218 Jazz Pop Theory	
(p. 203)	
Performance studies, including functional keyboard skills	14
MUS 296 Func Keybd Skls I	
(p. 203)	
MUS 297 Func Keybd Skls II	
(p. 203)	
MUS 391 Jazz Improv I	
(p. 203)	
MUS 392 Jazz Improv II	
(p. 203)	
MUS 396 Jazz Kybd Harmony I	
(p. 203)	
MUS 397 Jazz Kybd Harmony I	
(p. 203)	
MUS 399 Performance Studies	
(p. 203)	
or MUS 499 Performance	
(p. 203)	

Breadth

ASI 150	Intr to the Univ Exp	1
(p. 203)		
Total Hours to total at least		124

¹ Choose from any MUS 390 (p. 203). See course descriptions.

Bachelor of Arts with a major in Music- Music Studies Concentration (mus) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religious & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

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

45

MUS 200	Recital Attendance (7 semesters)	0
(p. 203)		
MUS 240	Fund of Conducting	2
(p. 203)		
MUS 241	Keyboard Comp I	0
(p. 203)		
MUS 242	Keyboard Comp II	0
(p. 203)		
MUS 250	Second Year Review	0
(p. 203)		
MUS 480	Capstone Project Sem (With MUS 481, satisfies CAP Major Capstone)	1
(p. 203)		
MUS 481	Capstone Proj Pres	1
(p. 203)		
Ensembles		4
MUS 390	Ensembles ¹	
(p. 203)		
or MUS 491	University Orchestra	
(p. 203)		
or MUS 492	Symphonic Wind Ens	
(p. 203)		
or MUS 493	University Chorale	
(p. 203)		
Music History and Literature		9
MUS 301	Mus Hist & Lit I (Satisfies CAP Integrative, and Advanced Historical Studies)	
(p. 203)		
MUS 302	Mus Hist & Lit II	
(p. 203)		
MUS 303	Intro World Music (Satisfies CAP Arts, and Diversity and Social Justice)	
(p. 203)		
Music Theory and Aural Skills		16
MUS 111	Theory of Music I	
(p. 203)		
MUS 112	Theory of Music II	
(p. 203)		
MUS 113	Aural Skills I	
(p. 203)		
MUS 114	Aural Skills II	
(p. 203)		
MUS 211	Theory of Music III	
(p. 203)		
MUS 212	Theory of Music IV	
(p. 203)		
MUS 213	Aural Skills III	
(p. 203)		
MUS 214	Aural Skills IV	
(p. 203)		
Performance studies, including functional keyboard skills		12
MUS 296	Func Keybd Skls I	
(p. 203)		
MUS 297	Func Keybd Skls II	
(p. 203)		
MUS 298	Func Keybd Skls III	
(p. 203)		

MUS 299 (p. 203)	Func Keybd Skls IV	
MUS 399 (p. 203)	Performance Studies	
or MUS 499 (p. 203)	Performance	

Breadth

ASI 150 (p. 203)	Intr to the Univ Exp	1
Total Hours to total at least		124

¹ Choose from any MUS 390 (p. 203). See course descriptions.

Bachelor of Arts with a major in 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 ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religious & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

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 (Satisfies CAP Diversity and Social Justice)	
ANT 306	Culture & Power (Satisfies CAP Inquiry)	
SOC 101	Principles of Sociology	
SOC 394	Popular Culture in Society	

Major Requirements 45

MUS 200	Recital Attendance (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 ¹		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 Music 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, including functional keyboard skills		8
MUS 296	Functional Keyboard Skills I	
MUS 297	Functional Keyboard Skills II	
MUS 399	Performance Studies	
or MUS 499	Performance Studies	
Breadth		
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

¹ 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.

Bachelor of Music with a major in Music Composition (muc) Minimum 137 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religious & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

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) (p. 203)	0
MUS 202	Prof Dev Workshops (7 semesters) (p. 203)	0
MUS 241	Keyboard Comp I (p. 203)	0
MUS 242	Keyboard Comp II (p. 203)	0
MUS 250	Second Year Review (p. 203)	0
MUS 314	Score Reading (p. 203)	2
MUS 450	Degree Recital (2 required. Satisfies CAP Major Capstone.) (p. 203)	0
Composition ¹		12
MUS 121	Composition I (p. 203)	
MUS 122	Composition I (p. 203)	
MUS 221	Composition II (p. 203)	
MUS 222	Composition II (p. 203)	
MUS 321	Composition III (p. 203)	
MUS 322	Composition III (p. 203)	
MUS 421	Composition IV (p. 203)	
MUS 422	Composition IV (p. 203)	
Conducting		4
MUS 240	Fund of Conducting (p. 203)	
MUS 345	Choral Conducting (p. 203)	
or MUS 346	Instr Conducting (p. 203)	
Ensembles		8
MUS 491	University Orchestra ² (p. 203)	
or MUS 492	Symphonic Wind Ens (p. 203)	
or MUS 493	University Chorale (p. 203)	
Music History and Literature		9

MUS 301 (p. 203)	Mus Hist & Lit I (Satisfies CAP Integrative, and Advanced Historical Studies)	
MUS 302 (p. 203)	Mus Hist & Lit II	
MUS 303 (p. 203)	Intro World Music (Satisfies CAP Arts, and Diversity and Social Justice)	
Music Theory and Aural Skills		16
MUS 111 (p. 203)	Theory of Music I	
MUS 112 (p. 203)	Theory of Music II	
MUS 113 (p. 203)	Aural Skills I	
MUS 114 (p. 203)	Aural Skills II	
MUS 211 (p. 203)	Theory of Music III	
MUS 212 (p. 203)	Theory of Music IV	
MUS 213 (p. 203)	Aural Skills III	
MUS 214 (p. 203)	Aural Skills IV	
Orchestration or arranging		4
MUS 316 (p. 203)	Fund of Orchestration	
or MUS 318 (p. 203)	Fund of Arranging	
MUS 416 (p. 203)	Adv Orchestration	
Performance Studies ³		12
MUS 296 (p. 203)	Func Keybd Skls I	
MUS 297 (p. 203)	Func Keybd Skls II	
MUS 298 (p. 203)	Func Keybd Skls III	
MUS 299 (p. 203)	Func Keybd Skls IV	
MUS 399 (p. 203)	Performance Studies	
or MUS 499 (p. 203)	Performance	
MUS electives		10
Theory and/or composition electives		10
Breadth		
ASI 150 (p. 203)	Intr to the Univ Exp	1
Non-music electives		9
Total Hours to total at least		137

¹ Each composition major must present one and a half recitals of original work by the senior year.

² May substitute MUS 390 (p. 203) with permission.

³ Functional Keyboard Skills or equivalent is required.

Bachelor of Music with a major in Music Education-INSTRUMENTAL CONCENTRATION (mue) Minimum 146 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religious & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

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 ¹

MUS 200 (p. 203)	Recital Attendance (7 semesters)	0
MUS 202 (p. 203)	Prof Dev Workshops	0
MUS 231 (p. 203)	Intro to Mus Ed	2

MUS 240 (p. 203)	Fund of Conducting	2
MUS 241 (p. 203)	Keyboard Comp I	0
MUS 242 (p. 203)	Keyboard Comp II	0
MUS 250 (p. 203)	Second Year Review	0
MUS 318 (p. 203)	Fund of Arranging	2
MUS 331 (p. 203)	Choral Mus Methods	3
MUS 332 (p. 203)	Instru Mus Methods	3
MUS 335 (p. 203)	Classroom Mus Mthds	3
MUS 340 (p. 203)	Mus Ed for Spec Needs	2
MUS 450 (p. 203)	Degree Recital (Satisfies CAP Major Capstone)	0
Performance Studies (7 semesters) ²		14
MUS 399 (p. 203)	Performance Studies	
Ensembles		6
MUS 390 (p. 203)	Ensembles (1 semester)	
Select five semesters from:		
MUS 491 (p. 203)	University Orchestra	
or MUS 492 (p. 203)	Symphonic Wind Ens	
or MUS 493 (p. 203)	University Chorale	
Functional Keyboard Skills		4
MUS 296 (p. 203)	Func Keybd Skls I	
MUS 297 (p. 203)	Func Keybd Skls II	
MUS 298 (p. 203)	Func Keybd Skls III	
MUS 299 (p. 203)	Func Keybd Skls IV	
Music History and Literature		9
MUS 301 (p. 203)	Mus Hist & Lit I (Satisfies CAP Integrative, and Advanced Historical Studies)	
MUS 302 (p. 203)	Mus Hist & Lit II	
MUS 303 (p. 203)	Intro World Music (Satisfies CAP Arts, and Diversity and Social Justice)	
Music Theory and Aural Skills		16
MUS 111 (p. 203)	Theory of Music I	
MUS 112 (p. 203)	Theory of Music II	
MUS 113 (p. 203)	Aural Skills I	

MUS 114 (p. 203)	Aural Skills II	
MUS 211 (p. 203)	Theory of Music III	
MUS 212 (p. 203)	Theory of Music IV	
MUS 213 (p. 203)	Aural Skills III	
MUS 214 (p. 203)	Aural Skills IV	
Additional Requirements for Instrumental Concentration ³		
Ensembles		3
MUS 390 (p. 203)	Ensembles (choral)	
Small Ensembles (4 semesters, 0.5 semester hours each)		
Music Education		9
MUS 195 (p. 203)	Beg Guitar Class I	
MUS 236 (p. 203)	Voice Lab	
MUS 336 (p. 203)	Woodwind Pedagogy (2 semesters)	
MUS 337 (p. 203)	Brass Pedagogy (2 semesters)	
MUS 338 (p. 203)	Percussn Pedagogy	
MUS 339 (p. 203)	String Pedagogy (2 semesters)	
Select a minimum of 6 elective semester hours from:		6
MUS 233 (p. 203)	Eurhythmics	
MUS 295 (p. 203)	Beg Guitar Class II	
MUS 338 (p. 203)	Percussn Pedagogy	
MUS 345 (p. 203)	Choral Conducting	
MUS 346 (p. 203)	Instr Conducting	
MUS 381 (p. 203)	Clin Educ Improv I	
MUS 399 (p. 203)	Performance Studies (may be repeated)	
MUS 408 (p. 203)	Dictn&Lit-Singrs	
MUS 430 (p. 203)	Jazz Pedagogy	
MUS 431 (p. 203)	Marching Band Pedagogy	
Teacher Education		25
EDT 110 (p. 203)	Profession-Teachng	
EDT 110L (p. 203)	Prfssn Tchng Lab	
EDT 207 (p. 203)	Chld&Adol In Eductn	

EDT 207L (p. 203)	Chld & Adlscd Ed Lab	
EDT 305 (p. 203)	Phil&Hist of Amer Ed (Satisfies CAP Practical Ethical Action, and Advanced Study in Philosophy)	
EDT 459 (p. 203)	Crt Rdg Wrtg Cnt Ar	
EDT 479 (p. 203)	Stdt Tchng-Mus K-12	

Breadth

ASI 150 (p. 203)	Intr to the Univ Exp	1
Total Hours to total at least		146

- Students in the music education program are required to maintain a 2.5 cumulative grade point average, a 2.5 cumulative average in teacher education courses, and a 2.5 cumulative average in music courses. Students must earn a grade of C- or higher in the following core music education courses: MUS 331 (p. 203), MUS 332 (p. 203) and MUS 335 (p. 203).
- On principal instrument.
- Students will select one of two concentration areas (instrumental or vocal). Upon successful completion of the degree and Praxis 2 exam, 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 with a major in Music Education-VOCAL CONCENTRATION (mue) Minimum 146 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religioius & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

BM Requirements

Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	7
Social Sciences (May include CAP Social Science)	3

Major Requirements ¹ 84

MUS 200 (p. 203)	Recital Attendance (7 semesters)	0
MUS 202 (p. 203)	Prof Dev Workshops (7 semesters)	0
MUS 231 (p. 203)	Intro to Mus Ed	2
MUS 240 (p. 203)	Fund of Conducting	2
MUS 241 (p. 203)	Keyboard Comp I	0
MUS 242 (p. 203)	Keyboard Comp II	0
MUS 250 (p. 203)	Second Year Review	0
MUS 318 (p. 203)	Fund of Arranging	2
MUS 331 (p. 203)	Choral Mus Methods	3
MUS 332 (p. 203)	Instru Mus Methods	3
MUS 335 (p. 203)	Classroom Mus Mthds	3
MUS 340 (p. 203)	Mus Ed for Spec Needs	2
MUS 450 (p. 203)	Degree Recital (Satisfies CAP Major Capstone)	0
Performance Studies (7 semesters) ²		14
MUS 399 (p. 203)	Performance Studies (7 semesters) ²	
Ensembles		6
MUS 390 (p. 203)	Ensembles (1 semester)	
Select five semesters from:		
MUS 491 (p. 203)	University Orchestra	
or MUS 492 (p. 203)	Symphonic Wind Ens	
or MUS 493 (p. 203)	University Chorale	
Functional Keyboard Skills		4
MUS 296 (p. 203)	Func Keybd Skls I	

MUS 297 (p. 203)	Func Keybd Skls II		
MUS 298 (p. 203)	Func Keybd Skls III		
MUS 299 (p. 203)	Func Keybd Skls IV		
Music History and Literature		9	
MUS 301 (p. 203)	Mus Hist & Lit I (Satisfies CAP Integrative, and Advanced Historical Studies)		
MUS 302 (p. 203)	Mus Hist & Lit II		
MUS 303 (p. 203)	Intro World Music (Satisfies CAP Arts, and Diversity and Social Justice)		
Music Theory and Aural Skills		16	
MUS 111 (p. 203)	Theory of Music I		
MUS 112 (p. 203)	Theory of Music II		
MUS 113 (p. 203)	Aural Skills I		
MUS 114 (p. 203)	Aural Skills II		
MUS 211 (p. 203)	Theory of Music III		
MUS 212 (p. 203)	Theory of Music IV		
MUS 213 (p. 203)	Aural Skills III		
MUS 214 (p. 203)	Aural Skills IV		
Additional requirements for Vocal Concentration ³			
MUS 408 (p. 203)	Dictn&Lit-Singrs	2	
Ensembles		1	
MUS 390 (p. 203)	Ensembles (instrumental)		
Music Education		7	
MUS 195 (p. 203)	Beg Guitar Class I		
MUS 295 (p. 203)	Beg Guitar Class II		
MUS 235 (p. 203) or MUS 236 (p. 203)	Voice Pedagogy Voice Lab		
MUS 237 (p. 203)	Brass Instrument Lab		
MUS 238 (p. 203)	WW Instrument Lab		
MUS 338 (p. 203)	Percussn Pedagogy		
MUS 339 (p. 203)	String Pedagogy		
Select a minimum of 8 elective semester hours from:		8	
MUS 233 (p. 203)	Eurhythmics		
MUS 338 (p. 203)	Percussn Pedagogy		
MUS 345 (p. 203)	Choral Conducting		
MUS 346 (p. 203)	Instr Conducting		
MUS 381 (p. 203)	Clin Educ Improv I		
MUS 399 (p. 203)	Performance Studies (on secondary instrument, may be repeated)		
MUS 408 (p. 203)	Dictn&Lit-Singrs		
MUS 430 (p. 203)	Jazz Pedagogy		
MUS 431 (p. 203)	Marching Band Pedagogy		
Teacher Education		25	
EDT 110 (p. 203)	Profession-Teachng		
EDT 110L (p. 203)	Prfssn Tchng Lab		
EDT 207 (p. 203)	Chld&Adol In Eductn		
EDT 207L (p. 203)	Chld & Adlscd Ed Lab		
EDT 305 (p. 203)	Phil&Hist of Amer Ed (Satisfies CAP Practical Ethical Action, and Advanced Study in Philosophy)		
EDT 459 (p. 203)	Crt Rdg Wrtg Cnt Ar		
EDT 479 (p. 203)	Stdtd Tchng-Mus K-12		
Breadth			
ASI 150 (p. 203)	Intr to the Univ Exp	1	
Total Hours to total at least		146	

