A wide-angle photograph of a university campus walkway. The path is paved with large, light-colored rectangular tiles. Several students are walking along the path, some in groups and some alone. To the right, a brick building with a white facade and a satellite dish on the roof is visible. A brick pillar with a pointed top stands on the right side of the path. The scene is set during the day with long shadows cast on the ground.

2018-19 Academic Catalog



ALMA COLLEGE

614 W. Superior St. • Alma, MI 48801-1599 • 1-800-321-ALMA • www.alma.edu



2018-19 Academic Calendar

Fall 2018

August	29	Wednesday	Freshman Orientation Begins; Opening Convocation
September	1	Saturday	Residence Halls Open, Noon for Upperclass Students Move-in
September	4	Tuesday	Classes Begin, 8 a.m.
September	7	Friday	Last Day to Add a 1st 7-week Class
September	14	Friday	Last Day to Add a 14-week Class
September	28	Friday	Last Day to Drop a 1st 7-week Class
September	29	Saturday	Homecoming
October	15–16	Monday–Tuesday	Fall Term Recess
October	17	Wednesday	Classes Resume, 8 a.m.; Mid Term Grades Due, 9 a.m.
October	19	Friday	End of 1st 7-week Classes
October	21	Sunday	Exam Preparation for 1st 7-week Classes; Exams 7–9 p.m.
October	22	Monday	Begin 2nd 7-week Classes
October	23	Tuesday	1st 7-week Class Grades Due, 9 a.m.
October	26	Friday	Last Day to Add a 2nd 7-week Class
November	5–16	Two Weeks	Last Day to Drop a 14-week Class; Elect Pass-Fail Option
November	16	Friday	Winter and Spring Terms 2019 Registration
November	19–27	Nine Days	Last Day to Drop a 2nd 7-week Class
November	21	Wednesday	Drop/Add for 2019 Winter and Spring Terms
November	26	Monday	Thanksgiving Recess Begins, 5 p.m.
December	10–14	Monday–Friday	Classes Resume, 8 a.m.
December	14	Friday	Fall Term Exams
December	18	Tuesday	Residence Halls Close, 5 p.m.
			Final Grades Due, 9 a.m.

Winter 2019

January	6	Sunday	Residence Halls Open, Noon
January	7	Monday	Classes Begin, 8 a.m.
January	11	Friday	Last Day to Add a 1st 7-week Class
January	18	Friday	Last Day to Add a 14-week Class
January	21	Monday	Martin Luther King Jr. Celebration Day; Classes Cancelled 1–6 p.m.
January 28–February 1	One Week		Spring Term Registration Week—Portal Open for Students
February	1	Friday	Last Day to Drop a 1st 7-week Class
February	19	Tuesday	End of 1st 7-week Classes
February	20	Wednesday	Begin 2nd 7-week Classes
February	23	Saturday	Winter Term Recess Begins
February	27	Wednesday	Mid Term Grades Due, 9 a.m.
March	3	Sunday	Exam Preparation for 1st 7-week Classes; Exams 7–9 p.m.
March	4	Monday	Classes Resume, 8 a.m.
March	6	Tuesday	1st 7-week Class Grades Due, 9 a.m.
March	8	Friday	Last Day to Add a 2nd 7-week Class
March	18–29	Two Weeks	Last Day to Drop a 14-week Class; Elect Pass-Fail Option
March	29	Friday	Fall Term 2019 Registration
April	1–5	Monday–Friday	Last Day to Drop a 2nd 7-week Class
April	4	Thursday	Drop/Add for 2019 Fall Term
April	15–19	Monday–Friday	Honors Day
April	19	Friday	Winter Term Exams
April	20	Saturday	Good Friday, No Classes After Noon; Residence Halls Close, 5 p.m.
April	23	Tuesday	Commencement, 2 p.m.; Residence Halls Close for Graduates, 5 p.m.
			Final Grades Due, 9 a.m.

Spring 2019

April	27	Saturday	Residence Halls Open, Noon
April	28	Sunday	Classes Begin, 1 p.m.
May	1	Wednesday	Last Day to Add a Spring Term Class
May	17	Friday	Last Day to Drop a Class
May	23	Thursday	Spring Term Ends/Residence Halls Close, 5 p.m.
May	28	Tuesday	Final Grades Due, 9 a.m.

Summer 2019

May 28 – June 21			Summer Session I
June	24	Monday	Grades Due, 9 a.m.
June 25 – July 23			Summer Session II
July	26	Friday	Grades Due, 9 a.m.
July 25 – August 20			Summer Session III
August	23	Friday	Grades Due, 9 a.m.

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A College of Distinction

The Alma College Mission

Alma College's mission is to prepare graduates who think critically, serve generously, lead purposefully and live responsibly as stewards of the world they bequeath to future generations.



Vision Statement

An Alma College education seeks to instill a love of learning and celebrate the joy of discovery. Each Alma student will experience a deeply interdisciplinary education that provides opportunity for self-reflection, hands-on learning, and personal and professional development. It will embrace the principle of local, national and global learning communities, build upon strong mentoring relationships, and integrate rapidly changing technology essential for current and future career paths.

The Core Values

Student-centered education in a residential setting

All members of the community — faculty, staff and trustees — are committed to creating an institution of quality centered on the growth and development of undergraduate students. The purpose of the residential college experience is to better prepare students to enter seamlessly into lives in community, vocation, family and faith.

Disciplinary expertise within an interdisciplinary context of learning

The Alma Experience expects students to apply intellectual rigor to the exploration of a range of disciplines, building a broad foundation in the sciences, humanities, fine and performing arts and social sciences. This liberal arts education also prepares students to pursue advanced work, independent research and creative performances with the depth of understanding to excel in one's discipline and to perceive the connections among disciplines. The practical knowledge and skills of the liberal arts prepare students for lifelong learning and leadership within a wide array of settings.

Engaged learning

Because education takes place everywhere and all the time, it is important both to create an exciting residential learning environment and to extend opportunities for significant learning into the community and wider world. Active participation in learning, engaged citizenship, service-driven leadership and committed stewardship are fostered through research-based undergraduate scholarship as well as programs that support experiential, international and service-learning opportunities.

Ethical integrity, aesthetic appreciation, spiritual sensitivity

With knowledge comes obligation. To live a complete life that withstands the scrutiny of self and others, individuals must exhibit personal integrity, respect for the value of all humanity and sensitivity to the spiritual and material beauty of one's existence. We expect these principles to be modeled in the educational programs, work and daily interactions of all members of the college community.

Welcome to Alma College

The Alma College Catalog for 2018-2019 provides details on all of the College's academic programs, policies, and procedures. Here you will find descriptions of courses offered; details of the requirements for each major, minor, or program; and an overview of the College's general education curriculum. We hope you will use this Catalog as a guide to your Alma College course of study and as a resource for exploring possibilities, considering all the ways you might both fulfill the requirements of your degree and enhance your academic experience.

As you explore the College's offerings, there are many resources available on campus to facilitate your success. Whether you are deciding on a major, planning your Venture, seeking an internship, engaging in service learning, exploring summer research opportunities, or preparing to study abroad, we are here to help. At Alma you'll find a faculty, staff and administration committed to helping you plan your own Alma experience for an engaged and rewarding academic career on campus and beyond.

Welcome to Alma!

— Kathleen Poorman Dougherty, Ph.D.
Provost and Senior Vice President for Academic Affairs

Alma College in Brief

A Liberal Arts Education

More than 130 years ago, a group of devoted Presbyterian clergy and laymen had a dream: to establish a liberal arts college based upon the loftiest of ideals — unifying the human mind and spirit through knowledge.

The essence of a liberal arts education is learning *how* to learn. Once acquired, this skill can be applied to any task, any profession. Career success is determined by our abilities to exercise such skill. The college's membership in Phi Beta Kappa is an indication of excellence in the liberal arts. Only 10 percent of colleges and universities share this distinction.

A liberal arts education holds up a mirror to the world around us, and in its reflection we see ourselves: as we were, as we are, as we might be. Through such self-discovery comes inspiration and, from inspiration, lifelong commitment. The highest moral and ethical character is built upon such foundations. Our best leaders are shaped by such beliefs.

Academic Programs and Degrees

Alma is classified as a selective Baccalaureate College — Arts and Sciences by the Carnegie Foundation for the Advancement of Teaching. The College confers bachelor's degrees in five areas: arts, sciences, fine arts, music and nursing.

Religious Affiliation

Alma College, affiliated with the Presbyterian Church (U.S.A.), affirms its Christian heritage in which all people are made in the image of God. We seek to foster a diverse community by welcoming people of all faiths, as well as those with no faith tradition, into the Alma College experience. Founded by Presbyterians in 1886, Alma is a highly regarded four-year liberal arts college. Though it is church affiliated, the college does not make religious affiliation or doctrinal uniformity a condition for admission or employment. Our heritage affirms that faith and critical thinking reinforce each other. We are committed to cultivating intellectual, spiritual, and vocational discovery in all aspects of campus life.

Scholarship and Assistance Opportunities

To recognize students' academic achievements in high school, Alma College administers a strong program of scholarships. Regardless of financial need, Alma students can receive scholarship support based on outstanding academic achievements.

Also available are State of Michigan scholarships, grants and loans; federal grants and loans; and federal and College work study program funding.

Undergraduate Research

Alma students are often invited to team up with faculty on scholarly research or to collaborate on creative or performing arts projects. An annual Honors Day features student presentations, performances and exhibits. Many students also present such work at regional, national and international meetings.

Accreditation and Compliance Statements

Alma College is accredited by the Higher Learning Commission. Individual academic programs have received accreditation or approval from the following state or national credential-granting organizations.

Higher Learning Commission
230 South La Salle Street, Suite 7-500
Chicago, IL 60604-1411
Phone: 1-800-621-7440 / (312) 263-0456
E-mail: info@hlcommission.org
Web site: hlcommission.org

American Association of Colleges of Nursing
Commission on Collegiate Nursing Education
655 K Street NW, Suite 750
Washington, DC 20001
Phone: (202) 463-6930
Web site: aacn.nche.edu

Commission on Accreditation of Athletic Training Education
6850 Austin Center Blvd., Suite 100
Austin, TX 78731-3184
Phone: (512) 733-9700 / (844) 462-2283
Web site: caate.net

American Chemical Society
Committee on Professional Training
1155 Sixteenth Street, NW
Washington, DC 20036
Phone: 1-800-227-5558 / (202) 872-4600
Web site: acs.org

Council for the Accreditation of Educator Preparation
1140 19th St. NW, Suite 400
Washington, DC 20036
Phone: (202) 223-0077
E-mail: caep@caepnet.org
Web site: caepnet.org

Michigan Department of Education
John A. Hannah Office Building
608 West Allegan, Box 30008
Lansing, MI 48909
Phone: (517) 373-3324
Web site: michigan.gov/mde/

Michigan Department of Licensing and Regulatory Affairs
Michigan Board of Nursing
PO Box 30193
Lansing, MI 48909
Phone: (517) 241-0918
Web site: michigan.gov/lara

National Association of Schools of Music
11250 Roger Bacon Drive, Suite 21
Reston, VA 20190-5248
Phone: (703) 437-0700
E-mail: info@arts-accredit.org
Web site: nasm.arts-accredit.org

Emergency Procedures

Alma College has adopted an Emergency Response Plan that provides contingency procedures for Alma College administrators, staff, faculty and students in the event of a campus emergency. The College also has implemented a Campus Alert System that allows the College to send immediate, time-sensitive voice, e-mail and text notifications to students, faculty and staff in the event of a campus emergency. Students, faculty and staff can update their emergency contact information via the College's Web portal.

Federal Compliance Statements

Campus Security. Alma College abides by the Student Right-to-Know, the Campus Security Act of 1990 and the Higher Education Act Reauthorization of 2008. The College makes information concerning campus crime statistics available in printed form and electronically to the campus community each year. This information is also available to prospective students or employees upon request.

Family Educational Rights and Privacy Act. Respecting our students' right to privacy is a priority at Alma College. The college complies with the Family Educational Rights and Privacy Act of 1974, as amended — a federal law that requires each institution to establish a written policy and procedures to protect the confidentiality of a student's education records.

At its discretion, Alma College may provide directory information in accordance with provisions of the Act. Typical use of this information includes but is not limited to media releases, publications, event programs and lists for on-campus office use. Directory information may include (1) student name, address, telephone number, and date and place of birth; (2) e-mail address; (3) field of study; (4) class schedule and class rosters; (5) identity of parents, guardians or next of kin; (6) dates of attendance, and degrees and awards received; (7) most recent previous educational agency or institution attended by the student; (8) participation in officially recognized activities and sports; (9) photographs; and (10) weight and height of members of athletic teams. Social security numbers are not considered directory information and will not be released except as required or permitted by the Act. As a general rule, Alma College will not release lists of directory information to off-campus vendors.

The Registrar at Alma College coordinates the inspection and review of procedures related to the protection and release of student education records. For more information about the law and related college policies, go to www.alma.edu/offices/registrar/student-rights.

Financial Information. The College's annual financial report is available for review by prospective students, alumni and the public upon request at the Financial Services Office.

Nondiscrimination Statement. Alma College is committed to providing equal educational opportunities for each student. Our non-discrimination policy applies to age, color, creed, gender, national origin, physical ability, race, religion and sexual orientation. Questions or concerns about our policies and practices regarding these matters should be directed to Kevin Carmody, Civil Rights/ Title IX Coordinator at (989) 463-7467 or carmodykd@alma.edu.

Students with Disabilities. Alma College is committed to complying with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act (ADA) by providing access to campus facilities and reasonable accommodations in programs, services and classroom activities. Students with disabilities who require accommodation should contact the Center for Student Opportunity to initiate services.

Notice. Alma's academic catalog contains the most accurate information available at the time of publication. Alma College reserves the right to change without notice, statements in this catalog concerning, but not limited to, curricula, fees, rules, policies, scholarships and tuitions.

Academic Rules and Procedures

Academic Advising Program

Upon admission to Alma College, each student is assigned a faculty advisor on the basis of academic and career interests. Working with this advisor, students plan their courses and evaluate their progress. For those students who are uncertain about their interests, advisors are specially selected who can assist them in exploring and establishing a career direction through a well-developed plan of coursework and co-curricular experiences. Students' academic goals may also change during the course of their college careers. Accordingly, students may change advisors at any time, especially when an academic major is declared.

Conditions of Enrollment

Registration. Returning students usually select courses during the registration period in the preceding term. Newly admitted students make course selections during Becoming A Scot Days. The selections are then reviewed with their faculty advisors during Orientation week, at which time the schedule may be adjusted.

Changes in Registration. Students must file changes through the approval process with the Registrar's Office. Courses may be added during the first week of each term if approved by the advisor and during the second week if approved by both the advisor and the instructor. No courses, except for those scheduled for the last seven weeks of the term, may be added after the second week.

Withdrawal. Withdrawal from an individual class may occur through the ninth week of a 14-week course, the fifth week of a seven-week course, or the third week of a four-week course. Neither the course nor the withdrawal will appear on the student's record. Please refer to the Alma College Academic Calendar for specific course add and drop dates.

Class Load. The class load for a 14-week term shall be no less than 13 and no more than 18 credits for full-time status. Students who wish to qualify for full benefits from the Veterans Administration, Social Security or other financial aid sources are advised to enroll for not less than 13 credits. Athletes should be aware that the Michigan Intercollegiate Athletic Association requires a 13-credit load for eligibility.

Class Attendance Requirements. Class attendance requirements are set by each individual instructor. Among the options available is mandatory attendance, with absences resulting in a lower grade. Faculty members who do not implement a mandatory attendance policy will take measures to combat a common student misconception — that if attendance is not required (with penalties attached), it is not important. To this end, the syllabi for all classes will explicitly state the attendance policy.

Commencement Attendance. Seniors are required to participate in Commencement unless excused by the Provost or the Registrar.

Final Examination Schedule. The Final Examination Schedule is established by the Registrar and published at the beginning of each term. Instructors will announce testing plans in the course syllabus; the final test or activity (presentation, paper, etc.) must be at the officially-scheduled time. Make-up examinations are given only with the permission of the instructor and may be charged a fee.

Withdrawal from College. Students who wish to withdraw from Alma College must complete the withdrawal process by contacting the Center for Student Opportunity. If this process is not completed, students will forfeit their deposits and refunds. The College assumes that students beginning a term intend to complete it. Students who leave during a term without completing the withdrawal process may receive failing grades for course enrollments.

Service members who must withdraw during the term due to unanticipated deployments or mobilization, activation, and/or temporary duty assignments may have the option to complete the term off campus, if feasible. The student would need to consult with faculty members and the Registrar's Office to review the options available.

If completion of the term is not an option, students withdrawing would be assigned non-punitive grades of "W" (for "withdraw") for the term.

Grading Practices

Grading System. The following letters and grade points are used to record evaluations of student work: "A" (4.0); "AB" (3.5); "B" (3.0); "BC" (2.5); "C" (2.0); "CD" (1.5); "D" (1.0); "DE" (0.5); and "E" (0.0 — failing). An "E" will be recorded for such reasons (other than failure to meet course requirements) as dishonesty, excessive absence or failure to comply with other conditions specified by the instructor.

Incomplete Grades. Incomplete ("IN") grades must be replaced by letter grades within six weeks after the end of the term or they automatically convert to "E."

Work in Progress. Work in Progress ("IP") must be successfully completed and graded within one year of the date of enrollment, or the grade automatically converts to "E" unless the instructor initiates Withdrawal Pass ("WP") or Withdrawal Fail ("WF"). Work in Progress grades may be used only for independent study or practicum courses. A grade of "Z" is assigned by the Registrar when a grade has not been received from an instructor.

Satisfactory Grade Option. Students may elect the Satisfactory Grade Option ("S" or "F") by filing the approved form with the instructor's consent at the Registrar's Office before the deadline to drop the class. If the student elects this option, evaluation of the course work is recorded as "S" (equivalent to a "C" or better) or as "F" (failing, no credit). Neither grade is computed in the GPA.

Application of the "S/F" option is limited as described below:

1. It is available only to students of sophomore, junior or senior standing.
2. No more than 16 credits may apply to the 136-156 required for the degree.
3. No more than six credits per term may be elected under this option.
4. No course counting for a Teaching Major or Minor and no education course presented for teacher certification may be graded using this option.
5. No more than four credits of the 36 required for the major (or six credits of the 56 required for an interdepartmental major or POE) may be graded under this option.

Some classes are graded only "S" or "F" and the student has no option. Credits earned for these courses are not subject to the limitations described above.

Grade Reports. Grade Reports are made available to all students on the student portal at the end of each term and to first-year students and sophomores at mid-term.

Appeal of Grades. Appeal of grades may be made when the student has evidence that the final grade is unfair, but the appeal must be made not later than six months after the recording of the initial grade. The appeal proceeds first to the instructor, then to the department chair, and, if the disagreement still stands, it may go to the Provost.

Academic Progress

Classification of Students. Students admitted to Alma College may earn degree credits. If enrolled in a full class load, students will be certified as regularly enrolled students and classification will be based on the number of credits earned: freshman (0-24); sophomore (25-55); junior (56-89); or senior (90 plus). Eligibility for some forms of financial aid may depend upon progress toward the degree as indicated by these classifications.

Probation and Dismissal. Students must achieve a 2.0 GPA to graduate. Students with less than a 2.0 GPA will be placed on probation and may be dismissed or barred from registration whenever such action is considered to be in the best interest of the student or the College.

Probation Guidelines. The Probation Guidelines in the chart below are based on an ascending scale of grade point deficiencies and the number of terms enrolled in college. Normal progress is defined as any condition above unsatisfactory progress (i.e., jeopardy).

Only students who are making unsatisfactory progress will be subject to restrictions on athletic eligibility, extracurricular activities and/or financial aid eligibility. Students will qualify for the recommended status when either the GPA equals or falls below, or the grade point deficiency equals or exceeds, the posted criteria.

Probation Guidelines				
# Terms	Unsatisfactory Progress		Satisfactory Progress	
	Dismissal	Jeopardy	Probation	Warning
1	—	1.25 (-12)	1.75 (-4)	<2.00 (-0.5)
2	1.50 (-16)	1.70 (-10)	<2.00 (-0.5)	
3	1.70 (-14)	1.85 (-8)	<2.00 (-0.5)	
4	1.80 (-12)	1.90 (-6)	<2.00 (-0.5)	
5	1.90 (-10)	1.95 (-4)	<2.00 (-0.5)	
6	1.95 (-6)	<2.00 (-0.5)		
7-10	<2.00 (-0.5)			

Academic Dismissal. Academic dismissal constitutes involuntary separation of the student from the College for a minimum of one Fall or Winter term. Re-enrollment, on academic jeopardy, is contingent upon approval of the Academic Standards Committee. Approval typically will be granted upon evidence of improved performance in academic work as demonstrated by successful (cumulative 3.0 or higher) completion of the equivalent of 13 credits of coursework which meets the requirements for transfer credits. In no case will a student be readmitted for the regular term succeeding the term in which the student was dismissed. First-term freshmen and first-term transfer students are not subject to academic dismissal.

Academic Jeopardy. Academic Jeopardy represents “unsatisfactory progress toward the degree” for determining eligibility for such programs as intercollegiate athletics and financial aid. Unsatisfactory progress also results from failure to complete credits according to this schedule: first year — 25; second year — 56; third year — 90; fourth year — 110; and fifth year — 136. Students who are subject to this level of probation may re-enroll at Alma College in a subsequent term according to the conditions as follows:

1. Arrangement with the academic advisor of a plan for improving academic performance to include repetition of classes, change of academic program, participation in the academic enrichment program, weekly meetings with the advisor to monitor progress and/or reduction of course load.
2. Agreement to the restriction of participation in extracurricular activities including varsity athletics, Greek societies, community government and/or hours of employment.
3. Completion of an interview with an administrator in the Center for Student Opportunity to verify understanding of and compliance with these conditions prior to re-enrollment.

First-term transfer students will qualify for jeopardy status according to the criteria for first-term freshmen. After the first term of

enrollment at Alma, however, the published guidelines will apply.

Academic Probation and Warning. Academic Probation and Warning are categories of probation which should warrant the student’s concern, but are not subject to the extracurricular restrictions cited above. Eligibility for some forms of financial aid, however, may be affected.

Right of Appeal. Individuals or groups affected directly by committee actions or decisions have the right to appeal such actions or decisions by submitting dissenting reports first to the committee, and second to the Faculty Organization and/or Student Congress (except in those cases where appeal procedures are delineated in the description of committee functions.)

Notification of these actions will be sent from the Office of the Provost to the student after review by the Academic Standards Committee of the faculty.

In accordance with Veterans Administration regulations, students who receive VA benefits and remain on probation for two consecutive terms will be deemed ineligible for further VA certification. To qualify again for VA benefits, such students must achieve a 2.0 GPA.

Other Procedures

Academic Minors. Students may obtain a minor in some fields of study. The minor must be a concentration of at least 24 credits including the requirements listed by the department. Every 24-credit concentration does not constitute a minor; to qualify, it must be approved by the department on a minor declaration form available at the Registrar’s Office.

The GPA in the area of the minor concentration must be at least 2.0 (“C”).

Repetition of Coursework. Repetition of coursework is permitted. In each case, the most recent effort is counted. Each effort is recorded on the student’s permanent record. Students may repeat a course that they passed previously to try to improve the original grade; however, no additional credits will be earned for the repeat.

Waiver Petitions. To secure waiver of College policies or requirements, students may petition the Academic Standards Committee. Comments from the advisor and other concerned parties are often required before the petition will be reviewed. There is no charge for the petition process. Petition forms are available in the Registrar’s Office.

Academic Dishonesty. Appropriate disciplinary action, including possible separation from the College, will be taken when students engage in plagiarism; the exchange of information on examinations; assisting or receiving assistance in the completion of an examination, the writing of an essay or the preparation of a laboratory report; or any other attempt to obtain deceptively an unearned grade.

Disciplinary Procedures. Disciplinary action following academic dishonesty is handled initially by the faculty member in whose class the offense occurred, who may impose penalties up to and including failure in the course. (Note: A student may not drop a course in which he or she has been failed for cheating.) All infractions and actions are to be reported to, and recorded in, the Provost’s Office. These cases are then reviewed by the Provost, who, especially in the case of repeated offenses, may apply more severe penalties than those imposed by the instructor. Finally, the Provost may refer cases to the Campus Judicial Committee, which may impose penalties up to and including suspension or expulsion from the College.

Appeals Procedures. A student may appeal the instructor’s decision to the Provost. The student may appeal the Provost’s decision to the Campus Judicial Committee.

Academic Honors

Dean's List

Students who achieve a 3.5 term GPA while carrying a minimum load of 13 credits (eight of which must be graded A-E) qualify for the Dean's List. The Dean's List is compiled at the end of both the Fall and Winter terms.

Departmental Honors

To graduate with Departmental Honors, students must demonstrate superior performance on the departmental comprehensive evaluation (where offered), present a thesis of honors caliber and achieve a GPA of at least 3.5 in the major field. Each department has autonomy over the comprehensive evaluation and the thesis.

President's Outstanding Senior Award

The President of Alma College may select seniors who have completed seven full (Fall or Winter) terms at Alma College and demonstrated scholastic superiority to receive the President's Outstanding Senior Award.

President's Cup

Juniors, sophomores and first-year students who have been at Alma College for one year and who attain the highest academic ranks in their classes based on GPA receive the President's Cup award.

Graduation Honors

Graduation Honors are awarded to graduating seniors who have completed at least 60 credits at Alma College:

- **Summa cum laude** to students who have achieved a 3.8 GPA (and 3.6 in credits outside the division of the major)
- **Magna cum laude** to students who have achieved a 3.6 GPA (and 3.4 in credits outside the division of the major)
- **Cum laude** to students who have achieved a 3.4 GPA (and 3.2 outside the division of the major)

Special Programs

Presidential Honors Program

In addition to academic excellence and a more thorough understanding of the liberal arts, the Presidential Honors Program's primary goals include stewardship, citizenship and leadership. Honors scholars are encouraged to immerse themselves in campus and community service and act as role models for their student peers.

Freshman Year. Honors students enroll in a one-semester 2-credit First Year Honors course, usually in the winter term. During this seminar, you will learn the history and rationale of the liberal arts and begin to consider how the liberal arts can best serve the needs of a 21st century student. You will also begin to consider possible collaborative efforts with faculty in your interest fields.

Sophomore Year. During your second year, you will enroll in a one-semester 2-credit Honors seminar and complete one of two projects:

1. A special research project from the "Faculty Project Catalog," which includes a list of research projects that faculty members have identified as needing student input to create a clearer picture
2. A directed study project proposed by the student and endorsed by a member of the Alma College faculty

Junior and Senior Years. During your last two years at Alma, to receive the honors designation upon graduation you must maintain a cumulative GPA average of 3.5 or higher and complete:

- A 4-credit research project under close direction of a faculty member
- A formal proposal to the Alma College administration to enhance the Alma College student experience or to enhance the college's reputation beyond Michigan's borders
- A service learning project
- A presentation of honors-related research on Honors Day
- A senior honors thesis or project

You may also choose to complete the requirements for membership in Phi Beta Kappa.

Interdisciplinary Programs

In addition to providing a solid foundation in basic skills and knowledge, the Alma curriculum offers students many opportunities to specialize. Students may choose from any one or a combination of 47 majors and interdepartmental majors, 34 minors, four different degree programs, and individually designed areas of concentration called Programs of Emphasis which are aimed at specific professional careers.

Interdisciplinary Programs

American Studies
Biochemistry
Cognitive Science
Communication and New Media Studies
Environmental Studies
Foreign Service

Gerontology
International Business
Nursing
Public Affairs
Public Health
Women's and Gender Studies

Pre-Professional Programs

With numerous opportunities to choose from, Alma graduates have many ways to prepare for satisfying careers in a wide range of professions.

Pre-Professional Programs

Education
Military Service: ROTC
Pre-Dentistry
Pre-Engineering
Pre-Law
Pre-Medicine

Pre-Seminary
Pre-Sports Medicine
Pre-Occupational Therapy
Pre-Physical Therapy
Pre-Physician's Assistant
Pre-Optometry
Pre-Veterinary

Accelerated Programs and Advanced Placement Options

Accelerated Program Options

Students may accelerate their Alma degree program to finish in less than four years through a combination of concentrated academic scheduling, advanced credits gained while in high school and transferred credits from other college work.

Advanced Placement (AP)

Students may earn college credit for work done in high school if they have participated in the College Entrance Examination Board Advanced Placement Program. The official results of examinations must be sent to the Registrar's Office for credit to be granted. The Advanced Placement courses and qualifying scores for the examinations are listed on the following table.

College Level Examination Program (CLEP)

Alma College does not accept credit from the College Level Examination Program (CLEP).

International Baccalaureate (IB)

Alma College awards 32 credits to students who earn the International Baccalaureate diploma. Alternatively, the College awards credit for individual exams taken at the Higher Level (HL) with earned scores of "5" or above. Alma College course credit earned by achievement on the IB HL exam with a score of 5 or higher will satisfy distributive requirements for graduation.

Advanced Placement Courses and Qualifying Scores

AP Course Name	Scores	Alma College Course Equivalent Credits Awarded*
Art History	4 (3 w/dept. approval)	ART 112 (4)
Studio Art: 2D Design	4	ART 180 (4)
Studio Art: 3D Design	4	ART 180 (4)
Studio Art: 3D Drawing	4	ART 180 (4)
Art (Studio)	4	ART 180 (4)
Biology	4	BIO 180 (4)
Chemistry	4	CHM 115 (4)
Comparative Government and Politics	4	POL 111 (4)
Computer Science A	5 (4 w/dept. approval)	CSC 120 (4)
Computer Science AB	4	CSC 120 (4)
	5 (w/dept. approval)	CSC 120–220 (4-8)
Economics: Macro	4	ECN 111 (4)
Economics: Micro	4	ECN 112 (4)
English Language and Comp	3	ENG 100 (4)
English Literature and Comp	3	ENG 180 (4)
Environmental Science	4	ENV 180 (4)
European History	4	HST 180 (4)
French Language and Culture	4	FRN 221 (4)
French Literature and Culture	4	FRN 222 (4)
German Language and Culture	4	GRM 221 (4)
German Literature and Culture	4	GRM 222 (4)
Human Geography	4	GGR 102 (4)
Math: Calculus AB	4	MTH 121 (4)
Math Calculus: BC	3	MTH 121–122 (8)
Music: Listening and Literature	4 (3 w/dept. approval)	MUS 180 (4)
Music Theory	4 (w/dept. approval)	MUS 111–112 (4-8)
Physics 1	4	PHY 112 (4)
Physics 2	4	PHY 113 (4)
Physics C: Mechanics	4	PHY 121 (4)
Physics C: Electricity and Magnetism	4	PHY 122 (4)
Psychology	4	PSY 120 (4)
Spanish Language and Culture	4	SPN 221 (4)
Spanish Literature and Culture	4	SPN 222 (4)
Statistics	4	MTH 116 (4)
U.S. Government and Politics	4	POL 101 (4)
U.S. History	4	HST 180 (4)
World History	4	HST 180 (4)

* All AP credit must have department approval to count in the major or minor.

Admission Information

Freshman Admissions

Students may apply to Alma College after completing their junior year of high school. To assure maximum consideration for scholarships and financial aid, applications should be submitted in the fall of a student's senior year, preferably by December 1. Alma College will continue evaluating applications on a rolling basis throughout the year. Online application and application requirements may be found at www.alma/apply or www.commonapp.org.

Basis for Admission

To be considered for admission, high school students should have (1) approximately a "B" average or higher, (2) an ACT composite score of 22 or an SAT combined (Evidence-Based Reading and Writing, and Math) score of 1110 and (3) made progress toward a total of 16 academic units, which must include a minimum of four years of English, three years of mathematics, three years of social studies and three years of science. In addition, at least two years of one foreign language are strongly recommended. Students who do not meet these requirements are considered individually for admission. All applicants are considered on the basis of their academic and test records.

Alma College's non-discrimination policy includes age, color, creed, gender, national origin, physical ability, race, religion and sexual orientation.

Pre-Enrollment Requirements

Before enrolling at Alma College, incoming students are required to submit

1. An official ACT or SAT profile sheet to be used in academic advising and course selection.
2. A final transcript of high school grades, including confirmation of graduation. Transcripts are also used in academic advising.
3. A medical form that will be used to establish the student's confidential medical history in the Wilcox Medical Center.

Campus Visits

Students are encouraged to schedule a personalized visit to Alma to meet with a member of the admissions staff, tour campus, meet professors and sit in on classes. The Admissions Office is open for interviews Monday through Friday from 8 a.m. to 5 p.m. (ET)

and selected Saturdays. Please consult www.alma.edu/visit for all our visit options. You may also call the Admissions Office at 1-800-321-ALMA or e-mail admissions@alma.edu.

Transfer Credit Evaluation

Alma College will accept credit earned from regionally accredited colleges or universities in the United States. An evaluation of credit gained is available upon submission of an application and transcripts to the Admissions Office. Limitations are as follows:

1. Only non-developmental courses that are graded "C" (2.0) or higher will be accepted for credit.
2. All transfer students must complete the final 68 credits for the degree in residence at Alma.
3. Transferred credit must be documented by receipt of an official transcript from each institution attended.

Transfer students are encouraged to consult with the Admissions Office to review transfer credit equivalencies.

Continuing Education

Continuing education courses are offered at Alma College during Fall, Winter and Spring terms. Regular admission requirements are waived to continuing education students, who pay reduced tuition rates for such coursework. No more than eight credits each term and no more than 32 total may be taken in this manner.

After 32 hours, it is assumed that the individual is a degree student who must apply for regular admission in part- or full-time coursework and pay regular tuition rates. Any exception to this requires permission from the Provost's Office.

Dual Enrollment

High school students interested in dual enrollment (high school/Alma College) should determine eligibility by consulting with their high school counselors. Students may apply for admission under Continuing Education status by submitting to the Registrar an Application for Dual Enrollment form available from the Registrar's Office and a high school transcript verifying a "B" average. College enrollment is limited to four credits for the first term and eight credits in subsequent terms. Contact the Registrar's Office for further information at (989) 463-7348.

Media Use Policy

Alma College reserves the right to use any photograph or video taken on campus or at an event sponsored by the college as well as any photo provided to the college. A student who wishes to be excluded from campus photography must contact the Associate Vice President of Communications in writing within the first two weeks of the first day of class of the fall or winter term. Requests for non-disclosure will be honored by the institution for only the current

academic year, therefore, the request must be filed annually with the Communication and Marketing Office. By failing to provide such notification, you agree that the college may use your likeness.

No person or organization may use, copy, alter or modify Alma College photographs, graphics, videography or other similar reproductions or recordings without the advance written permission of an authorized designee in the Communication and Marketing Office at Alma College.

College Expenses

Costs for Full-Time Students in 2018–19

Term	Tuition	Student Activity Fee	Double Room and Board	Total
Fall Term	\$19,999	\$130	\$5,499	\$25,628
Winter Term	\$19,999	\$130	\$5,499	\$25,628
TOTAL	\$39,998	\$260	\$10,998	\$51,256

Spring Term Expenses

Tuition	Board	Total
\$1,593	\$600	\$2,193

Summer Expenses

	2018	2019
Tuition	\$550/credit	TBD
Room	\$70/week	TBD

The total charges to attend Alma College for the 2018-19 academic year are listed on the next page. These charges include tuition, board and double room, and the student activity and technology fees for the Fall and Winter terms. The listed tuition charge is before any financial aid awards, which represent a significant cost reduction for most students. Spring Term charges are reflected separately. The Board of Trustees reserves the right to change any charges prior to the opening date of any term.