- Students in the music education program are required to maintain a 2.5 cumulative grade point average, a 2.5 cumulative average in teacher education courses, and a 2.5 cumulative average in music courses. Students must earn a grade of C- or higher in the following core music education courses: MUS 331 (p. 203), MUS 332 (p. 203) and MUS 335 (p. 203).
- On principal instrument.
- Students will select one of two concentration areas (instrumental or vocal). Upon completion of the degree and Praxis 2 exam, 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 with a major in Music Performance (mup) Minimum 137 hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103	The West & the World

REL 103	Introduction to Religious & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

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 (p. 203)	Recital Attendance (7 semesters)	0
MUS 202 (p. 203)	Prof Dev Workshops (7 semesters)	0
MUS 241 (p. 203)	Keyboard Comp I	0
MUS 242 (p. 203)	Keyboard Comp II	0
MUS 250 (p. 203)	Second Year Review	0
MUS 450 (p. 203)	Degree Recital (2 required. Satisfies CAP Major Capstone.)	0
Conducting		4
MUS 240 (p. 203)	Fund of Conducting	
MUS 318 (p. 203)	Fund of Arranging	
Ensembles		8
MUS 491 (p. 203)	University Orchestra	

or MUS 492 (p. 203)	Symphonic Wind Ens	
or MUS 493 (p. 203)	University Chorale	
Music History and Literature		9
MUS 301 (p. 203)	Mus Hist & Lit I (Satisfies CAP Integrative, and Advanced Historical Studies)	
MUS 302 (p. 203)	Mus Hist & Lit II	
MUS 303 (p. 203)	Intro World Music (Satisfies CAP Arts, and Diversity and Social Justice)	
Music Theory and Aural Skills		16
MUS 111 (p. 203)	Theory of Music I	
MUS 112 (p. 203)	Theory of Music II	
MUS 113 (p. 203)	Aural Skills I	
MUS 114 (p. 203)	Aural Skills II	
MUS 211 (p. 203)	Theory of Music III	
MUS 212 (p. 203)	Theory of Music IV	
MUS 213 (p. 203)	Aural Skills III	
MUS 214 (p. 203)	Aural Skills IV	
Orchestration or arranging		4
MUS 316 (p. 203)	Fund of Orchestration	
or MUS 318 (p. 203)	Fund of Arranging	
MUS 416 (p. 203)	Adv Orchestration	
Performance Studies ¹		36
Major area of specialization (24-32 hours)		
Minor area of specialization (4-12 hours) ²		
MUS electives ³		14
Breadth		
ASI 150 (p. 203)	Intr to the Univ Exp	1
Non-music electives ⁴		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 Must include MUS 296 (p. 203)-MUS 299 (p. 203) or MUS 399 (p. 203).

- ³ Voice majors must take MUS 235 (p. 203) and MUS 408 (p. 203); piano majors must include MUS 405 (p. 203) and MUS 435 (p. 203); 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 (p. 203)-MUS 339 (p. 203)). Majors are strongly urged to register for a Special Topics class with their performance instructor chosen to complement other performance studies.
- ⁴ Voice majors must include two semesters of foreign language study.

Bachelor of Music with a major in Music Therapy (mut) Minimum 134 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

BM Requirements

Mathematics (Satisfies CAP Mathematics) ¹	3
Natural Sciences, includes:	7
HSS 305 Human Anatomy (Applies to CAP Natural Science) (p. 203)	
Lecture with Lab	
Social Sciences (Includes CAP Social Science)	3

Major Requirements 87

MUS 200 (p. 203)	Recital Attendance (7 semesters)	0
MUS 202 (p. 203)	Prof Dev Workshops (7 semesters)	0
MUS 241 (p. 203)	Keyboard Comp I	0
MUS 242 (p. 203)	Keyboard Comp II	0
MUS 250 (p. 203)	Second Year Review	0
MUS 450 (p. 203)	Degree Recital (Satisfies CAP Major Capstone)	0
MUS 489 (p. 203)	Mus Therapy Intrnshp ²	2
Conducting and Arranging		4
MUS 240 (p. 203)	Fund of Conducting	
MUS 318 (p. 203)	Fund of Arranging	
Ensembles		6
MUS 491 (p. 203)	University Orchestra	
or MUS 492 (p. 203)	Symphonic Wind Ens	
or MUS 493 (p. 203)	University Chorale	
Music History and Literature		9
MUS 301 (p. 203)	Mus Hist & Lit I (Satisfies CAP Integrative, and Advanced Historical Studies)	
MUS 302 (p. 203)	Mus Hist & Lit II	
MUS 303 (p. 203)	Intro World Music (Satisfies CAP Arts, and Diversity and Social Justice)	
Music Theory and Aural Skills		16
MUS 111 (p. 203)	Theory of Music I	
MUS 112 (p. 203)	Theory of Music II	
MUS 113 (p. 203)	Aural Skills I	
MUS 114 (p. 203)	Aural Skills II	
MUS 211 (p. 203)	Theory of Music III	
MUS 212 (p. 203)	Theory of Music IV	
MUS 213 (p. 203)	Aural Skills III	
MUS 214 (p. 203)	Aural Skills IV	
Music Therapy, including core courses and practica		27
MUS 233 (p. 203)	Eurhythmics	
MUS 282 (p. 203)	Func Mus Thrpy Skls	

MUS 285 (p. 203)	Intro Mus Therapy
MUS 286 (p. 203)	Mus Therapy Methods
MUS 287 (p. 203)	Practcm Mus Thrpy I
MUS 288 (p. 203)	Practcm Mus Thrpy II
MUS 289 (p. 203)	Practcm Mus Thrpy III
MUS 290 (p. 203)	Mus Ther Treat Proc
MUS 381 (p. 203)	Clin Educ Improv I
MUS 382 (p. 203)	Clin Educ Improv II
MUS 385 (p. 203)	Music Therapy Prin
MUS 386 (p. 203)	Music & Psychothrpy
MUS 387 (p. 203)	Practcm Mus Thrpy IV
MUS 388 (p. 203)	Practcm Mus Thrpy V
MUS 486 (p. 203)	Mus Therapy Research

Performance Studies ³ 10

MUS 399 (p. 203)	Performance Studies
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Vocal and instrumental methods, including accompanying instruments of piano and guitar: 8

MUS 195 (p. 203)	Beg Guitar Class I
MUS 295 (p. 203)	Beg Guitar Class II
MUS 296 (p. 203)	Func Keybd Skls I
MUS 297 (p. 203)	Func Keybd Skls II
MUS 298 (p. 203)	Func Keybd Skls III
MUS 299 (p. 203)	Func Keybd Skls IV
MUS 338 (p. 203)	Percussn Pedagogy ⁴

Select one semester hour from:

MUS 237 (p. 203)	Brass Instrument Lab
MUS 238 (p. 203)	WW Instrument Lab
MUS 293 (p. 203)	Organ Class

Music and dance electives 5

Breadth

ASI 150 (p. 203)	Intr to the Univ Exp	1
PSY 101 (p. 203)	Introductory Psych (Satisfies CAP Social Science)	3
PSY 351 (p. 203)	Child Psychology	3
PSY 355 (p. 203)	Devlp Psychpath	3
PSY 363 (p. 203)	Abnormal Psychology	3
Total Hours to total at least		134

- 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 (p. 203) must be completed for a total of one semester hour.

Certificate in Church Music (MCh)

Church Music

MUS 110 (p. 203)	Fundamentals of Mus ¹	2
MUS 350 (p. 203)	Sacred Music Hst	3
MUS 351 (p. 203)	Church Music Admin	2
MUS 390 (p. 203)	Ensembles	1
MUS 399 (p. 203)	Performance Studies	1-2
MUS 452 (p. 203)	Contemp Litgcl Mus Rep	2
MUS 459 (p. 203)	Church Music Internship	2
REL 446 (p. 203)	Chrstrn Liturgy ²	3
Select one course from:		2
MUS 240 (p. 203)	Fund of Conducting	
MUS 545 (p. 203)	Adv Choral Cond	

Select six semester hours from: 6

MUS 318 (p. 203)	Fund of Arranging
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MUS 461 (p. 203)	ST:Church Music
MUS 505 (p. 203)	Teach Music w/Tech I
MUS 506 (p. 203)	Teach Music w/Technology II
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Total Hours	24-25

¹ May substitute additional credits in performance studies or church music workshops for MUS 110 (p. 203).

² Or two to three semester hours of a suitable religious studies course.

Minor in Music (mus)

Music

Select one track from: 22

Track A:

MUS 115 (p. 203)	Music Theory Prac
MUS 116 (p. 203)	Music Theory Prac
MUS 217 (p. 203)	Listen & Transcrip
or MUS 218 (p. 203)	Jazz Pop Theory
MUS 301 (p. 203)	Mus Hist & Lit I
MUS 302 (p. 203)	Mus Hist & Lit II

Select MUS electives (8 hours) ^{1,2}

Track B:

MUS 111 (p. 203)	Theory of Music I
MUS 112 (p. 203)	Theory of Music II
MUS 113 (p. 203)	Aural Skills I
MUS 114 (p. 203)	Aural Skills II
MUS 301 (p. 203)	Mus Hist & Lit I
MUS 302 (p. 203)	Mus Hist & Lit II

Select MUS electives (8 hours) ^{1,2}

Total Hours 22

¹ Must include six semester hours at the 300/400 level.

² No more than two semester hours of ensemble (MUS 390 (p. 203), MUS 491 (p. 203), MUS 492 (p. 203), MUS 493 (p. 203)) will count toward the minor.

Minor in Music Technology (mTC)

Music Technology

Select one music theory option from: 8

Option A

MUS 115 (p. 203)	Music Theory Prac
MUS 116 (p. 203)	Music Theory Prac
MUS 217 (p. 203)	Listen & Transcrip
or MUS 218 (p. 203)	Jazz Pop Theory

Option B

MUS 111 (p. 203)	Theory of Music I
MUS 112 (p. 203)	Theory of Music II
MUS 113 (p. 203)	Aural Skills I
MUS 114 (p. 203)	Aural Skills II

Applied Studies ¹ 6

MUS 399 (p. 203)	Performance Studies
MUS 499 (p. 203)	Performance

Ensembles ² 2

MUS 390 (p. 203)	Ensembles ³
MUS 491 (p. 203)	University Orchestra
MUS 492 (p. 203)	Symphonic Wind Ens
MUS 493 (p. 203)	University Chorale

Music History and Literature 3

MUS 301 (p. 203)	Mus Hist & Lit I
MUS 302 (p. 203)	Mus Hist & Lit II
MUS 303 (p. 203)	Intro World Music

Music Technology 5

MUS 223 (p. 203)	Intro Music Tech
MUS 323 (p. 203)	Rec&Digital Media

Total Hours 24

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 (p. 203). See course descriptions.

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 solfege 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 solfege 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, Instruments & Technology. 3 Hours

Survey of music literature, styles, and important composers, and the way the development of instruments has influenced changes in musical style. The course will also consider the ways technology has altered our approach and access to music making, listening, and dissemination in the twentieth century. Open to all University students.

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 112, 114.

MUS 285. Introduction to Music Therapy. 2 Hours

History and development of music therapy; survey of theoretical bases and current trends for the use of music in therapy; disability areas using music therapy. Orientation in the clinical field. 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 Middle Ages to the present. Important composers, masterworks of music literature, compositional styles.

MUS 302. Music History & Literature II. 3 Hours

Survey of Western music history and literature from the Middle Ages to the present. Important composers, masterworks of music literature, compositional styles.

MUS 303. Introduction to Music of the World. 3 Hours

Survey of music from representative cultures around the world, and its role and function in society.

MUS 304. History of American Music. 3 Hours

Survey of the American musical heritage emphasizing Anglo- and Afro-American folk traditions, early religious music, country music, pioneers in piano, band and concert music, and contemporary popular music. 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. Operal 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 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 the evolution of both film and film music, and their relationship to culture and society.

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 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 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. 0-1 Hours

Various ensembles offered by the Department of Music. See overview page for ensemble titles. Prerequisite(s): Permission of instructor.

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 1040 hours supervised clinical training through resident internship in an AMTA-approved program. 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 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

Select band that performs the finest in wind literature. Presents regular concerts during fall and winter terms. Auditions required.

MUS 493. University Chorale. 1 Hour

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

Ensemble specializes 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 (p. 222)

Minor:

- Philosophy (p. 224)

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 thirty-seven semester hours. The philosophy major program is also offered in India in conjunction with the Marianists. Consult the chairperson of the department for further information.

A minor in philosophy consists of eighteen semester hours.