The Fall and Winter terms tuition charge shown is for a term load of 13 to 18 credit hours. Students registering for more than the normal allowable credit hours per term are charged an overload rate of \$1,195 for each credit hour over 18. See the Tuition-Exempt Credits section on the next page for exception to this rule.

If a student goes from full-time status to part-time status after the official census date for the term (generally at the end of the second week) there is no tuition or financial aid adjustment. If a student adds a class and goes from part-time status to full-time status after the official census date, tuition is increased to the full-time rate but financial aid is not adjusted.

Students enrolled full time are required to live in Alma College residences and dine at the College's food service. Exceptions to this policy must be approved through the Student Affairs Office. Students may elect to participate in an off-campus Spring Term program. The costs — airline, hotel, meals, fees, etc. — are in addition to the Spring Term tuition charge. Room and board charges are assessed for the days spent on campus.

Housing Expenses. Costs shown for 2018-19 reflect double room occupancy. Students living in small single rooms will be charged \$6,499 each term for room and board.

Deposits. All accepted applicants are required to pay a Commitment fee of \$300, refundable until May 1. One-hundred dollars of the Commitment fee is applied as credit to the student's account for the Fall Term. Another \$100 serves as a security deposit from which the College may recover expenses incurred by the student for damage to or loss of College property upon the student withdrawing or graduating from Alma College. The final \$100 is a processing fee. Any unexpended portion of the security deposit can be gifted back to the college upon graduation or is refunded to the student after separation from the College providing all student charges have been paid in full.

Tuition-Exempt Credits. Students are permitted to enroll in a maximum of two credits, from the approved overload exempt class list, above the normal load of 18 credits without incurring a tuition overload charge. Additional exceptions may be allowed for first year, Fall Term students and some music major students. Students should contact the Registrar's Office for overload exempt courses and questions related to exempt courses. **Note:** approval for an exempt overload course can only be granted by the Registrar's Office.

Auditing Courses. Tuition for students who audit classes (for no credit) is \$550 for each credit hour.

Health Insurance Plan. All Alma College students are required to have health insurance and must participate in the Student Insurance Plan unless proof of comparable coverage is furnished. Students covered under a family plan, or who have other comparable coverage to the Alma College Plan, may waive coverage under the College Plan.

Alma College makes a comprehensive student insurance program available to students that is compliant with the Affordable Care Act. The plan provides for physician visits, prescription drug expense benefit, outpatient services including medical emergency, x-rays, lab procedures and miscellaneous tests, room and board, hospital miscellaneous, surgery (inpatient and outpatient), wellness benefits and a 24-hour Nurse Advice Line. The annual premium cost for the 2018-19 academic year is \$1,527. Full details about the plan are available at the Wilcox Health Center or at <https://www.studentplanscenter.com/school.aspx?school=25>.

All international students or exchange visitors who attend Alma College on F, J, or other visa status *must* purchase and enroll in the Alma College Student Injury and Sickness Plan before the start of classes for any given term, or the College will purchase coverage and place the charges on the student's account.

Off-Campus Study Costs and Financial Aid. Students are assessed a \$490 administrative fee and costs appropriate to their major and the program in which they are enrolled. Those who study off campus at the same host program for two or more consecutive terms are not assessed an additional administrative fee. However, those who study at different host programs or for non-consecutive terms are charged \$490 for each program or term.

1. Exchange Programs — defined as programs with institutions or organizations that have a reciprocal exchange agreement with Alma College to both send and receive students. Students are assessed Alma College tuition and mandatory fees for semester programs. Tuition for summer programs and all room and board fees are assessed for either Alma College or the host institution, depending on the College's agreement with the host institution. Alma College, state and federal financial aid may be applied toward semester exchange programs.
2. Off-Campus Study – defined as non-exchange domestic and study abroad programs approved for currently enrolled Alma College students. Students pay application and confirmation fees. Alma College pays other mandatory program fees to the host institution, such as orientation fees, etc., on behalf of the student and the cost is added to the Alma College student account.
 - a. All students **except** those who have declared a World Languages and Cultures major requiring study abroad are assessed the tuition and mandatory fees of the selected host program. External funding, including state and federal financial aid, may be applied to off-campus study. Alma College financial aid, including Tuition Exchange Programs, is generally not applied toward study abroad and domestic off-campus study programs. Employee Tuition Grants (ETG) may be applied to off-campus study up to the cost of Alma College tuition.
 - b. Students **who have** declared a World Languages and Cultures major that requires study abroad may choose either of the following:
 - i. Students may be assessed Alma College tuition and receive all Alma College and state and federal financial aid during their study abroad in the fall, winter or spring terms. No financial aid is available for summer programs. If the host institution's tuition cost exceeds the cost of Alma College tuition, the student is charged for the excess amount in addition to the cost of Alma's tuition.
 - or:
 - ii. Students may be assessed the host institution tuition and receive only state and federal financial aid for semester programs. No financial aid is available for summer programs. ETG may be applied up to the cost of Alma College tuition. Unused ETG may occasionally be used in a subsequent semester.

Orientation. All new incoming students are required to attend Orientation before the Fall Term. Transfer students are strongly encouraged to attend Orientation. The charge for Orientation is \$350 and includes room and board.

Student Activity Fee. The students of Alma College have elected to assess a fee on themselves at the rate of \$260 per year. This fee is used to sponsor social events such as dances, movies and live entertainment; support the yearbook, student newspaper and campus radio station; and admit each student to athletic events. *All students enrolled for eight or more credits are charged this fee.*

Summer Session. Tuition for the 2018 summer session is \$550 per credit hour or \$2,200 for a four-credit course; the 2019 summer session costs are to be determined.

Miscellaneous Fees

Auditing	\$550/credit
Continuing Education	\$275/credit
Early Examination Fee	\$125
Freshman Orientation	\$350
Late Registration Fee	\$125
Motor Vehicle Registration	
Resident Students	\$265/year
Resident Students – Silver Parking	\$235/year
Commuter Students	\$150/year
Proficiency Examination	\$275/credit
Room Change Fee	\$50

Payment of Tuition and Fees. Charges for tuition, room, board and fees are billed to students each term.

There are three alternatives for paying these charges:

1. Full payment is due on or before August 27, 2018, and January 2, 2019, respectively, for the Fall and Winter terms.
2. A deferred payment option provides for payment of half the balance due (after financial aid credits have been applied), plus a \$20 processing fee for the Fall Term that must be paid by August 31, 2018, with a deferred second payment for the remaining balance on or before October 12, 2018. The first payment for Winter Term, plus a \$20 processing fee is due on or before January 4, 2019, and the deferred second payment on or before February 8, 2019. A signed Deferred Payment Agreement form must be received by the Financial Services Office by the due date of the first payment for each term, August 31, 2018 and January 4, 2019 respectively.
3. An educational financing plan that permits payment of the annual expense over the academic year is available through Cashnet. Information is available from the Financial Services Office website at <https://www.alma.edu/offices/financial-services/for-students/payment-options>.

Payment of tuition and fee charges can be made with cash, personal checks, bank drafts, or money orders. Payments can also be made online with a Visa, Mastercard, American Express or Discover card, or with an e-check at the Financial Services Office Website: www.alma.edu/paymybill. A 2.5% convenience fee is charged for all credit and debit card payments. There is no fee to make an electronic check payment.

If the amount of the payment is more than the amount due, students may request a refund or the amount will be credited to their account.

Advance billings are available to be viewed and/or downloaded from the student portal approximately one month before the start of each term. Payment may be made by mail, online or in person at the Alma College Financial Services Office.

Payment *must* be received by the College prior to registration, or the student will have to make payment at the Financial Services Office during registration. Students are not permitted to attend class without making satisfactory financial arrangements.

Account Holds. A student's account is placed on a financial hold for the following reasons:

1. The student has withdrawn or graduated and has not paid their account balance in full. Until the account balance is paid in full, a student's transcript and/or diploma cannot be released.
2. The student is an active, current student with an account balance of \$1,000 or higher. An active, current student is not able to register or be placed in (or retain) a housing assignment for a future term until the account is under \$1,000. Default of the repayment plan may result in loss of the student's registration and housing assignment.

Late Payment Fees. Tuition and fees are due before classes start for each term. A late payment fee of \$25 per month is assessed on student accounts with a past due balance.

Failure to Meet Financial Obligations. In accordance with standard practice at colleges and universities, students are required to make satisfactory arrangements with the Financial Services Office for the settlement of all financial obligations. These include student accounts, student loans, parking fines, library fines, music record rentals and other expenses.

When a student fails to meet financial obligations, Alma College reserves the right to withhold the issuance of grades, transcripts and diplomas, and to suspend a student until the obligations are met. Unpaid balances on inactive student accounts will be referred to a collection agency. The student has responsibility for all costs and fees associated with the collection of the debt.

Financial Aid. Any financial aid other than a work-study grant awarded by the College for the entire year will be prorated; 50% to be available Fall Term and 50% to be available Winter Term. A work-study grant may not be deducted from charges because this aid represents funds to be earned during the year. Scholarships and grants awarded by organizations other than Alma College will not be credited until actually received. The Director of Financial Aid must be notified of any scholarship or grant awarded by organizations and agencies other than Alma College. You may review all financial aid policies at <https://www.alma.edu/admissions/financial-aid/policies/> as it is your responsibility to be familiar with situations that may affect your financial aid.

Refund of Federal Title IV Financial Aid. The Higher Education Amendments of 1998 mandates the formula for calculating the amount of financial aid a student and school may retain when a student withdraws from all classes before completing 60% of the term. Under Title IV financial aid regulations, the withdrawal date is defined as the earlier of:

1. The date the student began the withdrawal process or officially notified the institution of the intent to withdraw, or
2. The student's last date of documented attendance at an academically-related activity. If a student stops attending and fails to officially withdraw from classes, the student is considered to be unofficially withdrawn.

Unofficial withdrawal dates are determined by an end-of-term report from the Registrar's Office to identify students who have no passing grades. Faculty are contacted to determine the last date of attendance or academic activity for a student and that date is used as the withdrawal date.

If there is no proof of attendance beyond 60% completion of the term, the student is considered unofficially withdrawn and a refund calculation is performed.

Section 484B (c) of the HEA states that it is the institution's responsibility to determine a student's withdrawal date. Therefore, the institution, not the student, must document a student's attendance at an academically related activity. A student's certification of attendance that is not supported by documentation by the institution would not be acceptable documentation of the student's attendance.

The percentage of Title IV assistance earned is determined by dividing the total number of calendar days in the semester into the number of calendar days completed as of the withdrawal date. Any unearned aid must be returned to the Title IV program(s). Funds are returned in the following order: Unsubsidized Stafford Loan, Subsidized Stafford Loan, Perkins Loan, PLUS Loan, Pell Grant, SEOG and other Title IV programs. The student must either repay the federal overpayment in full or make satisfactory arrangements with either the Alma College Financial Services Office or the federal Department of Education. The payment or arrangement for payment must be made within 45 days of the date of notification of the federal overpayment or the student will lose further eligibility of federal Title IV aid until the debt is paid in full.

Withdrawal from College Refund Policy. Tuition and the student activity fee are refunded according to the following table.

Refunds for Fall and Winter Terms	
Withdrawal During Calendar Week No.	Percentage of Tuition Refundable
1	90%
2	85%
3	80%
4	70%
5	65%
6	60%
7	50%
8	45%
9	40%
10 and after	No Refund

College scholarships, grants and/or loans received by the student will be refunded on a comparable percentage basis.

Refunds for other non-College financial aid will be made in accordance with the rules and regulations applicable to those programs.

Withdrawal from College. Students who wish to withdraw from Alma College must complete the withdrawal process by contacting the Center for Student Opportunity. If this process is not completed, students will forfeit their deposits and refunds. The College assumes that students beginning a term intend to complete it. Students who leave during a term without completing the withdrawal process may receive failing grades for course enrollments and will be responsible for any tuition, and room and board charges for the term. If a student has registered for a future term and decides not to attend that term, the student must contact the CSO to formally withdraw and be removed from those classes. Failure to do so will result in the student being responsible to pay for tuition, fees, and room and board for the term, in its entirety.

Course Fees. Course fees are assessed for courses that incur unusual or extra expense. These expenditures are made on the basis of course registrations. Therefore, no refund is allowed for these fees.

Overload Charges. Full refunds will be made for overload charges up to the second Friday of the term. No refunds for overloads will be allowed after that time.

Room and Board. Cancellations and charges are as follows:

Fall 2018 New-Resident Housing

Cancellation Date	Fee
On or before June 30, 2018	\$0
July 1–August 10, 2018	\$500
After August 10, 2018	All room costs for the duration of the housing agreement

Fall 2018 Returning-Resident Housing

Cancellation Date	Fee
On or before April 27, 2018	\$0
April 28–June 30, 2018	\$500
After June 30, 2018	All room costs for the duration of the housing agreement

After start of term

Full room and board costs for the duration of the housing agreement

Cancellation and charges for all future terms will be posted and available in the term-based housing agreement.

Spring Term. No refund of tuition for withdrawals that occur *after* the fifth day of classes. A full refund is provided for withdrawals during the first five days of classes. There is no refund for room charges and the board fee will be prorated. Spring Term trip fees will be refunded only if the trip costs, such as airlines, hotels and other travel fees can be recovered.

Summer Session. No refund of tuition for withdrawals that occur after the fifth day of the term.

Requirements for Degrees

Alma College Credit

Alma College defines its credit hour in the context of the 4-4-1 calendar, just as institutions using semester systems link their credits to that calendar. The credit value of Alma courses is measured by “the Alma College 4-4-1 Credit Hour,” hereafter referred to as an “Alma credit.”

An Alma credit is equivalent to 120/136 – or, rounded to nearest tenth, .9 – of a semester credit hour. It is likewise equivalent to 136/108 –or, rounded, 1.3 – of a quarter credit hour. These equivalences are used when calculating compliance with the federal definition of the credit hour (34CFR 600.2):

A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally-established equivalency that reasonably approximates not less than:

- (1) One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately 15 weeks for one semester or trimester hour of credit, or 10–12 weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or
- (2) At least an equivalent amount of work as required in paragraph (1) of this definition for other activities as established by an institution, including laboratory work, internships, practice, studio work, and other academic work leading toward the award of credit hours.

Area of Concentration

Each student must declare an area of concentration before the end of the sophomore year by filing the approved form with the Registrar’s Office. This area of concentration may be a Departmental Major (at least 36 credits as prescribed by the department), an Interdepartmental Major (56 credits in courses approved by two or more departments and the Educational Policy Committee), or a

Program of Emphasis [POE] (56–68 credits in courses selected by the student to meet a specific educational goal as approved by the POE Committee no later than November 15 of the junior year).

The GPA in the area of concentration must be at least 2.0 (“C”) for the Bachelor of Arts, Bachelor of Science, Bachelor of Music and Bachelor of Science in Nursing degrees. For the Bachelor of Fine Arts degree, a 3.0 GPA in the major is required. For teacher certification purposes, a 2.75 GPA is required for all coursework. For additional certification requirements please see the Education Department section of this catalog. Courses outside the area of concentration must total 68 credits.

Comprehensive Evaluation

Most departments require graduating seniors to complete a comprehensive evaluation. Departments will determine the form of the comprehensive evaluation and may require students to take a nationally normed test, such as the Graduate Record Examination. Regardless of the form of the evaluation, the department shall determine the minimum criteria for passing with distinction, passing and failing.

Departments have the discretion to require satisfactory performance on a comprehensive evaluation for completion of the major. Results of evaluations that are non-credit bearing will not be recorded on the student’s transcript.

Failure of the comprehensive evaluation will not affect degree status unless a department specifies that successful completion is necessary to satisfy major requirements. Students may retake the comprehensive evaluation only with the permission of the department (or in the case of a POE, the POE Subcommittee of the Educational Policy Committee of the faculty). Only the results of the most recent effort will be recorded.

Contact Hours

Sixty minutes a week of classroom or direct faculty instruction constitutes 1 contact hour.

Cumulative Grade Point Average

The cumulative Grade Point Average (GPA) must be at least 2.0 for all degrees. This average is based only on grades achieved at Alma College or in its programs. Grades earned at other institutions will not be incorporated into this evaluation. Credits earned with a grade of "C" (2.0) or better at other institutions and accepted for transfer by Alma College will count toward the 136–156 credits required for the degree.

Degrees Awarded

Degrees are awarded at the end of the term in which the student completes all requirements; a formal commencement program is held only at the end of the Winter Term. The College awards the following degrees, which require total credits as listed:

Bachelor of Arts	136 credits
Bachelor of Science	136 credits
68 of the total credits earned must be in designated Science and Mathematics courses; specific requirements for the B.S. degree are available in the Registrar's Office	
Bachelor of Science in Nursing	136 credits
Bachelor of Fine Arts	148–156 credits
Bachelor of Music	144–156 credits

Specific requirements for the B.F.A. and B.M. degrees are listed in the Art and Design and Music sections of the catalog.

Earning an Additional Bachelor's Degree

A student may earn more than one bachelor's degree if:

1. The degrees are different.
2. The student completes 168 credits.
3. The student completes all requirements for both degrees.

Note: Students who earn a Bachelor of Music degree cannot also earn a Bachelor of Arts degree unless they qualify on the basis of a major other than music. Students who earn a Bachelor of Fine Arts degree cannot also earn a Bachelor of Arts degree unless they qualify on the basis of a major other than art.

Students who desire multiple degrees must notify the Registrar's Office by the end of the term prior to the one in which they plan to graduate. All degrees for which a student qualifies will be awarded as completed.

Double-counting Credits

A student may count up to eight credits of one major or minor in a different major or minor when those courses appear within the requirements, unless a department states otherwise within a departmental listing.

If a course is a required prerequisite or cognate to a major, it is automatically available for application to a different major or minor when that course appears within the requirements.

Note that no course, which counts toward any teaching major or teaching minor, may count toward any other teaching major or teaching minor.

Graduation Requirements and Full Time Enrollment

The minimum number of Alma credits required for graduation is 136. A full-time student shall take between 13 and 18 credits in each Fall or Winter term, with 16 credits being a standard load, and work beyond 18 credits constituting overload. Full-time enrollment shall be 4 credits in each Spring Term.

Limitations

Of the 136–156 credits required for a degree, students may apply up to the following number of credits from the classes listed here:

8 credits	Music 151, 152, 153, 153G, 154, 155, 156, 157, 158 and 159
6 credits	Exercise and Health Science 100–165
8 credits	Theatre/Dance 150, 151 and 152
8 credits	Practicums (numbered 385 or 386 in any department)
24 credits	Independent Study (in a single department)
36 credits	Practicum, Independent Study, Field Experience, Internship or Directed Teaching (in total)

A minimum of 68 credits applied toward graduation must be earned at Alma College or through Alma College-approved programs. Credit earned by enrollment in English as a Second Language, ACP 100, EDC 090, or EDC 091 do not count toward the 136–156 credits required for graduation.



Programs of Emphasis (POEs)




With the assistance of a faculty advisor, students may design an area of concentration composed of 56–68 credits in courses chosen to meet specific educational or career goals. In recent years, students have graduated with POEs in such fields as arts management, political science, environmental policy and sustainability, and music technology. For more information, contact the Registrar's Office.

Residency Requirement

Seniors are required to enroll in classes offered on the Alma campus or through Alma College programs during the Fall and Winter terms immediately prior to graduation.

Spring Term Requirements

Two Spring Term courses must be successfully completed, one of which must be a designated  ("S") course. Transfer students of sophomore standing or above must successfully complete one Spring Term course and it must be an  course. These designations are found in the Spring Term course booklet published each January.

 courses take advantage of the unique format of Spring Term and provide learning opportunities not possible within a traditional academic term. The Registrar's Office maintains a list of approved  courses. A term spent off campus in an approved Alma College program (ex. Philadelphia, Germany, France, etc.) may meet the  requirement. The student must still take two Spring Terms.

Statute of Limitation for Degree Requirements

If candidates are unable to fulfill all requirements, *including requirements for teacher certification*, by August 30 of the year of graduation, a five-year grace period is allowed for completion of deficiencies. This grace period is further defined as a maximum of nine years after the date of initial enrollment at Alma College. After the five-year period, the student must re-apply for candidacy and have his/her record re-evaluated under the requirements then in force. If those requirements are significantly different, the can-

didate may be required to complete additional work for the degree and/or teaching certificate. Certification requirements are subject to change by action of the State Board of Education and may not be reflected in this catalog.

Upper Level Courses

Upper Level Courses, identified by **UL** in the course description, must total at least 44 credits. Students with Interdepartmental Majors or a POE must earn 56 credits in upper level courses.

General Education Goals

The purpose of the general education program is to provide each student with a broad liberal arts education and a solid foundation for all fields of concentration. The following goals have been established for the general education curriculum.

- 1. Depth of knowledge in one or more disciplines.** Through majors, minors and POEs, all students will achieve mastery in one or more focused disciplinary or approved interdisciplinary path(s) of study.
- 2. Breadth of knowledge in the Liberal Arts tradition.** Students will demonstrate comprehension and application of the different ways of knowing in disciplines from the humanities, the social sciences, and the natural sciences.
- 3. Effective communication.** Students will demonstrate abilities to communicate effectively, in a variety of settings and for diverse audiences, through writing, speaking and other forms of expression.
- 4. Development of intellectual tools.** Students will demonstrate skills in critical analysis, quantitative and qualitative analysis and synthesis, scientific methods, and the use of information resources and technology.
- 5. Understanding of societies and cultures.** Students will develop understanding of:
 - the variety in human cultures, societies, histories, and aesthetic and ethical systems both within their own nation and in the larger global community;
 - the interrelationships between different parts of the global community;
 - their own place within and responsibility to this community.

To achieve the major objective of each area outlined above, students must complete courses or demonstrate proficiency in a variety of disciplines. Transferred courses must be approved for application.


Literacies

Alma College assumes that incoming students will have developed the basic skills for reading, listening and studying to a level adequate for success at the beginning level of college. Programs are available to support students who wish to improve their skills in these areas.

Composition

Students are urged to complete the first year writing course in their first year and are required to have done so by graduation. During orientation, they receive a recommendation about whether to take the transition course in writing, ENG 100, or the first year writing course, ENG 101, and discuss the recommendation with their advisors. This recommendation is based on the student's responses to a short questionnaire and their standardized writing test scores.

As a requirement for graduation, each student will successfully complete 16 credits of designated Quill writing courses. These credits will include ENG 101 (or its equivalent) during the first year of residency, as well as at least one upper level Quill course (2 or 4 credits) in the student's major field of study.

By definition, a Quill course is designed to improve the quality of student writing. To qualify as a Quill course, at least 25 percent of the final course grade must be based on written work, and at least 15 percent of the final course grade must be based on written work that has been submitted, evaluated, revised and resubmitted for final evaluation. In this catalog, Quill courses are marked with a .

Mathematics

All students are required to successfully complete at least four credits of college-level mathematical or computational science coursework as part of the Distributive Requirements listed on the following page. To ensure that all entering students are prepared for college-level work in mathematics, the College will determine the mathematical competency level of all entering freshmen and transfer students. Students who are not exempt on the basis of a qualifying ACT Mathematics sub-score are required to take a placement exam to determine a recommended initial course. MTH 100 (or demonstrated competency) is a prerequisite for many other courses.

Guide to General Education Distributive Requirements

To provide a broad education that includes knowledge, skills and understanding, the College requires that candidates for all degrees successfully complete the following:


I. First Year Seminar 2 credits

Minimum of two credits for all first-year students entering Alma College and transfer students with fewer than 25 credits awarded. Course is typically taken during the first term.

II. Writing Proficiency 16 credits

ENG 101, 201, or 202 with a grade of "C" or better, plus 12 additional credits of Quill writing courses. One of these courses must be in the major. Quill courses are designated with a .

III. Second Language/International Awareness 8 credits

Four credits taken in a second language plus one of the following: an additional four credits taken in the same or another second language, a term of study in a foreign country, or a four-credit course with non-U.S. or comparative international content or perspective. In this catalog, Second Language/International Awareness courses are marked with a .

IV. Distributive Requirements 36 credits

At least 12 credits in each of the following three divisions with no more than 4 of these credits from any one subject area as designated by three-letter prefix. Practicum and independent study credits cannot be counted toward this requirement.

Arts and Humanities (AH) 12 credits

12 credits (no more than 4 credits from any subject area) chosen from:

All courses in ART, COM, DAN, MUS, PHL, REL, THE

All ENG courses at the 110 level or higher

All language courses at the 112 level or higher

All HUM courses at the 110 level or higher

WLC courses 101, 180, 280 and 380

Four credits in total from THE and DAN may count towards the AH distributive

Social Sciences (SO) 12 credits

12 credits (no more than 4 credits from any subject area) chosen from:

All courses in ECN, HST, POL, SOC, ANT

Four credits in total from SOC and ANT may count towards the SO distributive

Natural Sciences (NS) 12 credits

At least 4 credits in each of the following three areas; must include at least two laboratory courses from different subject areas.

NS-1 Life Sciences: 4 credits

All courses in BCM, BIO, PSY

ENV 105*

IPH 212, 214, 215, 220, 224, 225, 226, 327, 328, 331, 340, 344, 401, 428, 430

NS-2 Physical Sciences: 4 credits

All courses in AST, CHM, GEO, PHY

ENV 110*, PSC 101

NS-3 Mathematics/Computation: 4 credits

CSC 120 or higher, MTH 110 or higher, PHL 303, PSY 220

* Completion of ENV 105 and 110 completes the NS-1 and NS-2 distributive requirements; however, it does not fulfill the two laboratory courses requirement as both courses are in the same ENV subject area.

Courses of Instruction

Courses of instruction are described on the following pages. Most courses numbered 100-199 are beginning level although some departments begin introductory work at the 200 level. Usually, 100- and 200-level courses are open to all students unless otherwise indicated by prerequisites. Most 300- and 400-level courses are upper level work for which prerequisites are a necessity. Not all upper level courses are offered every year; they are frequently alternated with others and offered every other year.

Courses listed in this catalog are subject to change. New courses and changes in existing courses are initiated by the appropriate departments or programs, and approved by the Provost, the Educational Policy Committee and the faculty.

Academic Divisions and Courses of Instruction

Humanities

Art and Design
 Chinese
 Communication
 Dance
 English
 French
 German
 Humanities
 Latin
 Library Science
 Medieval Studies
 Music
 New Media Studies
 Philosophy
 Religious Studies
 Spanish
 Theatre
 Women's and Gender Studies
 World Languages and Cultures

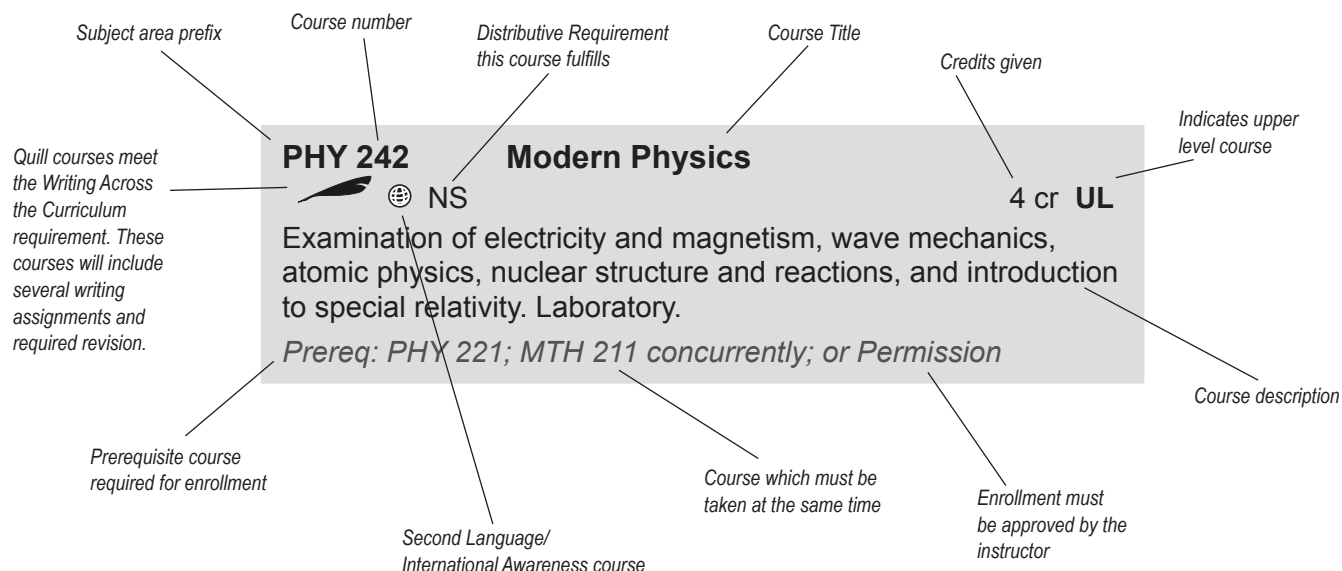
Natural Sciences

Astronomy
 Athletic Training
 Biochemistry
 Biology
 Biotechnology
 Chemistry
 Cognitive Science
 Computer Science
 Environmental Studies
 Geology
 Health Studies
 Integrative Physiology and Health Science
 Mathematics
 Nursing
 Physics
 Psychology
 Public Health

Social Sciences

American Studies
 Anthropology
 Business Administration
 Economics
 Education
 Foreign Service
 Geography
 Gerontology
 Health Care Administration
 History
 Political Science
 Public Affairs
 Sociology

Guide to Understanding Course Listings



General Studies

First Year Seminar (FYS)

As part of the General Education curriculum, first-year students entering Alma College and incoming transfer students with fewer than 25 credits awarded are required to successfully complete a minimum of two credits in a First Year Seminar course.

FYS 101 First Year Seminar

2-6 cr

First Year Seminar courses focus on the interdisciplinary nature of important and timely social, scientific, and cultural issues and are designed to provide every new student with high quality student-faculty interaction that helps students develop skills in critical thinking and communication. Topics vary. Course fee.

Honors Program (HNR)

Courses with this designation are open to students accepted into the Alma College Liberal Arts and Sciences Honors Program.

HNR 180A Honors Seminar I

2-4 cr

Course explores variable topics from a multidisciplinary and integrative perspective while addressing essential issues of liberal arts education. Open to first-year students in the Alma College Liberal Arts and Sciences Honors Program. Offered Winter only.

HNR 280A Honors Seminar II

2-4 cr UL

Second course available to students accepted into the Alma College Liberal Arts and Sciences Honors Program. Offered Winter only.

HNR 480 Senior Honors Seminar

2-4 cr UL

Capstone course for the honors program.

American Studies (AMS)

Minor Requirements

Thirty credits which must include:

1. Core: AMS-101, 102, and 301 and 16 credits from the following (no more than one course per department): ECN-111; ENG-260 or 261; HST-104, 105, 228; POL-101; and SOC-101.
2. Advanced Electives: eight credits from the following (no more than one course per department): ART-250; ENG-361 or 366; HST-277, 323, 325, or 326; POL-231, 325 or 336; and SOC-241 or 380A; or other approved (with substantial American content) topics courses (e.g., African American literature or religion, Native-American literature, etc.) AMS independent study or practicum subject to approval of the AMS coordinator.

AMS 101 Introduction to American Studies

2 cr

Focuses on the multi-disciplinary perspectives needed to understand the complexity of "the American experience(s)."
Prereq: First- year or Sophomore Standing

AMS 102 Perspective American Experience

2 cr

Focuses on seminal sources for deepening one's perspectives on "America."
Prereq: First- year or Sophomore Standing

AMS 301 American Studies Seminar

2-4 cr UL

Open only to students who have completed or are concurrently enrolled in the completion of 24 credits toward the AMS minor.
Prereq: AMS 101 and 102

Anthropology (ANT)

Anthropology courses, as designated by the three-letter prefix ANT, are offered through the Sociology and Anthropology Department.

Anthropology Major Requirements

Thirty-six credits which must include:

1. ANT-111, 212, 213, 214, and 498.
2. Sixteen credits from ANT-180, 215, 216, 217, 280, 311, 312, 315, 380, 385, 386, 499 or 500; up to four pre-approved credits from other disciplines appropriate to the student's sub-disciplinary interests. No more than four credits of approved ANT-180 may count towards the major.
3. Cognate: SOC-101
4. The comprehensive evaluation for the major is successful completion of ANT-498.

Anthropology Minor Requirements

Twenty-four credits which must include:

1. ANT-111 and 498.
2. Four credits chosen from ANT-212, 213 or 214.

In total, only 4 credits from SOC and ANT may count toward the Distributive Requirements in the Social Sciences; practicum and independent study courses do not count.

ANT 111 Introduction to Anthropology

SO

4 cr

Introduction to the holistic study of human kind. Development, organization, and functioning of cultures, as well as the relationship between biology and culture.

ANT 180 Topics in Anthropology

SO

1-8 cr

Investigation of a selected topic. May be taken only once for credit towards the SOC or ANT major.

ANT 212 Intro to Cultural Anthropology

SO

4 cr UL

Study of the development and variety of human cultures, or non-genetic adaptations to natural and social environments. Using a variety of theoretical perspectives, explore a range of contemporary and recent historic cultures to gain an appreciation of diversity of human world views and life ways. Investigate the process and effects of globalization.

Prereq: SOC-101 or ANT-111

ANT 213 Principles of Archaeology

SO

4 cr UL

A basic introduction to the history, theories and methods of anthropological archaeology. Issues of stewardship, accountability, social relevance, communication, preservation, repatriation and real world problem solving are integrated into the nuts and bolts of archaeological research. Opportunities for hands-on, post-excavation archaeological laboratory research.

Prereq: ANT-111 recommended

ANT 214 Fund. of Biological Anthropology

SO

4 cr UL

Focus on the physical nature of humankind and the relationship between mind-body-culture. Historic and current theoretical and methodological approaches to the investigation of the human body, its functions, and evolution. Methods and techniques used by paleontologists to investigate ancient hominids and their behavior. Examine current issues such as human demography, "race," forensics, epidemiology, stem cell research, genetics.

Prereq: ANT-111 or BIO-121 or BIO-202

ANT 215 Michigan Archaeological Fieldwork
SO SL 4 cr UL
Survey and excavation of a local archaeological site. Field methods, record keeping, preservation of finds, laboratory experience, and public education. Includes classroom instruction, field, and laboratory work, and a service-learning component. Course fee.
Prereq: ANT-111, 213, or 312 recommended

ANT 215M Michigan Archaeological Fieldwork
SO SL 4 cr UL
Survey and excavation of a local archaeological site. Field methods, record keeping, preservation of finds, laboratory experience, and public education. Includes classroom instruction, field, and laboratory work, and a service-learning component. Course fee.
Prereq: ANT-111, 213, or 312 recommended

ANT 216 Ethnobotany
SO 4 cr UL
Ethnobotanical and paleoethnobotanical approach to relationships between plants and human culture. Philosophical, ethical and technological perspectives of traditional and Western attitudes toward human-plant interactions. Issues of land-use rights, biodiversity, global stewardship and intellectual property rights. Combined lecture and seminar format.
Prereq: ANT-111

ANT 217 Medical Anthropology
SO 4 cr UL
An examination of the interplay between culture and medicine in a global context. Cross-cultural notions of healing, illness and medicine will be explored. Ethnography of medical practices, health disparities and policy implications will be examined.
Prereq: ANT-111 or Permission

ANT 280 Topics in Anthropology
SO 2-4 cr UL
Examines special subjects in Anthropology.