Faculty

John Inglis, Chairperson

Professors Emeriti: Kunkel, Quinn, Ulrich, Zembaty

Professors: Benson, DesAutels, Fischer, Fouke, Inglis, Johnson, Kebede, Tibbetts

Associate Professors: Gabbe, Mosser, Payne, Poe, Richards, Whisnant

Assistant Professors: James, McLeod, Paslaru, Velasquez

Lecturers: Bresnahan, Cheung, Lockwood, Marvin

Bachelor of Arts with a major in Philosophy (pHl) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹

12

HST 103

The West & the World

REL 103	Introduction to Religious & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

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 ^{1, 2}

PHL 103	Intro To Philosophy	3-7
(p. 222)		
or ASI 120	Dev West Global Ctxt	
(p. 222)		
PHL 240	Research Meth & Tech	1
(p. 222)		
PHL 301	Practical Logic ³	3
(p. 222)		
or PHL 302	Symbolic Logic	
(p. 222)		
PHL 350	Classical Greek PHL	3
(p. 222)		
PHL 352	Modern Philosophy	3
(p. 222)		
PHL 375	Ethical Theory	3
(p. 222)		
Select two seminars from: (Satisfies CAP Major Capstone)		6

PHL 440	Advanced Problems
(p. 222)	
PHL 451	Sem-Individ Phlsphrs
(p. 222)	
PHL 461	Sem-Cont Epistemolgy
(p. 222)	
PHL 462	Sem-Contemp Ethics
(p. 222)	
PHL 463	Sem-Cont Metaphysics
(p. 222)	

Select one track from:

Ethics and Social Justice 15

Select two courses from:

PHL 307	Philosophy and Women
(p. 222)	
PHL 310	Social Philosophy
(p. 222)	
PHL 312	Ethics
(p. 222)	
PHL 313	Business Ethics
(p. 222)	
PHL 314	Philosophy of Law
(p. 222)	
PHL 315	Medical Ethics
(p. 222)	
PHL 316	Engineering Ethics
(p. 222)	
PHL 317	Ethics&Modern War
(p. 222)	
PHL 318	Family Ethics
(p. 222)	
PHL 319	Information Ethics
(p. 222)	
PHL 321	Environmental Ethics
(p. 222)	
PHL 327	Philosophy of Peace
(p. 222)	
PHL 328	Phil of Punishment
(p. 222)	
PHL 357	Radical Philosophy
(p. 222)	
PHL 358	Marxist Philosophy
(p. 222)	
PHL 364	Race, Gender&Phl
(p. 222)	
PHL 370	Political Philosophy
(p. 222)	
PHL 371	Phl & Human Rights
(p. 222)	
PHL 372	Values & Economics
(p. 222)	
PHL 373	Phl&Cultr Diversty
(p. 222)	

Philosophy electives (9 hours)

History of Philosophy 15

Select two courses from:

PHL 351 (p. 222)	Medieval Philosophy
PHL 353 (p. 222)	Kant&19th Cent Phl
PHL 354 (p. 222)	20th Century Phl
PHL 361 (p. 222)	American Philosophy

Philosophy electives (9 hours)

Science, Technology, and Values 15

PHL 330 (p. 222)	Phl of Science
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Select one course from:

PHL 306 (p. 222)	Phil of Knowledge
PHL 315 (p. 222)	Medical Ethics
PHL 316 (p. 222)	Engineering Ethics
PHL 319 (p. 222)	Information Ethics
PHL 321 (p. 222)	Environmental Ethics
PHL 331 (p. 222)	Sci, Objtvtty & Values
PHL 332 (p. 222)	Technology&Values
PHL 333 (p. 222)	Phl & Cognitive Sci
PHL 334 (p. 222)	Phl of Ecology

Philosophy electives (9 hours)

Religion, Mind, and Metaphysics 15

PHL 308 (p. 222)	Metaphysics
or PHL 311 (p. 222)	Phl of Religion

Select one course from:

PHL 309 (p. 222)	Phil of Mind
PHL 351 (p. 222)	Medieval Philosophy
PHL 355 (p. 222)	Asian Philosophy
PHL 356 (p. 222)	Christian Philosophy
PHL 360 (p. 222)	Existentialism
PHL 365 (p. 222)	Islamic Phl& Culture

Philosophy electives (9 hours)

Culture and Human Diversity 15

Select two courses from:

PHL 307 (p. 222)	Philosophy and Women
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PHL 355 (p. 222)	Asian Philosophy
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PHL 361 (p. 222)	American Philosophy
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PHL 363 (p. 222)	African Philosophy
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PHL 364 (p. 222)	Race, Gender&Phl
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PHL 365 (p. 222)	Islamic Phl& Culture
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PHL 373 (p. 222)	Phl&Cultr Diversty
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Philosophy electives (9 hours)

Arts and Human Expression 15

Select two courses from:

PHL 320 (p. 222)	Philosophy of Art
PHL 323 (p. 222)	Phl & Literature
PHL 324 (p. 222)	Philosophy & Film
PHL 325 (p. 222)	Philosophy of Music
PHL 362 (p. 222)	Phl of Language

Philosophy electives (9 hours)

Self-Designed 15

Philosophy electives (15 hours)

Breadth

ASI 150 (p. 222)	Intr to the Univ Exp	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 (p. 222).

Minor in Philosophy (phl)**Philosophy**

PHL 103 (p. 222)	Intro To Philosophy	3
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PHL 301 (p. 222)	Practical Logic	3
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or PHL 302 (p. 222)	Symbolic Logic
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Select one course from: 3

PHL 350 (p. 222)	Classical Greek PHL
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PHL 351 (p. 222)	Medieval Philosophy
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PHL 352 (p. 222)	Modern Philosophy
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PHL 353 (p. 222)	Kant&19th Cent Phl	
PHL 354 (p. 222)	20th Century Phl	
Select one PHL seminar (400 level)		3
Select two PHL courses		6
Total Hours		18

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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

PHL 304. Philosophy of Human Nature. 3 Hours

The nature of human beings; the functions of consciousness, the possibility of freedom, the sources of values, and the goals of human life. Prerequisite(s): (ASI 111, ASI 112) 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 111, ASI 112) 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): (ASI 111, ASI 112) or PHL 103.

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 111, ASI 112) 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 111, ASI 112) or PHL 103.

PHL 310. Social Philosophy. 3 Hours

The concepts of liberty, justice, and equality as they relate to social problems such as punishment and rehabilitation, insanity and responsibility, privacy, population regulation, economic injustice, environmental degradation, discrimination, and reverse discrimination. Prerequisite(s): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

PHL 313. Business Ethics. 3 Hours

Review of general ethical theory; ethical assessments of incidents that often occur in commerce affecting employees, employers, consumers, competitors, or the local community. Prerequisite(s): (ASI 111, ASI 112) or PHL 103.

PHL 314. Philosophy of Law. 3 Hours

Major concepts of law to include the nature of law, legal reasoning, liberty, justice, responsibility, punishment. Prerequisite(s): (ASI 111, ASI 112) or PHL 103.

PHL 315. Medical Ethics. 3 Hours

Introduction to morality in general and inquiry into the major moral problems of medical practice: human life and the preservation of its integrity. Prerequisite(s): (ASI 111, ASI 112) 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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

PHL 320. Philosophy of Art. 3 Hours

Theories of art and criteria of evaluation developed by philosophers, artists, and critics; the relationship between art and society and between artistic and other human values. Prerequisite(s): (ASI 111, ASI 112) 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): PHL103 or ASI 112 or ASI 120.

PHL 323. Philosophy & Literature. 3 Hours

Critical examination of philosophical concepts in selected literary masterpieces, ancient and modern. Prerequisite(s): (ASI 111, ASI 112) or PHL 103.

PHL 324. Philosophy & Film. 3 Hours

Introduction to philosophical issues and aesthetic theory through a critical reading of texts and examination of selected narrative, documentary, animated, or abstract films. Prerequisite(s): (ASI 111, 112) 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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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): ASI 112 or PHL 103.

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): ASI 112 or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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 112.

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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

PHL 351. Medieval Philosophy. 3 Hours

Major philosophical problems from the fourth through the sixteenth centuries and their importance in shaping current beliefs and traditions in the Augustinian, Jewish, Islamic, Persian, Thomist, and Oxford cultural settings; human action, conscience, freedom, and law. Prerequisite(s): (ASI 111, ASI 112) or PHL 103.

PHL 352. Modern Philosophy. 3 Hours

Development of philosophy in the seventeenth and eighteenth centuries up to Kant with a focus on several major philosophical figures such as Descartes, Spinoza, Leibniz, Locke, Berkeley, and Hume. Prerequisite(s): (ASI 111, ASI 112) or PHL 103.

PHL 353. Kant & Nineteenth-Century Philosophy. 3 Hours

Development of philosophy beginning with Kant through the nineteenth century including phenomenology, existentialism, critical theory (Frankfurt School), hermeneutics, and analytic philosophy. Prerequisite(s): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

PHL 356. Christian Philosophy. 3 Hours

Major issues such as the relation of faith to reason, the relation of science to faith, and the problem of natural law. Christian considerations of practical philosophy and social theory. Prerequisite(s): (ASI 111, ASI 112) 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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

PHL 360. Existentialism. 3 Hours

Major themes in representatives of the existentialist movement, such as human freedom, the absurdity of human existence, the primacy of action, and the roles of speculation and the emotions. Prerequisite(s): (ASI 111, ASI 112) or PHL 103.

PHL 361. American Philosophy. 3 Hours

Study of the development of American philosophies in the context of historical interactions among Indigenous, European, African, and Asian worldviews in the Americas. Representatives of classical American pragmatism, such as Peirce, James, Dewey, and Addams will be studied in this context. Prerequisite(s): ASI 112 or PHL 103.

PHL 362. Philosophy of Language. 3 Hours

Theories of meaning and reference and their philosophical significance. Prerequisite(s): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

PHL 364. Race, Gender & Philosophy. 3 Hours

Philosophical investigation into the systematic nature of racism and sexism, including inquiry into the epistemological, metaphysical, linguistic, and representational structures that sustain and perpetuate the power dynamics of western post-colonial patriarchal society. Prerequisite(s): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

PHL 370. Political Philosophy. 3 Hours

Philosophical theories regarding the nature of the state and the legitimization of political authority will be analyzed and evaluated in the context of philosophical conceptions of human nature, liberty, equality, justice, welfare, and power. Prerequisite(s): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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 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): ASI 112 or PHL 103.

PHL 376. Philosophy & Revolution. 3 Hours

No description available.

PHL 377. Philosophy & Mass Media. 3 Hours

No description available.

PHL 378. Concept of the Self. 3 Hours

No description available.

PHL 379. Latin America Philosophy. 3 Hours

No description available.

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 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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103.

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): (ASI 111, ASI 112) or PHL 103; 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): (ASI 111, ASI 112) or PHL 103; 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): ASI 111, ASI 112; PHL 103, PHL 302, PHL 350, PHL 352; one 400-level seminar; permission of department chairperson.

Physics

- Bachelor of Science, Physical Science (p. 228)
- Bachelor of Science, Physics (p. 229)
- Bachelor of Science, Physics- Computer Science (p. 230)

Minor

- Physics (p. 231)

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 Erdei, Chairperson
Distinguished Service Professor: O'Hare
Professors Emeriti: Berney, Graham, Kepes, Miner, Yaney
Professors: Brecha, Elhamri, Evwaraye, Pedrotti, Powers
Associate Professors: Ahoujja, Craver, J. Erdei, Smith
Assistant Professor: Agah, Chong, Mathews
Lecturers: Kariyawasam, Song
Lab Instructors: Ballard, L. Erdei, Schaurer

Bachelor of Science with a major in 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 ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religioius & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	

Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	

Oral Communication		3
CMM 100	Principles of Oral Communication	

Mathematics		3
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Social Science		3
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Arts		3
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Natural Sciences		7
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Crossing Boundaries		variable credit
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Faith Traditions		
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Practical Ethical Action		
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Inquiry		
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Integrative		
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Advanced Study		variable credit
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Philosophy and/or Religious Studies		
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Historical Studies		
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Diversity and Social Justice		3
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Major Capstone		0-3
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- 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.

Major Requirements (Satisfies CAP Natural Science)		54
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CHM 123 (p. 228) & 123L (p. 228)	General Chemistry and Gen Chemistry Lab	4
CHM 124 (p. 228) & 124L (p. 228)	General Chemistry and Gen Chemistry Lab	4

GEO 115 (p. 228) & 115L (p. 228)	Physical Geology and Physical Geology Lab	4
GEO 116 (p. 228) & 116L (p. 228)	GeolgcI Hst-Earth and GeolgcI Hst-Earth Lb	4
PHY 206 (p. 228)	Gen Physics I Mech	3
PHY 207 (p. 228)	Gen Phy II Ele & Mag	3
PHY 208 (p. 228)	Gen Phy III Mec Wavs	3
PHY 210L (p. 228)	Gen Physics Lab I	1
PHY 211L (p. 228)	Gen Physics Lab II	1
PHY 480 (p. 228)	Capstone (Satisfies CAP Major Capstone)	1
Physical science courses (300/400 level) ¹		26

Bachelor of Science with a major in Physics (phy) Minimum 120 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religioius & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

Science Breadth Requirements

CHM 123 (p. 228) & 123L (p. 228)	General Chemistry and Gen Chemistry Lab (Applies to CAP Natural Science)	4
CHM 124 (p. 228) & 124L (p. 228)	General Chemistry and Gen Chemistry Lab	4
CPS 132 (p. 228) or CPS 150 (p. 228)	Progrmmng-Engr & Sci (Applies to CAP Natural Science) Algorithm&Progrm I	3
MTH 168 (p. 228)	Anly Geom & Calc I (Satisfies CAP Mathematics)	4
MTH 169 (p. 228)	Anly Geom & Calc II	4
MTH 218 (p. 228)	Anly Geom & Calc III	4
MTH 219 (p. 228)	Appl Diff Equations	3
MTH 310 (p. 228)	Lin Alg & Matrices	3

Major Requirements

Select one concentration from:

General Physiscs Concentration		37
PHY 206 (p. 228)	Gen Physics I Mech	3
PHY 207 (p. 228)	Gen Phy II Ele & Mag	3
PHY 208 (p. 228)	Gen Phy III Mec Wavs	3
PHY 210L (p. 228)	Gen Physics Lab I	1
PHY 211L (p. 228)	Gen Physics Lab II	1
PHY 301 (p. 228)	Thermal Physics	3
PHY 303 (p. 228)	Intermediate Mech I	3
PHY 333 (p. 228)	Dig&Alog Electrncs	3
PHY 390 (p. 228)	Intro Quantum Mech	3
PHY 408 (p. 228)	Int Elect & Magn I	3
PHY 430 (p. 228)	Advanced Lab I	2
PHY 431 (p. 228)	Advanced Lab II	2

PHY 480 (p. 228)	Capstone (Satisfies CAP Major Capstone)	1
PHY electives		6

Physics and Electro-Optics Concentration 43

ECE 443 (p. 228)	Intro-Electro Optics	3
PHY 206 (p. 228)	Gen Physics I Mech (Applies to Cap Natural Science)	3
PHY 207 (p. 228)	Gen Phy II Ele & Mag	3
PHY 208 (p. 228)	Gen Phy III Mec Wavs	3
PHY 210L (p. 228)	Gen Physics Lab I	1
PHY 211L (p. 228)	Gen Physics Lab II	1
PHY 301 (p. 228)	Thermal Physics	3
PHY 303 (p. 228)	Intermediate Mech I	3
PHY 333 (p. 228)	Dig&Alog Electrncs	3
PHY 390 (p. 228)	Intro Quantum Mech	3
PHY 404 (p. 228)	Physical Optics	3
PHY 408 (p. 228)	Int Elect & Magn I	3
PHY 430 (p. 228)	Advanced Lab I	2
PHY 431 (p. 228)	Advanced Lab II	2
PHY 480 (p. 228)	Capstone (Satisfies CAP Major Capstone)	1

Select two courses from: 6

EOP 501 (p. 228)	Geometric Optics	
EOP 502 (p. 228)	Opticl Radtn&Matter	
EOP 505 (p. 228)	Introductn-Lasers	
EOP 506 (p. 228)	Electro-Optc Dev&Sys	
or ECE 573 (p. 228)	Electro-Optcl Dev&Sys	
EOP 514 (p. 228)	Guided-Wave Optics	
or ECE 574 (p. 228)	Guided Wave Optics	

Breadth

ASI 150 (p. 228)	Intr to the Univ Exp	1
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Social Science and Behavioral Science (Includes CAP Social Science)	6
Total Hours to total at least	120

Bachelor of Science with a major in 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 ¹ 12

HST 103	The West & the World
REL 103	Introduction to Religioius & Theological Studies
PHL 103	Introduction to Philosophy
ENG 100	Writing Seminar I ²

Second-Year Writing Seminar ³ 0-3

ENG 200 Writing Seminar II

Oral Communication 3

CMM 100 Principles of Oral Communication

Mathematics 3

Social Science 3

Arts 3

Natural Sciences 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.

Major Requirements 72

(Satisfies CAP Mathematics and CAP Natural Science)

Computer Science ¹ 26

CPS 150 (p. 228)	Algorith&Progrm I
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CPS 151 (p. 228)	Algorithm&Progrm II
CPS 250 (p. 228)	Intro-Comptr Org
CPS 346 (p. 228)	Operating Systems I
CPS 350 (p. 228)	Data Struct&Algorithm
Three CPS courses (340 level or above)	

Mathematics 18

MTH 168 (p. 228)	Anly Geom & Calc I
MTH 169 (p. 228)	Anly Geom & Calc II
MTH 218 (p. 228)	Anly Geom & Calc III
MTH 219 (p. 228)	Appl Diff Equations
MTH 310 (p. 228)	Lin Alg & Matrices

Physics 28-30

PHY 206 (p. 228)	Gen Physics I Mech
PHY 207 (p. 228)	Gen Phy II Ele & Mag
PHY 208 (p. 228)	Gen Phy III Mec Wavs
PHY 210L (p. 228)	Gen Physics Lab I
PHY 211L (p. 228)	Gen Physics Lab II
PHY 323 (p. 228)	Computatnl Physics
PHY 333 (p. 228)	Dig&Alog Electrncs
PHY 480 (p. 228)	Capstone (Satisfies CAP Major Capstone)

Four PHY courses (300/400 level)

Minor in Physics (phy)

Physics	12
Select four PHY courses (300/400 level)	
Total Hours	12

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. General Physics. 3 Hours

Topics from mechanics, thermal and mechanical properties of matter, wave motion and sound, and electricity without the formalism of calculus. First term, each year.

PHY 201L. General Physics Laboratory. 1 Hour

Introductory laboratory appropriate for students of the health sciences. Experimental scientific techniques and the use of standard laboratory equipment. One two-hour period each week. First term, each year. 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

Introductory course in mechanics for students with a strong background in physics. Three lectures, one recitation each week. Corequisite(s): 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. 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. Capstone Project & Presentation. 1 Hour

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.

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 (p. 233)
- Bachelor of Arts, Political Science (p. 235)

Minors:

- Human Rights Studies (p. 236)
- Political Science (p. 237)

The Department of Political Science offers the Bachelor of Arts with a major in Political Science and the 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 thirty-nine semester hours of political science courses.
- A major in human rights studies requires forty-five to fifty-seven semester hours of courses in the humanities and the social sciences.
- A minor in political science consists of fifteen semester hours. Courses selected by students should strengthen academic or career objectives.
- A minor in human rights studies consists of eighteen semester hours. Courses selected should strengthen academic or career objectives.

Minors and Area Concentrations for Majors

A student majoring in political science may elect licensure in education (see EDT) or a 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. Students majoring in political science may elect to develop a multidisciplinary concentration in an area of interest including:

- Prelaw
- International affairs
- Public administration and urban affairs
- Political journalism
- Others developed by the student in conjunction with his or her advisor

Faculty

Jason Pierce, Chairperson

Director of Human Rights Studies Program: Natalie Hudson

Director of Graduate Certificate in Nonprofit & Community Leadership: Steve Neiheisel

Professors Emeriti: Ahern, Fogel, Inscho, Karns, Kerns, Lapitan, Nelson
Professor: Ingram

Associate Professors: Bilocerkowycz, Ensalaco, Ghere, Hudson, Miller, Neeley, Pierce

Assistant Professors: Ambrosius, Budabin, Pautz, Watkins

Lecturers: Birdsong, Neiheisel, Talbott

Bachelor of Arts with a major in Human Rights Studies 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 ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religious & Theological Studies	

PHL 103	Introduction to Philosophy		SOC 371	Soc of Human Rights	3
ENG 100	Writing Seminar I ²		(p. 233)		
Second-Year Writing Seminar ³			0-3		
ENG 200	Writing Seminar II		Select one course from:		
Oral Communication			3		
CMM 100	Principles of Oral Communication		CMM 412	Statistcl Mthd-Comm	
Mathematics		3	(p. 233)		
Social Science		3	HST 301	Research Seminar	
Arts		3	(p. 233)		
Natural Sciences		7	POL 207	Political Analysis	
Crossing Boundaries			variable credit	SOC 208	Social Resrch Methds
Faith Traditions			(p. 233)		
Practical Ethical Action			Select one course from three different concentrations:		
Inquiry			9		
Integrative			Anthropology		
Advanced Study		variable credit	ANT 360	Cultures-South Asia	
Philosophy and/or Religious Studies			(p. 233)		
Historical Studies			Criminal Justice Studies		
Diversity and Social Justice		3	CJS 336	Comp Crim Jus Systms	
Major Capstone		0-3	(p. 233)		
1 Completed with ASI 110 and ASI 120.			Economics		
2 Or ENG 100A and ENG 100B, or ENG 200H, by placement.			ECO 460	Eco Develop & Growth	
3 Completed with ENG 200H or ASI 120.			(p. 233)		
Liberal Studies Curriculum			History		
Creative and Performing Arts (May include CAP Arts)		3	HST 334	Hst Pal-Isrl Cflct	
L2 Proficiency (Proficiency in a language other than English) ¹		0-11	(p. 233)		
Literature (May include CAP Components)		3	HST 337	Hst Afr-19th Cn-Pr	
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)		3	(p. 233)		
Natural Sciences (Satisfies CAP Natural Sciences)		11	HST 356	Women in Third World	
Social Sciences (Includes CAP Social Science)		12	(p. 233)		
Major Requirements ²			45	HST 361	US Legl/Const Hst II
ASI 397	Hum Rights Advocacy (Satisfies CAP Major Capstone)	3	(p. 233)		
CMM 355	Rhetoric-Soc Movements	3	HST 399	Hst Blks-US s/1900	
(p. 233)			(p. 233)		
HST 312	Age-Democratc Revl	3	Philosophy		
(p. 233)			PHL 314	Philosophy of Law	
PHL 371	Phl & Human Rights	3	(p. 233)		
(p. 233)			PHL 317	Ethics&Modern War	
POL 305	Intro To Public Adm	3	(p. 233)		
(p. 233)			PHL 327	Philosophy of Peace	
POL 333	Pol of Human Rghts	3	(p. 233)		
(p. 233)			PHL 370	Political Philosophy	
POL 334	Pol-Human Rights II	3	(p. 233)		
(p. 233)			PHL 372	Values & Economics	
POL 406	Internatnl Law&Organ	3	(p. 233)		
(p. 233)			Political Science		
REL 363	Faith & Justice	3	POL 300	Political Issues ³	
(p. 233)			(p. 233)		
			POL 319	20th Cent Pol Thgt	
			(p. 233)		
			POL 331	Ntlsm & Ethno Poltcs (Satisfies CAP Social Science)	
			(p. 233)		
			POL 361	Leadership in NGO	
			(p. 233)		
			POL 450	Civil Liberties	
			(p. 233)		
			POL 452	Political Violence	
			(p. 233)		

Religious Studies

REL 358 (p. 233)	Liberation Theology
REL 360 (p. 233)	Christian Ethics
REL 366 (p. 233)	The Holocaust

Sociology

SOC 326 (p. 233)	Law & Society
SOC 328 (p. 233)	Racial&Eth Minorities
SOC 339 (p. 233)	Social Inequality
SOC 345 (p. 233)	Soc of Extremism
SOC 368 (p. 233)	Immigration
SOC 435 (p. 233)	Soc of Globalization

Spanish

SPN 380 (p. 233)	Spn&Ibero-Amr Cinema
SPN 480 (p. 233)	Spn&Ibero-Amr Cinema

Experiential or Research Requirement 3-6

Select one course from:

CMM 390 (p. 233)	Independent Study
HST 496 (p. 233)	Independent Study
PHL 492 (p. 233)	Directed Research
POL 431 (p. 233)	Independent Study
POL 495 (p. 233)	Internship
SOC 409 (p. 233)	Senior Project
SOC 498 (p. 233)	Independent Study

Or complete an Honors Thesis (for a total of 6 semester hours):

CMM 477 (p. 233) & CMM 478 (p. 233)	Honors Thesis and Honors Thesis
HST 477 (p. 233) & HST 478 (p. 233)	Honors Thesis and Honors Thesis
PHL 477 (p. 233) & PHL 478 (p. 233)	Honors Thesis and Honors Thesis

POL 477 (p. 233) & POL 478 (p. 233)	Honors Thesis and Honors Thesis
REL 477 (p. 233) & REL 478 (p. 233)	Honors Thesis and Honors Thesis
SOC 477 (p. 233) & SOC 478 (p. 233)	Honors Thesis and Honors Thesis

Breadth

ASI 150 (p. 233)	Intr to the Univ Exp	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 with a major in Political Science (pol) Minimum 124 Hours**Common Academic Program (CAP)**

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹ 12

HST 103	The West & the World
REL 103	Introduction to Religious & Theological Studies
PHL 103	Introduction to Philosophy
ENG 100	Writing Seminar I ²

Second-Year Writing Seminar ³ 0-3

ENG 200	Writing Seminar II
Oral Communication	
CMM 100	Principles of Oral Communication

Mathematics 3

Social Science 3

Arts 3

Natural Sciences 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.

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	Intro to Pol Science	3
(p. 233)		
POL 201	Amer Political Systems	3
(p. 233)		
POL 202	Intro Comp Politics	3
(p. 233)		
or POL 214	Intro-Intrntl Poltcs	
(p. 233)		
POL 207	Political Analysis	3
(p. 233)		
POL 316	American Pol Thought	3
(p. 233)		
or POL 317	Dev-Political Theory	
(p. 233)		
or POL 319	20th Cent Pol Thgt	
(p. 233)		
POL 499	Pol Sci Capstone	3
(p. 233)		
Select seven POL courses (May include CAP Components) ^{1, 2}		21

Breadth

ASI 150	Intr to the Univ Exp	1
(p. 233)		
Total Hours to total at least		124

- ¹ Including twenty-one semester hours at the 300/400 level.
- ² Students earning the B.A. in Political Science may count no more than six semester hours earned on internships (POL 495 (p. 233)) toward the fulfillment of the degree requirements in POL. Students may, however, take additional hours of internship credit (POL 495 (p. 233)) and count them toward the necessary 124 hours needed for graduation.

Minor in Human Rights Studies 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 eighteen 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	Pol of Human Rghts	3
(p. 233)		

POL 334	Pol-Human Rights II	3
(p. 233)		

Select one course from:		3
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PHL 371	Phl & Human Rights	
(p. 233)		

REL 363	Faith & Justice	
(p. 233)		

Select one course from:		3
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ANT 325	Anth of Human Rights	
(p. 233)		

SOC 371	Soc of Human Rights	
(p. 233)		

Select two courses from: ^{1, 2}		6
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ANT 325	Anth of Human Rights	
(p. 233)		

ANT 360	Cultures-South Asia	
(p. 233)		

ANT 368	Immigration	
(p. 233)		

CJS 336	Comp Crim Jus Systms	
(p. 233)		

CMM 355	Rhetoric-Soc Movements	
(p. 233)		

ECO 460	Eco Develop & Growth	
(p. 233)		

HST 312	Age-Democratc Revl	
(p. 233)		

HST 334	Hst Pal-Isrl Cflct	
(p. 233)		

HST 337	Hst Afr-19th Cn-Pr	
(p. 233)		

HST 356	Women in Third World	
(p. 233)		

HST 361	US Legl/Const Hst II	
(p. 233)		

HST 399	Hst Blks-US s/1900	
(p. 233)		

PHL 314 (p. 233)	Philosophy of Law
PHL 317 (p. 233)	Ethics&Modern War
PHL 327 (p. 233)	Philosophy of Peace
PHL 370 (p. 233)	Political Philosophy
PHL 371 (p. 233)	Phl & Human Rights
PHL 372 (p. 233)	Values & Economics
POL 300 (p. 233)	Political Issues ³
POL 305 (p. 233)	Intro To Public Adm
POL 319 (p. 233)	20th Cent Pol Thgt
POL 331 (p. 233)	Ntlsm & Ethno Poltcs
POL 406 (p. 233)	Internatnl Law&Organ
POL 450 (p. 233)	Civil Liberties
POL 452 (p. 233)	Political Violence
REL 358 (p. 233)	Liberation Theology
REL 360 (p. 233)	Christian Ethics
REL 363 (p. 233)	Faith & Justice
REL 366 (p. 233)	The Holocaust
SOC 326 (p. 233)	Law & Society
SOC 328 (p. 233)	Racial&Eth Minorties
SOC 339 (p. 233)	Social Inequality
SOC 345 (p. 233)	Soc of Extremism
SOC 368 (p. 233)	Immigration
SOC 371 (p. 233)	Soc of Human Rights
SOC 435 (p. 233)	Soc of Globalization

¹ At least one course must be from CMM, HST, PHL, or REL.

² Select any course that has not been already used to fulfill other Human Rights Studies Minor requirements.

³ This course can only be counted when the topic is relevant to human rights.

Minor in Political Science (pol)

Political Science

POL 201 (p. 233)	Amer Political Systems	3
Select four POL courses (300/400 level)		12
Total Hours		15

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 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 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

Examines 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 U.S. and in the international arena. Analysis of domestic and international government responses to specific environmental issues.

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

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. While students interested in careers in law should choose their undergraduate majors to match their interests and abilities, they should also contact the Prelaw Program as early in their

undergraduate careers as possible so they can receive effective prelaw advice.

The Prelaw Program, with sixteen prelaw faculty advisors, provides students with: curriculum advice designed to help develop skills needed for legal education; with information about the law school admission process; with aid in taking the Law School Admission Test (LSAT) including simulated tests and prep workshops; with opportunities for exploring legal education and legal careers through speakers, panels and other events; and with help in completing law school applications. In addition, the Program supports legal internships in cooperation with Political Science and the Criminal Justice Studies Program, allowing students to gain valuable experience working in a law firm or other law-related environment, and sponsors the Prelaw Student Advisory Council, the undergraduate chapter of Phi Alpha Delta, the Prelaw Club and a Mock Trial program in which students compete locally, regionally, and nationally. The Program emphasizes personalized advising 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.