ANT 311 Indigenous Cultures
SO 4 cr UL
A cross-cultural study of indigenous peoples around the globe. Major themes such as colonialism, sovereignty, language, belief systems and identity are examined through deep reading of specific ethnographic case studies.
Prereq: ANT-111 or ANT-212

ANT 312 North American Archaeology
SO 4 cr UL
Focus on major prehistoric and historic North American cultures as revealed through archaeology and representative archaeological sites. Special emphasis on Michigan and the Midwest. Opportunities for hands-on post-excavation laboratory research.
Prereq: ANT-111 or BIO-121 or BIO-202

ANT 315 Michigan Archaeological Fieldwork
SO 4 cr UL
Research from peer-reviewed and/or primary sources, application of research to data from local sites resulting in written report, exhibition, or public presentation. Supervision of field crews in Spring Term excavation and survey program. Intended for students with experience in, and serious commitment to, archaeological research.
Prereq: ANT-215 or Permission;

ANT 315M Michigan Archaeological Fieldwork
SO 4 cr UL
Research from peer-reviewed and/or primary sources, application of research to data from local sites resulting in written report, exhibition, or public presentation. Supervision of field crews in Spring Term excavation and survey program. Intended for students with experience in, and serious commitment to, archaeological research.
Prereq: ANT-215 or Permission;

ANT 380 Topics in Anthropology
SO 2-4 cr UL
Examines special subjects in Anthropology.
Prereq: ANT-111

ANT 385 Anthropology Practicum
4 cr UL
Participation in community institutions, agencies, schools, and business with individual faculty supervision. Applications of concepts through experience. About 11-14 hours of field work per week for each four credits. Includes paper report.
Prereq: Permission.

ANT 498 Research Seminar-Anthropology
SO 2-4 cr UL
Designed as a culminating experience for Anthropology majors and minors. Emphasizes student synthesis and application of cumulative anthropological knowledge. Students facilitate classes and engage in an original research project culminating in a public presentation of their work.
Prereq: ANT-111 and 12 UL credits of ANT or Permission.

ANT 499 Independent Study-Anthropology
2-4 cr UL
Supervised reading or project in special areas of anthropology.
Prereq: Permission.

ANT 500 Senior Thesis-Anthropology
SO 4 cr UL
Designed for Senior Anthropology majors with the consent of the Department. Program of empirical and theoretical research.

Art and Design (ART)

Two degree options are offered by the Art and Design Department. The Bachelor of Fine Arts (B.F.A.) in Art and Design is a pre-professional program designed for those who are seeking to continue to graduate school and/or who would like to work within a specific area of art. Students will select an area of concentration from: ceramics, drawing and painting, graphic design, photography, and sculpture. The Bachelor of Arts (B.A.) in Art and Design provides an overview of various media within the Studio Arts. Designed for various employable options beyond Art specific applications.

Bachelor of Fine Arts Degree Requirements

Acceptance to the B.F.A. program requires the candidate to submit a portfolio to the Department for approval after completing 24 studio credits. This portfolio must be submitted by December of the junior year. The Department may elect to consider portfolios of students with an overall GPA below 3.0 or those submitted after this deadline.

Thirty-two credits in ART which must include:

1. Core: ART-101, 111, 112, 120, 150, 162, 213, 225 and 319
2. Art History: 4 credits from 210, 211, 212, 215 or 218
3. Concentration: thirty-four credits from one of the following:
 - **Ceramics:** ART-140, 240, 250, 340, 440 and 14 additional credits of pre-approved electives in the area of concentration
 - **Drawing and Painting:** ART-162, 261, 262, 361, 362, 461, 462 and 6 additional credits of pre-approved electives in the area of concentration
 - **Graphic Design:** ART-230, 331, 332, 333, 334, NMS-232, ART/NMS 385, and at least 6 credits from any of the following: ART-222, 224, 430, or other pre-approved electives from ART or NMS
 - **Photography:** ART-224, 324, 424, 425, NMS 232, ART/NMS 385, and at least 10 credits from the following: ART-222, 320, 460, NMS-204, 210, 220, 381 or other pre-approved electives from ART or NMS
 - **Sculpture:** ART-140, 240, 250, 350, 450, PHY-140, and 12 additional credits of pre-approved electives in the area of concentration
4. Ten additional ART elective credits, at least 6 of which must be upper level.

5. Capstone: ART 501, ART-502, a senior exhibition approved by the Department with a successful Advisory Board review.
6. A 3.0 GPA in courses from ART and NMS (and PHY-140 if taken)
7. To earn a Bachelor of Fine Arts degree in Art and Design students must complete a total of 156 credits.

Bachelor of Arts (Art Major) Degree Requirements

Thirty-six credits which must include:

1. Core: ART-101, 111, 112, 120, 150, 319
2. Electives (8 cr): ART-140, 162, 210, 211, 212, 213, 215, 218, 222, 224, 228, 230, 250, 380, 385, or NMS-232
3. Capstone: ART 501, ART-502, a senior exhibition approved by the Department with a successful Advisory Board review.

Students pursuing the B.A. are strongly encouraged to pursue additional credits within an area of concentration to increase employment opportunities within the arts.

An emphasis in Animation, Graphic Novel and Comic Design are available within the BA and the BFA programs through our partnership with Duncan of Jordanstone College of Art and Design (DJCAC) at the University of Dundee in Scotland. Students wishing to continue in Animation would need to have the above course work as required for the major in addition to ART 162, 228, 253, and NMS 232 so that they can continue their semester or year long experience in Scotland during their Junior Year.

Art Minor Requirements

Twenty-four credits which must include:

1. ART-101, 111, 112, 120, 150
2. Four elective credits in Studio Art courses

Art History Minor Requirements

Twenty-four credits which must include:

1. ART-111 and 112
2. Sixteen upper level credits in Art History from 210, 211, 212, 215, 218, 280 (*which may be taken more than once for credit if different topics*), or other pre-approved course. Students may substitute up to four upper level credits from other related disciplines with prior department approval.

Program Considerations for Art History Minor

- Students who have had little or no studio experience are strongly encouraged to complete at least one studio course from the 100-200 level series.
- Because graduate programs in Art History typically require proficiency in at least two foreign languages, students who are considering advanced studies in this discipline should plan to include at least four terms of foreign language coursework in their curriculum.
- A Program of Emphasis (P.O.E.) in Art History or in Arts or Gallery Management is also available in consultation with the Art History faculty. Art History courses are supplemented with other appropriate courses in coordinate disciplines (Business, Anthropology, History, Religious Studies, etc.). Each P.O.E. is tailored to the student's particular interests and goals.
- Completion of a senior thesis is strongly encouraged if student is considering graduate school.

Transfer Credits in Studio Art

Up to three studio art courses may be included in the major by transfer from an accredited institution. Transfer of upper level studio work will require Departmental review.

Four credits from ART, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Humanities.

ART 101 Beginning Drawing

AH 4 cr
Through observation, this class will concentrate on the essential elements of drawing, its materials, and methods. This is an introductory level class, which prepares the student for higher levels of visual problem solving. Course fee.

ART 111 History of Art I

Ⓜ AH 4 cr
Survey of the human visual cultures from its earliest visual record to the Medieval Period. Course fee.

ART 112 History of Art II

Ⓜ AH 4 cr
Survey of the human visual cultures from the Renaissance through the 20th century. Course fee.

ART 120 Two-Dimensional Design

AH 4 cr
Investigation of foundational elements and principles of visual design as the basic building blocks for visual art and communication. Critical thinking skills, as they apply to studio art, are explored using traditional and digital techniques. Course fee.

ART 140 Ceramics I

AH 4 cr
Introduction to direct forming processes in clay; hand building and wheel-throwing. Investigation of the uses of slips, glazes, underglazes and other methods of surface enrichment. Participation in class kiln firings. Course fee.

ART 150 3-Dimensional Design

AH 4 cr
Introduction to studio work with emphasis on exploring a variety of materials in three-dimensions in solving visual and spatial problems. Line, volume, mass, scale, composition, plane, as well as other elements of design will be utilized in investigating form. Course fee.

ART 162 Figure Drawing I

AH 4 cr
An introductory drawing course using the human body to discuss proportion and space. Much of the class will focus on developing drawing technique and observational skills for naturalistic rendering. Course fee.

Prereq: ART-101 or ART-120 or Permission

ART 180 Topics in Studio Art

AH 1-4 cr
Selective topics in studio art. Topics can be taught within the college or external experiences in department recommended workshops, residencies, or other special programming from other qualified institutions. Credit will be awarded based on program content, length of time/hours, and portfolio brought back for review. May require a course fee.

ART 210 Survey of Classical Art

Ⓜ AH 4 cr UL
Introduction to the visual cultures of ancient Greece and Rome with emphasis on the context in which the arts were produced. Survey of ancient history, literature and mythology are included to enrich students' comprehension of the artworks. Course fee.

ART 211 Survey of Medieval Art

Ⓜ AH 4 cr UL
Introduction to the visual cultures of Medieval Europe, with an emphasis on the context in which the arts were produced. Survey of Medieval history, literature and religion are included to enrich students' comprehension of the artworks. Course fee.

ART 212 Survey of Renaissance Art

Ⓜ AH 4 cr UL
Introduction to the visual cultures of the Renaissance in Northern and Southern Europe, with an emphasis on the context in which the arts were produced. Surveys of Renaissance history, literature and religion are included to enrich students' comprehension of the artworks. Course fee.

ART 213 Survey of Modern Art
AH 4 cr UL
Survey of the visual cultures of Europe and the United States that gave rise to "Modernity," with an emphasis on the theory of its development and the cultural contexts in which it occurred. The course covers the arts produced from 1840 to 2001, and includes careful consideration of the different art movements that comprise modern art. Course fee.

ART 215M Contemporary Art
AH 4 cr UL
Introduction to the major artistic movements and critical theory in the last two decades. Students spend approximately one week in New York City, or other appropriate large city in the U.S or overseas exploring galleries, museums, and artists' studios. Seminar includes readings, discussion, and a research paper on a special topic. Course fee. Spring Term only.

ART 218M History of Photography
AH 4 cr UL
Student will explore the history of photography and its social impact. Connections will be made between the various photographic techniques, camera formats, and the aesthetics of the medium as the technology developed through the years. Course fee.
Prereq: Permission

ART 224 Film Photography
AH 4 cr UL
Introduction to basic 35mm traditional photography (Film and Darkroom techniques). Students will learn all aspects of the basic camera body, lenses, Black and White film, film and print development using traditional black and white film, paper and chemistry. Traditional 35mm SLR film camera is required. Course fee.

ART 225 Digital Photography
AH 4 cr UL
Students will explore the aesthetics of digital photography as it relates to the digital SLR camera, color aesthetics, post-production techniques and color management for printing or viewing. Course fee.

ART 228 Lighting Studio
AH 2 cr UL
Introduction to studio lighting concepts and techniques for still life, portraiture, documenting artwork, and commercial uses. These techniques are applicable to film, video and still images. Course fee.

ART 230 Graphic Design Studio
AH 4 cr UL
Development of communication skills through the organization of image and text to inform, persuade, identify, or clarify an idea to a specific audience. Students will design works for printed media and Web-based communications. Course fee.
Prereq: ART/NMS-120

ART 240 Ceramics II
AH 4 cr UL
A continuation of direct hand-building and throwing techniques, continued surface enrichment, and an introduction to basic mold-making and glaze mixing/testing. Course fee.
Prereq: ART-140

ART 241 Wheel Throwing
AH 2-4 cr UL
An introduction to wheel throwing with a secondary emphasis on altering and hand-building forms. Glaze mixing, surface development, and kiln firing will be covered. We will investigate traditional and contemporary forms and figure out how a pot is never just a pot. Course fee.

ART 243 3D Printing and Pottery
AH 4 cr UL
Introduces the use of contemporary technology in designing pottery and tableware through the use of the 3-D modeling programs, 3-D printing, mold-making, casting, ceramic decal

printing, as well as some direct hand forming methods. We will investigate the pot as a vessel for driving content; who will use these pots and for what purpose? Course fee.

ART 245 Raku Ceramics
AH 4 cr UL
An introduction to the history, aesthetics and techniques of raku-fired ceramics. Course fee.
Prereq: Permission

ART 250 Sculpture I
AH 4 cr UL
An investigation of both traditional and contemporary materials, methods, and subject matter. Form will be approached through processes that utilize addition, subtraction, manipulation and transformation. Course fee.

ART 253 Figurative Clay Sculpture
AH 4 cr UL
An introduction to building figures and animals in clay. Through the use of visual references, there will be a focus on understanding measurement, alignment, and proportion. Narrative development and content exploration will be supported by class discussions, lectures, and independent research. Works will be prepared for kiln firing and will be surfaced with glazes and paint. Course fee.

ART 255 Metal Sculpture
AH 2 cr UL
An introduction to working with metal from the sketchbook, to model, to sculpture. The models will be small-scale "sketches" that we assemble by soldering small scale wire and cardboard. We will be cutting metal with the aid of hand-made templates and a plasma cutter, then welding together complex forms with clamps and a MIG-welder. Course fee.

ART 261 Beginning Painting
AH 4 cr UL
This course is an introductory course discussing basic concepts of painting in oil. Focusing on value, minimal color, space and developing observational skills. Course fee.

ART 262 Figure Drawing II
AH 4 cr UL
This course is an advanced drawing course, which reaffirms practice in proportion, space, drawing techniques and observational skills applied to the figure. In addition, this course will discuss various materials, color, scale, and concept. Course fee.
Prereq: ART-101 and 162; or permission

ART 270 Introduction to Printmaking
AH 4 cr UL
This course will explore the basic printmaking methods and their art historical significance. The students will gain basic knowledge of techniques and vocabulary that will further develop their artistic expression through the creation of the multiple print and/or presentation processes. We will cover Monotype, Collagraph, Relief, and Dry point Etching using a more contemporary, less toxic process. Course fee.
Prereq: ART-101

ART 271 Introduction to Lithography
AH 4 cr UL
This course will give an overview of historical techniques and contemporary methods used in creating a lithograph. The emphasis of this course will be to visually express the students' ideas and concepts through the technical manipulation of the surface of the stone and/or plate resulting in a editions of prints. These techniques will include both drawing and painting methods on traditional stone and ballground plate lithography. Course fee.
Prereq: ART 101

ART 272 Introduction to Lithography
AH 4 cr UL
This course will give an overview of techniques used within both contemporary and historical references. The emphasis of this course will be to visually express the students' ideas and concepts through the technical manipulation of the surface of the stone

and/or plate resulting in a suite of prints. These techniques will include both drawing and painting methods on traditional stone and ballground plate lithography. Course fee. Prerequisites: ART 101.

Prereq: ART-101

ART 280 Topics in Art History

AH 4 cr UL

Selected topics in the history of art. Subject varies according to instructor's field. Course content and instructor announced in advance. May be repeated for credit if course content covers a different topic. (Past courses include women in art, history of prints). Course fee.

ART 280IM The Art and Literature of Ireland

 AH 4 cr UL

The powerful Irish tradition of dinnseanchas, or place name poetry has ensured that Ireland's landscape is vividly literary - every place we will visit resonates with multiple layers of ancient stories, stories that have taken form in both literature and the visual arts. As we explore why and how ancient and later monuments articulate the status and power of the landscape - its control, and its bounty - we will also investigate the stories written by later inhabitants who sought to explain and appropriate such monuments even as they added their own art and architecture at or near those sites. From the early myth cycles to William B. Yeats, James Joyce, and Seamus Heaney, the dinnseanchas reveals in Ireland's landscape artifacts of culture, mythology, and natural wonder.

ART 280M Topics in Art History

AH 4 cr UL

Selected topics in the history of art. Subject varies according to instructor's field. Course content and instructor announced in advance. May be repeated for credit if course content covers a different topic. (Past courses include art history in Rome, and world ceramics: London). Course fee. Spring Term only.

Prereq: Take ART-101 or ART-120;

ART 281 Topics in Studio Arts

AH 2-4 cr UL

Selected topics in studio art. Subject varies according to instructor's field. Course content and instructor announced in advance. May be repeated for credit if course content covers a different topic. May include course fee.

ART 290 Directed Studio

AH 2-4 cr UL

Exploration at the intermediate level through a studio project in a selected medium. Open to majors and non-majors. Utilizes a directed studio format. (Past courses included bookarts, jewelry, watercolor, wheel-thrown ceramics, etc.). Course fee.

Prereq: Permission

ART 299 ART Independent Study

1-4 cr UL

Individual study of a subject in Art or Art History. Course fee may apply.

Prereq: Permission

ART 319 Art Theory

 AH 4 cr UL

An exploration of the main theoretical discourses (philosophical, critical, historical) that impel both the creation and the reception of art, including the very definition of art, as deployed throughout the 20th century. Course fee.

Prereq: Junior or Senior Standing

ART 320M Photojournalism

 AH 4 cr UL

Student will explore historic and current photojournalism practices and aesthetic. They will travel to different countries and work on a specific assignment that applies to the cultural experiences of that location. Locations vary from year to year. Course fee. Spring Term only.

Prereq: ART-224 or Permission

ART 324 Photography II

AH 4 cr UL

An exploration of various camera formats including pinhole, medium and large format cameras, and the manner in which they communicate. Various printing methods will be explored based on aesthetic goals. Course fee.

Prereq: ART-224

ART 330 Graphic Design II

AH 4 cr UL

Explores the function of type as it relates to various aspects of graphic design. Anatomy of type, type structure, font families, and a brief history of type will be considered. Course fee.

Prereq: ART 120 and ART 230

ART 331 Graphic Design III

AH 4 cr UL

Introduction to aesthetic components in web design as it applies to graphic design. Course fee.

Prereq: ART-120 and ART-230

ART 332 Graphic Design IV

AH 4 cr UL

Introduction to the use of various narrative forms in art and graphic design. Techniques include motion graphics as applied to web design and basic animation techniques. Course fee.

Prereq: ART 120 and ART 230, or permission

ART 333 Graphic Design V

AH 4 cr UL

An intensive consideration of logo design as it applies to graphic design in print and animated form. Course fee.

Prereq: ART 120 and ART 230

ART 340 Ceramics III

AH 4 cr UL

This course is designed around developing an individual voice with fired clay and ceramic surface. Both form and surface will be explored in contributing to the content of the piece. Through research, surface testing, and experimentation, students will develop skills towards a disciplined studio practice. Course fee.

Prereq: ART-240

ART 350 Sculpture II

AH 4 cr UL

A continued material investigation in three-dimensions with a focused introduction to wood. Additionally, there will be a stronger emphasis on the students' individual investigation of material, process, and conceptual thought process. Course fee.

Prereq: ART-250

ART 361 Drawing and Painting I

AH 4 cr UL

This is an intermediate course, which discusses contemporary as well as traditional ways of creating a drawing and a painting. Time will be devoted to developing ideas of a unique body of work as well as material experimentation. Course fee.

Prereq: ART-262 or Permission

ART 362 Drawing and Painting II

AH 4 cr UL

This is an intermediate course, which discusses contemporary as well as traditional ways of creating a drawing and a painting. Time will be devoted to developing ideas of a unique body of work as well as material experimentation.

Prereq: ART-361 or Permission

ART 375 Photo Intaglio and Relief

AH 4 cr UL

Students will explore photo intaglio and relief as it is applied in a contemporary context. They will consider historical images to gain an understanding on how co-images may work well using this particular process. They will gain an understanding of the technical aspects in creating digital negatives and solar plates for intaglio and relief photo-based prints. Class fee.

Prereq: Take ART-225 or ART-224

ART 380 Topics in Studio Art
AH 2-4 cr **UL**
Selected topics in studio art. Subject varies according to instructor's field. Course content and artist announced in advance. May be repeated for credit if course content covers a different topic. (Past courses included advanced illustration, landscape photography and architectural ceramics.) Studio courses may be taught overseas during Spring Term. Course fee.
Prereq: ART-101 and ART/NMS-120; or Permission

ART 385 Art Internship
1-8 cr **UL**
Designed to provide on-site working experiences in the student's area of interest. Examples include: apprenticeships with professional artists, internships with museums or art centers, internships with community art councils, or short-term employment in firms specializing in an art-related area. Internships are arranged with assistance of faculty advisor. Possible course fee.
Prereq: ART-101, 111, 112, 120, 150 and Permission

ART 390 Advanced Directed Studio
AH 2-4 cr **UL**
In-depth study in the student's area of interest under direction of a faculty member in that area. Designed for junior and senior Art and Design majors who have completed 12 credits of studio work. Exceptions to this policy made only with Departmental permission. Subject matter arranged through close consultation with advisor according to individual needs or to specified curricula available. Course fee.
Prereq: Instructor Permission

ART 399 ART Independent Study
1-4 cr **UL**
Individual study of a subject in Art or Art History. Course fee may apply.
Prereq: Permission

ART 400 Art History Thesis
AH 2-4 cr **UL**
Readings, discussion and research paper on special topics in Art History. Course fee.
Prereq: Permission

ART 424 Photography III
AH 4 cr **UL**
Exploration of images made with digital and traditional technology. Students learn to create digital negatives that are printed using alternative hand-mixed light sensitive chemicals on papers. Students may also explore photo lithography, intaglio, and relief. Course fee.
Prereq: ART-120, 224, and 225.

ART 425 Photography - Alt. Processes
AH 4 cr **UL**
Exploration of images made with digital and traditional technology. Students learn to create digital negatives that are printed on light sensitive chemicals made by the students. Platinum/palladium and gum printing are two non-silver processes considered. Course fee.
Prereq: ART-101, ART-224, and either ART-120 or NMS-120, or Permission

ART 440 Ceramics IV
AH 4 cr **UL**
This course is designed around developing an individual voice with fired clay and ceramic surface. Both form and surface will be explored in contributing to the content of the piece. Through research, surface testing, and experimentation, students will develop skills towards a disciplined studio practice. Course fee.
Prereq: ART-340

ART 450 Sculpture III
AH 4 cr **UL**
This course is designed for students exploring complex technical procedures pertaining to sculpture. It will require in-depth research, presentation, and application of knowledge into a focused body of work. Course fee.
Prereq: ART-350

ART 461 Drawing and Painting III
AH 4 cr **UL**
This is an advanced course, which discusses contemporary as well as traditional ways of creating a drawing and a painting. Time will be devoted to creating a unique series of work, which will be applied to a capstone experience. Course fee.
Prereq: ART-362 or Permission

ART 462 Drawing and Painting IV
AH 4 cr **UL**
This is an advanced course, which discusses contemporary as well as traditional ways of creating a drawing and a painting. Time will be devoted to creating a unique series of work, which will be applied to capstone experience.
Prereq: ART-461 or Permission

ART 490 Advanced Directed Studio
AH 2-4 cr **UL**
In-depth study in the student's area of interest under direction of a faculty member in that area. Designed for junior and senior Art and Design majors who have completed 12 credits of studio work. Exceptions to this policy made only with Departmental permission. Subject matter arranged through close consultation with advisor according to individual needs or to specified curricula available. Course fee.
Prereq: Permission

ART 499 ART Independent Study
1-4 cr **UL**
Individual study of a subject in Art or Art History. Course fee.
Prereq: Permission

ART 500 Senior Show Studio
AH 2-4 cr **UL**
Student will work on a specific thesis and body of work as it relates to their capstone senior show thesis within their area of emphasis. Course Fee.
Prereq: Permission

ART 501 Lighting Studio
AH 2 cr **UL**
Studio lighting techniques specifically for documenting artwork. Seniors will be required to create a database of their art work and a website that promotes their work for senior show thesis review, graduate school applications and job application. Course fee.
Prereq: Senior standing and permission

ART 502 Professional Practices
AH 2 cr **UL**
This class prepares BA (with an emphasis) and BFA students for success after graduation. This class discusses opportunities, topics, and developments which will best prepare the student to be prepared and competitive in the visual art field after graduating. Course fee.
Prereq: Senior standing and permission

Astronomy (AST)

Four credits from AST, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Natural Sciences - Physical Sciences.

AST 101 Planetary Science
NS2 4 cr
Examines the solar system from the perspective of the interdisciplinary fields of planetary science. Study of both solid surfaces and atmospheres using the concepts and techniques of astronomy, geology, atmospheric science, meteoritics, physics and chemistry. Work involves theoretical and experimental studies of planetary processes at an introductory level in lecture, discussions and laboratory. Course fee.
Prereq: MTH-100

AST 112 The Universe
NS2 4 cr
Introduction to the current view of the physical universe. Topics include the stars, star clusters, the galaxy and cosmology. Required laboratory exercises illustrate principles and ideas used by astronomers to support their views of the cosmos. Course fee.
Prereq: MTH-112

AST 225 Astrophysics
NS2 4 cr **UL**
Study of the physics of stellar constituents of the universe: distances, magnitudes, colors, spectra and motions of stars; multiple and variable stars; stellar structure and evolution, star clusters, structure and rotation of the Milky Way galaxy, galaxies and cosmology.
Prereq: PHY-221 previously or concurrently

Biochemistry (BCM)

Major Requirements

Fifty-six credits which must include:

1. Core: BIO-121 and 204; CHM-115, 223, 224, 230, and 331 or 332; MTH-121 and 122; PHY-112 and 113 or 121 and 122; BCM-321, 422 and 430.
2. Eight elective credits, with labs, from the subject areas designated below:
 - **Four credits of 300-level or above lab coursework in CHM or BCM.** CHM-320, 331,332, 411, or other-department-approved course.
 - **Four credits of 300-level or above lab coursework in BIO or IPH.** BIO-301, 307, 308, 319, 320, 330; IPH 401, or other department-approved course.
3. If student completes BCM-499, then other department-approved courses may be used to satisfy the above elective requirements.(Ex: 4 credits of CHM-310, 311, 312, 313, or 314 plus one credit of BCM 499; BIO-333, 360, IPH-340 plus one credit of BCM-499.
4. Successful completion of the departmental Senior Comprehensive Examination.

Program Considerations

- Potential majors are advised to schedule MTH-121 and 122 and PHY-112 and 113 or 121 and 122 in the freshman and sophomore years so they may take CHM-331 or 332 in the junior year.
- Take note that BCM-422 and 430 are offered in the winter term of alternating years.
- This is an excellent major for pre-medical students, but additional electives are strongly advised.
- Students bound for graduate school should make careful course selections to support their area of emphasis. Additional course work in biology, chemistry and mathematics is desirable. It is strongly-advised that participation in research begin at least in the Junior year.
- Completion of an independent research project culminating in a senior thesis is encouraged.
- Students who declare a Biochemistry major may not elect a second major in Chemistry.


Four credits from BCM, with the exception of practicum or independent study courses, may count toward the Distributive Requirements in the Natural Sciences - Life Sciences.

BCM 180 Topics in Biochemistry
NS1 1-4 cr
Topics vary. Previous offerings have included "Genes and Society" (4 cr) for non-science majors, and the lab-only "Introduction to Molecular Genetics" (1 cr) for science majors seeking a peer-mentored experience. Laboratory. Course fee.
Prereq: Permission

BCM 180M Topics in Biochemistry
NS1 1-4 cr
Topics vary. Previous offerings have included "Genes and Society" (4 cr) for non-science majors, and the lab-only "Introduction to Molecular Genetics" (1 cr) for science majors seeking a peer-mentored experience. Laboratory. Course fee.


BCM 319 Toxicology
NS1 4 cr **UL**
An introduction to Toxicology. Topics include general principles, toxicodynamics and kinetics, metabolism and biochemical mechanisms, system and organismal responses, testing guidelines, analytical methods, and case studies (clinical and environmental). Laboratory. Course fee.
Prereq: BIO-121 and CHM-230

BCM 321 Biochemistry
NS1 4 cr **UL**
Overview of the major topics of biochemistry including the chemistry, structure, function, biological activity and molecular mechanisms of the major biological macromolecules. Introduction to bioenergetics and central metabolic pathways. Laboratory. Course fee.
Prereq: BIO-121, CHM-224 and CHM-230

BCM 422 Advanced Biochemistry
 NS1 4 cr **UL**
Further study of intermediary metabolism through the use of historical and current research articles. Introduction to biophysical methods. Emphasis on experimental design, data analysis and integration of biochemical information. Laboratory. Course fee. (Offered Winter, Odd numbered years)
Prereq: BCM-321

BCM 430 Molecular Genetics
NS1 4 cr **UL**
Study of the transmission of information at the molecular level and the techniques used in gene analysis. Topics include gene structure and function, gene expression, genetic mobility, genomics, transgenics and recombinant DNA methodology. Laboratory. Course fee. (Offered Winter, Even numbered years)
Prereq: BCM-321 and BIO-204

BCM 499 Biochemistry Independent Study
1-4 cr **UL**
Independent research in biochemistry resulting in a written report. Course fee.

BCM 500 Senior Thesis
 NS1 4 cr **UL**
Independent laboratory research of an original problem resulting in a thesis and public presentation. Required for departmental honors. Course fee.
Prereq: Permission

Biology (BIO)

Major Requirements

Thirty-six credits which must include:

1. Core (20 cr): BIO-121, 122, 123, 204, 290 and 490.
2. Electives in either General Studies or one of the following areas of concentration:
 - a. General Studies:
 - Eight credits of the following electives: BIO-302, 307, 308, 315, 361, 385, or 430.
 - Eight credits of additional upper level BIO electives which may include Spring Term and/or independent study credits.
 - b. Pre-Medicine/Health: BIO-205, 226 or 307, 301, 308, and 330.
 - c. Pre-Veterinary Medicine: BIO-301, 305, 307, 308, and 361.
 - d. Cell and Molecular: BIO-226 or 307, 301, 308, 330, and 430.

- e. Ecology and Evolution: BIO-302, 305, 306, 360, and 361.

3. Completion of the MFAT examination.

Teaching Major

Thirty-six credits which must include:

1. Core (24 cr): BIO-121, 122, 123, 204, 290, 302, and 490.
2. Twelve credits of upper level BIO electives.
3. Completion of MFAT examination.

Program Considerations

- Potential Biology majors should note that many career opportunities for biologists, including graduate and professional programs, require two terms each of Inorganic and Organic Chemistry, Physics and Mathematics. Therefore, Biology majors are encouraged to complete CHM-115, 223, 224 and 230; PHY-112 and 113 or PHY-121 and 122; and MTH-112 and 113, 116, or 121 and 122. Additional courses may be required for specific graduate/professional schools; majors should check prospective program websites for specific admission requirements.
- Students are also encouraged to complete a primary research experience either through independent study or a summer internship at Alma College or another institution. For those students considering graduate school and/or a career in research, multiple experiences are highly recommended.

Minor Requirements

Twenty-four credits which must include:

1. BIO-121, 122, 123
2. 12 credits of upper level BIO electives.

Teaching Minor Requirements

Twenty-four credits which must include: BIO-121, 122, 123, 204, 290, 302, and 490.

Four credits from BIO, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Natural Sciences - Life Sciences.

BIO 101 Biology for Non-Majors

NS1 4 cr
Study of living organisms, biological processes and classification. Current topics in biology are emphasized. For the non-major. Laboratory. Course fee.

BIO 121 Introduction to Cell Biology

NS1 4 cr
Study of basic biological processes, mostly at the cellular level, including the chemical basis of life, cellular structure and function, heredity, reproduction and the genetic basis of evolution. Required for BIO, BCM, BTC, and IPHS majors. Laboratory. Course fee.

BIO 122 Introduction to Plant Biology

NS1 4 cr
An introductory course emphasizing plants as the model organism for learning about basic biological principles including plant development, anatomy, physiology, behavior, evolution, and ecology. Studio format course, in which lectures and labs are combined for a student-focused, active-learning experience. Students work throughout the semester as members of collaborative groups to answer and develop questions, solve problems, perform experiments, and conduct research that is intended to help them learn. Laboratory. Course fee. (Formerly offered as BIO-202).

BIO 123 Introduction to Animal Biology

NS1 4 cr UL
This course examines the diversity of the animal kingdom. Animals will be studied in an evolutionary context, emphasizing morphology, life history, ecology and behavior. The laboratory will include dissections and demonstrations that allow students to appreciate the physical differences across the major phyla. Laboratory. Course fee. (Formerly offered as BIO-203).

BIO 125M Protein Expression Techniques

NS1 4 cr
This hands-on course focuses on various protein expression models in today's molecular research laboratory. Expression of

recombinant proteins in bacterial and animal cell culture has become a critical skill set for work in modern academic and applies industrial research settings. Instrumentation experience will include but not be limited to: Biosafety Level-2 in vitro cell culture, fluorescence microscopy, UV-VIS Spectrophotometry, SDS-PAGE, and affinity chromatography. Brief morning planning sessions coordinated by the instructor and upper level students will be followed by a full day in the laboratory.

BIO 180 Biological Topics

NS1 4 cr
Lecture, laboratory and/or field experiences of special relevance to biology. Recent topics have included animal behavior, recombinant gene techniques, microbial ecology and cell culture. May be taken more than once for credit. May include a course fee.

BIO 204 Genetics

NS1 4 cr UL
The mechanics of inheritance at the molecular and cellular levels and the relationship of this phenomenon to gene action, organismal development, population changes and evolution. Laboratory. Course fee.

Prereq: BIO-121 and Sophomore Standing

BIO 205 Human Embryology

NS1 4 cr UL
Development of the organism from its beginning to the establishment of the basic body plan and organ systems. Live embryos and developmental morphology of vertebrates. Laboratory. Course fee.

Prereq: BIO-121

BIO 206 Forest Vegetation

NS1 4 cr UL
Students will learn morphological features that characterize woody plant species, the use of those features for recognition and identification of woody plants, scientific and standard common names of those species, and the diversity of woody plants and their associated communities across North America. Laboratory. Course fee.

Prereq: BIO-122 or Permission

BIO 207 General Physiology

NS1 4 cr UL
Study of the function of various animal organ systems, especially the ways in which they interact to maintain homeostasis of the individual. Most examples are from mammalian systems. Laboratory. Course fee.

BIO 226 Human Physiology II

NS1 4 cr UL
Study of physiological functions of the human body and the relationship of systems to the maintenance of homeostatic balance. Includes applications of physiological principles to practical issues in medicine and physical performance. Laboratory. Course fee. (Cross-listed with IPH-226)

Prereq: BIO-121 and IPH-225

BIO 280 Topics in Biology

NS1 2 cr UL
Biological topics selected by the instructor. May be taken more than once for credit.

Prereq: BIO-121 or Permission

BIO 290 Sophomore Seminar

NS1 2 cr UL
Designed to show students how to plan and prepare a portfolio for their senior capstone presentation. Library skills, basic statistics and experimental design will be emphasized. Course fee.

Prereq: BIO-121, BIO-122, or BIO-123 or Permission

BIO 299 Biology Independent Study

1-4 cr UL
An opportunity for exceptional freshmen and sophomores to work directly with faculty on a research project. Typically, students help gather data and participate in the analysis of data. Introduction to the research process. Course fee.

Prereq: Permission

BIO 301 Cell Biology
NS1 4 cr UL
Study of the fine structure of eucaryotic and procaryotic cells, the chemical composition and organization of cells, and the particular organization and function of cell organelles and structural components. Laboratory. Course fee.