Prelaw Committee

Laura H. Hume (History), Director
Alakkad (Engineering), Becker (Sociology), Berry (Psychology),
Carter (History), Flockert (History), Frasca (Economics, Business
Administration), Hume (History), Ingram (Political Science),
Kimbrough (English), Payne (Philosophy), Pierce (Political Science),
Robinson (Biology), Russo (Education and Allied Professions), Yoder
(Communication)

Courses

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.

Premedicine/Predentistry

Majors:

- Bachelor of Science, Premedicine (p. 242)
- Bachelor of Science, Predentistry (p. 240)

The Bachelor of Science with a major in pre-medicine (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 pre-dental majors into special orientation classes, and identifies them to the Premedical Programs office. Members of the Premedical/Pre-dental Advisory Committee advise these students. However, advising services are available to all pre-professional 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/Predental Advisory Committee

Kathleen C. Scheltens, Director
Julie Simon (Mathematics), Assistant Director
Abueida (Mathematics), Ahouja (Physics), Burky (Biology), Church (Chemistry), Craver (Physics), Hansen (Biology), Johnson (Chemistry), Kango-Singh (Biology), Krane (Biology), Lopper (Chemistry), Mammana (Chemistry), Nickell (Biology), Nielsen (Biology), Rowe (Biology), Smith (Physics), Singh (Biology), S. Swavey (Chemistry), T. Williams (Biology), S. Wright (Biology)

Bachelor of Science in Predentistry (den) Minimum 120 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religious & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3

Social Science	3	or PHY 206	Gen Physics I Mech	
Arts	3	(p. 240)	and Gen Phy II Ele & Mag	
Natural Sciences	7	& PHY 207	and Gen Phy III Mec Wavs	
Crossing Boundaries	variable credit	(p. 240)		
Faith Traditions		& PHY 208		
Practical Ethical Action		(p. 240)		
Inquiry		PHY 201L	General Physics Lab ²	1
Integrative		(p. 240)		
Advanced Study	variable credit	PHY 202L	General Physics Lab	1
Philosophy and/or Religious Studies		(p. 240)		
Historical Studies		MED 480	Pre-Med Capstone (Satisfies CAP Major Capstone)	1
Diversity and Social Justice	3	(p. 240)		
Major Capstone	0-3	Select one course from:		3
		CPS 111	Intro-Personal Comp	
		(p. 240)		
		MTH 207	Intro to Statistics	
		(p. 240)		
		MTH 367	Statistical Meth I	
		(p. 240)		
		Select five science courses, two with accompanying laboratories, from:		17
		BIO 309	Comp Anat Vertebrts	
		(p. 240)	and Comp Anatomy Lab	
		& 309L		
		(p. 240)		
		BIO 312	General Genetics	
		(p. 240)	and Genetics Lab	
		& 312L		
		(p. 240)		
		BIO 403	Physiology I	
		(p. 240)	and Physiology Lab	
		& 403L		
		(p. 240)		
		BIO 404	Physiology II	
		(p. 240)		
		BIO 411	General Microbiology	
		(p. 240)	and Gen Microbiology Lab	
		& 411L		
		(p. 240)		
		BIO 415	Neurobiology	
		(p. 240)		
		BIO 427	Immunology	
		(p. 240)		
		BIO 439	Analysis Biol Data	
		(p. 240)		
		BIO 440	Cell Biology	
		(p. 240)	and Cell Bio Lab	
		& 440L		
		(p. 240)		
		BIO 442	Developmental Bio	
		(p. 240)	and Devlpmntl Bio Lab	
		& 442L		
		(p. 240)		
		BIO 445	Evolution&Devlpmnt	
		(p. 240)		
		BIO 460	Intro Bioinformatics	
		(p. 240)		

Social Science	3
Arts	3
Natural Sciences	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.

Major Requirements	63
Satisfies CAP Mathematics and CAP Natural Science	
BIO 151 Concepts of Bio I	4
(p. 240) and Concepts-Bio Lab I	
& 151L (p. 240)	
BIO 152 Concepts of Bio II	4
(p. 240) and Concepts-Bio Lab II	
& 152L (p. 240)	
CHM 123 General Chemistry	4
(p. 240) and Gen Chemistry Lab	
& 123L (p. 240)	
CHM 124 General Chemistry	4
(p. 240) and Gen Chemistry Lab	
& 124L (p. 240)	
CHM 313 Organic Chemistry	4
(p. 240) and Organic Chemistry Lab	
& 313L (p. 240)	
CHM 314 Organic Chemistry	4
(p. 240) and Organic Chem Lab	
& 314L (p. 240)	
CHM 420 Biochemistry	3
(p. 240)	
CHM 462L Biochemistry Lab	1
(p. 240)	
MTH 148 Introductory Calc I	6
(p. 240) and Introductory Calc II	
& MTH 149	
(p. 240)	
or MTH 168 Anly Geom & Calc I	
(p. 240) and Anly Geom & Calc II	
& MTH 169	
(p. 240)	
PHY 201 General Physics	6
(p. 240) and General Physics ²	
& PHY 202	
(p. 240)	

BIO 462 (p. 240)	Molecular Biology
BIO 466 (p. 240)	Bio-Infectious Dis
BIO 470 (p. 240)	Cancer Biology
BIO 475 (p. 240) & 475L (p. 240)	Human Anatomy and Human Anatomy Lab
BIO 480 (p. 240) & 480L (p. 240)	Prin of Microscopy and Microscopy Lab
CHM 201 (p. 240) & 201L (p. 240)	Quantitative Anal and Quant Analysis Lab
CHM 302 (p. 240)	Physical Chemistry
CHM 427 (p. 240)	Medicinal Chemistry
CHM 451 (p. 240)	Gen Biochemistry I
CHM 452 (p. 240)	Gen Biochemistry II

Bachelor of Science in Premedicine (med) Minimum 120 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

Major Requirements 63

Satisfies CAP Mathematics and Natural Science	
BIO 151 (p. 240) & 151L (p. 240)	Concepts of Bio I and Concepts-Bio Lab I 4
BIO 152 (p. 240) & 152L (p. 240)	Concepts of Bio II and Concepts-Bio Lab II 4
CHM 123 (p. 240) & 123L (p. 240)	General Chemistry and Gen Chemistry Lab 4
CHM 124 (p. 240) & 124L (p. 240)	General Chemistry and Gen Chemistry Lab 4
CHM 313 (p. 240) & 313L (p. 240)	Organic Chemistry and Organic Chemistry Lab 4
CHM 314 (p. 240) & 314L (p. 240)	Organic Chemistry and Organic Chem Lab 4
CHM 420 (p. 240)	Biochemistry 3
CHM 462L (p. 240)	Biochemistry Lab 1
MTH 148 (p. 240) & MTH 149 (p. 240)	Introductory Calc I and Introductory Calc II 6
or MTH 168 (p. 240) & MTH 169 (p. 240)	Any Genom & Calc I and Any Genom & Calc II
PHY 201 (p. 240) & PHY 202 (p. 240)	General Physics and General Physics ² 6
or PHY 206 (p. 240) & PHY 207 (p. 240) & PHY 208 (p. 240)	Gen Physics I Mech and Gen Phy II Ele & Mag and Gen Phy III Mec Wavs
PHY 201L (p. 240)	General Physics Lab ² 1
PHY 202L (p. 240)	General Physics Lab 1
MED 480 (p. 240)	Pre-Med Capstone (Satisfies CAP Major Capstone) 1
Select one course from:	
CPS 111 (p. 240)	Intro-Personal Comp 3

MTH 207 (p. 240)	Intro to Statistics	17
MTH 367 (p. 240)	Statistical Meth I	
Select five science courses, two with accompanying laboratories, from: ³		
BIO 309 (p. 240) & 309L (p. 240)	Comp Anat Vertebrts and Comp Anatomy Lab	17
BIO 312 (p. 240) & 312L (p. 240)	General Genetics and Genetics Lab	
BIO 403 (p. 240) & 403L (p. 240)	Physiology I and Physiology Lab	17
BIO 404 (p. 240)	Physiology II	
BIO 411 (p. 240) & 411L (p. 240)	General Microbiology and Gen Microbiology Lab	17
BIO 415 (p. 240)	Neurobiology	
BIO 427 (p. 240)	Immunology	17
BIO 439 (p. 240)	Analysis Biol Data	
BIO 440 (p. 240) & 440L (p. 240)	Cell Biology and Cell Bio Lab	17
BIO 442 (p. 240) & 442L (p. 240)	Developmental Bio and Devlpmntl Bio Lab	
BIO 445 (p. 240)	Evolution&Devlpmnt	17
BIO 460 (p. 240)	Intro Bioinformatics	
BIO 462 (p. 240)	Molecular Biology	17
BIO 466 (p. 240)	Bio-Infectious Dis	
BIO 470 (p. 240)	Cancer Biology	17
BIO 475 (p. 240) & 475L (p. 240)	Human Anatomy and Human Anatomy Lab	
BIO 480 (p. 240) & 480L (p. 240)	Prin of Microscopy and Microscopy Lab	17

CHM 201 (p. 240) & 201L (p. 240)	Quantitative Anal and Quant Analysis Lab
CHM 302 (p. 240)	Physical Chemistry
CHM 427 (p. 240)	Medicinal Chemistry
CHM 451 (p. 240)	Gen Biochemistry I
CHM 452 (p. 240)	Gen Biochemistry II

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 (p. 244)
- Bachelor of Science, Psychology (p. 245)

Minor:

- Psychology (p. 245)

Psychology is the scientific study of behavior - how and why we think, feel and act . It is a diverse field that touches all aspects of human endeavor.

The objectives of the Department of Psychology are to provide students with learning experiences in and out of the classroom which will increase their critical thinking skills, facilitate their acquisition of the body of knowledge inherent in the study of human behavior, equip them with its research methodology, and prepare them for employment or graduate school.

The Department of Psychology offers both the Bachelor of Arts and the Bachelor of Science degrees. Each student, in consultation with an advisor, selects a program leading to either a Bachelor of Arts or a Bachelor of Science with appropriate elective credits according to individual interests and goals. The availability of both degrees allows the student to plan a double major or a major in psychology with a strong

concentration of study in a related or complementary discipline. Each psychology major must complete: PSY 101, PSY 216, and PSY 217 early in his or her academic career. The remaining requirements are stated in the two outlines below. Exceptions to these requirements must be approved by the chairperson.

Psychology majors are required to attain grades of C- or better in the following courses:

PSY 101	Introductory Psychology	3
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.

Faculty

Carolyn Roecker Phelps, Chairperson

Professors Emeriti: Allik, Biers, Butter, DaPolito, Eggemeier, Korte, Kuntz, Moroney

Professors: Polzella, Reeb

Associate Professors: Bauer, Crutcher, Elvers, Katsuyama, Kirschman, Roecker Phelps, Zois

Assistant Professors: Davis, Dixon, Fuhs, Goodnight, Kunz, Montoya, O'Mara

Visiting Assistant Professor: Berry

Lecturers: Engle, Farnsworth, Layman-Guadalupe, Rodriguez

Bachelor of Arts with a major in Psychology (psy) MINIMUM 124 HOURS

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3

Arts	3
Natural Sciences	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.

Major Requirements 36

PSY 101 Introductory Psych (Satisfies CAP Social Science) (p. 243)	3
PSY 216 Elementary Statistic (p. 243)	3
PSY 217 Expermntl Psychology (p. 243)	3
Select two courses from:	6

PSY 321 Cognitive Processes (p. 243)	
PSY 322 Learning (p. 243)	
PSY 323 Psy of Perception (p. 243)	
PSY 422 Physiological Psy (p. 243)	

Select two courses from: 6

PSY 341 Social Psychology (p. 243)	
PSY 351 Child Psychology (p. 243)	
PSY 361 Personality (p. 243)	
PSY 363 Abnormal Psychology (p. 243)	

Select one course from: (Satisfies CAP Major Capstone) 3

PSY 471 Hst of Psychology (p. 243)	
PSY 478 Honors Thesis (p. 243)	
PSY 480 Senior Seminar (p. 243)	
PSY 499 Ind Research Sem (p. 243)	

PSY courses (300/400 level) ^{2, 3} 12-24

Bachelor of Science with a major in Psychology (psy) MINIMUM 120 HOURS

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

Major Requirements 36

PSY 101 Introductory Psych (p. 243)	3
PSY 216 Elementary Statistic (p. 243)	3
PSY 217 Expermntl Psychology (p. 243)	3
Select two courses from:	6
PSY 321 Cognitive Processes (p. 243)	
PSY 322 Learning (p. 243)	
PSY 323 Psy of Perception (p. 243)	
PSY 422 Physiological Psy (p. 243)	
Select two courses from:	6
PSY 341 Social Psychology (p. 243)	

PSY 351 Child Psychology (p. 243)	
PSY 361 Personality (p. 243)	
PSY 363 Abnormal Psychology (p. 243)	
Select one course from: (Satisfies CAP Major Capstone)	3
PSY 471 Hst of Psychology (p. 243)	
PSY 478 Honors Thesis (p. 243)	
PSY 480 Senior Seminar (p. 243)	
PSY 499 Ind Research Sem (p. 243)	
PSY courses (300/400 level) ³	12-24

Minor in Psychology (psy)

Psychology

PSY 101 Introductory Psych (p. 243)	3
Select one course from:	3
PSY 321 Cognitive Processes (p. 243)	
PSY 322 Learning (p. 243)	
PSY 323 Psy of Perception (p. 243)	
PSY 422 Physiological Psy (p. 243)	
Select one course from:	3
PSY 341 Social Psychology (p. 243)	
PSY 351 Child Psychology (p. 243)	
PSY 361 Personality (p. 243)	
PSY 363 Abnormal Psychology (p. 243)	
Select three PSY courses (300/400 level) ¹	9
Total Hours	18

¹ Only three semester hours of PSY 352 (p. 243), PSY 490 (p. 243), PSY 493 (p. 243), PSY 494 (p. 243), and/or PSY 497 (p. 243) may count toward the minor.

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 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 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 Capstone. 3 Hours

Seminar 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.

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 (p. 248)

Minors:

- Religious Studies (p. 249)
- Religious Studies- Catechesis (p. 249)

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 eighteen 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 nineteen 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, Thimmes

Professors: Barnes, Branick, Miguel Diaz, Doyle, Inglis (Philosophy), Kallenberg, Levering, Miller, Portier, Roberts, Trollinger (History), Zukowski

Associate Professors: Bennett, Bunta, Johnson, Johnston, Moore, Orji, Smith, Thompson, Yocum

Assistant Professors: DeAnda, Kozar, McGrath, Salih

Lecturers: Marian Diaz

Bachelor of Arts with a major in Religious Studies (rel) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religioius & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	

Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

Major Requirements ^{1, 2, 3} 36

REL 103 (p. 247)	Introduction to Religious and Theological Studies	3-7
or ASI 110 (p. 247)	The Roots and Development of Western Culture in a Global Context	
REL 490 (p. 247)	Capstone Seminar (Satisfies CAP Major Capstone)	3

Select one track from:

Ministry 30

REL 315 (p. 247)	The Gospels	
REL 323 (p. 247)	Hst-Christianity I	
or REL 324 (p. 247)	Hst-Christianity II	
REL 360 (p. 247)	Christian Ethics	
REL 437 (p. 247)	Significance-Jesus	
REL 440 (p. 247)	The Church	
REL 443 (p. 247)	The Sacraments	
REL 485 (p. 247)	Lay Ministry	

Select one course in each: Old Testament, world religions, religion and culture

Catholic Schools 30

REL 323 (p. 247)	Hst-Christianity I	
or REL 324 (p. 247)	Hst-Christianity II	

REL 327 (p. 247)	US Religious Expr
or REL 328 (p. 247)	US Cath Experience
or REL 329 (p. 247)	African Amer Rel
REL 360 (p. 247)	Christian Ethics
REL 383 (p. 247)	Phil of Rel Educ
or REL 487 (p. 247)	Rel Ed Thry&Prac
Select one course in each: Old Testament, New Testament, world religions, religion and culture; two courses in systematic theology	
Graduate School Preparation	
REL 323 (p. 247)	Hst-Christianity I
REL 324 (p. 247)	Hst-Christianity II
REL 437 (p. 247)	Significance-Jesus
REL 440 (p. 247)	The Church
or REL 443 (p. 247)	The Sacraments
Select one course in each: Old Testament, New Testament, ethics, world religions, religion and culture, systematic theology	
World Religions	
REL 323 (p. 247)	Hst-Christianity I
or REL 324 (p. 247)	Hst-Christianity II
Select three courses from:	
REL 304 (p. 247)	Hinduism
REL 305 (p. 247)	Eastern Orthodoxy
REL 306 (p. 247)	Buddhism
REL 307 (p. 247)	Judaism
REL 308 (p. 247)	Islam
Select one course in each: Old Testament, New Testament, ethics, systematic theology, religion and culture	
REL elective	
General	
Select one course in each: Old Testament, New Testament, world religions, church history, systematic theology, ethics, religion and culture	
REL elective	

Minor in Religious Studies (rel)

Religious Studies

Select eighteen REL semester hours ¹	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 ¹

REL 328 (p. 247)	US Cath Experience ²	3
Forum for Young Catechetical Leaders		4
REL 281 (p. 247)	Forum Cat Lead I	
REL 282 (p. 247)	Forum Cat Lead II	
REL 283 (p. 247)	Forum Cat Lead III	
REL 284 (p. 247)	Forum Cat Lead IV	
Select one Liturgy course from:		3
REL 356 (p. 247)	Chr Tradition-Prayer	
REL 383 (p. 247)	Phil of Rel Educ	
REL 443 (p. 247)	The Sacraments	
REL 446 (p. 247)	Chrstn Liturgy	
REL 488 (p. 247)	Spirituality&Rel Educ	
Select one Scripture course from:		3
REL 310 (p. 247)	The Pentateuch	
REL 311 (p. 247)	The Prophets	
REL 315 (p. 247)	The Gospels	
REL 318 (p. 247)	Studies in Paul	
Select one Morality or Ethics course from:		3
REL 360 (p. 247)	Christian Ethics	

REL 363 (p. 247)	Faith & Justice	
REL 364 (p. 247)	Current Moral Issues	
Select one Ecclesiology or Church History course from:		3
REL 323 (p. 247)	Hst-Christianity I	
REL 324 (p. 247)	Hst-Christianity II	
REL 440 (p. 247)	The Church	
Total Hours		19

¹ These hours are in addition to REL 103 (p. 247) (or REL 198 (p. 247) or ASI 110), which is usually taken in the student's first year.

² Or equivalent.

Courses

REL 103. Introduction to Religious & Theological Studies. 3 Hours

Examination of the nature of religion, comparative aspect of religion, and the function of religion as a source of interpretation of life. The 'Catholic Option' takes the majority of its perspectives and examples about religious beliefs and practices from the Roman Catholic tradition. The 'Scripture Option' takes the majority of its perspectives and examples about religious beliefs and practices from scriptural traditions.

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 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): ASI 111 or REL 103.

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): ASI 111 or REL 103.

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): ASI 111 or REL 103.

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): ASI 111 or REL 103.

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): (ASI 110, ASI 120 or equivalent) or (REL 103 or 198).

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): (ASI 110, ASI 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, ASI 120 or equivalent) or (REL 103 or REL 198).

REL 307. Judaism. 3 Hours

Basic introduction to Judaism: its history, its faith, its worship. Prerequisite(s): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

REL 309. Afro-Latin Religions. 3 Hours

The study of Voudou, 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): ASI 110 or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 111, ASI 112 or equivalent) or (REL 103 or REL 198).

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): (ASI 111, ASI 112 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

REL 326. Protestant Christianity. 3 Hours

Survey of the development of Protestant thought from the Reformation. Prerequisite(s): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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.

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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 (ASI 110/120).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 111, ASI 112 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

REL 369. Christian Ethics & Engineering. 3 Hours

Study in applied Christian ethics addressing the moral issues facing engineers. How to make a moral decision, engineering as a profession, codes of ethics, safety, environmental issues, confidentiality, employee rights, whistleblowing, consulting, conflicts, and career choices. Prerequisite(s): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

REL 378. Neorealism Modern Religion. 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.

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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.

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198); PHL 103.

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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.

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198); 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): (ASI 110, 120 or equivalent) or (REL 103 or REL 198).

Sociology, Anthropology, and Social Work

Major:

- Bachelor of Arts, Sociology (p. 254)

Minors:

- Sociology (p. 254)
- Anthropology (p. 254)
- Social Work (p. 254)

Sociology is the scientific study of society. The unique insight of sociology is that people are who they are largely because of their social experiences and interactions with others. "The sociological imagination" is the ability to understand the relationship between the individual experience and the broader social context. In addition to studying various aspects of social behavior, sociology studies the nature and causes of social problems such as crime, marital instability, poverty, and racism. The challenge facing sociologists is to apply their knowledge in ever more constructive ways for the improvement of society.

Students intending to major or minor in sociology should consult with the department chairperson to plan their programs of courses. The sociology major program is also offered in India in conjunction with the Marianists. 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 fifteen semester hours. The minor in criminal justice studies consists of eighteen semester hours.

Faculty

Laura M. Leming, F.M.I., Chairperson

Professors: Curran, Davis-Berman, Donnelly, L. Majka, T. Majka, Miller

Associate Professors: Becker, Jipson, Leming, Picca

Assistant Professors: Cassiman, Dasgupta, Forbis, Longazel, Thompson-Miller

Lecturers: Holcomb, Kim, Litka

Bachelor of Arts with a major in Sociology (soc) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religioius & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

Major Requirements ¹

SOC 101 Prin of Sociology (p. 253)	3
or SOC 204 Mod Social Problems (p. 253)	
SOC 208 Social Resrch Methds (p. 253)	3

SOC 303 Modern Social Theory (p. 253)	3
SOC 308 Data Analysis (p. 253)	3
SOC 351 Urban Sociology (p. 253)	3
SOC 408 Sr Project Design (p. 253)	1
SOC 409 Senior Project (Satisfies CAP Major Capstone) (p. 253)	3
Select six SOC courses (May include CAP Components) ²	18

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 fifteen semester hours. Students intending to minor in anthropology should consult with the department chairperson to plan their selection of courses.

Anthropology

ANT 150 Cultural Anthropolgy (p. 253)	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 fifteen semester hours.

Social Work ¹

Select fifteen SWK semester hours ²	15
Total Hours	15

¹ 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 (p. 253), Social Work Practice.

² At least twelve semester hours at the 300/400 level.

Minor in Sociology (soc)

Sociology

Select fifteen SOC semester hours ¹	15
Total Hours	15

¹ At least twelve semester hours at the 300/400 level.

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 international contexts. Prerequisite(s): ANT 150.

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

Introduction to the scientific study of language and its relationship to other aspects of human behavior.

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 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. 1-6 Hours

Formulation and carrying out of a research design in archaeology, physical anthropology, linguistics, or cultural anthropology. Prerequisite(s): Permission of instructor.

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.

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. (Same as SOC 330.)

SWK 331. Death, Dying & Suicide. 3 Hours

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 this society.

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 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 Minorities. 3 Hours

Study of the major immigrant and racial groups in the United States and other countries. Issues and problems related to their minority status in the dominant culture.

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. Marriage & the Family. 3 Hours

Historical, cross-cultural, and current study of social relationships during dating and courtship, interpersonal communication in marriage and family life, sexuality in marriage, adjustments in parenthood, divorce and remarriage, alternatives to traditional marriage, and the future of marriage and family life.

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 social inequality in society. Emphasis on the processes that divide people into unequal groups based on wealth, status, and power. The effects of inequality on individual life chances and life styles.

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 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 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

Examination of theories, research, and social policies pertinent to the sociological study of human rights. Topics include: progress and challenges in the evolution and application of human rights norms; global stratification, poverty and human development; social locations (race, class, gender, and age) and human rights; the relationship between human rights and development; and social movements and human rights promotion. Prerequisite(s): (SOC 101 or SOC 204) or permission of instructor.

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 coordinator of sustainability, energy and environment.

Sustainability, Energy and Environment Advisory Committee

Robert Brecha (Physics), Coordinator
Cassiman (Social Work), Fouke (Philosophy), Hallinan (Mechanical Engineering), Jablonski (Marianist Environmental Education Center and Religious Studies), Kwon (Visual Arts), McEwan (Biology), Pautz (Political Science), Potter (English), Wu (Geology)

Minor in Sustainability, Energy and Environment (see)

Sustainability, Energy and Environment ¹

SEE 250	Intr-Sustn Ergy&Envr	3
(p. 259)		

SEE Core		6-9
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Select one or two courses (3-6 hours) from:

ASI 320	Cities and Energy
(p. 259)	

ASI 322	Cities and Suburbs
(p. 259)	

or ASI 323	Cities and Suburbs
(p. 259)	

or ASI 324	Cities and Suburbs
(p. 259)	

SEE 303	Constructns of Place
(p. 259)	

Select no more than one course (0-3 hours) from: ²

SEE 301	Glbl Chng&Erth Sys
(p. 259)	

BIO 359	Sustainable Biosphre
(p. 259)	

BIO 395	Global Envr Biology
(p. 259)	

GEO 208	Environmentl Geology
(p. 259)	

CHM/GEO	Energy Resources
234 (p. 259)	

SEE Depth		6-9
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(one course with experiential or research component) ³

SEE 401	Sustnblty Research I
(p. 259)	
& SEE 402	and Sustnblty Resrch II (SEE Depth Courses)
(p. 259)	

SEE 477	SEE-Honors Thesis
(p. 259)	
& SEE 478	and SEE-Honors Thesis
(p. 259)	

ASI 345	Topics Soc Sci Study
(p. 259)	

ECO 435	Eco of Environmnt
(p. 259)	

ENG 342	Literature and the Environment
(p. 259)	

HST 342	Environ Hst Americas
(p. 259)	

PHL 321	Environmental Ethics
(p. 259)	

PHL 334	Phl of Ecology
(p. 259)	

POL 371	Environmental Policy
(p. 259)	

REL 472	Ecology & Religion
(p. 259)	

SWK 335 (p. 259)	SWK & Envir Justice
Total Hours	18

- 1 Students who wish to minor in Sustainability, Energy and Environment should contact the coordinator of the Sustainability, Energy and Environment minor.
- 2 Students with a major not otherwise requiring a biology course must complete either SEE 301 (p. 259) (with its prerequisite) or BIO 359 (p. 259) or BIO 395 (p. 259).
- 3 Additional courses may be approved by SEE coordinator.

Courses

SEE 250. Introduction to Sustainability, Energy & the Environment. 3 Hours

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 o 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 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 (p. 260)

Minor:

- Theatre (p. 261)

A major in Theatre (THR), offered by the Department of Communication, provides a solid 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 100 or THR 300.

A minor in theatre consists of twenty-one semester hours. Courses in dance are not included.

The Department of Communication also offers a concentration in Theatre (CTR (p. 142)).

Faculty

Jonathan A. Hess, Chairperson, Department of Communication
Darrell F. Anderson, Program Director
Professor Emeritus: Gilvary
Associate Professor: Anderson
Assistant Professor: Dunlevy
Lecturer: Beran, Evans

Bachelor of Arts with a major in Theatre (thr) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected	
First-Year Humanities Commons ¹	12
HST 103	The West & the World
REL 103	Introduction to Religioius & Theological Studies
PHL 103	Introduction to Philosophy
ENG 100	Writing Seminar I ²
Second-Year Writing Seminar ³	0-3
ENG 200	Writing Seminar II
Oral Communication	3
CMM 100	Principles of Oral Communication
Mathematics	3
Social Science	3
Arts	3

Natural Sciences	7	THR 415	Hst of the Theatre I	3
Crossing Boundaries	variable credit	(p. 260)		
Faith Traditions		or THR 425	Hst of Theatre II	
Practical Ethical Action		(p. 260)		
Inquiry		Select fifteen THR semester hours ¹		15
Integrative		Total Hours		21
Advanced Study	variable credit	¹ 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 100 (p. 260) and/or THR 300 (p. 260) is limited to a maximum of three semester hours within the minor.		
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.

Major Requirements	38
THR 105 Intro to Theatre (Satisfies CAP Arts)	3
(p. 260)	
THR 305 Theatre Stagecraft	3
(p. 260)	
or THR 307 Theatre Lighting	
(p. 260)	
THR 310 Acting I	3
(p. 260)	
THR 325 Thy&Crtcsm Stage: I	3
(p. 260)	
or THR 326 Thy&Crtcsm stage:II	
(p. 260)	
THR 330 Concepts Scene Design	3
(p. 260)	
THR 340 Director-Theatre	3
(p. 260)	
THR 415 Hst of the Theatre I	3
(p. 260)	
or THR 425 Hst of Theatre II	
(p. 260)	
Select one from: (Satisfies CAP Major Capstone)	3
THR 440 Prob Thr Prod&Design	
(p. 260)	
THR 490 Spec Prob Theatre	
(p. 260)	
THR Laboratories ¹	4
THR 100 Theatre Lab	
(p. 260)	
THR 300 Theatre Lab	
(p. 260)	
THR electives ²	10

Minor in Theatre (thr)

Theatre

THR 105	Intro to Theatre	3
(p. 260)		

Courses

THR 100. Theatre Laboratory. 1-3 Hours

Credit allowance for role playing and/or play production in mainstage productions. Fifty hours of work minimum for one semester hour of credit. Repeatable up to three semester hours in first and second years. All registration retroactive. No advance registration.