BIO 302 Ecology
NS1 4 cr UL
Investigation of population, community and ecosystem structure, dynamics and energetics. Laboratory and field studies. Course fee.
Prereq: Sophomore Standing or Permission

BIO 305 Comparative Vertebrate Anatomy
NS1 4 cr UL
Explores the use of homology and cladistics to recover phylogenies and to understand the evolution of anatomical features of vertebrates. The function, form, and biodiversity of chordates with emphasis on vertebrates are discussed. Laboratory. Course fee.
Prereq: BIO-203

BIO 306 Forest Ecology
NS1 4 cr UL
Ecological interactions crucial to understanding forest ecosystems. This class will be taught by using the flipped classroom teaching method which will involve active learning techniques. Students will be responsible for a significant amount of preparation outside of class and active learning projects during class. Laboratory and field studies, with one Saturday field trip with a focus on acquiring field techniques and mastering quantitative skills. Laboratory. Course fee.
Prereq: BIO-122 or Permission

BIO 307 General Physiology
NS1 4 cr UL
Study of the function of various animal organ systems, especially the ways in which they interact to maintain homeostasis of the individual. Most examples are from mammalian systems. Laboratory. Course fee.
Prereq: Sophomore Standing or Permission

BIO 308 Microbiology
NS1 4 cr UL
Survey of the bacteria, viruses and other protists emphasizing their structure, physiology, systematics, ecology and genetics. Focuses on microbes important to humans including disease and the immune response. Laboratory. Course fee.
Prereq: Junior or Senior Standing or Permission

BIO 309 Aquatic Biology
NS1 4 cr UL
The physical, chemical and biological factors that affect fresh water organisms. Comparison of streams, rivers and lake habitats of Michigan. Laboratory. Course fee.
Prereq: BIO-121 or Permission

BIO 315M Behavioral Ecology (Field Studies)
NS1 4 cr UL
Field studies of groups of organisms in habitats ordinarily not accessible during the Fall or Winter term. A recent topic has been marine invertebrates of Jamaica. May be elected more than once for credit. Course fee. Spring Term only.
Prereq: Permission

BIO 319 Toxicology
NS1 4 cr UL
The study of toxic effects of chemicals on human and ecological populations. This includes the basic principles of toxicology and toxicity testing, fate and transport of materials in the environment and the body, key toxins and toxicants, and modes of toxic action among other topics. These subjects are supplemented with scientific literature on current topics in toxicology. Laboratory. Course fee.
Prereq: BIO-121 and CHM-115 (one course from CHM-223, BIO-203, or IPH-225 recommended)

BIO 320 Medical Botany
NS1 4 cr UL
Study of the contribution of plants to modern medicine. Topics include the botany, anthropology, chemistry, and pharmacology of plant derived drugs. Cross-listed with BTC-320. Laboratory. Course fee.
Prereq: BIO-121 and CHM-223

BIO 325M Protein Expression Techniques
NS1 4 cr UL
This hands-on course focuses on various protein expression models in today's molecular research laboratory. Expression of recombinant proteins in bacterial and animal cell culture has become a critical skill set for work in modern academic and applies industrial research settings. Instrumentation experience will include but not be limited to: Biosafety Level-2 in vitro cell culture, fluorescence microscopy, UV-VIS Spectrophotometry, SDS-PAGE, and affinity chromatography. Brief morning planning sessions coordinated by the instructor and upper level students will be followed by a full day in the laboratory.

BIO 330 Immunology
NS1 4 cr UL
The basic elements of the immune system that govern the innate and adaptive immune responses will be covered. Emphasis will be spent on B and T lymphocyte functions and the mechanisms of immune defense against pathogens. Course fee.
Prereq: BIO-121 or permission

BIO 333 Cancer Biology
NS1 4 cr UL
Basic concepts and principles of tumor evolution and behavior including an introduction to oncogenes, tumor-suppressors and genome-maintenance genes, carcinogens, and their roles in cancer initiation and progression, and a detailed look into several of the more common types of malignancies.
Prereq: BIO-121 or permission

BIO 344 Human Dissection
NS1 2 cr UL
Gross anatomy and dissection of the human body. Laboratory. Course fee.
Prereq: BIO-226 or 307 or Permission

BIO 360 Evolution
NS1 4 cr UL
Study of evolution as it applies to aspects of the biological sciences. Topics include history, mechanisms of evolution and population genetics. Laboratory. Course fee.
Prereq: BIO-121

BIO 361 Animal Behavior
NS1 4 cr UL
Animal behavior is examined from an ecological and evolutionary perspective. Topics include reproduction, habitat selection, foraging and fighting behaviors. Laboratory. Course fee.
Prereq: BIO-120 or 203 or Permission

BIO 380 Topics in Biology
NS1 2-4 cr UL
Lecture, laboratory and/or field experiences of special relevance to biology. Recent topics have included animal behavior, recombinant gene techniques, microbial ecology and cell culture. May be taken more than once for credit. Course fee.
Prereq: BIO-121 (or equivalent) or Permission

BIO 385 Biology Practicum
2-4 cr UL
Biological knowledge is applied to an outside working situation. Pass/fail only.
Prereq: BIO-121 and Permission

BIO 387M Clinical Histopathology
NS1 4 cr UL
Normal cytologic structure of major tissue types in various species will be studied. Abnormal changes will be identified and studied, and pathophysiologic causes of these abnormalities discussed. Cytologic changes will be related to gross anatomical appearance

and abnormalities that would be evident on diagnostic imaging modalities. Students will gain understanding of the symptoms created in the patient by the diseased tissue and which diseases/disorders must therefore be considered. Lab will develop skills/utilized in histological preparation and examination of normal and diseased tissue.

Prereq: Take BIO-121

BIO 399 Biology Independent Study 1-4 cr **UL**

An opportunity for exceptional first-year and sophomore students to work directly with faculty on a research project. Typically, students help gather data and participate in the analysis of data. Introduction to the research process. Course fee.

Prereq: Permission

BIO 430 Molecular Genetics 4 cr **UL**
NS1

Study of the transmission of information at the molecular level and the techniques used in gene analysis. Topics include gene structure and function, gene expression, genetic mobility, genomics, transgenics and recombinant DNA methodology. Laboratory. Course fee. (Cross-listed with BCM 430.)

Prereq: BIO-204 and BCM-321, or Permission

BIO 490 Senior Capstone Seminar 2 cr **UL**
NS1

Students choose a topic of interest, or one related to prior research experiences, and express their work in written form and present their work in a public forum. Completion of the Major Field Test for Biology is required for completion of the course. Course fee.

Prereq: Senior Standing

BIO 499 Biology Independent Study 1-4 cr **UL**

Individual study of a particular subject in biology of an experimental or analytical nature. It may be a synthetic library analysis at the junior or senior level. Course fee.

Prereq: Permission

BIO 500 Senior Thesis 4 cr **UL**
NS1

Independent laboratory research of an original problem culminating in a thesis. Course fee.

Prereq: Permission

Biotechnology (BTC)

Major Requirements

Eighty-credits, which must include: Core Courses:

1. CHM-115, 223, 224, 230 and BCM-321
2. BIO 121 and 204
3. PHY-112 and 113 or PHY-121 and 122
4. Computation (8 cr): MTH 112 or higher and Biostatistics (MTH-118)
5. Four credits of BTC Techniques
6. Six credits of Journal Club BTC-101, 201, and 301.
7. Capstone (2 cr): BTC-401

General and Integrative Electives:

1. At least four additional credits from BTC offerings
2. Eight credits from BIO-307 or IPH-226; BIO-308, 330; BCM-430; IPH-340; PSY-201
3. At least twelve biotechnology-related credits outside the natural sciences, which must be approved by the program (See item 6 under Program Considerations).
4. Successful qualification for and completion of an intensive summer research experience in an academic or industrial setting.

Program Considerations

- Students with AP Biology test scores of 5 may elect to receive four credits of BIO-121, thus fulfilling this requirement.

- Yearly enrollment in a Journal Club offering is the expectation. Winter Term only.
- In order to ensure academic options within a four year plan, CHM-115/223 and BIO-121 are desirable first year courses.
- For maximum benefit, consider enrolling in BTC 180 Molecular Techniques in the first available Spring Term.
- An off-campus summer research experience is viewed as most valuable.
- Students are invited to petition the Biotechnology Steering Committee in writing if they encounter new or distinctive offerings that are relevant to the major.

BTC 101 Biotechnology Journal Club 2 cr

Gain familiarity with, and be conversant in current literature and developments in the biotechnology sector. Primary research literature articles of various thematic topics are discussed and presented in a student-directed format. Graduating seniors must enroll in BTC-401 and will receive advanced assignments consistent with a capstone experience.

BTC 125M Protein Expression Techniques 4 cr
NS1

This hands-on course focuses on various protein expression models in today's molecular research laboratory. Expression of recombinant proteins in bacterial and animal cell culture has become a critical skill set for work in modern academic and applies industrial research settings. Instrumentation experience will include but not be limited to: Biosafety Level-2 in vitro cell culture, fluorescence microscopy, UV-VIS Spectrophotometry, SDS-PAGE, and affinity chromatography. Brief morning planning sessions coordinated by the instructor and upper level students will be followed by a full day in the laboratory.

BTC 201 Biotechnology Journal Club 2 cr **UL**

Gain familiarity with, and be conversant in current literature and developments in the biotechnology sector. Primary research literature articles of various thematic topics are discussed and presented in a student-directed format. Graduating seniors must enroll in BTC-401 and will receive advanced assignments consistent with a capstone experience.

BTC 280 Biostatistics 4 cr **UL**
NS1

Introduction to the analytical methods commonly used in biotechnology and biomedical sciences. Emphasis on the basic concepts of experimental design, quantitative analysis of data and hypothesis testing. Provides a foundation to evaluate information critically to support research objectives and a better understanding of statistical design of experimental trials for biological products/devices.

BTC 299 Research in Biotechnology 1-4 cr **UL**

Students will work independently on a faculty-mentored research project. This typically involves conducting experiments, gathering data and analyzing data.

Prereq: Permission

BTC 301 Biotechnology Journal Club 2 cr **UL**

Gain familiarity with, and be conversant in current literature and developments in the biotechnology sector. Primary research literature articles of various thematic topics are discussed and presented in a student-directed format. Graduating seniors must enroll in BTC-401 and will receive advanced assignments consistent with a capstone experience.

BTC 320 Medical Botany 4 cr **UL**
NS1

Study of the contribution of plants to modern medicine. Topics include the botany, anthropology, chemistry, and pharmacology of plant derived drugs. Course fee. (Cross-listed as BIO-320.)

Prereq: BIO-121 and CHM-223

BTC 325M Protein Expression Techniques

NS1

4 cr UL

This hands-on course focuses on various protein expression models in today's molecular research laboratory. Expression of recombinant proteins in bacterial and animal cell culture has become a critical skill set for work in modern academic and applies industrial research settings. Instrumentation experience will include but not be limited to: Biosafety Level-2 in vitro cell culture, fluorescence microscopy, UV-VIS Spectrophotometry, SDS-PAGE, and affinity chromatography. Brief morning planning sessions coordinated by the instructor and upper level students will be followed by a full day in the laboratory.

BTC 399 Research in Biotechnology

1-4 cr UL

Students will work independently on a faculty-mentored research project. This typically involves conducting experiments, gathering data and analyzing data.

*Prereq: Permission***BTC 401 Biotechnology Journal Club**

2 cr UL

Gain familiarity with, and be conversant in current literature and developments in the biotechnology sector. Primary research literature articles of various thematic topics are discussed and presented in a student-directed format. Graduating seniors must enroll in BTC-401 and will receive advanced assignments consistent with a capstone experience.

BTC 430 Molecular Genetics

NS1

4 cr UL

Study of the transmission of information at the molecular level and the techniques used in gene analysis. Topics include gene structure and function, gene expression, genetic mobility, genomics, transgenics and recombinant DNA methodology. Laboratory. Course fee.

*Prereq: BCM-321 and BIO-204***BTC 499 Research in Biotechnology**

1-4 cr UL

Students will work independently on a faculty-mentored research project. This typically involves conducting experiments, gathering data and analyzing data.

*Prereq: Permission***BTC 500 Senior Thesis**

4 cr UL

Independent laboratory research of an original problem resulting in a thesis and public presentation. Required for departmental honors.

Prereq: Permission

Business Administration (BUS)

Major Requirements**General Business Administration Major**

Thirty-six credits which must include:

Core Courses (36 cr):

1. BUS-121, 221, 225, 309, 323, 333, 440
2. Four credits from 224A, 224B, 224C, 224D
3. Four credits from BUS-150, 151, 340, 341, 342, 350, 385/386, 299/399/499, 500

*See also Required Cognate Courses.

Accounting Major

Fifty-two credits which must include:

Core Courses (36 cr):

1. BUS-121, 221, 225, 309, 323, 333, 440
2. Four credits from 224A, 224B, 224C, 224D
3. Four credits from BUS-150, 151, 340, 341, 342, 350, 442, 385/386, 299/399/499, 500

Accounting Emphasis (16 cr)

1. BUS-321, 322, 331, 425.

*See also Required Cognate Courses.

Professional Accounting (CPA) Major

The State of Michigan requires five years of coursework in order to sit for the CPA exam (or 168 credit hours at Alma College). Students interested in pursuing the Professional Accounting (CPA) can, **with careful planning of coursework at Alma, complete the necessary coursework required to sit for the exam in four years.** In addition to the courses required for the Accounting Major, students must complete the following courses for the Professional Accounting (CPA) Major: BUS-366, 422, 426 and 449. (See also Required Cognate Courses.) As part of their cognates, students must also take ECN-111 and MTH-116. Total Credit Hours: 68.

Finance Major

Forty-four credits which must include:

Core Courses (36 cr):

1. BUS-121, 221, 225, 309, 323, 333, 440
2. Four credits from 224A, 224B, 224C, 224D
3. Four credits from BUS-150, 151, 340, 341, 342, 350, 442, 385/386, 299/399/499, 500

Finance Emphasis (8 cr)

1. Eight credits from BUS-319, 410, 429, or other finance elective

*See also Required Cognate Courses

Management Major

Forty-four credits which must include:

Core Courses (36 cr):

1. BUS-121, 221, 225, 309, 323, 333, 440
2. Four credits from 224A, 224B, 224C, 224D
3. Four credits from BUS-150, 151, 340, 341, 342, 350, 442, 385/386, 299/399/499, 500

Management Emphasis (8 credits)

1. Eight credits from BUS-223, 301, 324, 423, 427 or other management elective

*See also Required Cognate Courses

Marketing Major

Forty-four credits which must include:

Core Courses (36 credits)

1. BUS-121, 221, 225, 309, 323, 333, 440
2. Four credits from 224A, 224B, 224C, 224D
3. Four credits from BUS-150, 151, 340, 341, 342, 350, 442, 385/386, 299/399/499, 500

Marketing Emphasis (8 credits)

1. Eight credits from BUS-334, 336, 337, 338, 339, 401, 428, 435, 436 or a four credit NMS course

*See also Required Cognate Courses

International Business Administration Major (IBA)

Thirty-two credits which must include: Core Courses:

1. BUS-121, 221, 309, 323, 333, 440
2. Four credits from 224A, 224B, 224C, 224D
3. Four credits BUS electives

International Coursework:

1. Twelve credits from ECN-111, 112, 331 or 332
2. Twenty-four credits (or proficiency) in a foreign language beginning at the 111 level

*See also Required Cognate Courses

Secondary Teaching Major Requirements

Thirty-six credits which must include:

1. BUS-121, 221, 309, 323, 327, 333, 440
2. Four credits from 224A, 224B, 224C, 224D
3. 401 or 410

*See also Required Cognate Courses.

Business Administration Minor Requirements

Twenty-eight credits which must include:

1. BUS-121, 221, 309, 323, 333, and 440
2. Four credits from 224A, 224B, 224C, 224D

Cognate courses required for all Business Majors and Minors:

1. Economics: ECN-111 or 112;
2. Data/Business Analytics; four credits from ECN-217, 317; POL-111, 215, or other course pre-approved by the department.
3. Quantitative: four credits from MTH-113, 116, 118, 121, 341, PSY-220 or other course pre-approved by the department. MTH-116 is the preferred course.

4. Ethics: four credits from PHL-225, 227, 228, 229, 242 or other course pre-approved by the department.
5. One course in COM or NMS or any other communication course approved by the department (students may take any two or four credit course in either COM or NMS).

BUS 121 Business Foundations

4 cr

General survey course that introduces the students to the various business disciplines. Students will briefly investigate the disciplines of accounting, finance, international business, law, management and marketing and how all of these disciplines are interrelated. The areas of business ethics and social responsibility will also be examined.

BUS 150 Entrepreneurs in Action I

SL 1 cr

Preparation to present strategic business cases and planning initiatives at regional and national competitions focused on entrepreneurship and the free enterprise system. Only four credits in total from BUS-150, 151 and BUS-350 will count toward the Business Administration major.

BUS 151 Entrepreneurs in Action II

SL 1 cr

Preparation to present strategic business cases and planning initiatives at regional and national competitions focused on entrepreneurship and the free enterprise system. Only four credits in total from BUS-150, 151 and BUS-350 will count toward the Business Administration major.

Prereq: Permission

BUS 215 Fundamentals of Law

 4 cr UL

Overview of the law and everyday legal situations that are encountered in cross disciplinary professions. Topics covered may include contracts, employment, real estate and leases, criminal law, torts, financial issues and personal property. Students who took FYS Everyday Law are not allowed to take this course and receive credit. Course fee.

BUS 221 Financial Accounting

4 cr UL

General survey course that introduces the study and application of the basic concepts and methods used in developing and reporting financial information about an economic entity. Emphasis on developing the ability to interpret and apply accounting information to the decision-making process.

Prereq: BUS-121 or HCA-131 (may be taken concurrently), MTH-101 or equivalent

BUS 223 Business Leadership and Society

 4 cr UL

Social, ethical and legal responsibilities that leaders have to society at large in profit and non-profit enterprises. Special focus on helping students become future leaders who think critically about the outcome of decisions they make and how these decisions impact society as a whole. Uses a case-analysis approach to study decisions made by business leaders that have had positive and negative impacts on companies in our society. Designed as an experiential learning class. Includes simulations, case applications and projects.

Prereq: BUS-121 or Permission

BUS 224A Managerial Accounting

4 cr UL

Study of accounting with emphasis on cost accounting, Cost-volume-profit, budgeting, capital budgeting and decision making. Emphasis on how cost and managerial accounting concepts apply to decision making and management analysis.

Prereq: BUS 121 or HCA 131, BUS 221

BUS 224B Managerial Decision Models

4 cr UL

Study of accounting with emphasis on cost-volume-profit, incremental analysis, budgeting, capital budgeting and decision making. Emphasis on how cost and managerial accounting concepts apply to decision making and management analysis.

Includes basic data analytics and additional spreadsheet design practice.

Prereq: BUS 121 or HCA 131, BUS 221

BUS 224C Managerial Healthcare

4 cr UL

Study of accounting with emphasis on cost-volume-profit, incremental analysis, budgeting, capital budgeting and decision making. Focuses on current topics in healthcare accounting including revenue cycle and reimbursement, cost accounting, non-hospital providers (physician groups, nursing homes).

Prereq: BUS 121 or HCA 131, BUS 221

BUS 224D Managerial Accounting - Topics

4 cr UL

Study of accounting with emphasis on cost-volume-profit, incremental analysis, budgeting, capital budgeting and decision making. Focuses on a current topic area relevant to students (retail, service, not-for-profit, manufacturing, etc.)

Prereq: BUS 121 or HCA 131, BUS 221

BUS 225 Legal Environment of Business

4 cr UL

Introduces legal concepts and critical thinking that are applied in a business context. Includes the study of complex business problems with a legal and ethical focus. Students will build knowledge of the law and legal concepts to help navigate the everyday business world. Topics may include: the court system, litigation process, negligence and strict liability, employment law and discrimination, contracts, real and personal property law, torts, product liability, consumer law and criminal law impacting business.

BUS 226 Cross-Cultural Studies

 4 cr

Study of selected aspects of world business and economics, politics, religion, communication and the exploration of cultural relations across national boundaries. Special focus on the importance of effective cross-cultural relations for global managers and corporations. Locations vary.

BUS 301 Business Communications

 4 cr UL

Preparation for effective communication in the business realm. Emphasis on business writing, presentation skills, and obtaining solid listening skills in business forums. Students will improve professionalism regarding communication that is oral, written and electronic. Other topics include: the report process, business research methods and business etiquette.

Prereq: ENG 101 and BUS 121

BUS 309 Managerial Finance

4 cr UL

Introduction to the principles of managerial financial policies, leading to maximizing the value of a firm. Major emphasis on financial decisions facing a firm, management of current assets, capital budgeting, cash flow management, optimal capital structure, time value of money and financial/ratio analysis.

Prereq: Four credits from BUS-222 or BUS-224(A-D or 224M); ECN 111, 112, 201 or 202; and four credits from MTH 113, 116, 118, 121, 341, PSY 220, or Permission

BUS 315 Personal Finance

4 cr UL

This course is designed to provide the skills and knowledge in all areas of financial planning including investment management, income taxation, insurance/risk management, employee benefits, housing costs, retirement and estate planning.

Prereq: BUS-121; BUS-309; and 4 credits from BUS-222 or BUS-224(A-D) or BUS 224M

BUS 321 Intermediate Accounting I

4 cr UL

In-depth study of theoretical framework, concepts and methods relating to financial accounting, with special attention given to asset measurement and income determination. Emphasis on developing analytical and problem-solving skills.

Prereq: four credits from BUS-222 or BUS-224(A-D or 224M)

BUS 322 Intermediate Accounting II4 cr **UL**

Thorough and balanced study of theory, concepts, methods and applications relating to financial accounting with special attention to debt and owner equity measurement and disclosure. Emphasis on earnings per share calculation and accounting for leases and pensions.

Prereq: BUS-321

BUS 323 Contemporary Management4 cr **UL**

Exploration of the four primary functions of management: planning, organizing, leading and controlling. Emphasis on understanding functions and roles that managers play within organizational structures and society stakeholders. Students will engage in numerous contemporary experiential learning and project applications. Developing managerial problem-solving, business professionalism, teamwork, and communication skills are a cornerstone of this course.

Prereq: four credits from BUS-222 or BUS-224(A-D or 224M); ECN 111, 112, 201 or 202; and four credits from MTH 113, 116, 118, 121, 341, PSY 220, or Permission

BUS 324 Human Resource Management4 cr **UL**

Emphasis on employment issues of organizations such as: recruiting, selecting, training, compensating and managing human resources. Other critical topics such as appraisal, discipline, safety, benefits and collective bargaining are discussed. Insight is also provided into the legal issues involved with human resource management and the framework for equal opportunity employment.

Prereq: BUS-323 or Permission

BUS 325 Business Law I4 cr **UL**

Explores legal topics such as courts, litigation, and alternative dispute resolution, contract formation, defenses to contract enforceability, third party rights and discharge, breach and remedies, sales and commercial transactions, negotiable instruments, personal property, bailments, and liability of accountants and other professionals. This class is designed to prepare future accountants, attorneys, finance, health care and other professionals for navigating legal issues in their field.

Prereq: Junior Standing

BUS 326 Business Law II4 cr **UL**

Explores the legal environment in which business actually operates. Topics include the law of agency, partnerships, corporations, bankruptcy, and estates and trusts.

Prereq: Junior Standing

BUS 327 Law for Educators4 cr **UL**

Designed for educators to explore the legal environment in which business operates. Topics include an introduction to the court system, employment law, environmental law, contracts, remedies, ethics, sales, commercial instruments, bailments, and real and personal property.

Prereq: Junior Standing

BUS 331 Cost Accounting4 cr **UL**

For service and manufacturing sectors, study of cost accounting systems and cost information including objectives, data accumulation, presentation and communication. Emphasis on cash flow, cost behavior and allocation, management planning and control, breakeven analysis and variance analysis useful in decision making.

Prereq: four credits from BUS-222 or BUS-224(A-D or 224M)

BUS 333 Marketing and Society4 cr **UL**

General survey course acquainting students with the business and economic principles underlying the transfer of goods and services from producer to consumers. Investigation of the institutions, systems of distribution, and the functions and policies of the

marketing discipline.

Prereq: four credits from BUS-222 or BUS-224(A-D or 224M); ECN-111, 112, 201 or 202; and four credits from MTH-113, 116, 118, 121, 341, PSY-220, or Permission

BUS 336 Direct Response Marketing2 cr **UL**

Investigate the role that direct response marketing plays in the overall marketing plan for an organization. Topics covered include: customer relationship marketing, data base marketing, user characteristics, lead generation and ethical considerations.

Prereq: BUS-333 or Permission

BUS 337 E-Commerce2 cr **UL**

Investigate the importance of the rapidly growing field of e-commerce within a firm's overall strategic marketing plan. Topics covered include: user characteristics, privacy and security issues, and ethical and legal considerations. This course will NOT be a course in Web site development.

Prereq: BUS-333 or Permission

BUS 338 Entrepreneurial Marketing4 cr **UL**

Examines the marketing discipline from the perspective of the entrepreneur. Topics covered include: marketing research, selection of target markets and marketing mix (product, price, place, promotion).

Prereq: BUS-333 or Permission

BUS 339 Logistics/Supply Chain Management2 cr **UL**

Supply chain management encompasses all areas of business that deal with the movement of product. This includes the inbound movement of raw materials and component parts, the transfer of inventory from one location to another and the outbound movement of products to the customer. Areas covered include customer service, facility location, inventory management, order processing, purchasing/procurement, transportation and warehousing.

Prereq: BUS-333

BUS 340 Applications and Cases in Finance4 cr **UL**

A study of finance principles and theories as applied to complex corporate problems through the use of company analysis and other hands-on applications.

Prereq: BUS-121, 221, 309, 323, 333, and four credits from BUS-222 or BUS-224(A-D or 224M)

BUS 341 Applications and Cases in Management4 cr **UL**

Apply management concepts to real life cases and situations. Examine complex management problems in the business world. Learn critical thinking, problem solving and conceptual thinking through the use of role play, simulations, projects, and case applications. This is a synergistic class and content from core classes will be utilized in this experiential learning environment.

Prereq: BUS-121, 221, 309, 323, 333 and four credits from BUS-222 or BUS-224(A-D or 224M)

BUS 342 Applications and Cases in Marketing4 cr **UL**

A study of marketing principles and theories as applied to complex corporate problems through the use of company analysis and other hands-on applications.

Prereq: BUS-121, 221, 309, 323, 333 and four credits from BUS-222 or BUS-224(A-D or 224M)

BUS 350 Entrepreneurs in Action III

SL

2 cr **UL**

Preparation to present strategic business cases and planning initiatives at regional and national competitions focused on entrepreneurship and the free enterprise system. Only four credits in total from BUS-150, 151 and BUS-350 will count toward the Business Administration major.

Prereq: Permission

BUS 366 Commercial Law4 cr **UL**

Focuses on the legal theory and mechanisms designed to facilitate commercial transactions within our society. Topics may include: the law of agency, partnerships, corporations, sales, commercial paper, debtor-creditor relations, secured transactions, and other appropriate topics for professionals working with the commercial realm.

Prereq: Junior Standing or Permission

BUS 380DM Strategic Leadership4 cr **UL**

Today's business leaders confront an increasing array of choices in an environment characterized by constant change. Leadership requires knowledge and technical competence, but as important is the development of the skills needed to align, motivate, and guide diverse teams to perform at the highest levels in rapidly changing environments. This course will employ case studies to engage Alma juniors and seniors in the kind of decisions today's leaders face. Key to the class will be the opportunity to meet with successful alumni from a range of fields, gaining their perspectives on the characteristics of successful leadership. Reading will range from Marcus Aurelius to Jim Collins. We will spend most of one week of the course in Chicago, working with alumni to develop perspectives on leadership. Spring Term only.

Prereq: Permission

BUS 380DMA World in Debt4 cr **UL**

A World in Debt: Evolution of the Relationship Between Debtors and Creditors from Antiquity through the Great Recession. This course will explore the history, philosophy and mechanics of bankruptcies, reorganizations and other forms of insolvency proceedings from antiquity through the present. Consideration will be given to how society deals with insolvent individuals, corporations and even cities and nations (i.e. Detroit, Greece, Puerto Rico). Emphasis will be given to the conflicting and recurring themes of debtor punishment versus rehabilitation and fresh start. Finally, the course will focus on current insolvency issues including "too big to fail" legislation, cross border bankruptcies in the era of globalization, and the student loan crisis.

BUS 380M Strategic Leadership4 cr **UL**

Today's business leaders confront an increasing array of choices in an environment characterized by constant change. Leadership requires knowledge and technical competence, but as important is the development of the skills needed to align, motivate, and guide diverse teams to perform at the highest levels in rapidly changing environments. This course will employ case studies to engage Alma juniors and seniors in the kind of decisions today's leaders face. Key to the class will be the opportunity to meet with successful alumni from a range of fields, gaining their perspectives on the characteristics of successful leadership. Reading will range from Marcus Aurelius to Jim Collins. We will spend most of one week of the course in Chicago, working with alumni to develop perspectives on leadership. Spring Term only. Course fee.

Prereq: Permission

BUS 385 Business Administration Practicum4 cr **UL**

Only four credits will count in the major. Requires permission. Student must also successfully complete the appropriate internship workshops that are sponsored by the Center for Student Opportunity (CSO).

Prereq: Complete the following courses with a minimum grade of C: BUS-121, 221, 225, 309, 323, 333 and four credits from BUS-222 or BUS-224(A-D or 224M)

BUS 401 Advertising4 cr **UL**

Study of advertising and its use in marketing programs. Emphasis on the role of advertising in the world of business, developing advertising strategies, selecting media, managing advertising activities and budgeting for profitability. Special emphasis on the social and ethical aspects of the advertising program.

Prereq: BUS-333 or Permission

BUS 410 Investments4 cr **UL**

Principles of investments, types of investments including common and preferred stocks, bonds, options, mutual funds and derivatives, analysis of risk and return, portfolio structure, operation of markets, analysis of investment requirements, and market timing strategies.

Prereq: BUS-309 or Permission

BUS 415 Advanced Finance4 cr **UL**

Application of principles of finance to solving selected business case problems and analyzing current financial topics. Coverage includes capital structure decisions, working capital policy, current liability management, optimal capital budgets, dividend policy, and lease financing aimed at maximizing the value of a firm.

Prereq: BUS-221, BUS-309, and four credits from BUS-222 or BUS-224(A-D or 224M)

BUS 422 Advanced Accounting4 cr **UL**

Accounting for partnerships, governmental units, not-for-profit organizations, corporate consolidations, foreign currency transactions and translation of foreign financial statements.

Prereq: BUS-322 and Senior Standing

BUS 423 Small Business Management4 cr **UL**

Examines the principles and practices pertaining to the operation of small business enterprises. Students are required to apply skills learned in the core business courses, with a special emphasis on management. Opportunities and risks inherent in starting small businesses are analyzed and the skills needed to successfully run a small business are discussed.

Prereq: BUS-221, 309, 323, 333, and four credits from BUS-222 or BUS-224(A-D or 224M)

BUS 425 Federal Individual Income Tax4 cr **UL**

This course covers the federal income tax laws and regulations impacting individuals. Topics covered include: personal and dependency exemptions, gross income, deductions, losses, tax credits property transactions and federal gifts taxes. Students gain analytical and problem-solving skills for dealing with individual income tax issues.

Prereq: four credits from BUS-222 or BUS-224(A-D or 224M)

BUS 426 Federal Business Taxation4 cr **UL**

Explore corporate operating rules, capital structure, distributions, reorganization, partnerships, S-Corporations, exempt entities, tax administration and practice, and multi-state and international transactions. Gain analytical and problem-solving skills for dealing with business tax issues.

Prereq: four credits from BUS-222 or BUS-224(A-D or 224M)

BUS 427 Transnational Management4 cr **UL**

Study of labor forces, competitive practices, decision making, planning and control, and human resource management in international business. Exploration of other topics influencing global managers and corporations.

Prereq: BUS-323

BUS 428 Global Marketing Management4 cr **UL**

Exploration of the environment of international markets and institutions. Analysis of the impact of cultural, social, financial, legal, political and technical problems in the marketing plan with particular emphasis on current international developments.

Prereq: BUS-333 or Permission

BUS 428M Global Marketing Management 4 cr **UL**
Exploration of the environment of international markets and institutions. Analysis of the impact of cultural, social, financial, legal, political and technical problems in the marketing plan with particular emphasis on current international developments.
Prereq: BUS-333 or Permission

BUS 429 Multinational Finance 4 cr **UL**
Analysis of foreign exchange issues and risk management, international investment and capital budgeting, global securities and capital markets.
Prereq: BUS-309

BUS 435 Marketing Research 4 cr **UL**
Study of the formal research techniques applicable to marketing. Methodical considerations include sample selection, questionnaire design, data collection, processing and analysis of data, and the preparation of managerial reports.
Prereq: four credits from BUS-222 or BUS-224(A-D or 224M); ECN-111 or 112; four credits from MTH-113, 116, 118, 121, 341 or PSY-220; or Permission

BUS 436 Selling/Sales Management 4 cr **UL**
Designed to introduce students, through hands-on role playing and practice, to the profession of Personal Selling. Steps in the selling process will be analyzed. Students will be required to prepare a sales presentation. The latter half of the class will focus on Sales Management. Supervisory techniques, measurement tools, and use of training material will be analyzed. Upon successful completion of the course, students will be prepared for an entry-level personal selling position.
Prereq: BUS-333

BUS 440 Global Strategic Management 4 cr **UL**
Coverage of all aspects of strategy with a focus on industry and corporate analysis, especially in the global environment. Emphasis on individual written and group oral presentations of case analyses. Students apply the concepts learned to actual business situations. The capstone course for Business Administration and International Business Administration majors.
Prereq: BUS-121, 221, 309, 323, 333 and four credits from BUS-222 or BUS-224(A-D or 224M)

BUS 442 Accounting Information Systems 4 cr **UL**
Study of accounting information systems, including systems analysis, design and implementation. Emphasis on design and documentation tools and internal controls. Focuses on the needs and responsibilities of accountants as end users of systems, system designers and auditors.
Prereq: BUS-322 or by Permission

BUS 442M Accounting Information Systems 4 cr **UL**
Study of accounting information systems, including systems analysis, design and implementation. Emphasis on design and documentation tools and internal controls. Focuses on the needs and responsibilities of accountants as end users of systems, system designers and auditors. Spring Term only.
Prereq: BUS-322 or by Permission

BUS 446 Cross-Cultural Studies 4 cr **UL**
Study of selected aspects of world business and economics, politics, religion, communication and the exploration of cultural relations across national boundaries. Special focus on the importance of effective cross-cultural relations for global managers and corporations. Locations vary.

BUS 449 Auditing 4 cr **UL**
Study and evaluation of the nature, objectives, scope and theory of the audit process as applied to accounting and internal control

systems. Emphasis and balance placed on standards, ethics, current developments and legal requirements as well as special topics including statistical sampling and audit of electronic data processing systems.
Prereq: BUS-322 and Senior Standing

BUS 480 International Business Law 2-4 cr **UL**
This seminar course is an overview of the international legal business environment, including overviews of common and code law systems and their impact on the conduct of international business. Subjects include contract interpretation, world legal agreements and bodies, and treaty agreements. The course will also explore business ethics, extraterritorial reach of US and European law, and regulatory aspects of international law impacting mergers, acquisitions, and joint ventures. Students will engage in discussion about current and past international transactions, ethical conundrums confronted in the conduct of international business, and the intersection of a myriad of national laws with the conduct of business across major jurisdictions.
Prereq: Junior or Senior Standing

BUS 499 Business Admin. Independent Study 1-4 cr **UL**
Requires instructor permission.