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 201. Basic Dance for the Performing Artist. 2-3 Hours

Beginning course in movement introducing the basic principles of dance and performance technique. Open to all University students.

THR 202. Stage Makeup. 2 Hours

The basic principles of the art and technique of makeup so that the student may use them in design and execution to develop and project the character. 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 206. Stage Management. 2 Hours

Study of methods and standards of stage management in the theatre. Emphasis on organizational and management practices common to most theatres. Development of skills in applying methods of stage management.

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 301. Intermediate Dance for the Performing Artist. 2 Hours

Intermediate-level course in movement for students interested in further developing dance and performance technique. Prerequisite(s): Permission of department chairperson.

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 305. Theatre Stagecraft. 3 Hours

Study and application of scene construction, rigging, backstage organization, production analysis, and technician-designer relationship.

THR 307. Theatre Lighting. 3 Hours

Study and application of lighting for the stage: instruments, controls, sources, elements of electricity, and lighting design for all types of theatres, as well as graphic representation.

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 312. Film & Television Acting. 3 Hours

The study and practice of basic techniques of acting for 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 320. Movement & Voice for the Stage. 3 Hours

An integrated approach to the study of stage movement and voice production for the theatre.

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 325. Theory & Criticism of the Stage I. 3 Hours

Survey of representative plays from classical to neo-classical periods as a basis for theatrical production and dramatic criticism. THR 325 or 326 required of all THR majors. Prerequisite(s): THR 105.

THR 326. Theory & Criticism of the Stage II. 3 Hours

Continuation of THR 325 from romantic to modern periods. Prerequisite(s): THR 105.

THR 330. Concepts of Scene Design. 3 Hours

Studies in the principles of composition and aesthetic theory as applicable to scene design. Development of personal design approach to plays of various styles. Required of all theatre majors.

THR 340. The Director in the Theatre. 3 Hours

The basic functions of a director in the production of play: interpretation, composition, movement, characterization, rhythm, design concept, and actor training. Required of all theatre majors. Prerequisite(s): THR 105, THR 310, THR 330.

THR 344. Acting/Directing for Musical Theatre. 3 Hours

Study of performance and directing techniques for Musical Theatre.

THR 350. Theatre Styles. 3 Hours

Examination of the relationships among playwright, audience, actor, designer, and director in the development of major theatre styles of expression.

THR 351. Intermediate Jazz Dance. 2 Hours

Intermediate course in the theory and practice of tap dance.

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. Topics in Theatre Study. 1-6 Hours

Study of special topics or themes in theatre performance and production. May be repeated as topics change. Prerequisite(s): Permission of department chairperson.

THR 371. Intermediate Ballet. 2 Hours

Intermediate course in the theory and practice of classical ballet technique. Prerequisite(s): Permission of department chairperson.

THR 414. Advanced Scene Design. 3 Hours

Individual development in scene design through intensive study in plays of various styles. Detailed representation of design ideas in rendering and models required. Prerequisite(s): THR 330; permission of department chairperson.

THR 415. History of the Theatre I. 3 Hours

History of theatre from pre-Grecian through Elizabethan; the physical theatre as reflection of and influence on civilization. (THR 415 or THR 425 required of all majors.).

THR 424. Play Directing. 3 Hours

Study of the evolution of the modern director. Emphasis is on script interpretation as a basis for the development and execution of the production concept. Prerequisite(s): THR 340.

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 440. Problems in Theatre II. 3 Hours

Individual research and project work of student's selection under the direct supervision of faculty. (THR 440 or THR 485 or THR 490 required of all majors.) Repeatable up to twelve semester hours. Prerequisite(s): Permission of department chairperson.

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 485. Theatre Seminar. 3-6 Hours

Concentration on one theatrical figure, genre period, or discipline for research and analysis. (THR 440 or THR 485 or THR 490 required of all majors.) Repeatable up to six semester hours. Prerequisite(s): Permission of department chairperson.

THR 490. Special Problems in Theatre. 3-5 Hours

Individual research and report on topic of student's choice in the field of theatre under direct supervision of faculty/staff. (THR 440 or THR 485 or THR 490 required of all majors.) Repeatable up to nine semester hours.

THR 498. Theatre Internship. 1-3 Hours

Theatre work experience with an approved organization. Student must be in good academic standing with at least twelve hours of theatre courses completed. Student may petition the head of the Theatre Program for a second internship if the second internship is at a different organization and the student can demonstrate that the second internship offers a unique and significant educational opportunity not available through the first internship. Permission. Grading Option Two only.

Visual Arts

Majors:

- Bachelor of Arts, Art History (p. 264)
- Bachelor of Arts, Visual Arts (p. 265)
- Bachelor of Fine Arts, Art Education (p. 266)
- Bachelor of Fine Arts, Fine Arts (p. 267)
- Bachelor of Fine Arts, Graphic Design (p. 268)
- Bachelor of Fine Arts, Photography (p. 269)

Minors:

- Art History (p. 269)
- Fine Arts (p. 270)
- Graphic Design (p. 270)
- Photography (p. 270)
- Visual Arts (p. 270)

The Department of Visual Arts 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 Visual Arts 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 forty 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 sixty-five 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

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 thirty-five to forty 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 twelve 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, pre-kindergarten through grade twelve, 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.

Visual Arts Minors

- A Minor in Art History consists of eighteen semester hours. (For majors in visual arts, only six semester hours of the minor may double count.)
- A Minor in Fine Arts consists of twenty-one semester hours. (Not open to majors in visual arts.)
- A Minor in Photography consists of twenty-one semester hours. (Not open to majors in visual arts.)
- A Minor in Visual Arts consists of twenty semester hours. (Not open to majors in art education, fine arts, photography, or visual communication design.)
- A Minor in Graphic Design consists of twenty-one semester hours. (Not open to majors in visual arts.)
- Transfer students seeking a visual arts minor must complete at least nine of the required semester hours in the visual arts department while in residency at the University of Dayton.

Visual Arts 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 Visual Arts majors are reviewed by the Visual Arts 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 Visual Arts 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 Visual Arts Foundations courses, the Foundations Scholarship Review and work within the major.

Faculty

Judith Huacuja, Chairperson
Professor Emeritus: Niles
Professors: Crum, Whitaker
Associate Professors: Clarke, Holscher Almazan, Huacuja, Jones, Kwon, Marcinowski, Matlack-Whitaker, Phelps, Wilbers
Assistant Professors: Bradshaw, Jennings
Lecturers: Kargl, Tsen

Bachelor of Arts with a major in Art History (hoa) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religioius & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	

Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	

Oral Communication		3
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CMM 100	Principles of Oral Communication	
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Mathematics		3
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Social Science		3
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Arts		3
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Natural Sciences		7
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Crossing Boundaries		variable credit
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Faith Traditions		
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Practical Ethical Action		
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Inquiry		
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Integrative		
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Advanced Study		variable credit
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Philosophy and/or Religious Studies		
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Historical Studies		
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Diversity and Social Justice		3
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Major Capstone		0-3
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- 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.

Liberal Studies Curriculum

L2 Proficiency (Proficiency in a language other than English)	0-11
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Literature (May include CAP Components)	3
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Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
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Natural Sciences (Satisfies CAP Natural Science)	11
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Social Sciences (Includes CAP Social Science)	12
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Major Requirements		42
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VAH 101	Introduction to Visual Arts (Satisfies CAP Arts)	3
(p. 263)		

VAH 201 (p. 263)	Survey of Art I	3
VAH 202 (p. 263)	Survey of Art II	3
VAH 203 (p. 263)	Survey of Art III	3
VAH 485 (p. 263)	Art History Seminar (Satisfies CAP Major Capstone)	3
VAR 299 (p. 263)	Second Year Review	0
Select seven VAH courses (300/400 level)		21
Select two major program courses ¹		6

Breadth

VAR 100 (p. 263)	Vis Arts Foundatn	1
Total Hours to total at least		124

¹ Major program courses may be chosen, in consultation with an art history advisor, from among the following disciplines and courses: ANT 300 (p. 263), CMM 313 (p. 263), ENG 322 (p. 263), VAF 104 (p. 263), VAF 232 (p. 263), PHL 320 (p. 263), PSY 375 (p. 263) and REL 374 (p. 263). 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 with a major in Visual Arts (var) Minimum 124 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religious & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		7
Crossing Boundaries		variable credit
Faith Traditions		
Practical Ethical Action		
Inquiry		
Integrative		
Advanced Study		variable ¹ 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.

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

Total Hours to total at least		45
VAD 220 (p. 263)	Design Processes I	3
VAF 104 (p. 263)	Foundation Drawing	3
VAF 112 (p. 263)	Foundation 2-D Dsgn	3
VAF 117 (p. 263)	Foundation 3-D Dsgn	3
VAF 216 (p. 263)	Design and Color	3
VAP 101 (p. 263)	Foundatn Photography	3
VAP 201 (p. 263)	Photography II	3
or VAP 240 (p. 263)	Digital Processes I	
VAR 299 (p. 263)	Second Year Review	0
VAR 495 (p. 263)	Senior Project Seminar (With VAR 496, Satisfies CAP Major Capstone)	1
VAR 496 (p. 263)	Project, Presnt&Papr	3
Select one course from: (Satisfies CAP Arts)		3
VAH 201 (p. 263)	Survey of Art I	
VAH 202 (p. 263)	Survey of Art II	
VAH 203 (p. 263)	Survey of Art III	
Select one VAH course (300/400 level)		3
Select five Visual arts courses ¹		14

Breadth

VAR 100 (p. 263)	Vis Arts Foundatn	1
Total Hours to total at least		124

¹ 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 with a major in Art Education (fae) Minimum 134 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

BFA 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 ^{1, 2}

VAE 231 Intro-Art Ed (p. 263)	2
VAE 383 Foundatn of Art Ed (p. 263)	3
VAE 483 Tch Visual Arts (p. 263)	3
VAF 104 Foundation Drawing (p. 263)	3
VAF 112 Foundation 2-D Dsgn (p. 263)	3
VAF 117 Foundation 3-D Dsgn (p. 263)	3

VAF 204 Drawing II (p. 263)	3
VAF 216 Design and Color (p. 263)	3
VAF 226 Painting I (p. 263)	3
VAF 232 Sculpture I (p. 263)	3
VAF 240 Ceramics I (p. 263)	3
or VAF 242 Ceramics II: Wheel Throwing (p. 263)	
VAF 253 Printmaking I (p. 263)	3
or VAF 353 Printmaking II (p. 263)	
VAF 304 Drawing III (p. 263)	3
VAF 498 Senior/Prof Seminar (With VAF 499, satisfies CAP Major Capstone) (p. 263)	3
VAF 499 Portfolio & Paper:FA (p. 263)	1
VAP 101 Foundatn Photography (p. 263)	3
VAR 299 Second Year Review (p. 263)	0
Select two courses from: (Satisfies CAP Arts)	6
VAH 201 Survey of Art I (p. 263)	
VAH 202 Survey of Art II (p. 263)	
VAH 203 Survey of Art III (p. 263)	
Select one course from:	3
VAH 470 19th Century Art I (p. 263)	
VAH 471 19th Century Art II (p. 263)	
VAH 480 20th Century Art I (p. 263)	
VAH 483 20th Century Art II (p. 263)	
Select one VAH course	3
Select four VAR courses	12
Education requirements:	28
EDT 110 Profession-Teachng and Prfssn Tchng Lab & 110L (p. 263)	3
EDT 207 Chld&Adol In Educatn and Chld & Adlscd Ed Lab & 207L (p. 263)	4
EDT 305 Phil&Hist of Amer Ed (Satisfies CAP Practical Ethical Action, and Advanced Study in Philosophy) (p. 263)	3
EDT 340 Educating Diverse Student Populations in Inclusive Settings (Satisfies CAP Integrative, and Diversity and Social Justice) (p. 263)	3

EDT 340L (p. 263)	Ed Dvs st Pop Inc Lb	0
EDT 459 (p. 263)	Crt Rdg Wrtg Cnt Ar	3
EDT 477 (p. 263)	StdT Tchng-Art K-12	12
Breadth		
VAR 100 (p. 263)	Vis Arts Foundatn	1
Total Hours to total at least		134

¹ 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.

² Students are required to pass PRAXIS I and II and a Second Year Review in their studio work.

Bachelor of Fine Arts with a major in Fine Arts (art) Minimum 132 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religioius & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

BFA Requirements

Humanities (Includes CAP Components)	12
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Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	7
Social Sciences (Includes CAP Social Science)	9

Major Requirements

Major Requirements		79
VAF 104 (p. 263)	Foundation Drawing	3
VAF 112 (p. 263)	Foundation 2-D Dsgn	3
VAF 117 (p. 263)	Foundation 3-D Dsgn	3
VAF 204 (p. 263)	Drawing II	3
VAF 216 (p. 263)	Design and Color	3
VAF 226 (p. 263)	Painting I	3
VAF 232 (p. 263)	Sculpture I	3
VAF 253 (p. 263)	Printmaking I	3
VAF 304 (p. 263)	Drawing III	3
VAF 326 (p. 263)	Painting II	3
VAF 332 (p. 263)	Sculpture II	3
VAF 353 (p. 263)	Printmaking II	3
VAF 498 (p. 263)	Senior/Prof Seminar (With VAF 499, satisfies CAP Major Capstone)	3
VAF 499 (p. 263)	Portfolio & Paper:FA	1
VAP 101 (p. 263)	Foundatn Photography	3
VAR 299 (p. 263)	Second Year Review	0
VAF emphasis		12
Select two courses from: (Satisfies CAP Arts)		6
VAH 201 (p. 263)	Survey of Art I	
VAH 202 (p. 263)	Survey of Art II	
VAH 203 (p. 263)	Survey of Art III	
Select two VAH courses (300/400 level) (May include CAP Components)		6
Select Visual arts courses		12
Breadth		
VAR 100 (p. 263)	Vis Arts Foundatn	1
Total Hours to total at least		132

Bachelor of Fine Arts with a major in GRAPHIC Design (GDN) Minimum 129 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹	12
HST 103 The West & the World	
REL 103 Introduction to Religious & Theological Studies	
PHL 103 Introduction to Philosophy	
ENG 100 Writing Seminar I ²	
Second-Year Writing Seminar ³	0-3
ENG 200 Writing Seminar II	
Oral Communication	3
CMM 100 Principles of Oral Communication	
Mathematics	3
Social Science	3
Arts	3
Natural Sciences	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.