BUS 500 Senior Thesis 4 cr **UL**
Student must have a GPA of 3.5 or better calculated on all BUS courses taken.
Prereq: Senior Standing and Permission

Chemistry (CHM)

Major Requirements

Thirty-six credits which must include:

1. Core Courses (28 cr): CHM-115, 223, 224, 230, 320, 331, and 332
2. Select Area of Concentration:
 - Chemistry: eight credits from CHM-251, 300 or 400 level courses, BCM-321 or 422. At least four credits must be at or above the 300 level.
 - American Chemical Society Certified Degree: CHM-313 and 314; BCM-321; and four credits chosen from CHM-399, 411, 499, or BCM-422.
 - Pre-Medicine: BCM-321 and four credits from 300 or 400 level courses in Chemistry; The American Chemical Society Certified Degree is also available with the pre-medicine concentration.
3. Successful completion of CHM-450

Program Considerations

- Potential majors are advised to schedule MTH-121 and 122 and PHY-121 and 122 (or PHY-112 and 113) in the freshman and sophomore years so they may enroll in CHM-331 and 332 in the junior year.
- Completion of an independent research project normally culminating in a senior thesis is recommended. Students bound for graduate school should make careful course selections to support their particular area of emphasis; participation in research, completion of CHM-313, 314 and 411, MTH-210 and 211 should be considered.
- Experience with calculus based physics (PHY- 121 and 122) is preferred over PHY-112 and 113.
- Students bound for medical school should elect CHM-115 in the fall of the freshman year so that BCM-321 can be completed in advance of taking the MCAT at the end of the Junior year (CHM-115, 223, 224, 230 and BIO-121 are prerequisites to BCM-321).
- To be a competitive medical school applicant, the Chemistry Department strongly recommends students completing a Chemistry major also take genetics and physiology, in addition to considering upper level electives from Biology, Biochemistry or Integrated Physiology and Health Science.

Departmental Honors

Students may achieve honors in Chemistry by:

1. Earning a 3.5 GPA in all chemistry classes.
2. Performing at a superior level in departmental Senior Seminar.
3. Preparing and presenting a senior thesis of honors caliber. See the Department chair for details on how to fulfill the thesis requirements.

Minor requirements

Twenty-four credits which must include: Eight credits numbered 300 or above (BCM-321 and 422 may also be applied toward this minor)

Teaching Major Requirements

Completion of the requirements for the Chemistry major.

Teaching Minor Requirements

Twenty-four credits which must include:

1. CHM-115, 223, 224, 230 and BCM-321
2. Four credits from CHM-320, 331 or 332

American Chemical Society Certified Degree

Completion of CHM-115, 223, 224, 230, 313, 314, 320, 331, 332, 450, BCM-321 and four credits chosen from CHM-399, 411, 499, or BCM-422. Completion of a minimum of 400 hours of laboratory work must be included. Students must consult with the Chemistry chair in their junior year for approval of their program.

Four credits from CHM, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Natural Sciences - Physical Sciences.

CHM 103M Basic Chemical Investigations

NS2 4 cr

Basic chemical phenomena and methodology for non-science majors. Topics center on real-world problems and societal issues with significant chemical content. Laboratory uses modern chemical instrumentation including spectrophotometers. Does not count toward the Chemistry major or minor. DR and academic credit will only be awarded to one of CHM-103 or CHM-115. Spring Term only. Laboratory. Course fee.

Prereq: MTH-100 or Placement

CHM 115 Chemical Analysis

NS2 4 cr

Introduction to the basic principles of chemistry in a context of chemical analysis. Intended for students in the sciences. Includes the periodic table, elements, ionic and covalent compounds, stoichiometry, atomic and molecular structure, spectroscopy, gases, pH and acid-base and oxidation-reduction reactions. DR and academic credit will only be awarded to one of CHM-103 or CHM-115. Laboratory. Course fee.

Prereq: MTH-110 or Placement

CHM 199 Chemistry Independent Study

1-4 cr

Planned program of reading or laboratory experimentation. Course fee.

Prereq: Permission

CHM 223 Organic Chemistry I

NS2 4 cr UL

Study of the chemistry of carbon-containing compounds, emphasizing the various functional groups and their transformations, reaction mechanisms and stereochemistry, and the development of synthetic schemes. Laboratory. Course fee.

Prereq: CHM-115

CHM 224 Organic Chemistry II

NS2 4 cr UL

Study of the chemistry of carbon-containing compounds, emphasizing the various functional groups and their transformations, reaction mechanisms and stereochemistry, and the development of synthetic schemes. Laboratory. Course fee.

Prereq: CHM-115, 223

CHM 230 Inorganic Chemistry

 NS2 4 cr UL

Study of the chemistry of the metals and non-metals emphasizing periodic behavior, elementary thermodynamics, ionic and covalent structures, oxidation and reduction reactions, acid-base chemistry, equilibria, transition metal complexes and reaction kinetics. Laboratory. Course fee.

Prereq: CHM-224 or Permission

CHM 251 Chemistry of Ordinary Things

NS2 4 cr UL

An exploration of the applications of principles of general and organic chemistry of everyday phenomena. Additional topics include an introduction to drug design and aspects of spectroscopy to probe molecular structure. Laboratory. Course fee.

Prereq: CHM-223

CHM 280 Topics in Chemistry

4 cr UL

Chemical topics chosen by the instructor. May be taken more than once for credit. Course fee may apply.

Prereq: CHM-230

CHM 310 Medicinal Chemistry

NS2 2 cr UL

Study of the molecular aspects of drug function leading to an understanding of the basis for rational drug design. Discussion of physical-chemical properties and their effect on biological activity, structure-activity relationships, drug metabolism and receptor theory.

Prereq: CHM-230

CHM 311 Environmental Chemistry

NS2 2 cr UL

Introduction to environmental chemistry, emphasizing the origins, transport, reactions, effects and fates of chemical species in the water, air, soil and living environments.

Prereq: CHM-230

CHM 312 Fragrance and Flavor Chemistry

NS2 2 cr UL

A study of the physiological basis for smell and taste, history of fragrances and flavors, origins and analysis of natural materials and raw materials for and production of synthetic ingredients. The fragrance and flavor industry, marketing and product application will also be discussed. There is no separately assigned lab, however students will be engaged in laboratory exercises. Course fee.

Prereq: CHM-230

CHM 313 Inorganic Structures

NS2 2 cr UL

A survey of inorganic species including symmetry, bonding models and spectroscopy. An overview of the reactions of organometallic compounds will be included.

Prereq: CHM-230

CHM 314 Bioinorganic Chemistry

NS2 2 cr UL

The study of the use of metals by biological species emphasizing inorganic models, reaction types and reaction mechanisms.

Prereq: CHM-230

CHM 320 Instrumental Analysis

 NS2 4 cr UL

Principles and laboratory methods of chemical analysis using instrumentation: chromatography, spectroscopy, Fourier transform infrared and nuclear magnetic resonance spectroscopy, atomic absorbance and ion selective electrodes. Laboratory. Course fee.

Prereq: CHM-230

CHM 331 Chemical Thermodynamics

NS2 4 cr UL

The laws of thermodynamics are applied to chemical mixtures and reactions, and the principles of statistical mechanics are used to derive these laws from the behavior of single molecules. Laboratory. Course fee.

Prereq: CHM-230, MTH-122 and PHY-113 or 122

CHM 332 Quantum Chemistry
NS2 4 cr **UL**
The principles of quantum mechanics are used to describe the structure of atoms and molecules and their spectroscopic properties. The kinetics of chemical reactions are studied and rate laws are derived. Laboratory. Course fee.
Prereq: CHM-230, MTH-122 and PHY-113 or 122

CHM 380 Topics in Chemistry
NS2 1-4 cr **UL**
Chemical topics chosen by the instructor. May be taken more than once for credit.
Prereq: CHM-230

CHM 399 Chemistry Independent Study
1-4 cr **UL**
Laboratory investigation of an original problem. Course fee.
Prereq: Permission

CHM 411M Advanced Organic Chemistry
NS2 4 cr **UL**
An advanced study of spectroscopic and synthetic methods with an emphasis on biologically relevant molecules. This course has an intensive laboratory component that helps prepare students for post-graduate studies or direct employment in the scientific community. Advanced techniques include multi-dimensional NMR, rotary evaporation, chromatography, solid phase synthesis, reactions requiring inert atmospheres and multi-step synthesis. Special emphasis will be placed on developing laboratory procedures from the primary literature. Spring Term only. Laboratory. Course fee.
Prereq: CHM-230 or Permission

CHM 450 Senior Seminar
NS2 1 cr **UL**
Analysis of the literature in a variety of chemical subfields. Culminates in an oral exam evaluating the ability to read and interpret the literature.
Prereq: Senior Standing; BCM or CHM Major

CHM 480 Topics in Chemistry
NS2 1-4 cr **UL**
Chemical topics chosen by the instructor. May be taken more than once for credit.
Prereq: CHM-230

CHM 499 Chemistry Independent Study
1-4 cr **UL**
Laboratory investigation of an original problem. Course fee.
Prereq: Permission

CHM 500 Senior Thesis
NS2 2 cr **UL**
Preparation of a comprehensive thesis and a public presentation on an investigation of an original problem. Required for departmental honors.
Prereq: Six credits in CHM-399 or 499 or taken concurrently

Chinese (CHN)

Chinese courses, as designated by the three-letter prefix CHN, are offered through the Modern Languages Department.

Four credits from CHN 112 or higher, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Humanities.

CHN 111 Beginning Chinese I
4 cr
This introduction to Chinese places emphasis on all four basic skills: speaking, listening, reading and writing. Secondary objective provides insight through participation in Chinese culture and society.

CHN 112 Beginning Chinese II
AH 4 cr
This introduction to Chinese places emphasis on all four basic skills: speaking, listening, reading and writing. Secondary objective provides insight through participation in Chinese culture and society.
Prereq: CHN-111 or Permission

CHN 221 Intermediate Chinese I
AH 4 cr
Second year Chinese; continuing study of the Chinese language; training of listening and speaking skills with additional emphasis on reading and writing within a cultural context.
Prereq: CHN-112 or Permission

CHN 222 Intermediate Chinese II
AH 4 cr
Second year Chinese; continuing study of the Chinese language; training of listening and speaking skills with additional emphasis on reading and writing within a cultural context.
Prereq: CHN-112 or Permission

Cognitive Science (COG)

Minor Requirements

Complete a major in one of the member disciplines (Computer Science, Psychology or Philosophy) or other approved program. Twenty-four credits beyond the major, including:

1. COG-120 and 180.
2. Six to ten additional credits chosen from COG 180, 280, 399, 480 or 499.
3. Remaining credits chosen from PSY 121, 201, 204, 231, 310; ENG 220; CSC 117, 120, 220; or PHL 303, 305, 347. Other courses in the constituent disciplines may be included with approval.

COG 120 Introduction to Cognitive Science
2 cr
Introduces the constituent disciplines of Cognitive Science and explores relationships among these disciplines in the study of the mind. Conducted in classroom and laboratory. Team taught by faculty from at least two of the member disciplines.

COG 180 Topics in Cognitive Science
2-4 cr
Exploration of an area introduced in COG-120. Possible topics: mental images, language of thought, child's theory of mind, scripts, prototypes and schemas, consciousness. Orientation to the relevant literature. May be repeated for credit for distinct topics.
Prereq: COG-120

COG 280 Advanced Topics in Cognitive Science
2-4 cr **UL**
In-depth study of a selected topic in Cognitive Science or a constituent discipline. Possible topics: neural networks, natural language processing, neuroscientific approaches, discourse analysis, philosophy of the mind. May be repeated for credit for distinct topics.
Prereq: COG-120 or 180

COG 399 Cognitive Science Independent Study
1-4 cr **UL**
Requires instructor permission.

COG 480 Topics in Cognitive Science
2-4 cr **UL**
Critical consideration of current research in Cognitive Science or across constituent disciplines. Student papers and projects reflect emphasis on skills in the evaluation, integration and formulation of inquiry within and across disciplines. Team taught by faculty from at least two of the member disciplines. May be repeated for credit for distinct topics.
Prereq: COG-120, 180 and Permission

Requires instructor permission.

Communication (COM)

Major Requirements

Thirty-six credits which must include:

1. Core: COM-101 and 111
2. Context: Twenty credits in COM, 16 of which must be upper-level.
3. Capstone: COM-350, 450, and an internship (385) or applied learning experience approved by the department.

Notes: In addition to the requirements listed above, an ethics course in the Philosophy Department is strongly encouraged. No more than 4 credits of COM-385 may be counted toward the COM major.

Departmental Honors

Completion of all COM major requirements, 3.5 GPA in the major, and completion of a senior thesis of honors caliber (COM-500).

Minor Requirements

Twenty-four credits which must include:

1. COM-101, 111, 450
2. Eight additional credits at the upper level

Four credits from COM, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Humanities.

COM 101 Human Communication

AH 4 cr
Beginning study of the nature, problems and theories of human communication. Examines issues of meaning, relationship and community within interpersonal, group and media contexts. Surveys rhetorical, pragmatic and interpretive perspectives on the communication process.

COM 102 Group and Team Communication

AH 4 cr
This class helps students understand, apply, and embody principles of effective group and team communication. In a semester-long team project, students apply the principles of effective team communication to both teams observed in organizations and to their own teams through ethnographic research methods.

COM 111 Fundamentals of Speech Communication

AH 4 cr
Elements of oral communication in public contexts. Emphasis on diagnosing rhetorical situations, inventing and delivering informative and persuasive presentations, and facilitating public discussion.

COM 123 Performing Advocacy

AH SL 4 cr
Explores the relationships among identity, power and culture. Students learn how to become advocates through the use of Everyday Life Performance and other performance techniques, engaging in perspective taking and service learning with marginalized groups.

COM 192 Introduction to Public Relations

AH 2 cr
Introduction to the principles of public relations and strategic corporate communication practices. Topics include message design, campaign planning, audience analysis, issue management, and case studies of ethical issues.

COM 201 Relational Communication

AH 4 cr **UL**
Examination of messages, roles and strategies through which interpersonal relationships are initiated, maintained and changed. Emphasis on analysis of interaction and communication processes in a variety of interpersonal contexts.

COM 202 Group Communication and Teamwork

AH 2 cr
Uses academic literature, case discussions, illustrative exercises, and group projects to foster the development of skills needed to participate in and lead groups and teams. The course focuses on how to recognize and diagnose group communication difficulties, and to develop strategies for improving teamwork and group performance.

COM 211 Political Communication

AH 4 cr
Explores the influence of political messages and discourse in civic life. Topics include the relationship of free speech and a free press to democracy, historical and contemporary foundations for understanding the social influence of political messages the political uses and effects of traditional and new media, and contemporary challenges to free speech, deliberative public discourse, and participatory democracy.

COM 212 Sports Communication

AH 4 cr
Explores the function of sports communication and its impact on players, organizations, fans and professionals. Issues examined include decision making, crisis communication, gender dynamics, community relations and social media presence.

COM 220 Intercultural Communication

☺ AH 4 cr **UL**
Study of interdependent relationship between communication and culture. Examines conceptual and experiential problems of communication across cultural boundaries. Focuses on perceiving, interpreting, and evaluating different cultural values, world views and patterns of communication. Course fee.

COM 221 Intimacy and Technology

AH 4 cr **UL**
Explore the way communication technologies impact and influence our relational lives. Focus on both old and new media, examining the way specific communication channels shape our romantic, platonic, familial and professional relationships. Through readings, discussion, film and scrutiny of their own technology usage, students will investigate the relationship between intimacy and technology.

COM 223 Humor, Culture and Communication

AH 4 cr **UL**
Explores humor as an important means of communicating cultural messages by considering issues such as power, identity and marginality. Focusing on a variety of media - from stand-up comedy performance to literary parody, this course examines humor as social critique and potentially subversive rhetoric. Through analysis and performance of stand-up comedy, students gain an understanding of the relationship between humor and power, and the importance of this relationship in rhetorical and cultural contexts. Course fee.

COM 227 Argument and Public Advocacy

AH 4 cr **UL**
Investigates the nature and practice of argument in a democratic society. Focuses on speeches, debates, conversations, and other contexts of public argument. Emphasis on the analysis of evidence, reasoning, assumptions, and values in current policy debates.

COM 243 Health Communication

AH 4 cr **UL**
Examines communication practices in health care relationships and organizations. Topics include effective provider-patient interaction, communication relationships in health organizations, rhetorical and media strategies for managing health issues, and the uses of new communication technologies to promote health and manage health information.

COM 253 Environmental Communication

🌿 AH 4 cr **UL**
Examines issues and controversies in conservation, ecology and environmentalism from a communication perspective. Emphasizes critical analysis of the role of mass media and public discourse in

the definition, deliberation and resolution of environmental issues.


COM 281 Topics in Relational Communication
AH 4 cr UL
Exploration of specific topics in relational communication, which may include nonverbal communication, conflict communication, intimacy and technology, family communication, communicating loss and other areas.

COM 282 Topics in Strategic Communication
AH 4 cr UL
In-depth exploration of specific topics in strategic communication, which may include political campaign communication, corporate image management, public policy and advocacy, presidential rhetoric, the rhetoric of social movements, organizational change, non-profit leadership, strategic health campaigns, environmental advocacy, and other areas. May be taken more than once for credit as topics vary.

COM 302 Strategic Organizational Communication
AH 4 cr UL
Study of strategic communication goals, messages, networks, and systems in organizations. Examines internal organizational processes of socialization, coordination, leadership, and change as well as external communication processes of issue management, corporate citizenship, and public relations.
Prereq: COM-202 or 4 credits in COM or Permission

COM 320 Gender and Communication
AH 4 cr UL
Explores the rhetorical construction of gendered identities, focusing on cultural messages about femininity and masculinity in social, political, institutional and relational contexts. Through readings, discussions, films and presentations, the course examines the way gendered identities are created, contested and performed, emphasizing the relevance of this process to our daily lives.
Prereq: Four credits COM and Sophomore Standing, or Permission

COM 327 Propaganda and Persuasion
AH 4 cr UL
Examines the mediated and rhetorical processes of social influence and the elements of propaganda. Emphasis on analysis of institutional persuasive strategies in film, television, print and oral media.


COM 350 Seminar in Communication Inquiry
 AH 4 cr UL
Examination of systematic methodological approaches to the formal analysis of communication processes, messages and problems. Focus on evaluation of research literature and creation of a research proposal. Requires Junior standing.
Prereq: Twelve credits in COM, including COM-101 or Permission; Junior Standing


COM 353 Risk and Crisis Communication
AH 4 cr UL
This course examines the communication practices and resources through which individuals, groups, agencies, media organizations, and communities recognize and respond to natural and socially created risks and crises. Topics include the nature and types of risks and crises, the functional requirements for effective risk and crisis communication, the organizational and procedural elements of risk and crisis communication systems, and the communication skills needed to design and disseminate the verbal, visual, and multi-media messages to reduce risks and manage crises.
Prereq: COM-243 or 253 or Permission

COM 381 Adv Seminar in Relational Com
AH 4 cr UL
Through substantive reading, discussion and presentation, students focus on a particular area of relational communication (topics vary) in order to gain in-depth understanding and become familiar with recent scholarship in that area. Using a seminar format, each student plays a significant role in sharing scholarly findings.

COM 382 Adv Seminar Strategic Commun
AH 4 cr UL
Topics vary. Students engage in advanced reading, lead substantive discussions, and develop research-based presentations to demonstrate in-depth understanding of specific and timely topics and issues in strategic public discourse and advocacy.
Prereq: Junior Standing and 4 upper level credits in COM or Permission

COM 385 Communication Internship
2-4 cr UL
Application of communication concepts and skills through participation in communities, institutions, agencies, schools and businesses. Supervision by faculty and sponsoring organizations. Includes interpretive journal and substantive analytic paper.
Prereq: Twelve credits in COM and Junior Standing or Permission

COM 450 Communication Theory
 AH 4 cr UL
Synthesis, integration and elaboration of theoretical perspectives on communication issues, problems and practices developed through previous coursework, projects and internships. Coursework includes completion of individual senior project and compilation of portfolio.
Prereq: COM Major or Minor; Senior Standing and COM-385 or Permission

COM 500 Senior Thesis
 AH 2-4 cr UL
Development and completion of original research. May be interpretive, critical, empirical, or theoretical. Required for departmental honors. Requires senior standing and permission.

Computer Science (CSC)

Major Requirements

Thirty-six credits which must include:

1. CSC-120, 121, 204, 230, 240 and 310
2. Fourteen additional credits as follows:
 - Eight credits from CSC-410, 420, 430 or 440.
 - Electives may be chosen from any CSC course numbered 114 or above; MTH-336; and COG-120.
3. Cognates: MTH-120, 220 and any additional MTH course numbered 113 or higher (MTH-336 cannot be counted for this requirement and as a CSC elective).
4. The senior comprehensive examination includes three parts: successful completion of the Major Field Test in Computer Science, submission of an approved writing sample and an approved oral presentation.

Note: No more than six credits from CSC-114, 117, and COG-120 may be applied to satisfy major requirements.

Program Considerations

Graduate school bound students are strongly encouraged to take CSC-420, 430, 440, and to minor in mathematics. Many graduate schools expect undergraduate research as part of entering students' background; thus, a senior thesis is also encouraged. Consult carefully with your advisor. Students seeking a technical professional position upon graduation are strongly encouraged to take CSC-410, 420, 430, 440 and MTH-116 and 117; a practicum is recommended.

Minor Requirements

Twenty-four credits which must include:

1. CSC-120 and 121
2. At least eight upper level credits
3. Cognate: MTH-120

Four credits from CSC 120 or higher, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Natural Sciences - Mathematics/Computation.

<p>CSC 100 Computer Systems 2 cr Introduction to the use of modern computer systems. Basics of word-processing, graphics, spreadsheets, Internet access and Web development software. Use of computer peripherals such as printers, scanners and digital cameras. Taught in a laboratory setting.</p>	<p>CSC 240 Algorithms and Complexity NS3 4 cr UL Advanced data structures and algorithms, algorithmic analysis, and an introduction to distributed and parallel algorithms. <i>Prereq: CSC-121 and MTH-220</i></p>
<p>CSC 105 Modern Spreadsheets 2 cr Introduction to the use of modern spreadsheets, with a particular emphasis on business applications. Taught in a laboratory setting. <i>Prereq: MTH-100 or Placement</i></p>	<p>CSC 280 Topics in Computer Science NS3 2-4 cr UL Topical study in computer science. While topics vary, the course usually introduces a particular computer programming language (e.g., C, C++, Prolog, etc.). <i>Prereq: CSC-121 and Permission</i></p>
<p>CSC 117 Image and Reality 4 cr Explores the current reality of artificial intelligence and visions of what it is and will be. Examination of current artificial intelligence systems. Particular emphasis on robotics, with projects involving robot design, creation and programming. Laboratory. <i>Prereq: MTH-100 or Placement</i></p>	<p>CSC 310 Computer Organization NS3 4 cr UL Advanced introduction to assembly languages and structure and organization of digital computers, including addressing schemes, digital representation of data and computer arithmetic. Course fee. <i>Prereq: CSC-121</i></p>
<p>CSC 118 Media Computation 4 cr Introduction to media programming and computation. Exploring computer programming for manipulating images, sounds, movies, e-text, and other digital media. Skills and knowledge will involve problem-solving, data representation, and programming principles including recursion, user-interaction, and object-oriented design. Introduction to computer science hardware and software fundamentals. CSC-118 and 120 may not both be taken for credit in the major. Laboratory. <i>Prereq: MTH-100 or Placement</i></p>	<p>CSC 335 Computer Graphics NS3 4 cr UL Introduction to techniques of computer graphics including three-dimensional representations, perspective, computer animation, computer art and applications of computer graphics to various other disciplines. <i>Prereq: CSC-121 and MTH-220</i></p>
<p>CSC 120 Object-Oriented Programming I NS3 4 cr Fundamentals of object-oriented programming in the language of instruction (e.g., Java). Topics include: basic computation, input and output, control structures, classes and object instantiation, methods and parameter passing, arrays and strings, sorting and searching. Laboratory. <i>Prereq: MTH-100 or placement</i></p>	<p>CSC 345 Artificial Intelligence NS3 4 cr UL Survey of major topics in artificial intelligence. Emphasis on fundamental concepts: search, knowledge representation, problem solving and logic. Additional topics such as expert systems, learning, natural language processing, neural networks, planning, theorem proving and vision. Programming in an AI language. <i>Prereq: CSC-121</i></p>
<p>CSC 121 Object-Oriented Programming II Techniques NS3 4 cr Focuses on object-oriented design, encapsulation and inheritance. Programming topics such as recursion and event-driven programming. Basic data structures such as a stacks, queues and linked lists. <i>Prereq: CSC-120</i></p>	<p>CSC 380 Topics in Game Development NS3 2-4 cr UL Course for students of computer graphics to explore applications in computer game programming. The course will use student-designed projects to explore advanced programming via digital graphics, audio, and user-interface design. Students will be encouraged to use modern game engines and to target mobile devices. <i>Prereq: CSC-335 or Permission</i></p>
<p>CSC 204 Social and Ethical Issues NS3 2 cr Studies social and moral problems arising from the use of computing technologies, with a particular focus on the Internet. Topics such as free speech, privacy, communications interception, encryption, intellectual property, liability for software and hardware malfunction, and for information content. <i>Prereq: Any CSC course or Permission</i></p>	<p>CSC 399 Computer Science Independent Study 1-4 cr UL Requires instructor permission.</p>
<p>CSC 230 Software Engineering NS3 4 cr UL Software development: requirements, specification, modern design techniques, program testing methods, software metrics as used in quality evaluation, and project management. <i>Prereq: CSC-121</i></p>	<p>CSC 410 Database Management NS3 4 cr UL In-depth study of techniques for storing, selecting and retrieving data. Topics selected from file and database organization, safety and recovery, privacy, security and commercial systems. <i>Prereq: CSC-230</i></p>
<p>CSC 235M Computer Game Design NS3 4 cr UL Explores the process by which computer games go from conception through formal design to implementation and testing. Uses coursework and team projects to cover aspects of the design process including brainstorming and narrative development, game programming, art and sound design, and marketing. <i>Prereq: CSC-121 or permission</i></p>	<p>CSC 420 Operating Systems NS3 4 cr UL Survey of major concepts of operating systems. Investigation of relationships among the operating system, the architecture and the systems programs of a computer system. <i>Prereq: CSC-310</i></p>
	<p>CSC 430 Theory of Computing NS3 4 cr UL In-depth study of the main components of the theory of computation: finite automata and computability. <i>Prereq: CSC-240</i></p>
	<p>CSC 440 Compiler Design NS3 4 cr UL In-depth study of the principles of computer language processor design. Includes lexical analysis, syntactic analysis, semantic analysis, object code generation and error detection. <i>Prereq: CSC-310</i></p>

CSC 499 Computer Science Independent Study 1-4 cr UL
Requires instructor permission.

CSC 500 Senior Thesis 1-4 cr UL
NS3
Requires instructor permission.

Dance (DAN)

Dance courses, as designated by the three-letter prefix DAN, are offered through the Theatre and Dance Department. Dance courses were offered under the prefix THD through the 2016-17 academic year.

Dance Major Requirements

Thirty-six credits which must include:

1. Eight credits of Dance Studio Technique choosing from: DAN-139, 140, 144, 145, 160, 210, 240, 244, 245, 340, and 344 (any of which may be repeated for credit but which must include at least ONE ballet course and ONE modern course);
2. 16 credits of Dance Theory: DAN-191, 220, 347, and 351;
3. DAN-201 Choreography I;
4. Either the senior capstone (DAN-495) or the honors thesis (DAN-500);
5. Six credits of selected THE or DAN electives.

All majors are required to take the departmental comprehensive examination at the end of the winter term of the senior year. This exam is administered on campus by the department.

Dance Minor Requirements

Twenty-four credits which must include:

1. Six credits of Dance Technique choosing from DAN-139, 140, 144, 145, 160, 210, 240, 244, 245, 340, 344 (any of which may be repeated for credit but must include at least ONE ballet course and ONE modern course);
2. Eight credits of Dance Theory: DAN-191, 220, 347, and 351;
3. Four credits of Choreography I: DAN-201;
4. Six credits of selected THE or DAN electives.

Students bound for graduate school or the dance-teaching profession should choose courses to support their area of emphasis. Participation in research and additional coursework in choreography, pedagogy, theatre, music, business, physiology and anatomy are

In total, only 4 credits from THE and DAN may count toward the Distributive Requirements in the Arts and Humanities; practicum and independent study courses do not count.

DAN 139 Somatic Movement 2 cr
AH
Introduction to Somatic Methods; e.g. Alexander Technique, Ideokinesis, Bartenieff, and Feldenkrais.

DAN 140 Modern Dance I Beginning 1 cr
AH
Development of modern dance as a performing art. Movement exploration exercises and beginning techniques of modern dance. May be repeated for credit.

DAN 141 Social Dance 1 cr
AH
Application of basic steps and variations of the cha cha, Charleston, jitterbug, polka and waltz.

DAN 142 Tap Dance I Begin 1 cr
AH
Elementary exploration of rhythms and steps basic to the art form of tap dancing. Study of terminology and technique. Beginning tap routines with elementary progressions. May be repeated for credit.

DAN 143 Yoga I 1 cr
AH
Yoga complements the dancer as well as the human being in many ways, particularly in the physical realm. Slow stretching and breathing increase flexibility and awareness, and restore tone and vitality. May be repeated for credit.

DAN 144 Ballet I Beginning 1 cr
AH
Development of ballet as a performing art. Build strength and develop body carriage/posture and learn basic techniques of ballet. May be repeated for credit.

DAN 145 Jazz Dance I Beginning 1 cr
AH
Development of jazz dance as a performing art. Principles of basic jazz dance. May be repeated for credit.

DAN 146 Dance in the Humanities 4 cr
AH
Investigation of dance as an art form. Involves movement awareness, improvisation, exploratory exercises and movement games designed to build trust. Collaboration with class members to create a performance atmosphere is an integral part of the course. Students design environments dealing with the theatrical aspect of dance.

DAN 148 Highland Dance I 1 cr
AH
Introduction to basic movements, steps and terminology of Highland Dance. Emphasis on fundamentals of footwork and introduction to history and cultural background of Scottish dances. May be repeated for credit.

DAN 149 Pointe I Beginning 1 cr
AH
Development of classical ballet skill techniques en pointe. Principles of beginning pointe technique are displayed and discussed. May be repeated for credit.
Prereq: DAN-144 or Permission

DAN 151 AC Dance Company 1 cr
AH
Participation in dance concerts throughout the term. Opportunities for choreography, performance and organizational planning. May be repeated for credit. Final registration subject to audition.

DAN 160 Afro-Brazilian Dances 1 cr
Ⓜ AH
Studio course that introduces vocabulary, history, and cultural aspects of Afro-Brazilian dance.

DAN 180 Topics in Dance 4 cr
AH
Special topics and projects selected by instructor in dance. Background prerequisites vary with selections.

DAN 191 Dance Professions 4 cr
AH
Survey on dance professions, including dance related careers, and guest speakers.

DAN 201 Choreography I 4 cr
AH
Analysis of choreographic styles. Principles of various choreographers examined and experienced. Development of individual skills for choreographing.

DAN 210 Dance Improvisation 1 cr
AH
Dance Improv introduces students to new ways to move and craft dances through imposed structures.

DAN 220 Dance Pedagogy 4 cr
AH
This course examines practical, pedagogical, and philosophical approaches to teaching dance in different settings, including schools (K-12), recreation, and professional dance training.

Through readings, discussions, lectures, individual and group assignments, students will develop and apply lesson plans based on practical and reflexive skills. The content of this course includes the NDEO (National Dance Education Organization) and MAEIA (Michigan Arts Education Instruction and Assessment) standards. Different genres of dance may be included depending on the specialties of participants.

Prereq: 4 credits from DAN Sophomore Standing

DAN 240 Modern Dance II Intermediate 1 cr
 AH
 Continuation of Modern Dance I. Emphasis on movement patterns and development of body alignment. May be repeated for credit.
Prereq: DAN-140 or permission

DAN 242 Tap Dance II Intermediate 1 cr
 AH
 Continued exploration into rhythms and steps basic to the art form of tap dancing. Study of terminology and technique. Intermediate tap routines with intermediate progressions. May be repeated for credit.
Prereq: DAN-142 or Permission

DAN 243 Yoga II 1 cr
 AH
 Yoga complements the dancer as well as the human being in many ways, particularly in the physical realm. Slow stretching and breathing increase flexibility and awareness, and restore tone and vitality. May be repeated for credit.
Prereq: DAN-143 or Permission

DAN 244 Ballet II Intermediate 1 cr
 AH
 Continuation of Ballet I. Development of ballet combinations and concentration on body alignment. May be repeated for credit.
Prereq: Permission

DAN 245 Jazz Dance II Intermediate 1 cr
 AH
 Continuation of Jazz Dance I with emphasis on rhythmic patterns, intermediate steps and body isolations. May be repeated for credit.
Prereq: DAN-145 or Permission

DAN 248 Highland Dance II 1 cr
 AH
 Continuation of Highland Dance I. Technical accuracy, style and conditioning stressed. Emphasis on performance preparation. May be repeated for credit.
Prereq: DAN-148 or Permission

DAN 280 Topics in Dance 4 cr
 AH
 Special topics and projects selected by instructor in dance. Background prerequisites vary with selections.

DAN 295 Dance for the Camera 2-4 cr
 AH
 The course covers history, theories, and filmmaking for choreography and dancing in film.

DAN 296 Dance and Communities 2 cr
 AH
 The course will teach students about how to create dance projects that engage communities.

DAN 299 Dance Independent Study 1-4 cr UL
 Supervised reading, research or projects in dance.

DAN 301 Choreography II 4 cr UL
 AH
 Further investigation of the analysis of choreographic styles. Continued development of individual skills for choreographing.
Prereq: DAN-201 or Permission

DAN 310 Dance and Digital Technology 2 cr
 AH
 The course covers history, theories, and application of digital technologies to live dance.

DAN 340 Modern Dance III Advanced 1 cr UL
 AH
 Continuation of Modern Dance II. Emphasis on refinement of performance techniques, style and improvisation. May be repeated for credit.
Prereq: DAN-240 or Permission

DAN 344 Ballet III Advanced 1 cr UL
 AH
 Continuation of Ballet II. Emphasis on further development of style and technique. May be repeated for credit.
Prereq: Permission

DAN 346M Dance/Theatre Trip 4 cr UL
 AH
 In-depth investigation and exploration of various dance and theatre forms. Opportunities to witness professional dance companies and theatre companies, attending performances and touring backstage. Historical backgrounds and current trends in dance and theatre examined. Journal, critiques and final paper. Trips have included London, New York, and Toronto. Spring Term only.
Prereq: Permission

DAN 347 Dance Criticism 4 cr UL
 AH
 Introduction to the history of dance criticism as well as philosophies of early dance critics. Review dance films, video tape recordings and actual performances and evaluate each in the various critical styles. Investigate the structure and function of historical, recreative and judicial criticism, and review dance critics of today and their influence upon the dance world.
Prereq: DAN 351

DAN 351 Dance History 4 cr UL
 AH
 Survey of culture, styles and methods of dance from the Baroque period to the Modern period. Ethnic, concert and interpretative forms. Emphasis on the theatrical ballet and 20th century contemporary dance.

DAN 380 Topics in Dance 4 cr UL
 AH
 Special topics and projects selected by instructor. Background prerequisites vary with selections.

DAN 380M Topics in Dance 4 cr UL
 AH
 Special topics and projects selected by instructor. Background prerequisites vary with selections.

DAN 385 Dance Practicum 4 cr UL
 Study-work participation in community institutions, schools or professional organizations combined with faculty supervision. Practical experience in teaching, directing or performance of dance. Culminates in written report. Also offered as DAN 386.
Prereq: Permission

DAN 399 Dance Independent Study 1-4 cr UL
 Supervised reading, research or projects in dance.

DAN 480 Topics in Dance 1 cr UL
 AH
 Special topics and projects selected by instructor in dance. Background prerequisites vary with selections.

DAN 499 Dance Independent Study 1-4 cr UL
 Supervised reading, research or projects in dance.

Students with honors in Theatre and Dance must complete a Senior Thesis, approved and directed by the Department.

Economics (ECN)

Major Requirements

Thirty-six credits which must include:

1. Eight credits from ECN-111, 112, 122, or other approved 100-level course
2. ECN-217, 311, 312, and 317
3. Twelve credits of ECN at or above the 300-level
4. Successful completion of ECN-500 or a minimum score of 150 on the Major Field Achievement Test in Economics is required for the Department's comprehensive evaluation. Students should schedule the MFAT for the Fall Term of their senior year. Students who fail the Fall MFAT will retake it in the Winter Term. Students who fail a second time will be given an oral comprehensive evaluation.
5. All 36 credits that count toward the major must be taken for letter grade. Economics courses may be taken for S/F credit but only above and beyond the 36 credits taken for letter grade for the major.
6. Prior approval is required for all transfer credit for any 300-level or above ECN coursework.

- The Department recommends that students supplement the major with courses from other areas, including (but not limited to) Business Administration, Computer Science, Mathematics, Philosophy, Political Science, and Psychology. Students interested in Economics graduate work are strongly encouraged to take at least a year of calculus or other advanced Mathematics classes. Computer Science classes are also useful as preparation for Economics graduate work.

Minor Requirements

Twenty-four credits which must include:

1. Eight credits from ECN-111, 112, 122, or other approved 100-level course
2. Sixteen additional credits of ECN coursework (which may not be taken for S/F credit)

Departmental Honors

Honors candidates must have a minimum overall 3.3 GPA and a 3.5 GPA in the Economics Department, complete ECN-500 and present that work in some forum, either internal or external.

Four credits from ECN, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Social Sciences.

ECN 111 Principles of Macroeconomics

SO 4 cr
Introductory survey of macroeconomic theory and national policy. Supply and demand analysis and solutions to basic economic problem of scarcity in the American economy. Examines relationship between national income and its determinants with emphasis on role of fiscal and monetary policies in stabilizing national economic performance. (Formerly offered as ECN-201).

ECN 112 Principles of Microeconomics

SO 4 cr
Introductory survey of microeconomic theory. Principles of consumer demand; production, exchange and distribution in capitalist economies; labor and resource markets; international trade and exchange rate theory and policy.

ECN 122 Introduction to Game Theory

SO 4 cr
An introduction to the study of game theory as it applies to economics and other disciplines, including political science, psychology, philosophy, and evolutionary biology. This class focuses on its numerous practical uses, such as formulating business strategy, designing online auctions, and waging war. (Formerly offered as ECN-202).

ECN 122M Introduction to Game Theory

SO 4 cr
An introduction to the study of game theory as it applies to economics and other disciplines, including political science, psychology, philosophy, and evolutionary biology. This class focuses on its numerous practical uses, such as formulating business strategy, designing online auctions, and waging war.

ECN 180 Readings in Economics

SO 1-4 cr
Selected introductory topics in Economics announced in advance. May be taken more than once for credit if topics are different.

ECN 180M Applied Computational Methods

SO 4 cr
Selected topics in Economics.

ECN 217 Quantitative Methods

SO 4 cr
An introduction to a variety of the quantitative methods used in the social sciences. Students will learn the basic probability and research design theory necessary for understanding and applying quantitative methods in social sciences. Students will replicate data analyses and conduct their own with real world data. Students will learn to use statistical software, like R. Prerequisite for ECN 317.

Prereq: One math class at MTH-110 level or higher, or Permission

ECN 311 Intermediate Macroeconomics I

SO 4 cr UL
Models of national income determination. The monetary system and the relationship between money and financial markets. Monetary theory and policy. Explanations of inflation and unemployment. Business cycles and economic growth theory.
Prereq: ECN-100 level course or permission

ECN 312 Intermediate Microeconomics

SO 4 cr UL
Price mechanism and elasticity concepts. Theories of consumer behavior and producer behavior. Pricing in product and resource markets. General equilibrium theory.
Prereq: ECN-100 level or permission

ECN 314 Behavioral Economics

SO 4 cr UL
Study of economic decision-making from based on modified neo-classical assumptions. Students will explore selected themes from psychology, sociology, and neuroscience. We will also investigate the relevance of behavioral economics to the formation of good public policy. Students will engage with the material through a combination of lectures, discussion, experiments, and research projects.
Prereq: ECN-100 level or permission

ECN 317 Econometrics

SO 4 cr UL
Survey of standard forecasting techniques in business and economics. Introduces the use of econometric models with emphasis on multiple regression, simulation modeling and time-series analysis. Special attention to applying forecasting techniques to real-world data.
Prereq: ECN-100 level and ECN-217, or permission

ECN 318 Mathematical Economics

SO 4 cr UL
Formal application of mathematical tools to micro- and macroeconomic analysis; algebra, sets, matrix algebra, differential and integral calculus, ordinary and partial differential equations, and finite difference equations.
Prereq: ECN-111 and 112; MTH-113 or 121

ECN 320 Money and Capital Markets
SO 4 cr UL
Analysis of money and capital market instruments and financial market interrelationships. Investigates role of financial intermediaries as both suppliers and users of credit. Emphasizes influences of monetary policy and regulations on functioning of U.S. and world credit markets.
Prereq: ECN-100 level or Permission.

ECN 322M Game Theory
SO 4 cr UL
Advanced study of game theory as it applies to economics and other disciplines. This class focuses on its numerous practical uses, such as formulating business strategy, designing online auctions, and waging war. ECN 322 students will conduct a topical lecture as part of their final grade. Students who have completed ECN 122 may not take ECN 322 for credit.
Prereq: ECN-100 level or permission

ECN 326 Economic Development
SO 4 cr UL
Seeks to answer the question why some countries are rich and other countries poor. The role of the economist in development will be examined.
Prereq: ECN-100 level or permission

ECN 331 International Trade
SO 4 cr UL
Examines the exchange across international borders of goods, services and factors, and the impacts of this trade on domestic and global economies both in theory and practice. Theories of trade are compared and contrasted to both empirical studies and histories of trade. Topics include free trade, commercial policy, barriers to trade, foreign investment, imperialism and political economy of trade.
Prereq: ECN-100 level or permission

ECN 332 International Finance
SO 4 cr UL
Examine the principles and practical aspects of international finance. Theories of exchange rate determination are compared and contrasted. Topics include, but are not limited to: comparative advantage, arbitrage, international macroeconomics, foreign exchange issues, global money and capital markets, exchange rate forecasting and interest rate swaps.
Prereq: ECN-100 level or permission

ECN 340 Environmental Economics
SO 4 cr UL
Survey of both theories and practices of the economics of natural resources and the environment. Topics include: notions of value and property, externalities, renewable and nonrenewable resources, willingness-to-pay arguments, cost-benefit analysis, natural resource policy, hazardous waste, environmental policy, sustainable development, and environmental racism and classism.
Prereq: ECN-100 level or permission

ECN 345 Labor Economics
SO 4 cr UL
Survey the field of labor economics. Topics include the theory of allocation of time, life cycle theory, labor supply, theory of the firm, labor demand, wage determination, human capital theory, occupational wage differentials, and theories of labor market discrimination.
Prereq: ECN-100 level or permission

ECN 380 Topics in Economics
SO 4 cr UL
Selected topics in economics announced in advance. May be taken more than once for credit if topics are different.
Prereq: ECN-111 or 112

ECN 385 Economics Practicum
SO 4 cr UL
Requires Junior standing or permission.

ECN 499 Economics Independent Study 4 cr UL
Under supervision, student formulates project topic, conducts research and prepares a properly documented paper presenting conclusions and support. Requires instructor permission.

ECN 500 Senior Thesis 4 cr UL
SO
Requires instructor permission.

Education (EDC)

The Michigan State Board of Education certifies all teachers. Alma College is authorized to recommend to the State Board those students who have completed a bachelor's degree, passed state required Subject Area Tests in teaching majors and minors, and successfully fulfilled all requirements of the Teacher Education Program. The Education Department offers majors leading to elementary or secondary certification. The Department also offers a *non-certification* Educational Studies Major and Minor. **Certification requirements are subject to change by action of the State Board of Education and may not be reflected in this catalog.**

Teaching Major and Minor Requirements: Requirements for Teaching Majors and Minors are in the subject area department listings. Requirements for group majors or minors are listed in the Education Department listing and students should consult with the Education Department Chair about requirements. Majors and minors not listed here are not approved for certification. (*These requirements are subject to change and reflect compliance with the standards and rules established by the Michigan State Board of Education.*)

Graduation Requirements: Students who are in the elementary or secondary Teacher Education Certification Program shall only be deemed as **satisfying graduation requirements when all required education courses for certification are complete.**

Alma students may seek either secondary or elementary certification. For certification purposes, students are responsible for completing teaching majors and minors, including secondary or elementary majors, as described at the time of declaration of that major/minor.

SECONDARY EDUCATION MAJOR REQUIREMENTS

The Secondary Education Major may only be completed with another valid Alma College teaching major. Some certification endorsement areas require an additional teaching major. All teacher candidates are strongly encouraged to complete at least one additional subject area for certification.

The Secondary Education Major consists of 36 credits of a required Professional Sequence of Education courses:

1. EDC-130 (2 cr) with 103 (1 cr).
2. EDC-230 (3 cr) with 203 (1 cr); EDC 240 (4 cr).
3. EDC-311 (1 cr); 312 (1 cr); 303 (1 cr); EDC-346 (4 cr); 370 (2 cr); 373 (3 cr) (except for Special Education major).
Prerequisites include Admission to the Teacher Education Program.
4. EDC-430S (3 cr) with 490S and 491S (10 cr). *Prerequisites include successful completion of all other courses of Secondary Education Major and Admission to Student Teaching.*

Michigan Secondary Standard Certification Requirements

This certificate allows teaching in grades 6-12 in subjects in which the candidate has a teaching major, minor or additional endorsement. To be recommended for certification, the candidate must complete the following:

1. The Secondary Education Major, *requirements listed above*, with a 2.5 GPA and no Education course may be taken Pass/Fail, except for 1 credit placement classes, or be graded below a 2.0 (C).
2. A Teaching Major with a 2.75 GPA. Additional endorsement areas for certification must also be met with a 2.75 GPA.
3. An overall cumulative GPA of 2.75.

- Students must also pass the appropriate MTTC subject area test in their subject area major. To be recommended for certification in an additional endorsement area, candidates must also pass the appropriate MTTC subject area test in that subject. For initial certification, MTTC subject-area passing scores will remain valid for five years.
- Students must provide proof of valid CPR and First Aid cards as required by the Michigan Department of Education.

Secondary Teaching Endorsements (Majors and Minors)

Alma College offers the following teaching majors and/or minors for students seeking secondary certification:

- Biology (major or minor)
- Business, Management, Marketing and Technology (major only)
- Chemistry (major or minor)
- English (major or minor)
- History (major only)
- Mathematics (major or minor)
- Music (K-12 comprehensive major only)
- Physical Education (major only; see EDC department)
- Physics (major or minor)
- Social Studies (additional endorsement, group major, must also complete History major; see EDC Department for advising)
- Spanish (major)
- Special Education - Learning Disabilities (K-12 major only)

Social Studies Additional Endorsement (Group Major - Secondary)

All Secondary Teaching students who wish to add a Social Studies Endorsement must also complete a major in History. Students MUST see the Education Department for advising on this major.

Forty-eight credits which must include:

- ECN-111 (4 cr) and 112 (4 cr)
- GGR-101 (2 cr), 102 (2 cr), and 201 (4 cr)
- POL-101 (4 cr) and 121 (4 cr)
- HST-100 (4 cr), 101 (4 cr), 104 (4 cr), 105 (4 cr), and 206 (4 cr) (students may double count up to two of the above HST courses for the HST teaching major and the SST group teaching major)
- EDC-445S (4 cr)
- For certification, take and pass the MTTC Social Studies test.

No course graded below 2.0 (C) may count toward a Social Studies Group Major; a 2.75 GPA is required.

Special Education - Learning Disabilities Endorsement (K-12 Major only) (Secondary or Elementary)

Thirty-six credits which must include:

- EDC-150 (2 cr) with 105 (1 cr)
- EDC-250 (3 cr) with 205 (1 cr)
- EDC-255 (4 cr), 350 (4 cr), 355 (4 cr)
- EDC-450 (3 cr) with 405 (1 cr)
- EDC-453 (4 cr) and EDC-455 (3 cr) with 495 (6 cr)
- For certification, take and pass the MTTC Special Education - Learning Disabilities test.

No course graded below 2.0 (C) may count toward a Special Education - Learning Disabilities K-12 Major; a 2.75 GPA is required.

Special Education majors do not take EDC-373. It is possible for secondary majors to complete the Special Education major without an additional teaching major / minor; however, it is not recommended.

Additional Requirements

In addition to completing appropriate coursework in the Education Department and in the teaching major, students must meet Alma College graduation requirements and demonstrate personal characteristics suitable for entering the teaching profession.

ELEMENTARY EDUCATION MAJOR REQUIREMENTS

The Michigan Department of Education (MDE) has approved two program options for elementary education at Alma College. To be recommended, the candidate must complete 60 credits of EDC courses, consisting of 36 credits of professional sequence courses and 24 credits of Elementary Education Content and Pedagogy courses.

- Professional Sequence (36 cr)
 - EDC-100 (2 cr), 120 (2 cr)
 - EDC-203 (1 cr) with 230 (3 cr); EDC-240 (4 cr)
 - EDC-301 (1 cr) with 311 (1 cr)
 - EDC-302 (1 cr) with 312 (1 cr)
 - EDC-370 (2 cr), 373 (3 cr), (except for Special Education major), 400 (2 cr)
 - EDC-430E (3 cr) with 490E/491E (10 cr)
- Elementary Education Content and Pedagogy (24 cr)
 - EDC-160 (4 cr); 262 (4 cr)
 - EDC-360 (3 cr) with 362 (3 cr)
 - EDC-361 (3 cr) with 363 (3 cr)
 - EDC-460 (4 cr)

Michigan Elementary Standard Certification Requirements

This certificate permits teaching in grades K-5 all subjects and K-8 self-contained classrooms, and, if desired, 6-8 in a content area minor or major.

Elementary Education majors may complete certification requirements for Option 1: Core Subject **OR** Option 2: Comprehensive Major.

Students may elect to add an endorsement from either Option in addition to completing Option 1 or Option 2.

ELEMENTARY OPTION 1: Core Subject must include *all* of the following:

- Elementary Education Major - 60 credits of required EDC courses including 36 credits of Professional Sequence courses and 24 credits of Elementary Education Content and Pedagogy courses (see above). *A 2.5 GPA is required for the Elementary Education certification major and no course for certification may be taken Pass/Fail, except for 1 credit placement classes, or be graded below a 2.0 (C).*
- Either a Teaching Major or two Teaching Minors selected from the following:
 - Social Studies Group Major.
 - Integrated Science Group Major or Group Minor.
 - Language Arts Group Major or Group Minor.
 - Elementary Mathematics Major or Minor

A 2.5 GPA is required for each certification major and/or minor and no course required for certification may be taken Pass/Fail or be graded below a 2.0 (C).
- As Cognates, a Planned Program of Elementary Education Content courses which must include the following:
 - MTH-202 (4 cr)
 - HUM-110 (4 cr)
 - HST-104, 121 or 254 (American History, 4 cr)
 - IPH-271A (2 cr)
 - BIO-101 (4 cr)
 - HST-206 (4 cr)
 - ENG-225 (4 cr)
 - PSC-101 (4 cr) (Note: Integrated Science majors/minors take other required courses)

No cognate course required for certification may be taken Pass/Fail or be graded below a 2.0 (C).

No cognate course required for certification may be taken Pass/Fail or be graded below a 2.0 (C).

- An overall GPA of 2.75 is required for Alma College to recommend a student for certification.
- The MTTC Test in Elementary Education (passing score required for certification). **Note:** Elementary candidates must pass State tests in their Specialty Area Endorsement (major or minor) to be certified in these areas. For initial certification, MTTC subject-area passing scores will remain valid for five years.
- Students must provide proof of valid CPR and First Aid cards as required by the Michigan Department of Education for certification.

Language Arts Major (Elementary only)

Forty credits which must include:

- ENG-120 (4 cr), 190 (4 cr), 225 (4 cr); EDC-160 (4 cr); four credits of any 300-level literature course
- Four credits in Literature from: ENG-250 (4 cr), 251 (4 cr), 260 (4 cr), 261 (4 cr)
- Eight credits in Writing from: ENG-201 (4 cr), 202 (4 cr), 210 (4 cr), 220 (4 cr), 270 (4 cr), 291 (4 cr), 293 (4 cr)
- Four credits in Communication Arts from: COM-101 (4 cr), 111 (4 cr); NMS-201 (4 cr)
- Four credits in Multicultural and Interpersonal perspectives from: COM-123 (4 cr), 220 (4 cr), 201 (4 cr); ENG-240 (4 cr), 241 (4 cr), 367 (4 cr), 368 (4 cr), 381 (4 cr)

6. For certification, take and pass the MTTC Language Arts test.

Language Arts Minor (Elementary only)

Twenty-eight credits which must include:

1. ENG-120 (4 cr); 225 (4 cr); and COM 220 (4 cr)
2. ENG-250 (4 cr), 251 (4 cr), 260 (4 cr) or 261 (4 cr)
3. ENG-201 (4 cr), 210 (4 cr), or another writing class approved by the English Department
4. COM-101 (4 cr), 111 (4 cr), 123 (4 cr), or 227 (4 cr)
5. EDC-160 (4 cr)
6. For certification, take and pass the MTTC Language Arts test.

Integrated Science Group Major (Elementary only)

Forty credits which must include:

1. BIO-101 (4 cr) and 121 (4 cr); CHM-103 (4 cr); PHY-112 (4 cr); ENV-105 (4 cr) and 110 (4 cr); GEO-113 (4 cr); PSC-380 (4 cr).
2. Two elective classes from: ENV-380 (4 cr); GEO-101 (4 cr), PHY-101 (4 cr) or 113 (4 cr), BIO-309 (4 cr), only one 399 (4 cr) Independent Study allowed from one of the following departments: ENV, GEO, CHM, BIO, BCM, IPH, CSC; or other four-credit class approved by the Education Department.
3. For certification, take and pass the MTTC Integrated Science test.

Integrated Science Group Minor (Elementary only)

Twenty-eight credits which must include:

1. BIO-101 (4 cr) and 121 (4 cr); CHM-103 (4 cr); ENV-110 (4 cr); GEO-113 (4 cr); PSC-380 (4 cr)
2. One elective class from ENV-105 (4 cr), GEO-101 (4 cr) or other four-credit class approved by the Education Department.
3. For certification, take and pass the MTTC Integrated Science test.

Social Studies Group Major (Elementary only)

Forty-four credits which must include:

1. ECN-111 (4 cr) and 112 (4 cr)
2. POL-101 (4 cr) and 121 (4 cr)
3. GGR -101 (2 cr), 102 (2 cr), and 201 (4 cr)
4. HST-100 (4 cr), 101 (4 cr), 104 (4 cr), 105 (4 cr), and 206 (4 cr)
5. For certification, take and pass the MTTC Social Studies test.

Mathematics Major (Elementary)

See MTH Department course listings.

Mathematics Minor (Elementary)

See MTH Department course listings.

Additional Requirements

In addition to completing appropriate coursework in the Education Department and in the majors and minors, students must meet Alma College graduation requirements and demonstrate personal characteristics suitable for entering the teaching profession.

ELEMENTARY OPTION 2: Comprehensive Major must include *all* of the following:

1. Elementary Education Major - 60 credits of required EDC courses including: 36 credits of Professional Sequence courses and 24 credits of Elementary Education Content and Pedagogy courses (see above). *A 2.5 GPA is required for the Elementary Education certification major and no course for certification may be taken Pass/Fail, except for 1 credit placement classes, or be graded below a 2.0 (C).*
2. Either a Teaching Major in Spanish (36 cr), or a Minor in Early Childhood (ZS) (24 cr), or a K-12 major in Special Education - Learning Disabilities (36 cr). *No course for certification may be taken Pass/Fail, except for 1 credit placement classes, or be graded below a 2.0 (C). A 2.5 GPA is required for each certification major and/or minor, except the K-12 Special Education - Learning Disabilities major, which requires a 2.75 GPA.*
3. As Cognates, a Comprehensive Program of 30 credits of required Elementary Education Content courses which must include the following:
No course required for certification may be taken Pass/Fail

or be graded below a 2.0 (C).

- BIO-101 (4 cr)
 - PSC-101 (4 cr)
 - MTH-202 (4 cr)
 - HST-104, 121 or 254 (4 cr)
 - HST-206 (4 cr)
 - HUM-110 (4 cr)
 - IPH-271A (2 cr)
 - ENG-225 (4 cr)
4. An overall GPA of 2.75 is required for Alma College to recommend a student for certification.?
 5. The MTTC Test in Elementary Education (passing score required for certification). **Note:** Elementary candidates must pass State tests in their Specialty Area Endorsement (major or minor) to be certified in these areas. For initial certification, MTTC subject-area passing scores will remain valid for five years.
 6. Students must provide proof of valid CPR and First Aid cards as required by the Michigan Department of Education for certification.

Early Childhood - General and Special Education Minor (ZS) (Elementary only)

Twenty-four credits which must include:

1. EDC-183 (4 cr)
2. EDC-281 (4 cr)
3. EDC-282 (2 cr)
4. EDC-283 (1 cr)
5. EDC-383 (4 cr)
6. EDC-493 (5 cr)
7. SOC-220 (4 cr)
8. For certification, take and pass the MTTC Early Childhood Education test.

Special Education - Learning Disabilities (K-12 Major only) (Secondary or Elementary)

Thirty-six credits which must include:

1. EDC-150 (2 cr) with 105 (1 cr).
2. EDC-250 (3 cr) with 205 (1 cr).
3. EDC-255 (4 cr), 350 (4 cr), 355 (4 cr).
4. EDC-450 (3 cr) with 405 (1 cr).
5. EDC-453 (4 cr) and EDC-455 (3 cr) with 495 (6 cr).
6. For certification, take and pass the MTTC Special Education - Learning Disabilities test.

No course graded below 2.0 (C) may count toward a Special Education - Learning Disabilities K-12 Major; a 2.75 GPA is required.

Additional Requirements

In addition to completing appropriate coursework in the Education Department and in the majors and minors, students must meet Alma College graduation requirements and demonstrate personal characteristics suitable for entering the teaching profession.

Classroom Placement Students - Background Check

Michigan school districts require anyone who has contact with children in their school buildings, including staff or volunteers, to provide the district with documentation that he or she has not been placed on the central registry for substantiated abuse or neglect. All students who have an Education course with a classroom placement must have a background check completed at the Department of Health and Human Services (DHHS) prior to beginning in their assigned classroom. This is free of charge and DHHS records must be current. See the Education Department for more details.

Student Teachers - Fingerprinting Procedure

School districts require fingerprinting of student teachers. All student teachers must have the Criminal Background Check Livescan fingerprinting procedure completed by July 15 prior to beginning student teaching in their assigned district. Livescan must be completed at a Michigan Department of Education-approved site and is a statewide procedure. A fee is charged for this service and fingerprint records must be valid within one year. See the Education Department for more details.

Admission to the Teacher Education Program (TEP)

The Education Department reviews all applicants and judges their suitability for entrance to the program during the student's sophomore year. For full approval students must have the

following:

1. Formal application for admission to the TEP, including completion of a writing component (TEP essay), submitted by the January deadline. Information about the writing component, completed during Fall term, will be available from the Education Department. If you have any questions, please see the Chair of the Education Department. (Students who decide to seek teacher certification after the sophomore year can be admitted late but may require extra time to complete the program).
2. A cumulative GPA of at least 3.0
3. ENG 101 with a grade of C or above and MTH 100, or demonstrate proficiency by placement into a higher level course.
4. Scores meeting accreditation requirements in reading, math, and writing on a nationally normed assessment.
5. Evidence that the student is making an effort to acquire competence in the humanities, natural sciences, and social sciences.
6. Evidence that the applicant has personal characteristics conducive to success in the teaching profession (as indicated by disposition assessment forms, the recommendation of the Education Department, and a Felony Conviction Statement confirming that the student has not been convicted of any act contributing to the delinquency of a minor or involving moral turpitude).
7. Good standing - academic and student life.
8. Passing scores for content and writing on the TEP essay.

Please be aware that these requirements are subject to change in accordance with state or national accreditation mandates. All major(s) and minor(s) must be declared through the Registrar's Office at the time of TEP application.

Admission to Student Teaching

The Education Department reviews a student for admission to Directed Teaching (Education 490-491). For full approval students must have the following:

1. Admission to the Teacher Education Program.
2. A formal application for student teaching submitted by November 15 of the academic year prior to student teaching.
3. A 2.75 overall GPA.
4. For secondary: a GPA in the area(s) of concentration - Teaching Major(s) of 2.75; if applicable, a C or above in all classes in the Social Studies endorsement.
5. For elementary: a GPA in the Teaching Major(s) of 2.5 with C or above in all courses (2.75 required for K-12 Special Education - Learning Disabilities major)
6. A 2.5 GPA in Education courses and a grade of C or above in all courses.
7. In compliance with State of Michigan specifications, satisfactory demonstration of
 - high academic achievement.
 - successful group work with children in classroom placements.
 - knowledge of research-based teaching.
 - working knowledge of modern technology and use of computers

Additional Notes

1. Admission to the Teacher Education Program is a prerequisite for all classes at the 300 level and above for certification candidates.
2. Note on scheduling: it is expected that students take *no more than one* placement class in any semester.
3. Once approved for student teaching, the requirements must be retained in order to begin the student teaching term.

EDUCATIONAL STUDIES MAJOR

The Educational Studies Major is designed for those interested in education in a variety of fields but who are not currently interested in earning teacher certification.

Thirty-six credits which must include at least 15 upper level credits and must include:

1. Core courses (13 or 14 credits):
 - EDC-100 (2 cr) and 120 (2 cr) *or* 103 (1 cr) with 130 (2 cr); EDC-203 (1 cr) with 230 (3 cr).
 - EDC-311 (1 cr) and 312 (1 cr); 370 (2 cr) **?OR??** 373 (3 cr); 400 (2 cr).

2. Concentration of at least 12 credits in one of the following or a concentration approved by the department:
Capstone: EDC-470 (5 cr) internship/experience in an appropriate setting as approved by the department.
 - Child Development: EDC-160 (4 cr), 183 (4 cr), 281 (4 cr), 282 (2 cr), 283 (1 cr), 373 (3 cr) or 150 (2 cr) with 105 (1 cr), 383 (4 cr) or approved courses.
 - Special Needs: Select from EDC-150 (2 cr) with 105 (1 cr), 250 (3 cr) with 205 (1 cr), 255 (4 cr), 350 (4 cr), 355 (4 cr), 450 (3 cr) with 405 (1 cr) 460 (4 cr), or approved courses.
 - Literacy: Select from EDC-160 (4 cr), 346 (4 cr), 360 (3 cr), 460 (4 cr), or approved courses.
 - Pedagogy: Select from EDC-262 (4 cr), 301 (1 cr), 302 (1 cr), 303 (1 cr), 354 (4 cr), 360 (3 cr), 361 (3 cr), 362 (3 cr), 363 (3 cr), 373 (3 cr), 383 (4 cr), 460 (4 cr) or approved courses.
3. Electives in EDC courses or other courses approved by the Education Department.

Educational Studies Minor

The Educational Studies Minor is for those interested in education in a variety of fields, but who are not currently interested in earning teacher certification. Twenty-four credits which must include:

1. Core Courses:
 - EDC-100 (2 cr) and 120 (2 cr) *or* EDC-103 (1 cr) with 130 (2 cr).
 - EDC-311 (1 cr) and 312 (1 cr).
2. Electives in EDC courses or other courses selected in consultation with, and approved by the Education Department.
3. At least eight upper level credits must be included in the minor.

EDC 100 Introduction to Diverse Learners

2 cr

An introduction to learners and learning. Students reflect upon their own schooling and learning experiences, applying the different perspectives and theories on learning introduced in the course. Students will consider the diversity of learning styles, aptitudes, interests, intelligences, and diverse learner backgrounds. They will begin to consider the role and responsibilities of classroom teachers towards all learners, thus developing understandings they will build on throughout the program. Required for elementary certification. Fall/Winter.

EDC 103 Foundations of Secondary Education

1 cr

A 40-hour field experience to provide hands-on, realistic yet transitional experience/opportunity for those interested in teaching at the high school or middle school level. Must take EDC-130 concurrently. Fall/Winter

Prereq: EDC-130 concurrently

EDC 105 Introduction to Special Education-Field

1 cr

Learn to identify patterns of students' strengths and weaknesses, and specify intervention strategies to assist in learning. Introduction to the process of developing, implementing, and evaluating the progress of an IEP. Includes 30 hours of Elementary/Middle/High placement. Pass/Fail only. Required for Special Education K-12 major. Winter only.

Prereq: EDC-150 concurrently

EDC 120 Teaching in Context

2 cr

Introduction to perspectives on teaching. Historical, philosophical, sociological and comparative frameworks and models of teaching, including learning environments and teaching approaches. Examination of multiple purposes and goals of schooling; ethical and professional responsibilities of teachers to multiple stakeholders. Required for elementary certification. Fall/Winter

EDC 130 Foundations of Secondary Education

2 cr

A beginning course that is meant to help the pre-service teacher understand the realities of teaching and the education profession in general. A foundation to assist the student in making a better,

more informed career choice about becoming a secondary teacher while also providing cases that secondary teachers must effectively face every day. Required for secondary certification.

Fall/Winter

Prereq: EDC-103 concurrently

EDC 150 Introduction to Special Education

2 cr

Introduction to characteristics and categories of exceptional children, birth through adulthood. Learn the rules and regulations concerning provision of special education and related services. Discussion of historical and legal issues. Learn to develop, implement, and evaluate the progress of an IEP. Required for Special Education K-12 major. Winter only.

Prereq: EDC-105 concurrently

EDC 160 Children's Literature

 SL

4 cr

This standards-based course introduces students to a body of literature written for children and how it may be used across the curriculum; the interactions between readers, texts, and contexts; and critical issues in the selection and use of children's literature. Students will explore, read, and respond to children's literature in a variety of ways that include preparing collections of literary works and activities for use with children. Required for elementary certification. Fall/Winter

EDC 180 Issues and Ideas in Education

2-4 cr

Survey of topics to broaden understanding of teaching and learning. Open to prospective teachers and others interested in education in the United States or in other societies. Course fee.

EDC 183 Intro to Early Childhood Education

SL

4 cr

Introduction to the early childhood profession, the nature of the profession, including its philosophical, historical and social foundations and current contextual influences (e.g., demographic and policy influences). Familiarization with various types and models of early childhood programs. Includes discussion of characteristics of developmentally appropriate practice. Learn and apply guidelines for the organization and administration of early childhood programs. Required for Early Childhood Endorsement. Winter only.

EDC 190 Field Experience in Education

1-4 cr

Arranged assignment in an education setting intended to enhance a student's understanding of teaching and learning. Requires instructor permission.

EDC 203 Child Development and Education - Field

1 cr UL

A 40-hour placement in classrooms concurrent with EDC-230. Provides an introduction to the professional roles and responsibilities of teaching all children. Students will be placed in a "home" classroom and work closely with that teacher to observe, assist, and work closely with students applying psychology principles and learning theories. Fall/Winter

Prereq: Sophomore Standing

EDC 205 Intro to Learning Disabilities - Field

1 cr UL

Work with children identified with a learning disability and collaboratively plan interventions/services including diagnosis, assessment, and specific remedial techniques. Experience the IEP process including the creation of goals and objectives which frame special education children's learning. Identify and discuss rules of confidentiality. Includes 30 hours of Elementary/Middle/High placement. Pass/Fail only. Required for Special Education-Learning Disabilities K-12 major. Winter only.

Prereq: EDC-105 and 150; EDC-250 concurrently

EDC 230 Child Development and Education

3 cr UL

An overview of psychological theories and research applied to classroom learning. The course includes study of concepts in human development - cognitive, affective, physical, emotional,

moral, and social; study of learning, motivation, and assessment; developmentally appropriate practice; an overview of processes of human development in childhood and adolescence with a focus on socialization and education; and study of the influences of family, community, and culture on education. Required for elementary and secondary certification. Fall/Winter

Prereq: Sophomore Standing; EDC-203 concurrently

EDC 240 Learning Env and Reflective Teaching

4 cr UL

Examination of characteristics of productive classroom learning environments. Analysis of cases of teaching and learning; evaluation of instructional strategies and activities, technologies, and resources that enhance learning for all learners; planning for classroom management. Includes peer teaching. Required for elementary and secondary certification. Fall/Winter

Prereq: Sophomore Standing

EDC 250 Introduction to Learning Disabilities


3 cr UL

Includes the study of the characteristics of children with learning disabilities and interventions/services for these individuals including diagnosis, assessment, and specific remedial techniques. Understand and implement research based theories and philosophies through lesson planning and field placement. Discussion of correlating factors leading to identification. Required for Special Education K-12 major. Winter only.

Prereq: EDC-105 and 150; EDC-205 concurrently

EDC 255 Transition Mgmt in Special Education

4 cr UL

 Covers various life management theories in relation to all curriculum subjects. Students develop skills to effectively manage children's behaviors and to be effective classroom managers. Engage in strategic planning in the areas of: study skills, self-management, problem solving, reasoning, coping skills, and self-determination skills. Fall only.

Prereq: EDC-105 and 150

EDC 262 Mathematical Thinking and Learning


4 cr UL

Investigate particular teaching and learning strategies that may help or hinder different students' learning of mathematics. Focus on interpreting children's mathematical work and examine central questions in mathematics teaching. Develop familiarity with available resources and begin the development of skills and attitudes to learn from teaching and other opportunities. May include a service learning component. Required for elementary certification. Winter only.

Prereq: Sophomore Standing

EDC 281 Child Dev and Learning: Birth - Age 8


4 cr UL

 Examination of physical, cognitive, social, emotional and other types of development in infancy and early childhood. Addresses the development of children with special needs and linguistically and culturally diverse backgrounds. Students complete 30 hours of field placement in an early childhood setting. Required for Early Childhood Endorsement. Fall only. Course fee.

Prereq: EDC-183; Sophomore Standing

EDC 282 School, Family & Community Partnerships

2 cr UL

 Emphasizes the critical role of family-school partnerships in ensuring children's well-being and academic success. Introduction to historical roles of the family and community in early childhood education. Discussion of barriers to family involvement as well as effects of successful family participation. Addresses various types of family involvement and best practice guidelines associated with each type. Explores models for involving communities as partners in children's care and education. Required for Early Childhood Endorsement. May include a service learning component. Winter only.