BFA Requirements

Humanities (Includes CAP Components)	9
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	7
Social Sciences (Includes CAP Social Science)	3

Major Requirements 85

VAD 220 Design Processes I (p. 263)	3
VAD 240 Form and Concept (p. 263)	3
VAD 245 Typography I (p. 263)	3
VAD 320 Design Processes II (p. 263)	3
VAD 345 Typography II (p. 263)	3

VAD 360 Web Design (p. 263)	3
VAD 411 Graphic Design I (p. 263)	3
VAD 412 Graphic Design II (p. 263)	3
VAD 415 Graphic Design III (p. 263)	3
VAD 498 Senior/Prof Seminar (With VAD 499, satisfies CAP Major Capstone) (p. 263)	3
VAD 499 Portfolio&Paper-GD (p. 263)	1
VAF 104 Foundation Drawing (p. 263)	3
VAF 112 Foundation 2-D Dsgn (p. 263)	3
VAF 117 Foundation 3-D Dsgn (p. 263)	3
VAF 204 Drawing II (p. 263)	3
VAF 216 Design and Color (p. 263)	3
VAH 383 Hst-Graphic Design (p. 263)	3
VAP 101 Foundatn Photography (p. 263)	3
VAR 299 Second Year Review (p. 263)	0
Select two courses from: (Satisfies CAP Arts)	6
VAH 201 Survey of Art I (p. 263)	
VAH 202 Survey of Art II (p. 263)	
VAH 203 Survey of Art III (p. 263)	
Select one fine arts course from:	3
VAF 226 Painting I (p. 263)	
VAF 253 Printmaking I (p. 263)	
VAF 240 Ceramics I (p. 263)	
VAF 242 Ceramics II: Wheel Throwing (p. 263)	
VAF 232 Sculpture I (p. 263)	
VAF 370 Illustration I (p. 263)	
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 communication courses	6

Breadth

VAR 100	Vis Arts Foundatn	1
(p. 263)		
Total Hours to total at least		129

Bachelor of Fine Arts with a major in Photography (pho) Minimum 131 Hours

Common Academic Program (CAP)

*credit hours will vary depending on courses selected

First-Year Humanities Commons ¹		12
HST 103	The West & the World	
REL 103	Introduction to Religioius & Theological Studies	
PHL 103	Introduction to Philosophy	
ENG 100	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200	Writing Seminar II	
Oral Communication		3
CMM 100	Principles of Oral Communication	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

BFA Requirements

Humanities (Includes CAP Components)	18
Mathematics, excluding MTH 205 (Satisfies CAP Mathematics)	3
Natural Sciences (Satisfies CAP Natural Science)	7
Social Sciences (Includes CAP Social Science)	9

Major Requirements

VAR 104	Foundation Drawing	3
(p. 263)		
VAR 112	Foundation 2-D Dsgn	3
(p. 263)		
VAR 117	Foundation 3-D Dsgn	3
(p. 263)		

or VAF 216	Design and Color	
(p. 263)		
VAH 382	Hst of Photogrphy I (Satisfies CAP Advanced Historical Studies)	3
(p. 263)		
VAH 480	20th Century Art I	3
(p. 263)		
VAH 482	Hst-Photogrphy II	3
(p. 263)		
VAP 101	Foundatn Photography (Satisfies CAP Arts)	3
(p. 263)		
VAP 201	Photography II	3
(p. 263)		
VAP 240	Digital Processes I	3
(p. 263)		
VAP 302	Color Photography I	3
(p. 263)		
VAP 410	Advanced Photography	3
(p. 263)		
VAP 498	Senior/Prof Seminar (With VAP 499, satisfies CAP Major Capstone)	3
(p. 263)		
VAP 499	Portfolio&Paper:VAP	1
(p. 263)		
VAR 299	Second Year Review	0
(p. 263)		
Select two courses from:		6
VAP 320	Studio Practice I	
(p. 263)		
VAP 330	Alternative Photo I	
(p. 263)		
VAP 340	Digital Processes II	
(p. 263)		
Select two courses from:		6
VAH 201	Survey of Art I	
(p. 263)		
VAH 202	Survey of Art II	
(p. 263)		
VAH 203	Survey of Art III	
(p. 263)		
Select three VAP courses (300/400 level)		9
Select Visual Arts courses (May include CAP Components)		14

Breadth

VAR 100	Vis Arts Foundatn	1
(p. 263)		
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	
(p. 263)		
VAH 202	Survey of Art II	
(p. 263)		
VAH 203	Survey of Art III	
(p. 263)		

Select four VAH courses (300/400 level)	12
Total Hours	18

Minor in Fine Arts (art)

Fine Arts

VAF 104 (p. 263)	Foundation Drawing	3
VAF 112 (p. 263)	Foundation 2-D Dsgn	3
VAH 201 (p. 263)	Survey of Art I	3
or VAH 202 (p. 263)	Survey of Art II	
or VAH 203 (p. 263)	Survey of Art III	
Select four VAF courses		12
Total Hours		21

Minor in GRAPHIC Design (GDN)

Graphic Design

VAD 220 (p. 263)	Design Processes I	3
VAD 240 (p. 263)	Form and Concept	3
VAD 245 (p. 263)	Typography I	3
VAD 320 (p. 263)	Design Processes II	3
VAF 112 (p. 263)	Foundation 2-D Dsgn	3
VAF 216 (p. 263)	Design and Color	3
VAH 383 (p. 263)	Hst-Graphic Design	3
Select one course from:		3
VAD 318 (p. 263)	Grph Dsn-3 Dimensns	
VAD 345 (p. 263)	Typography II	
VAD 360 (p. 263)	Web Design	
VAD 395 (p. 263)	Advertising Design	
VAD 411 (p. 263)	Graphic Design I	
Total Hours		24

Minor in Photography (pho)

Photography

VAH 382 (p. 263)	Hst of Photgrphy I	3
VAP 101 (p. 263)	Foundatn Photgrphy	3

VAP 201 (p. 263)	Photography II	3
VAP 240 (p. 263)	Digital Processes I	3
Select three VAP courses (300/400 level)		9
Total Hours		21

Minor in Visual Arts (var)

Visual Arts

VAD 215 (p. 263)	Computr Appl-Design	2
or VAD 218 (p. 263)	Computr Appl-Illust	
VAF 104 (p. 263)	Foundation Drawing	3
VAF 112 (p. 263)	Foundation 2-D Dsgn	3
VAH 201 (p. 263)	Survey of Art I	3
or VAH 202 (p. 263)	Survey of Art II	
or VAH 203 (p. 263)	Survey of Art III	
VAP 101 (p. 263)	Foundatn Photgrphy	3
Select two VAD, VAF, VAP and/or VAR courses		6
Total Hours		20

Visual Arts-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 the Arts: Visual Arts. 3 Hours

Developing knowledge, skills values and attitudes in visual arts for the purpose of integration into classrooms for middle childhood and the adolescent learner. Prerequisite(s): EDT 110, EDT 110L.

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. .

Visual Arts-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 201. Survey of Art I. 3 Hours

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

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 eighteenth through the twentieth centuries. Open to all students. .

VAH 320. Latin American Art. 3 Hours

Survey of Latin American art history from the 19th century to the present.

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 II. 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, and architecture of Italy between c. 1300 and c. 1550. Prerequisite(s): VAH 202 or permission of instructor and department chairperson.

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. Twentieth Century Art II. 3 Hours

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

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.

Visual Arts-Fine Arts Courses

VAF 104. Foundation Drawing. 3 Hours

Introduction to basic visual concepts, various drawing media, and approaches to experimental technique. Emphasis on perspective, perceptual awareness, volume in space, and expressive freedom.

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 thru 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 basic painting principles, techniques, and materials; still life, landscape, figure, and abstraction. Prerequisite(s): (VAF 104, VAF 112, VAF 216) or permission of department chairperson.

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. 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. Scripture 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 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. Drawing IV. 3 Hours

Observational and expressive drawing. Continued work with the figure in combination with a variety of other subject matter. Emphasis on the development of a body of work with a related idea.. Prerequisite(s): (VAF 204, VAF 304) or permission of department 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 442. Ceramics IV. 3 Hours

Investigation of advanced studio topics within ceramics. Problems structured to encourage technical, conceptual, and aesthetic exploration leading to the creation of a cohesive body of work. May be repeated as topics change. Prerequisite(s): VAF 342 or permission of instructor.

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 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.

Visual Arts-Photography Courses**VAP 100. Darkroom Photography. 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 35mm film, paper, and related 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. Course does not fulfill Visual Arts degree requirements.

VAP 101. Foundation Photography. 3 Hours

Fundamentals of black-and-white still photography, including camera function, exposure, film processing, and printing, with an emphasis on learning the visual language of photographic imagery through a series of creative assignments.

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 I. 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. Portfolio and Paper. 1 Hour

Completion and presentation of an undergraduate portfolio and a comprehensive paper that surveys the student's undergraduate career in the major and also serves as the foundation for a formal, public presentation that is reviewed by faculty and peers. Faculty approval of the portfolio and the paper is required for graduation. Prerequisite(s): VAP 498 or permission of department chairperson.

Visual Arts 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 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 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. Project, Presentation & Paper. 3 Hours

The second of two capstone courses leading to graduation. To be taken in the second semester of the senior year. Students complete a senior project and paper, and give a public presentation regarding the project 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.

Visual Arts-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 215. Computer Applications- Design. 2 Hours

An introduction to page design software programs and their use in the design process. Prerequisite(s): VAR 200.

VAD 218. Computer Applications- Illustration. 2 Hours

An introduction to drawing and paint software programs and their use in illustration. Prerequisite(s): VAR 200.

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. Visual Form. 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 312. Visual Form. 3 Hours

Investigation of the perceptual and psychological effect of the visual elements-line, shape, value, volume, texture, and color-in visual communication. Exploration of word and image relationships.

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 321. Computer Aided Illustrations. 3 Hours

An exploration of the use of the computer as both a tool and a medium for the creation and production of illustrations.

VAD 344. Design for Multimedia I. 3 Hours

An introduction to the design process, including visual principles, aesthetic issues, and diverse applications for multimedia and interactive electronic media. Emphasis is placed on the visual organization of information in these environments.

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 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 444. Design for Multimedia II. 3 Hours

Advanced level design for multimedia and interactive electronic media. Emphasis is placed on actual or simulated client-based projects.

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. 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. 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. 1 Hour

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.

Women's and Gender Studies

Major:

- Bachelor of Arts, Women's and Gender Studies (p. 276)

Minor:

- Women's and Gender Studies (p. 278)

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 thirty-four to thirty-nine semester hours, including at least ten semester hours in four core WGS courses and twenty-four semester hours of upper-division courses offered by other departments. For these additional twenty-four 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 fifteen semester hours, including one interdisciplinary core course (WGS 150 (<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), Fleischmann (History), Hudson (Political Science), James (Philosophy), Laufer-Ukeles (Law), Leming (Sociology, Anthropology, and Social Work), Merithew (History), Picca (Sociology, Anthropology, and Social Work), Potter (English), Rismiller (Women's Center), Watters (Communication)

BACHELOR OF ARTS WITH A MAJOR IN 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 ¹

HST 103 (p. 276)	West and World	
REL 103 (p. 276)	Int Rel&Theo Studies	
PHL 103 (p. 276)	Intro To Philosophy	
ENG 100 (p. 276)	Writing Seminar I ²	
Second-Year Writing Seminar ³		0-3
ENG 200 (p. 276)	Writing Seminar II	
Oral Communication		3
CMM 100 (p. 276)	Princ of Oral Comm	
Mathematics		3
Social Science		3
Arts		3
Natural Sciences		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.

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 34

(May include CAP Components)		
WGS 150 (p. 276)	Intro Wm&Gndr Stdies ^{1,2}	3
or WGS 350 (p. 276)	Fem Social Change	
WGS 310 (p. 276)	Fem Thry & Mthd	3
WGS 390 (p. 276)	Service Lrng in WGS	1-3

WGS 490 (p. 276)	Senior Sem in WGS (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: ³

Select three semester hours from the final area below	3
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Areas: ⁴

Literature and Arts

CMS 415 (p. 276)	Women & Communication	
ENG 333 (p. 276)	Images-Women in Lit	
ENG 335 (p. 276)	African Amer Lit	
ENG 336 (p. 276)	Gender in Fiction	
ENG 345 (p. 276)	Colonl&Postcolonl Lit	
VAH 360 (p. 276)	Art History&Feminsm	

Philosophy and Religious Studies

PHL 307 (p. 276)	Philosophy and Women	
PHL 364 (p. 276)	Race, Gender&Phl	
REL 471 (p. 276)	Women and Religion	
REL 472 (p. 276)	Ecology & Religion	
REL 474 (p. 276)	Women-Global Church	

Social Sciences ³

ANT 306 (p. 276)	Culture and Power	
HSS 325 (p. 276)	Women in Sport	
POL 340 (p. 276)	Gender&Internatnl Rel	
PSY 443 (p. 276)	Psychology of Women	
PSY 462 (p. 276)	Human Sexuality	
SOC 322 (p. 276)	Sex Roles & Society	
SOC 330 (p. 276)	Perspectves-Agng	
SOC 331 (p. 276)	Marriage & Family	
SOC 332 (p. 276)	Sociology of Women	

SOC 333 (p. 276)	Soc of Sexualities
SOC 339 (p. 276)	Social Inequality
SOC 432 (p. 276)	Struct of Privilege
SWK 325 (p. 276)	Child Abuse
SWK 327 (p. 276)	Parentng:Soc Welfare
SWK 330 (p. 276)	Perspectives on Aging
SWK 370 (p. 276)	Social Welfare Policy
UDI 341 (p. 276)	Sexual Diversity

Cultural Diversity Requirement ⁵

Select one U.S./Europe Multicultural course from: 3

ENG 335 (p. 276)	African Amer Lit
HST 351 (p. 276)	Women Gender Am
HST 353 (p. 276)	Hst-Wom in Eurp Soc
PHL 364 (p. 276)	Race, Gender&Phl
SOC 432 (p. 276)	Struct of Privilege

Select one Global (non U.S./Europe) course from: 3

ANT 306 (p. 276)	Culture and Power
ENG 345 (p. 276)	Colonl&Postcolnl Lit
HST 354 (p. 276)	Hst-Women Mid East
HST 356 (p. 276)	Women in Third World
POL 340 (p. 276)	Gender&Internatl Rel
REL 471 (p. 276)	Women and Religion
REL 474 (p. 276)	Women-Global Church

Breadth

ASI 150 (p. 276)	Intr to the Univ Exp	1
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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 150 (p. 276) may also take WGS 350 (p. 276) in lieu of one of the required disciplinary courses. WGS 350 (p. 276) 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 ¹**

WGS 150 (p. 276)	Intro Wm&Gndr Stdies	3
or WGS 310 (p. 276)	Fem Thry & Mthd	
or WGS 350 (p. 276)	Fem Social Change	

Select twelve semester hours from at least three different academic disciplines (300/400 level) ² 12

Total Hours 15

- ¹ Students who wish to minor in Women's and Gender Studies should contact the director of the Women's and Gender Studies Program.
- ² A student may, alternatively, take two of the indicated WGS core courses (WGS 150 (<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.

Courses**WGS 150. Introduction to Women's & Gender Studies. 3 Hours**

Introduction to history, methods, and key 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 (drawing from the arts, humanities, social sciences, and natural sciences), and multicultural in approach. Prerequisite(s): 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.