Prereq: Sophomore Standing

EDC 283 The Care and Edc of Infants and Toddlers 1 cr **UL**
 A framework for understanding how infants and toddlers grow and learn. Developmentally appropriate curricula and materials will be examined. Required for Early Childhood Endorsement. Fall only.
Prereq: EDC-183, Sophomore Standing

EDC 301 Elem Science and Social Studies - Field 1 cr **UL**
 Classroom observation and participation in teaching science and social studies. Includes 40 hours of classroom placement. Pass/fail only. Required for elementary certification. Fall only.
Prereq: TEP Approval; EDC-311, 361, and 363 concurrently

EDC 302 Teaching Elem Lang Arts and Math - Field 1 cr **UL**
 Classroom observation and participation in teaching language arts and math. Includes 40 hours of classroom placement. Pass/fail only. Required for elementary certification. Winter only.
Prereq: TEP Approval; EDC 312, 360, and 362 concurrently

EDC 303 Secondary Ed Methods and Experience 1 cr **UL**
 Topics and issues in instructional planning, teaching, and assessment are explored in-depth and with particular emphasis on secondary education and specific subject areas. Students spend 30 hours in secondary classroom placements, working in their major(s) content areas, and will have specialized teaching methods support in those subjects with an emphasis on best practices. Required for secondary certification. Fall only. (Specific topics offered as EDC-303B, EDC-303E, EDC-303H, EDC-303MA, EDC-303MU, EDC-303PE, EDC-303S).
Prereq: TEP Approval; EDC-311 concurrently

EDC 311 Topics Seminar A 1 cr **UL**
 Introduction to issues and topics in instructional planning, differentiation, and instructional strategies. Required for elementary and secondary certification, and EDS major and minor. Fall only.
Prereq: TEP Approval or EDS Major or Minor; EDC 301, 361, and 363 concurrently for Elementary majors; EDC-303 concurrently for Secondary majors.

EDC 312 Topics Seminar B 1 cr **UL**
 Introduction to issues and topics in the historical context of schooling and current issues in education, assessment, and the professional roles of educators. Required for elementary and secondary certification, and EDS major and minor. Winter only.
Prereq: TEP Approval or EDC Major or Minor; EDC-302, 360, and 362 concurrently for Elementary majors.

EDC 346 Teaching Reading in Middle & Senior High 4 cr **UL**
 Survey of strategies for teaching, diagnosing and improving word recognition, comprehension and study skills. Survey of student language needs and program planning for reading instruction at the middle and senior high school levels. May include a service learning component. Required for secondary certification. Fall only.
Prereq: TEP Approval

EDC 350 Instructional Design in Special Edc 4 cr **UL**
 Examination of the methods of identification, assessment, and instructional planning for individuals with learning disabilities. Curriculum design and modification/adaptation of instructional materials for struggling children in the special education and general education setting are covered. A variety of classroom practices and strategies which emphasize and promote individual motivation, classroom management, transition planning, the use of assistive technology, and meeting the needs of diverse children are analyzed. Required for Special Education-Learning Disabilities K-12 major. Fall only.
Prereq: EDC-105, 150, 205, 250, 255; TEP Approval

EDC 355 Understanding Stu w/Learning Disability 4 cr **UL**
 Exploration of brain development and characteristics of children with learning disabilities from early childhood through adolescence. A focus on understanding ways of helping children with learning disabilities succeed through the use of instructional planning, technology, and inclusive education. Analysis of useful and creative strategies for teaching struggling individuals and understanding the importance and practicality of building support systems with parents, general education teachers, and other community resources. Required for Special Education-Learning Disabilities K-12 major. Winter only.
Prereq: EDC-105, 150, 205, 250, 255; TEP Approval

EDC 360 Teaching Elementary Language Arts 3 cr **UL**
 Examination of reading and language arts methods. Survey of developmental reading including phonemic awareness, phonics, word recognition, fluency, vocabulary development, and comprehension. Use of assessment to inform instruction, classroom organization and management of the reading program, and methods of teaching language arts, including their interrelationships with reading. Required for elementary certification. Winter only.
Prereq: TEP Approval; EDC-302, 312, and 362 concurrently

EDC 361 Teaching Elementary Science 3 cr **UL**
 Examination of methods and materials in elementary science education. May include service learning project and action research project. Required for elementary certification. Fall only.
Prereq: TEP Approval; EDC-301, 311, and 363 concurrently

EDC 362 Teaching Elementary Mathematics 3 cr **UL**
 This course builds on EDC-262 and focuses on four areas: Teaching mathematics, working with students as individuals, organizing a class, and professionalism and reflective learning. Required for elementary certification. Winter only.
Prereq: TEP Approval; MTH-202 and EDC-262; EDC-302, 312, 360 concurrently

EDC 363 Teaching Elementary Social Studies 3 cr **UL**
 Examination of methods and materials in elementary social studies education. Required for elementary certification. Fall only.
Prereq: TEP Approval; EDC-301, 311, and 361 concurrently

EDC 370 Instructional and Assistive Technology 2 cr **UL**
 Builds on basic skills and knowledge demonstrated through successful completion of Technology Modules so that students are well prepared to use technology effectively and appropriately for multiple purposes in their teaching. Students learn to use technological tools, operations, and concepts to enhance learning and assessment, productivity, communication, and professional development. Students learn about the ethical, legal, physical, and psychological issues and principles of technology use in schools. Students utilize technology for curriculum planning and for instruction, including on-line learning experiences. Students learn to use assistive technologies to enhance the learning of all children in ways that best meet individual needs. Required for elementary and secondary certification.
Prereq: TEP Approval or EDS Major

EDC 373 Special Education for Classroom Teachers 3 cr **UL**
 Introduction to the teaching of exceptional students. Review of historical and legal issues in special education. Characteristics of exceptional learners, birth through adolescence. Examination of materials and methodology appropriate for instructing exceptional learners in inclusive classrooms. Includes eight-hour practicum. Required for elementary and secondary certification (except Special Education major). Winter only.
Prereq: TEP Approval

EDC 383 Curriculum and Methods: Early Childhood 4 cr **UL**

Preparation for planning and facilitating developmentally appropriate learning experiences for young children in the content areas of language, literacy, mathematics, science, social studies, the arts, health and safety. Techniques for adapting instruction to culturally diverse learners and those with developmental delays. Preparation in appropriate management and guidance techniques, and designing appropriate physical environments and schedules for young children. Students practice integrating systematic observation of young children's behavior with instructional design and assessment and program evaluation techniques. Students learn techniques for working cooperatively with families in the care and education of their children and with community services and referral procedures for children. Includes a 30-hour practicum in an early childhood site. Required for Early Childhood Endorsement. Classroom placement included. Fall only.

Prereq: TEP Approval

EDC 385 Education Practicum 1-4 cr **UL**

Requires instructor permission.

EDC 399 Education Independent Study 1-4 cr **UL**

Individual investigation of an educational problem planned with faculty in Alma's Education Department.

Prereq: Junior Standing; Permission

EDC 400 Issues and Contexts 2 cr **UL**

Research into current topics and perennially important issues in education. Required for elementary certification and EDS major. Fall/Winter.

Prereq: TEP Approval or EDS Major; Senior Standing

EDC 405 Curriculum Mthds in Special Ed - Field 1 cr **UL**

Demonstration of the understanding of the IEP process by evaluating how goals and objectives are formulated to frame children's learning. Goals within an IEP are identified and an instructional unit implemented incorporating appropriate teaching strategies. Individual growth as a result of the interventions is measured and the success of the instructional methods is analyzed and evaluated. Appropriate individual performance assessments are created. The ability to modify instruction based on assessment data is demonstrated. Includes 30 hours of Elementary/Middle/High placement. Pass/Fail only. Required for Special Education-Learning Disabilities K-12 major. Fall only.

Prereq: EDC-105, 150, 205, 255, 350, 355; TEP Approval; EDC-450 concurrently

EDC 430E Student Teaching Seminar - Elementary 3 cr **UL**

Reflection on student teaching and professional issues. Classroom inquiry and analysis; self-reflection and professional development plans; representation in portfolio, web, and interviews; legal and ethical issues. Required for elementary certification. Note: Students must be approved for student teaching and have completed all core education and teaching major/minor courses prior to beginning student teaching. See department for exceptions.

Prereq: TEP Approval; ST Approval; Take EDC-490E and EDC-491E concurrently

EDC 430S Student Teaching Seminar - Secondary 3 cr **UL**

Reflection on student teaching and professional issues. Classroom inquiry and analysis; self-reflection and professional development plans; representation in portfolio, web and interviews; legal and ethical issues. Required for secondary certification. Note: Students must be approved for student teaching and have completed all core education and teaching major/minor courses prior to beginning student teaching. See department for exceptions.

Prereq: TEP Approval; ST Approval; Take EDC-490S and EDC-491S concurrently

EDC 445F Methods in World Languages E/S 2 cr **UL**

Students spend 30 hours in a language classroom placement specific to the student's major and level (elementary or secondary) and will have specialized teaching methods support in World Languages with an emphasis on instructional planning, teaching, and assessment. Required for elementary (K-5) and secondary (6-12) World Language certification.

Prereq: TEP Approval

EDC 445S Secondary Methods in Social Studies 4 cr **UL**

Survey of special teaching methods in student's major field of social studies. Required for secondary social studies certification.

Prereq: TEP Approval

EDC 450 Curriculum Methods in Special Education 3 cr **UL**

Preparation and planning for the development of curriculum and individualized teaching methodology appropriate for individuals with disabilities in the least restrictive environment. Basic principles of instructional design are discussed. Appropriate child performance assessments are created with students demonstrating the ability to modify instruction based on assessment data. Current practices and problems of instructing students with learning disabilities are addressed. Required for Special Education-Learning Disabilities K-12 major. Fall only.

Prereq: EDC-105, 150, 205, 255, 350, 355; TEP Approval; EDC-405 concurrently

EDC 453 Assess and Remediation in Special Ed 4 cr **UL**

This course provides pre-service teachers with the knowledge and skills necessary to complete a comprehensive educational evaluation, interpret the results, and develop an instructional plan to address individual youth needs and deficits. Formal and informal assessment procedures are examined and include the evaluation of reading, language, mathematics, social/emotional development, vocational and transitional needs. Techniques for communicating test results are discussed. FERPA rules are addressed. Students will be working in the field on a full-time basis during the final 6-weeks of this course to study the content in the field. Fall or Winter as determined by department.

Prereq: EDC-105, 150, 205, 250, 255, 350, 355, 405 and 450; TEP Approval; EDC-455 and 495 concurrently

EDC 455 Special Ed Student Teaching Seminar 3 cr **UL**

Work collaboratively to discuss strategic planning for students with learning difficulties. Design and prepare to implement models of collaboration that enhance the participation of special education students within the general education environment. Discuss current topics in special education. Fall or Winter as determined by department.

Prereq: EDC-105, 150, 205, 250, 255, 350, 355, 405, 450; TEP Approval; EDC-453 and 495 concurrently

EDC 460 Teaching the Struggling Reader 4 cr **UL**

Survey of theory and methods associated with reading instruction for struggling readers. Emphasis placed on assessment of reading strengths and needs as well as specific strategies for reading improvement. Includes supervised instruction. Required for elementary certification. Fall only.

Prereq: TEP Approval; Senior Standing

EDC 470 Educational Studies Internship 5 cr **UL**

Application of educational concepts, skills, and theory, through participation in a work setting related to student's learning objectives and long-term goals. Supervision by faculty and sponsoring organization. Includes substantive reflection assignment. Requires instructor permission and junior standing. Fall/Winter/Spring/Summer.

Prereq: 12 credits total in EDC including EDC-100 and 120 or EDC-103 and 130; and at least 3 credits of upper-level EDC credits; TEP Approval; Junior Standing.

EDC 480 Topics in Education2-4 cr **UL**

Survey of a selected topic chosen for study. May be taken more than once for credit.

Prereq: Permission

EDC 490E Directed Teaching - Elementary5 cr **UL**

Teaching under the direction of a cooperating teacher in the public schools. Applications must be filed by November 15 of the academic year prior to directed teaching. Pass/fail only. Required for elementary certification. Fall/Winter.

Prereq: TEP and ST Approval

EDC 490S Directed Teaching - Secondary5 cr **UL**

Teaching under the direction of a cooperating teacher in the public schools. Applications must be filed by November 15 of the academic year prior to directed teaching. Pass/fail only. Required for secondary certification. Fall/Winter.

Prereq: TEP and ST Approval

EDC 491E Directed Teaching - Elementary5 cr **UL**

Teaching under the direction of a cooperating teacher in the public schools. Applications must be filed by November 15 of the academic year prior to directed teaching. Pass/fail only. Required for elementary certification. Fall/Winter.

Prereq: TEP and ST Approval

EDC 491S Directed Teaching - Secondary5 cr **UL**

Teaching under the direction of a cooperating teacher in the public schools. Applications must be filed by November 15 of the academic year prior to directed teaching. Pass/fail only. Required for secondary certification. Fall/Winter.

Prereq: TEP and ST Approval

EDC 493 Directed Teaching: Early Childhood5 cr **UL**

Directed teaching experience of 280 hours in an early childhood setting under the guidance of a professional early childhood educator. Under guidance of cooperating teacher, students work effectively with parents as partners in their children's education. Students in the Directed Teaching course regularly reflect on and evaluate their experience with a College Field Instructor. Junior or senior year. Must apply for student teaching by November 15 of junior year and be approved prior to beginning ECE student teaching. Pass/Fail only. Fall/Winter/Spring/Summer.

Prereq: EDC-183, 281, 282, 283, 383, SOA-220; TEP and ST Approval

EDC 495 Special Education Student Teaching6 cr **UL**

An 8 week directed teaching experience in a special education classroom setting under the guidance of a special education professional. The special education teacher and candidate work collaboratively to discuss strategic planning and accommodations for students with learning difficulties. The candidate will design and prepare to implement units of instruction and will work collaboratively to ensure learning for special education students in a pull-out setting and within the general education environment. Students will differentiate instruction for remediation and modify general education curriculum for student diverse learning needs. Fall or Winter as determined by department.

Prereq: EDC-105, 150, 205, 250, 255, 350, 355, 405 and 450; TEP and ST Approval; EDC-453 and 455 concurrently

EDC 499 Education Independent Study4 cr **UL**

Individual investigation of an educational problem or development of a creative, usable project.

Prereq: Senior Standing, EDC or EDS major, and Permission

EDC 500 Senior Thesis2-4 cr **UL**

Required for departmental honors.

Prereq: Permission

English (ENG)

Major Requirements

Thirty-six credits which must include:

1. ENG-120, 190, 220, 320, and 420.
2. ENG-250 or 251; and 260 or 261.
3. Eight additional credits of upper level literature selected from the following: ENG-340, 351, 353, 354, 355, 356, 360, 361, 364, 365, 366, 367, 368, 380L, 381, 382, and 383.
4. Cognate: Four credits of foreign language at or above the 112 level to help students appreciate sounds, structure and beauty of a language different from their own.
5. Students who meet Alma's requirements for honors and who present a senior thesis judged to be of honors caliber are eligible for English Department honors.
6. Note: ENG-100, 101 and 110 do not count in the English major. No independent study counts toward the major unless it is approved as a substitute for a major requirement.

Minor Requirements

Twenty-four credits which must include:

1. ENG-120.
2. ENG-250 or 251; and 260 or 261.
3. ENG-190, 201, 220, 225, 270, or 320.
4. Two additional 300 level literature courses chosen from: ENG-340, 351, 353, 354, 355, 356, 360, 361, 364, 365, 366, 367, 368, 380L, 381, 382, and 383.
5. Note: ENG-100, 101, and 110 do not count in the English minor.

English Secondary Teaching Major

Same requirements as the English major.

English Secondary Teaching Minor

Same requirements as the English minor.

Language Arts Teaching Major and Minor (Elementary only)

See the Education section of the catalog for list of requirements.

Writing Minor Requirements

Twenty-four credits which must include:

1. ENG-190, 202, and 220
2. Twelve credits from ENG-201, 210, 270, 290, 291, 292, 293, 301, 370, 390, or 391

Program Considerations

- Prospective majors should plan to take ENG-120 in the first year, ENG-220 in the sophomore year, ENG-320 in the junior year, and English 420 in the senior year. **Note:** One foreign language course at or above the 112 level is required for the English major.
- ENG-100, 101 and 110 do not count toward the English major or minor.
- Students considering graduate school are urged to complete more than the required number of 300-level literature classes and ENG-500 Senior Thesis. Students interested in pursuing a Ph.D. in literature are strongly recommended to take additional modern language courses.
- English majors may also elect a writing minor. Up to eight credits may count toward both the major and minor requirements

Prerequisites for advanced studies in literature (ENG 340 through 368) are ENG 240, 241, 250, 251, 260 or 261.

Four credits from ENG 110 or higher, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Humanities.

ENG 100 College Rhetoric I

4 cr

Development of writing as a process of thinking and communication that involves stages of generating, drafting and revising. Emphasis on writing in several forms for a variety of purposes and audiences. Review of basic paragraph, sentence and spelling skills. Regular conferences to discuss writing.

ENG 101 College Rhetoric II 4 cr
Developing critical thinking and reading skills with emphasis on analytical, persuasive and research writing. Development of style and voice. Evaluation of writing from various disciplines and contemporary issues. Requires ENG-100 or placement.

ENG 110 Studies in Literature 4 cr
AH
Thematic approach to understanding, analyzing and appreciating literature. Courses may focus on particular genres, like poetry or the short story, or focus on themes like gothic writers, environmental literature, or the Holocaust. This course is designed to be introductory and is open to students with a wide range of backgrounds and experiences with literary studies. Course does not count toward the English major.

ENG 120 Literary Analysis 4 cr
AH
Preparation for advanced study of literature and language, including vocabulary, critical approaches, and writing strategies employed in literary analysis. This course is required for a major or minor in English, but open to all students with a solid foundation in reading and writing.

ENG 180 Elements of Poetry 2-4 cr
AH
This class explores everything about poetry that is not words—things like image, space, silence, music, motion. We will explore a wide range of poetry, from the Imagists, the Beats, haiku, proverb, Kaddish, contrapuntal, and renga, and develop a greater understanding of and appreciation for poetry.

ENG 180FMA Always a River: Fishing in Literature 4 cr
AH
"Always a River" will involve intensive reading and discussion about fishing in addition to writing nature essays. As a class we will also travel five different days to Grayling to fish in the Ausable under the tutelage of professional guides from Old Ausable Fly Shop. Lastly, we will spend at least one day cleaning up the river as a class. The focus of the course is thus three-fold: to explore and read about fishing in literature, especially Michigan literature, to receive hands-on instruction in the art of fly fishing and river ecology, and to require students to write several nature essays.

ENG 180GM Geology and Mythology of Greece 4 cr
AH
Greece and the Greek Isles nurtured a civilization whose impact on literature, politics, and philosophy continues to the day. They are also home to some of the most distinctive and important geology in the world. This course will explore the physical forces, which shaped Greek landscapes, then look at the way these landscapes in turn helped shape the history and culture of the people who lived on them. It will visit sites that illustrate the geological mechanisms, which formed the region's distinctive beauty, and discuss historic events like the catastrophic 1686 B.C.E. volcanic eruption on Santorini, which affected settlements across the Mediterranean. The course will also explore how Greek literature, from ancient works like the Odyssey to modern classics like Zorba the Greek, uses this environment to trace the human condition. Sites of study will most likely include Athens, Rhodes, Santorini, and Crete.

ENG 180M Studies in Lit and Language 4 cr
AH
Selected topics in English.

ENG 181 Diversity Studies in Literature 4 cr
AH
Studies of literature beyond the American and British canon: Asian American literature, Black women writers, Eastern European and non-Western world literature, and postcolonial writers. Students may register for more than one course under this number.

ENG 182 Off-Campus: American Experience Experience: Literary and Cultural Voices 4 cr
AH
Special emphasis on travel to develop historical and cultural awareness as it adds to the richness of the American literary experience such as writers of the Southwest in Taos, New Mexico, New England writers in Martha's Vineyard and Key West writers in Florida. Genres, periods and authors vary.

ENG 183 Off-Campus: British Literature & Culture 4 cr
AH
Special emphasis on travel to develop historical and cultural awareness as it adds to the richness of the British literary experience such as Shakespeare and Company in London and Medieval Literature in England. Genres, periods and authors vary. Spring Term only.

ENG 183M Medieval & Renaissance Drama in London 4 cr
AH
Special emphasis on travel to develop historical and cultural awareness as it adds to the richness of the British literary experience such as Shakespeare and Company in London and Medieval Literature in England. Genres, periods and authors vary. Spring Term only.

ENG 190 Introduction to Creative Writing 4 cr
AH
Writing in different genres, including poetry, short fiction, drama and creative nonfiction. Critiquing of student and professional writing.

ENG 201 Advanced Rhetoric 4 cr UL
AH
Exploring the principles of invention, arrangement and style beyond the level of ENG-101. Emphasis on connections between what writers say and how they say it. In-depth critiquing of student and professional writing.
Prereq: ENG-101 or Proficiency

ENG 202 Digital Rhetoric 4 cr UL
AH
Exploration of the rhetorical conventions and contexts of writing in digital contexts, as well as the intersections between textual and visual choices. Students explore writing in a variety of digital contexts and will read and discuss scholarly methods for thinking critically about the place of writing in new media.
Prereq: ENG-101 or Equivalent and a 200-level writing course

ENG 210 Teaching Writing 4 cr UL
AH
Development of written fluency and critical evaluation skills; introduction to central theories of reading and writing instruction. Designed for future teachers in any discipline, writing center advisors, or those going into any field that requires evaluation of writing such as editing and publishing.

ENG 220 Reading, Writing, Research 4 cr UL
AH
Writing workshop for those pursuing a major or minor in English studies. Course focuses upon exploring the different creative and critical modes of writing used in the major and beyond, advanced research methods, and issues in researched writing.
Prereq: ENG-120

ENG 225 General Linguistics 4 cr UL
AH
Understanding the function and structure of language through analysis of its subdivisions: phonetics and phonology, morphology, syntax, semantics and pragmatics, language usage, dialect and historical development.
Prereq: ENG-101, 201, or 202 and Sophomore standing

ENG 230 Shakespeare on Film 4 cr UL
AH
Study of Shakespeare's plays from the perspective of text and film. Emphasis on understanding selected plays, comparing different interpretations, and comprehending different cinematic styles.
Prereq: ENG-101, 120, 201 or 202

ENG 240 Children in World Literature
 ☺ AH 4 cr UL
 A study of literature written for children and young adults. The range of texts will include Rudyard Kipling's *Jungle Book* and the popular *Hunger Games* Trilogy. Lectures and discussions will attempt to describe the embedded cultural assumptions and colonial power structures implicit in children's literature.
Prereq: ENG-101, 120, 201 or 202

ENG 241 Themes in World Literature
 ☺ AH 4 cr UL
 A study of Literature from a global perspective. The course will study universal themes such as "family," "love," and "identity" using classics of world literature from Homer to Ngugi Wa Thiong'o (in English translation where necessary.)
Prereq: ENG-101, 120, 201 or 202

ENG 250 Survey of British Literature I
 ☺ AH 4 cr UL
 Exploring British literature from its beginning to the end of the 18th century, from Medieval period through the Neo-Classical period.
Prereq: ENG-101, 120, 201 or 202

ENG 251 Survey of British Literature II
 ☺ AH 4 cr UL
 Exploring British literature of the 19th and 20th centuries, from the Romantic era to the present.
Prereq: ENG-101, 120, 201 or 202

ENG 260 Survey of American Literature I
 AH 4 cr UL
 Analyzing American literature from its beginnings to the Civil War, including the Puritan and Romantic periods.
Prereq: ENG-101, 120, 201 or 202

ENG 261 Survey of American Literature II
 AH 4 cr UL
 Examining American literature from the Civil War and the Realistic movement to the present.
Prereq: ENG-101, 120, 201 or 202

ENG 270 Writing for the Media
 AH 4 cr UL
 Examine the basics of writing for various mass media forms - print, broadcasting, and online media. Learn and gain practical experience on the particular journalistic writing skills required for the different media, along with examining related legal and ethical issues.

ENG 283M Shakespeare on Stage
 🦅 ☺ AH 4 cr UL
 Study of Shakespeare's plays offering a representative survey of the major histories, comedies and tragedies. Spring Term only.
Prereq: Two courses in literature

ENG 290 Poetry Workshop I
 AH 4 cr UL
 Exploring the craft of writing poems and practicing the habit of art. In-depth critiquing of student and professional writing.
Prereq: ENG-190 and Permission

ENG 291 Fiction Workshop I
 AH 4 cr UL
 Exploring the craft of writing short fiction and practicing the habit of art. In-depth critiquing of student and professional writing.

ENG 292 Playwriting Workshop
 AH 4 cr UL
 Exploring the craft of writing short plays and practicing the habit of art. In-depth critiquing of student and professional writing. Requires instructor permission to register. (Also listed as THE-292.)

ENG 293 Creative Nonfiction Workshop
 AH 4 cr UL
 Exploring the craft of writing creative nonfiction and practicing the habit of art. In-depth critiquing of student and professional writing.
Prereq: ENG-190 or Permission

ENG 295 Grant Writing
 AH SL 4 cr UL
 A study of composition focusing on grant writing as a genre of professional writing. This course explores grant writing from both a theoretical and a practical perspective, including the philosophy of philanthropy, the process of identifying needs, developing grant proposals, and identifying funding sources.
Prereq: ENG-101 or Permission

ENG 299 English Independent Study
 2-4 cr UL
 Requires instructor permission.

ENG 301 Professional Rhetoric
 🦅 AH 4 cr UL
 Advanced study of style and rhetoric in a variety of professional writing contexts, including creative, educational, and corporate environments.
Prereq: ENG-101 or equivalent and a 200-level writing course

ENG 320 Critical Theory
 🦅 AH 4 cr UL
 Surveys modern literary and critical discourse with emphasis on understanding and applying different theoretical approaches to literature.
Prereq: ENG-220 and one upper level literature course

ENG 340 Women's Literature
 🦅 AH 4 cr UL
 Studies in the literature of women from its beginnings in Julian of Norwich through Bradstreet and Woolf to the present. Includes historically and internationally diverse authors in a variety of genres.
Prereq: Two courses in literature

ENG 351 Chaucer
 AH 4 cr UL
 Study of Chaucer's major works, including the *Canterbury Tales* and *Troilus and Criseyde*, and/or selected works of Chaucer's contemporaries.
Prereq: Two courses in literature

ENG 353 The English Renaissance
 ☺ AH 4 cr UL
 Selected study of English Renaissance texts ranging from More's *Utopia* to Milton's *Paradise Lost*. Includes works by authors such as Marlowe, Spenser, Donne, Herbert, Jonson and Marvell.
Prereq: Two courses in literature

ENG 354 Shakespeare
 🦅 AH 4 cr UL
 Study of Shakespeare's plays offering a representative survey of the major histories, comedies and tragedies.
Prereq: Two courses in literature

ENG 355 British Romantics and Victorians
 🦅 ☺ AH 4 cr UL
 Study of the major 19th-century British writers from Blake to Hopkins. Includes such authors as Wordsworth, Coleridge, Keats and the Brownings, and such essayists as Wollstonecraft, Hazlitt, Carlyle and Pater.
Prereq: Two courses in literature

ENG 356 Modern British and Irish Literature
 ☺ AH 4 cr UL
 Study of major British and Irish authors since 1900, including Yeats, Joyce, Eliot, Woolf and Beckett.
Prereq: Two courses in literature

ENG 360 Transatlantic 18th Century Literature
 🦅 AH 4 cr UL
 Study of the literature of "the long Eighteenth Century" from a transatlantic perspective. This course examines the emergence of the novel, as well as the impact of the slave trade and of the Enlightenment on the literature of Britain, the Americas and the Caribbean. Authors include Equiano, Wheatley, Behn, Swift, Defoe, Burney, Godwin, Brown and Foster.
Prereq: Two courses in literature

ENG 361 Modern American Writers to 1865
 AH 4 cr **UL**

Examines in depth selected writers from the Revolution to the Civil War, with a special focus on the struggle to define an "American" literature. Includes such authors as Brown, Irving, Poe, Douglass, Jacobs, Dickinson, Melville, Hawthorne, Whitman and Stowe.

Prereq: Two courses in literature

ENG 364 Studies in Drama
 AH 4 cr **UL**

Studies of issues and developments in English language drama from the Restoration to the present. Individual sections might be organized by themes, by period (i.e., Restoration or 20th-century drama), or by focusing on multiple works by playwrights such as Dryden, Behn, Farquhar, Shaw, O'Neill, Williams, Albee, Churchill, or Fugard.

Prereq: Two courses in literature

ENG 365 Studies in the Novel
 AH 4 cr **UL**


Studies of issues and developments in English language novel. Individual sections might be organized by themes, by periods, or by focusing on multiple works by authors as diverse as Defoe and DeLillo, Richardson and Rushdie, or Melville and Morrison.

Prereq: Two courses in literature

ENG 366 Modern American Literature
 AH 4 cr **UL**

Studies of American literature from post-WWII to the present.

Prereq: Two courses in literature

ENG 367 African American Literature
 AH 4 cr **UL**

Study of African American Literature as a distinct tradition beginning with the experience of enslavement and influenced by African and African American oral cultural heritage.

Prereq: Two courses in literature

ENG 368 American Indian Literature
 AH 4 cr **UL**

Study of the rich and varied literary tradition's roots in oral culture and its modern and contemporary expressions.

Prereq: Two courses in literature

ENG 370 Journalistic Studies and Projects
 AH 4 cr **UL**

Variable topics: magazine article writing and marketing, extended literary journalism, history of journalism, print promotion and group publicity.

Prereq: ENG 270 or Permission

ENG 380 Studies in Literature and Language
 AH 1-4 cr **UL**

The study of various topics such as Holocaust literature, the dramas of AIDS, contemporary Scottish literature and travel literature. Students may register for more than one course under this number.

Prereq: Two courses in literature

ENG 380GGeology and Mythology of Greece
 AH 1-4 cr **UL**

Greece and the Greek Isles nurtured a civilization whose impact on literature, politics, and philosophy continues to the day. They are also home to some of the most distinctive and important geology in the world. This course will explore the physical forces, which shaped Greek landscapes, then look at the way these landscapes in turn helped shape the history and culture of the people who lived on them. It will visit sites that illustrate the geological mechanisms, which formed the region's distinctive beauty, and discuss historic events like the catastrophic 1686 B.C.E. volcanic eruption on Santorini, which affected settlements across the Mediterranean. The course will also explore how Greek literature, from ancient works like the Odyssey to modern classics like Zorba the Greek, uses this environment to trace the human condition. Sites of study will most likely include Athens, Rhodes, Santorini, and Crete.

ENG 381 Diversity Studies in Literature
  AH 4 cr **UL**

Studies of literature beyond the American and British canon: Asian American literature, Black women writers, Eastern European and non-Western world literature, and postcolonial writers. Students may register for more than one course under this number.

Prereq: Two courses in literature

ENG 382 Off Campus Studies: American Experience-Literary and Cultural Voices
 AH 4 cr **UL**



Special emphasis on travel to develop historical and cultural awareness as it adds to the richness of the American literary experience such as writers of the Southwest in Taos, New Mexico, New England writers in Martha's Vineyard and Key West writers in Florida. Genres, periods and authors vary.

Prereq: Two courses in literature

ENG 383 Off-Campus: British Lit and Culture
 AH 4 cr **UL**

Special emphasis on travel to develop historical and cultural awareness as it adds to the richness of the British literary experience such as Shakespeare and Company in London and Medieval Literature in England. Genres, periods and authors vary.

Prereq: Two courses in literature

ENG 383M Shakespeare on Stage
  AH 4 cr **UL**

Study of Shakespeare's plays offering a representative survey of the major histories, comedies and tragedies. Spring Term only.

Prereq: Two courses in literature

ENG 385 English Practicum
 2-8 cr **UL**

Application of concepts in language and writing through participation in journalistic, public relations and other work settings. Supervision by faculty and sponsoring organization. Includes interpretive journal and summarizing paper.

Prereq: Permission

ENG 390 Poetry Workshop II
 AH 4 cr **UL**

Advanced workshop in the art and craft of writing poems. In-depth critiquing of student and professional writing. Creating a chapbook of poems and giving a public reading.

Prereq: ENG-190, 290 and Permission

ENG 391 Fiction Workshop II
 AH 4 cr **UL**

Advanced workshop in the art and craft of writing fiction. In-depth critiquing of student and professional writing. Creating a chapbook of fiction and giving a public reading.

Prereq: ENG-190, 291 and Permission

ENG 393 Creative Nonfiction Workshop
 AH 4 cr **UL**

Exploring the craft of writing creative nonfiction and practicing the habit of art. In-depth critiquing of student and professional writing.

Prereq: Prerequisite: ENG-190 and permission

ENG 399 English Independent Study
 2-4 cr **UL**

Requires twenty-four completed English credits with "B" average and permission.

ENG 420 Senior Seminar
 AH 4 cr **UL**

A sustained investigation in the study of language and literature that draws upon the expertise developed in previous English courses. Topics will vary each term. Students will complete a seminar project and submit a portfolio of their writing in the major.

Prereq: ENG-320, three upper level literature courses and senior standing

ENG 490 Independent Study in Creative Writing
 AH 2-4 cr **UL**

Independent study in creative writing.

Prereq: ENG-390 or 391, or Permission

ENG 499 English Independent Study2-4 cr **UL**

Requires 30 credits completed in the English department with 'B' average, and permission.

ENG 500 Senior Thesis

AH

1-4 cr **UL**

Requires instructor permission.

Environmental Studies (ENV)

Major Requirements

Sixty credits which must include forty credits of Core Courses and sixteen credits of electives (mostly upper-level) that allow focus in a particular area of study.

1. Core (40 credits): ENV-105; ENV-110 or GEO-101; ENV-205, 291, and 480; eight credits from CHM-115, BIO-121, 122, or 123; eight credits from POL-141, PHL-225, COM-253, ENC-340; eight credits from ENV-319, 360, 370.
 2. Complete one of the following tracks (16 credits):
 - a. **Environmental Science:** Sixteen upper-level credits from the following departments: BIO, BCM, CHM, ENV, IPH, PHY, PSY, and/or MTH/CSC, approved by the ENV department chair.
 - b. **Environmental Health:** Sixteen credits selected from BIO-307 or IPH-226; IPH-270, 331, 328, 430; ENV-265, 380, or other special topics courses approved by the ENV department chair.
 - c. **Environmental Policy:** Four credits from POL-101, PHL-228, HST-271; twelve credits from POL-217, 225/226 (only four credits can count toward major), 231, 233, 242, 305, 341, 401; COM-227, 327, or other special topics courses approved by the ENV department chair.
- Because ENV is an interdepartmental major, all majors are required to take 56 upper-level credits to graduate in accordance with the academic catalog guidelines.
 - The Program Comprehensive Evaluation is in the form of oral presentation to the Environmental Studies faculty as part of the ENV-480 seminar.
 - Note that ENV-480 is linked with the School for Public and Environmental Affairs (SPEA) at Indiana University and counts for Master's level credit for students accepted into the SPEA program.?

Other Considerations:

- Students are expected to complete an internship or research experience appropriate to their academic and career goals and approved by the department chair.
- Recommended courses include: PHY-112 or 121, and MTH-121.
- Potential majors are highly recommended to consult with the ENV program chair as soon as possible to develop an appropriate curricular plan. A firm grasp of statistics is critical for all of the major tracks and a minimum of MTH 116 (which counts towards the Distributive Requirements in the Natural Sciences - Mathematics/Computation) is expected. Further mathematical and analytical requirements will be discussed between the potential major and program chair(s) and will be tailored to the student's specific academic and career goals.

Minor Requirements

Twenty-six credits which must include: ENV-105; ENV-110 or GEO-101; ENV-205, 480; BIO-121, 122, or 123; CHM-115; 4 credits from POL-141, PHL-225, ECN-340, COM-253.

Environmental Studies students are recommended to conduct research or take a Spring Term experience abroad that utilizes our relationships with various institutions. MTH-116 (Statistics) and/or MTH-121 (Calculus) are strongly advised to fulfill NS-3 distributive requirements. MTH-121 is required for most graduate work.

ENV 105 Intro to Environmental Studies

NS1

4 cr

Examination of humans and their relationship to the natural environment. Explores current status of environmental problems,

controversies and solutions. Laboratory. Course fee.

ENV 110 Environmental Geology

NS2

4 cr

Investigation into the causes of geologic hazards such as earthquakes, mass movement, volcanoes and desertification. Includes investigation into geologic process involved in the formation of energy and material resources, their origin, uniqueness and the impact of their use on the environment. Topics center on the interrelationships among all physical Earth processes. Laboratory.

ENV 205 Environmental Health4 cr **UL**

Exploration of the relationship between the environment and human health. Topics include exposure to pollution, environmental disasters, injuries, and occupational health. The following concepts will be explored: environmental justice, toxicology, public health, and risk assessment.

Prereq: ENV-105 or ENV-110 (both courses are recommended); or Permission

ENV 265 Global Health Perspectives4 cr **UL**

This course provides an overview of the major human health issues among the global community. Topics include: health education, healthcare, infectious disease, nutrition, violence, pollution and other health hazards. Review of case studies and data organization related to health disparities among different countries will be studied.

Prereq: ENV-205 or permission

ENV 291 Scientific Writing and Methods2 cr **UL**

Examination of the different types of scientific writing, literature, along with practice of effective science communication within multiple formats. Brief coverage of how science writing and communication is different from everyday writing and communication. Skill development in effectively representing and understanding basic statistical analyses, graphs, diagrams and illustrations and their role in effective communication.

Prereq: ENV-205 or permission

ENV 319 Toxicology

NS1

4 cr **UL**

The study of toxic effects of chemicals on human and ecological populations. This includes the basic principles of toxicology and toxicity testing, fate and transport of materials in the environment and the body, key toxins and toxicants, and modes of toxic action among other topics. These subjects are supplemented with scientific literature on current topics in toxicology. Laboratory. Course fee.

Prereq: BIO-121 and CHM-115 (one course from CHM-223, BIO-203, or IPH-225 recommended)

ENV 360 Watershed Hydrology4 cr **UL**

Investigation of the methods and means describing how surface water and groundwater move in the environment. Topics include the relationship between surface and groundwater, migration of contaminants in fluvial and subsurface systems, and the theoretical and practical application of mathematical expression of water movement. Real-world, local problems serve as a centerpiece for project development.

Prereq: ENV-205 and ENV-291, or permission. CHM-115 recommended.

ENV 370 Risk Assessment4 cr **UL**

Systematic approach to the prediction of risks to human health and the environment. Theoretical framework of basic risk assessments is paired with application of real-world examples of known and unknown chemical and biological agents. Students learn to prepare ecological risk assessments.

Prereq: ENV-205 and ENV-291, or Permission.

ENV 380 Environmental Problems and Issues 4 cr **UL**

Examination of selected environmental issues and problems. Content varies. Topics may include pollution, energy, natural resources, land use planning and recycling. Course fee.
Prereq: ENV-105 or 110 or Permission

ENV 380M Topics in Env Studies 4 cr **UL**

Selected topics in Environmental Studies problems. Content varies. Topics may include pollution, energy, natural resources, land use planning and recycling. Course fee.

ENV 385 Environmental Studies Practicum 1-4 cr **UL**

Practicum in the field of Environmental Studies.
Prereq: ENV-105, 110 and one additional course from the ENV curriculum

ENV 480 Topics Seminar in Environmental Studies 2 cr **UL**

Capstone course in environmental studies. Interdisciplinary approach incorporating scientific knowledge with policy and humanistic issues that are applied to real-life environmental problems.
Prereq: Sixteen credits of ENV or Senior Standing or Permission

ENV 499 Environmental Studies Independent Study 1-4 cr **UL**

Independent study in the field of environmental studies.
Prereq: ENV-105, 110 and one additional course from the ENV curriculum

Exercise & Health Studies (EHS)

All 100-level courses are graded pass/fail. Courses numbered 200 and above will receive a letter grade.

EHS 110 Beginning Tennis 1 cr

Activity-based course. Pass/Fail only. Course fee.

EHS 112 Beginning Golf 1 cr

Activity-based course. Pass/Fail only. Course fee.

EHS 130 Beginning and Adv Beginning Swimming 1 cr

Activity-based course. Pass/Fail only. Course fee.

EHS 131 Adv Begin/Intermediate Swimming 4 cr

Activity-based course. Pass/Fail only. Course fee.

EHS 150 Fitness for Life 1 cr

Introduction to lifetime activities for physical fitness and cardiovascular health; includes fitness testing and personalized exercise prescription. Pass/Fail only.

EHS 154 Conditioning 1 cr

Activity-based course. Pass/Fail only. Course fee.

EHS 156 Strength Training 1 cr

Activity-based course. Pass/Fail only. Course fee.

EHS 157 Aerobic Exercise 1 cr

Activity-based course. Pass/Fail only. Course fee.

EHS 160 Individual Activity 1 cr

Activity-based course. Pass/Fail only. Course fee.

EHS 165 Group Activity 1 cr

Designed for a group of students to contract for a specific goal-centered learning experience. Goals, activities and means of evaluation must be detailed with the instructor. Pass/Fail only.

EHS 180 Topics in EHS 2-8 cr

Activity-based course. Pass/Fail only. Course fee.

EHS 199 EHS Independent Study 1-4 cr

Activity-based course. Pass/Fail only. Course fee.

EHS 200 Lifeguarding 2 cr

Fundamentals of lifeguarding. Satisfactory completion of this course qualifies student for American Red Cross lifeguarding certification. Course fee.

EHS 201 Water Safety 2 cr

Requires Advanced Life Saving Certificate.

EHS 202 SCUBA Diving 2 cr

SCUBA diving is a course designed to prepare students for SCUBA certification as a SCUBA schools international (SSI) open water diver. Students will complete a classroom component as well as a pool component. Course fee.

EHS 203 Advanced Open Water SCUBA Diving 2 cr

Designed to enhance the performance skills completed in EHS-202. Students complete a classroom component as well as a pool component. Course fee.
Prereq: EHS-202

EHS 280 Topics in EHS 1 cr **UL**

Topics in physiology selected by the instructor. Students expected to give a presentation.

EHS 350D Principles of Coaching for Teachers 2 cr **UL**

Designed as a variable content course with the subject to be determined on a demand basis. Topics may include basketball, football, soccer, track, volleyball or baseball/softball.

EHS 380 Topics in EHS 1-4 cr **UL**

Designed as a variable topic and credit course which may include adaptive and corrective physical education, injury rehabilitation, environmental physiology and sports medicine.

EHS 399 EHS Independent Study 1-4 cr **UL**

Foreign Service (FOR)

Interdepartmental major. Requires fifty-six credits in approved courses, typically drawn from the areas of economics, history and political science.

FOR 385 Foreign Service Practicum 1-8 cr **UL**

FOR 400 Seminar4 cr **UL**

Integration and application of work taken in various required courses. Problems considered will be determined by the international climate at the time the course is given.

Prereq: Permission

FOR 499 Foreign Service Independent Study1-8 cr **UL****FOR 500 Senior Thesis**1-4 cr **UL**

Individual research culminating in the preparation of a major paper. Work should be initiated during the Fall Term of the senior year.

French (FRN)

French courses, as designated by the three-letter prefix FRN, are taught in French. World Languages and Cultures courses, as designated by the three-letter prefix WLC, are taught in English. Courses taught internationally may have a different emphasis from those offered on campus.

Major Requirements

Thirty-six credits beyond FRN-112, which must include:

1. Sixteen credits of upper-level French classes.
2. Successful completion of WLC 101;
3. Students should be aware that a maximum of 6 credits (including WLC 101) may be taken wherein the primary language of instruction is English; courses must be pre-approved by the WLC department.
4. A minimum of one semester of approved international study in a French-speaking country.
5. Successful completion of English cognate: 4 credits from ENG 201, ENG 202, ENG 220, ENG 225, or ENG 320
6. Language Proficiency must be demonstrated by taking an approved external proficiency exam. Majors are expected to perform at the American Council on the Teaching of Foreign Languages (ACTFL) Advanced Low proficiency level (as averaged across the four skills listening, speaking, reading, writing).
7. Students will write and defend in open forum an acceptable paper of moderate length reflecting on their study of French, study abroad experience and how the role of language and culture combines with the mission of a liberal arts education.

Minor Requirements

1. Two credits of WLC 101 and twenty-four (24 cr) FRN credits, which must include:
2. Eight FRN credits at the upper level.
3. A semester or Spring Term of study in a French-speaking country is highly recommended.
4. Language Proficiency must be demonstrated by taking an approved external proficiency exam. Majors are expected to perform at the American Council on the Teaching of Foreign Languages (ACTFL) Intermediate High proficiency level (as averaged across the four skills listening, speaking, reading, writing).

The course numbers FRN 291-295 and *391-*395 are reserved for courses taken on College-approved programs of study abroad.

The course numbers FRN 291-295 and *391-*395 are reserved for courses taken on College-approved programs of study abroad. Level determined by FRN 222 and placement.

Four credits from FRN 112 or higher, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Humanities.

Department Honors may be achieved in the World Languages and Cultures Department by:

1. Having a 3.5 GPA in all language classes.
2. Performing beyond minimum requirements on the Language Exam portion of the Departmental Comprehensive Evaluation.

3. Presenting a senior thesis of honors caliber.

Advanced Credit in a second language may be earned by:

1. Scoring at the 4 level or higher on the Advanced Placement (AP) exam.
2. Successfully completing the International Baccalaureate Program (IB) or the National Foreign Language Examination.

FRN 111 Beginning French I

4 cr

Introduction to French. Primary objective is to help students acquire necessary basic skills: speaking, listening, reading and writing. Secondary objective is to provide insight on French culture and society.

FRN 112 Beginning French II

☺ AH 4 cr

Introduction to French. Primary objective is to help students acquire necessary basic skills: speaking, listening, reading and writing. Secondary objective is to provide insight on French culture and society.

Prereq: FRN-111 or Permission

FRN 169 Quebec

☺☺ AH 4 cr

An introduction to the province of Quebec, designed for students with one year of college French or more. Readings cover the history of the province, its political struggles, and its artistic expression. Includes a visit to Montreal, and extended stay at Laval University, museum visits, and limited excursions. Course fee. Spring Term only.

Prereq: Permission

FRN 170 Paris in May

☺☺ AH 4 cr

Provides two academic components: language study and French culture. Students attend a regular language class through Alma College at the Alliance Francais (any level) and study cultural history of Paris through selected readings, directed visits and shows. Course fee. Spring Term only.

Prereq: Permission

FRN 207 French Conversation I

☺ AH 2 cr

Extensive class discussion, oral reports, summaries of selected readings and viewing materials to develop fluency in oral expression and comprehension. Reading and discussion of numerous topics, which change each year. May be repeated for up to four credits. Does not count toward the French majors or minors.

FRN 221 Intermediate French I

☺ AH 4 cr

Systematic study of grammar and further development of speaking and writing skills through readings and discussions.

Prereq: FRN-112 or placement

FRN 222 Intermediate French II

☺ AH 4 cr

Systematic study of grammar and further development of speaking and writing skills through readings and discussions.

Prereq: FRN-221 or Placement

FRN 255 French Literature in Translation

☺ AH 4 cr

A study of representative literary works in translation from the French canon. Readings/lecture/discussion in English.

FRN 291 French Language Studies

☺ AH 2-4 cr

Further study of grammar and development of reading, writing, speaking and listening skills.

FRN 292 Targeted French Language Studies

☺ AH 2-4 cr

Targeted study of written French, oral French, or pronunciation.

- FRN 293 Studies in History and Civilization**
 🌐 AH 2-4 cr
 Topics in French, Francophone, or regional history, culture, art, or film.
- FRN 294 Studies in French and Francophone Lit**
 🌐 AH 2-4 cr
 Studies in literature on a variety of topics or genres.
- FRN 295 Studies in Business French**
 🌐 AH 2-4 cr
 Study of business French for commercial communication with the French-speaking world.
- FRN 307 French Conversation II**
 🌐 AH 2 cr UL
 Extensive class discussion, oral reports, summaries of selected readings and viewing materials to develop fluency in oral expression and comprehension. Reading and discussion of numerous topics, which change each year. May be repeated for up to four credits. Does not count toward the French majors or minors.
- FRN 321 French Composition and Conversation**
 🌐 AH 4 cr UL
 Advanced composition and conversation with extensive writing and emphasis on speaking skills. Includes reading, discussions and debate on a wide variety of cultural topics.
Prereq: FRN-222
- FRN 330 Current Issues**
 🌐 AH 4 cr UL
 Advanced composition and conversation. Contemporary French social problems contrasted with those of the U.S. using newspapers, magazines and TV broadcasts.
Prereq: FRN-321 or Permission
- FRN 350 Study in French Literature**
 🌐 AH 4 cr UL
 Studies in literature which emphasize different centuries, genres or themes. May be taken more than once for credit.
Prereq: FRN-321 or Permission
- FRN 354 From Labelle Epoque to the 1990s**
 🌐 AH 4 cr UL
 Study of major literary movements and authors of the 20th century.
Prereq: FRN-321 or Permission
- FRN 355 History of French Literature I**
 🌐 AH 4 cr UL
 Study in French literature from its origins to the late 20th century. Readings from significant works of each literary period.
Prereq: FRN-321 or Permission
- FRN 356 History of French Literature II**
 🌐 AH 4 cr UL
 Study in French literature from its origins to the late 20th century. Readings from significant works of each literary period.
Prereq: FRN-321 or Permission
- FRN 360 Francophone Literature**
 🌐 AH 4 cr UL
 Studies in French-speaking, non-European countries' literatures. Addresses Afro-French literature, French-Caribbean literature, or French-Canadian literature.
Prereq: FRN-321 or Permission
- FRN 369 Quebec**
 🌐 AH 4 cr UL
 An introduction to the province of Quebec, designed for students with one year of college French or more. Readings cover the history of the province, its political struggles, and its artistic expression. Includes a visit to Montreal, and extended stay at Laval University, Course fee. Spring Term only.
Prereq: Permission
- FRN 370 Paris in May**
 🌐 AH 4 cr UL
 Provides two academic components: language study and French culture. Students attend a regular language class through Alma College at the Alliance Francais (any level) and study cultural history of Paris through selected readings, directed visits and shows. Course fee. Spring Term only.
Prereq: Permission
- FRN 371 History of French Civilization I**
 🌐 AH 4 cr UL
 Introduction to French civilization and culture to 1715. Political, social and religious institutions; art, architecture, music and literature.
Prereq: FRN-321 and permission
- FRN 372 History of French Civilization II**
 🌐 AH 4 cr UL
 Introduction to French civilization and culture from 1715 to present. Political, social and religious institutions; art, architecture, music and literature.
Prereq: FRN-321 and Permission
- FRN 377 Studies in French Film**
 🌐 AH 4 cr UL
 Studies in French film, emphasizing the critical analysis of technical and artistic applications, socio-historical contexts and directors' personal styles.
Prereq: FRN-321 or permission
- FRN 380 Topics in French Language, Lit and Civ**
 🌐 AH 4 cr UL
 Various topics such as Afro-French literature and culture, the French novel, the short story, French literary criticism and theory, study of individual authors, social structures in modern France, the press in France, the French educational system, modern French art and others.
Prereq: FRN-321 or Permission
- FRN 391 French Language Studies**
 🌐 AH 2-4 cr UL
 Further study of grammar and development of reading, writing, speaking and listening skills.
- FRN 392 Targeted French Language Studies**
 🌐 AH 2-4 cr UL
 Targeted study of written French, oral French, or pronunciation.
- FRN 393 Studies in History and Civilization**
 🌐 AH 2-4 cr UL
 Topics in French, Francophone, or regional history, culture, art, or film.
- FRN 394 Studies in French and Francophone Lit**
 🌐 AH 2-4 cr UL
 Studies in literature on a variety of topics or genres.
- FRN 395 Studies in Business French**
 🌐 AH 2-4 cr UL
 Study of business French for commercial communication with the French-speaking world.
- FRN 495 Senior Thesis Part I**
 🌐 AH 1 cr UL
 Prior to enrollment in FRN 500. Designed to set the preliminary work toward the senior thesis in motion. Students will be required to work on a bibliography, outline, and prospectus of the forthcoming thesis.
Prereq: Permission
- FRN 499 French Language Independent Study**
 🌐 AH 4 cr UL
Prereq: Senior Standing; Permission

Prereq: Permission

Geography (GGR)

GGR 101 Human and Environmental Relationships

2 cr

Introduction and overview of the discipline of geography. Central themes include human environment interaction, spatial analysis, and pattern and process. Study of human and natural components of the earth's surface with a focus on relationships between humans and their environments.

GGR 102 World and Regional Cultures

2 cr

Study of various cultural attributes with a focus on the relationships between humans and their environments. Topics examined within a spatial framework that includes population, ecology, religion, politics, economics, agriculture, resources, industry, urbanization, trade, energy use and development.

Prereq: GGR-101

GGR 201 Contemporary World Geography

4 cr UL

Focus on the relationship between the elements of physical geography and human activity both spatially and through time. Develop critical and analytical skills useful in understanding and explaining the spatial patterns of human distribution and behavior as they are influenced by, and have influence on the physical world. Learn how to understand and interpret patterns of human action, belief systems, institutional structures, and socio-economic practices, and how they impact the environment.

Prereq: GGR-101 and 102 or Permission

Geology (GEO)

Four credits from GEO, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Natural Sciences - Physical Sciences.

GEO 101 Physical Geology

NS2

4 cr

Overview of physical Earth processes including rock and mineral formation, weathering and erosion, volcanism, seismicity and glaciation. Topics focus on central theme of plate tectonics. Also included are tectonic mechanisms responsible for structural change and landforms. Laboratory. Course fee.

Prereq: MTH-100 or Placement

GEO 112 Introduction to Michigan Basin Geology

NS2

4 cr

Field-oriented course focusing on unique geology of the Michigan Basin. Emphasis on tectonic and climatic changes in Michigan's geologic past and the rock records and fossil assemblage representing these changes. Topics include formation of the Michigan Basin's unique structure. Field trips include Wallace limestone quarry, evaporite deposits in a Grand Rapids gypsum mine, sandstone ledges at Grand Ledge, Silver Lake sand dunes and regional Pleistocene glacial features. Laboratory. Course fee.

Prereq: MTH-100 or Placement

GEO 113 Dynamic Earth

NS2

4 cr

Study of the earth's dynamic systems as explained by plate tectonics theory. Examination of rock and fossil records. Laboratory. Course fee.

Prereq: MTH-100 or 101

Gerontology (GER)

Minor Requirements

Twenty-six credits, which must include:

1. At least one upper-level course in civilization or literature.
2. Successful completion of WLC 101.
3. Study in a German-speaking country is highly recommended.
4. Language Proficiency must be demonstrated by taking an approved external proficiency exam. Majors are expected to have a passing grade of *Goethe-Zertifikat B1* or its equivalent or Intermediate-High proficiency level as averaged across the four skills (listening, speaking, reading and writing) at the American Council on the Teaching of Foreign Languages (ACTFL).

GER 385 Gerontology Practicum

1-8 cr UL

Requires instructor permission.

Prereq: Permission

GER 480 Senior Seminar

2 cr UL

Multidisciplinary capstone seminar for gerontology minors.

Prereq: Permission

German (GRM)

German courses, as designated by the three-letter prefix GRM, are taught in German. World Languages and Cultures courses, as designated by the three-letter prefix WLC, are taught in English

Courses taught internationally may have a different emphasis from those offered on campus.

Major Requirements

Thirty-six credits at the 200-level or above which must include:

1. Courses in German language, civilization and literature.
2. Successful completion of WLC 101.
3. Students should be aware that a maximum of 6 credits (including WLC 101) may be taken wherein the primary language of instruction is English; courses must be pre-approved by the WLC department.
4. Successful completion of English cognate: 4 credits from ENG 201, ENG 202, ENG 220, or ENG 320.
5. A minimum of one semester of approved international study in a German-speaking country.
6. Language Proficiency must be demonstrated by taking an approved external proficiency exam. Majors are expected to have a passing grade of *Goethe-Zertifikat B2* or its equivalent or perform at the Advanced-Low proficiency level (as averaged across the four skills listening, speaking, reading and writing) at the American Council on the Teaching of Foreign Languages (ACTFL).
7. Students will write and defend in open forum an acceptable paper of moderate length reflecting on their study of German, study abroad experience and how the role of language and culture combines with the mission of a liberal arts education.

Minor Requirements

Twenty-six credits, which must include:

1. At least one upper-level course in civilization or literature.
2. Successful completion of WLC 101.
3. Study in a German-speaking country is highly recommended.
4. Language Proficiency must be demonstrated by taking an approved external proficiency exam. Minors are expected to have a passing grade of *Goethe-Zertifikat B1* or its equivalent, or perform at the Intermediate-High proficiency level (as averaged across the four skills listening, speaking, reading and writing) according to the American Council on the Teaching of Foreign Languages (ACTFL).

Four credits from GRM 112 or higher, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Humanities.

Department Honors may be achieved in the World Languages and Cultures Department by:

1. Having a 3.5 GPA in all classes applied to the Major.
2. Performing beyond minimum requirements on the Language Exam portion of the Departmental Comprehensive Evaluation, and
3. Presenting a senior thesis of honors caliber.

Advanced Credit in a second language may be earned by:

1. Scoring at the 4 level or higher on the Advanced Placement (AP) exam.
2. Successfully completing the International Baccalaureate Program (IB) HL exam with a score of 5.

GRM 111 Beginning German I

4 cr

Introduction to German. Primary objective: to enable students to begin early and meaningful communication in German by acquiring necessary basic skills. Emphasizes skills in speaking, listening, reading and writing. Secondary objective provides insight through participation in German culture and society. (Alma, Germany)

GRM 112 Beginning German II

☺ AH

4 cr

Introduction to German. Primary objective: to enable students to begin early and meaningful communication in German by acquiring necessary basic skills. Emphasizes skills in speaking, listening, reading and writing. Secondary objective provides insight through participation in German culture and society. (Alma, Germany)

Prereq: GRM-111 or Placement

GRM 200 German Masterpieces

☺ AH

4 cr UL

Reading and discussion of selected works of German literature in English translation, including Böll, Brecht, Goethe, Grass, Hesse, Kafka, Peter Schneider, Maron and Plenzdorf. Does not count toward major or minor. (Alma)

GRM 221 Language and Culture

☺ AH

4 cr UL

Continuation of GRM 112 with additional emphasis on reading and writing skills, augmented by detailed study of German contemporary culture. Extensive grammar review and intensive oral-aural practice. Class conducted in German. (Alma and Germany)

Prereq: GRM-112 or placement

GRM 222 Introduction to Reading

☺ AH

4 cr UL

Intensive reading and discussion of selected German material of medium difficulty designed to acquaint students with critical reading skills. Emphasis on reading skills, vocabulary acquisition, German syntax and expanded writing skills. (Alma and Germany)

Prereq: GRM-221, Placement or Permission

GRM 231 Composition and Conversation I

☺ AH

4 cr UL

Systematic study of grammar and further development of speaking and writing skills through reading, discussion, intensive classroom drill through culture. (Germany)

Prereq: GRM-112 or Permission

GRM 232 Composition and Conversation II

☺ AH

4 cr UL

Systematic study of grammar and further development of speaking and writing skills through reading, discussion, intensive classroom drill through culture. (Germany)

Prereq: GRM-112 or Permission

GRM 251 Aspects of German Culture I

☺ AH

4 cr UL

Intermediate level investigation of various historic aspects of contemporary German civilization and culture through speaking, writing, reading exercises, discussion and excursions. (Germany)

Prereq: GRM-112 or Permission

GRM 252 Aspects of German Culture II

☺ AH

4 cr UL

Intermediate level investigation of various historic aspects of contemporary German civilization and culture through speaking, writing, reading exercises, discussion and excursions. (Germany)

Prereq: GRM-112 or Permission

GRM 299 Readings in the Arts and Sciences

☺ AH

1-8 cr UL

Designed for students who wish to develop reading abilities in sciences and humanities. Specific readings reflect individual needs and interests. (Alma)

Prereq: GRM-112 or Permission

GRM 311 Advanced Conversation and Composition I

☺ AH

4 cr UL

Refinement and extension of language skills through consideration of contemporary issues and experiences from internet, newspapers, magazines and audio-visual materials. Expanded oral composition, extensive and intensive written composition. Review of selected grammatical problems. (Alma and Germany)

Prereq: GRM-222 or permission

GRM 312 Advanced Conversation and Composition II

☺ AH

4 cr UL

Refinement and extension of language skills through consideration of contemporary issues and experiences from internet, newspapers, magazines and audio-visual materials. Expanded oral composition, extensive and intensive written composition. Review of selected grammatical problems. (Alma and Germany)

Prereq: GRM-222 or Permission

GRM 313 Intensive Language Practice

☺ AH

4 cr UL

Review of selected grammatical problems; refinement of speaking, reading and writing skills through extensive classroom practice and cultural excursions. (Germany)

Prereq: GRM-222 or Permission

GRM 315 Selected 20th Century Authors

☺ AH

4 cr UL

Representative authors of the 20th century such as Thomas Mann, Hermann Hesse, Heinrich Böll, Bertolt Brecht, Günter Grass, Ingeborg Bachmann, Christa Wolf and Monika Maron. Problems of literary and human response to transition and flux of modern society are explored. (Alma)

Prereq: GRM-222 or Permission

GRM 316 The German Novelle

☺ AH

4 cr UL

Investigation of the Novelle; its style, historical development and variants in German literature with examples drawn primarily from the 19th and 20th centuries. Readings from Kleist, Brentano, Tieck, Storm, Stifter, Droste-Hülshoff, Kafka and Mann. (Alma)

Prereq: GRM-222 or Permission

GRM 321 In Search of German Identities

☺ AH

4 cr UL

In-depth investigation of modern German culture and civilization from Bismarck to emergence of National Socialism. (Alma)

Prereq: GRM-222 or Permission

GRM 322 Foundations of Contemp Germany

☺ AH

4 cr UL

Continuation of German culture and civilization with emphasis on the present; in-depth consideration of current social-political problems and possible solutions; the place of a unified Germany in a new European political-economic order. (Alma)

Prereq: GRM-222 or Permission

GRM 341 Introduction to German Literature

☺ AH

4 cr UL

Introduction to German literature through the study of form and genre. Stress on formal structuring of literature and the communicative process. Examples drawn from a wide range of periods, styles and milieux. Basic literary theory. (Alma)

Prereq: GRM-311 or Permission

GRM 350 Postwar German Short Stories AH

4 cr UL

The course, conducted in German, investigates the adoption of the genre "Kurzgeschichte" from American literature in postwar German literature and explores how West- and East-German writers, by means of this genre, come to terms with their pasts from 1950s through 1970s. (Alma)

Prereq: GRM-311 or Permission

GRM 399 GRM Independent

2-4 cr UL

Independent study on selected topics in German.

GRM 401 Advanced Composition and Stylistics I AH

4 cr UL

Concentration on areas of composition and style, both oral and written, which pose difficulty for advanced students; emphasis also given to advanced oral practice. (Germany)

Prereq: GRM-312 or Permission

GRM 402 Advanced Composition and Stylistics II AH

4 cr UL

Continued oral and written investigation into advanced grammar with attention to individual problems defined in previous study. Reading of contemporary culture and literary sources. Advanced oral practice. (Germany)

Prereq: GRM-401

GRM 403 Advanced Composition and Stylistics III AH

4 cr UL

Extensive investigation into points of concern for advanced German students, stressing intensive and extensive reading, conversation and writing to allow mastery of stylistic difficulties and idiomatic expressions. Questions and abilities investigated beyond the normal range of German study. (Germany)

Prereq: GRM-402

GRM 411 The Age of Goethe AH

4 cr UL

Study of literature and society surrounding the lifetime of Goethe, generally including the most significant authors and works from 1750-1825.

Prereq: GRM-341 or Permission

GRM 412 Social Engagement in 19th & 20th Century AH

4 cr UL

Investigation of the significant ideas affecting the individual and position in society, the alteration of expectations, social forces and basic cultural changes as seen in works of authors such as Lenz, Büchner, Hebbel, Heine, Hauptmann, Kafka, Brecht, Grass, Böll, Hochhuth, Weiss and Maron. (Alma)

Prereq: GRM-341 or Permission

GRM 420 Advanced German for Teachers AH

2 cr UL

Intensive review combined with cultural exposure and a stay abroad. Intended for persons who already possess a good command of German, but especially for high school instructors (Germany); requires GRM major or minor; prior teaching experience.

GRM 499 German Independent Study

4 cr UL

Prereq: Senior Standing; Permission

GRM 500 Senior Thesis AH

4 cr UL

Prereq: Permission

Health Care Administration (HCA)

Major Requirements

Fifty-six credits which must include:

- Core Courses (40 cr):** HCA-131 (may take BUS-121) BUS-221, 224; HCA-319, 328, 329, 385, 441; IPH-430, PHL-229.
- Electives (select 16 credits of the following):** ANT 217; HCA-280, 334, 344, 380, 405, 433, 450, 499, 500; IPH-331, 340; PSY-260; SOC-234,336; COM-243.
- Required prerequisites (16 credits):** BIO-121; ECN-111 and 112; and one course from: MTH- 116, BTC-280, or PSY-220.

HCA 131 Intro to Health Service Management

4 cr

This course is geared toward first and second year students who desire a fundamental understanding of health service management. It will explore a variety of health care settings including hospitals, nursing homes and clinics. Case studies will augment student learning in leadership, motivation, organizational behavior, management thinking, performance and quality improvement, information technology, ethics and cultural competency. This is a required course for the Health Care Administration major.

HCA 319 Health Care Finance

4 cr UL

Implements financial management, managerial management, and economic principles to analyze real-world health care issues. Emphasizes and encourages problem-solving and creative thinking through the use of texts, cases, and models of health care industry. Provides a comprehensive overview of financial structure, market forces, controls and techniques used in health care financial management and the perspectives of the various interest groups involved (providers, insurers, policy makers, patients, and the general public). Provides students with an overview of the principal financial mechanisms in place across the U.S. health care industry and specific insights into critical issues the industry currently faces.

Prereq: BUS-121 or HCA-131; BUS-221; four credits from BUS-222 or BUS-224(A-D); or permission

HCA 328 Health Law

4 cr UL

This course provides a legal framework for students interested in health care administration and managing the legal issues they will face in a health care organization. Students will learn the basic legal principles including: contract law, tort liability and malpractice, employment law, fraud and abuse, health planning and advocacy, HIPAA/Privacy, public health laws, and other related topics.

Prereq: ECN-111 and 112, MTH-116 or BTC-280 or PSY-220, and four credits from BUS-222 or BUS-224(A-D); or Permission

HCA 329 Health Administration

4 cr UL

Explore relevant findings from the behavioral sciences and other disciplines to help students apply appropriate management skills in their organization. Study the basics of leadership, communication, motivation, change theories, organizational culture, problem solving, conflict and negotiations, decision-making, productivity measurement, the TQM process, resources allocation, and mission and values development.

Prereq: BUS-121 or HCA-131; BUS-221; four credits from BUS-222 or BUS-224(A-D); or permission

HCA 334 Health Care Marketing

4 cr UL

This general survey class will acquaint students to the marketing discipline from the perspective of Health Care Administration. Topics include target markets, marketing segmentation, marketing research and the marketing mix. NOTE: Students cannot earn

credit for both BUS-333 and 334.

Prereq: four credits from BUS-222 or BUS-224(A-D); ECN-111 and 112; MTH-116 or BTC-280 or PSY-220; or Permission

HCA 344 Health Care Human Resource Management 4 cr UL

Explore human resources management in healthcare organizations including: recruitment and selection of employees, benefits and compensation management, privileging and credentialing of health professions, performance evaluation, staffing plans, labor relations and labor laws relevant to healthcare organizations. Discussion of other topics such as appraisal, discipline, safety, benefits and collective bargaining as related to healthcare human resources.

Prereq: HCA-329 or Permission

HCA 385 Health Care Administration Practicum 4 cr UL

Only four credits will count in the major. Requires permission. Student must also successfully complete the appropriate internship workshops that are sponsored by the Center for Student Opportunity (CSO) and the HCA department.

Prereq: BUS-121 or HCA-131; BUS-221; four credits from BUS-222 or BUS-224(A-D); HCA319, 329, 441, IPH-430 and PHL-229

HCA 405 Health Care Informatics 4 cr UL

The course will give students a broad exposure to the field of Health Informatics. Topics include, but are not limited to, networking, information systems, information technology, coding, data bases, HL7, security and HIPAA.

Prereq: HCA-329 or Permission

HCA 433 Exploring Health Disparities 4 cr UL

Introduction to global health care systems and models and their influences on health disparities and delivery of healthcare. Students will think critically about and discuss health and healthcare within a global environment. Examine vulnerable populations and how social determinants influence the health outcomes of various nations.

Prereq: BUS-121 or HCA-131 and Permission

HCA 441 Strategic Planning in Health Care 4 cr UL

Introduces students to strategic planning as it applies to health care organizations. Students will develop practical skills in strategic management, such as internal and external environmental assessment, competitor analysis, and methods for evaluating strategic alternatives that can be used in different types of health care settings. Explores the leadership roles of governing boards, health care managers, and clinicians.

Prereq: HCA-319 and 329

HCA 450 Long-Term Care Management 4 cr UL

Basic overview of long-term care management in the United States. Covers the state of the field, those it serves, and the various organizations who serve them. Examines issues affecting all long-term care providers, individually or collectively (e.g., financing, regulations, integration, ethical issues). Discusses how various segments of long-term care fit together to form an overall system while looking at trends that are likely to shape the field in the future.

Prereq: HCA-329 or Permission

HCA 499 HCA Independent Study 1-4 cr UL

Requires instructor permission.

HCA 500 HCA Senior Thesis 4 cr UL

Student must have a GPA of 3.5 or better calculated on all BUS courses taken.

Prereq: Senior Standing and Permission

Health Studies (HSS)

HSS 180 Topics in HSS 2-4 cr
Exploration of special topics in health studies. Topics will vary and be selected by the instructor. May be taken more than once.

HSS 385 Health Studies Practicum 1-8 cr UL
Observation of communication and career opportunities in a health care setting. One example of a practicum is a hospital rotation. Written work is required. Course fee. Pass/fail only.

History (HST)

The study of history provides a historical perspective which contributes to an understanding of the economic (E), social (S), political (P), intellectual (I) and technological (T) factors which affect human behavior as well as the historical interpretation (H) which explains that behavior. Students may identify these central course themes by noting the explanatory caption, e.g. (ESPI). All lower level courses focus on the principal economic, social, political and intellectual problems in particular historical eras. Similarly, courses which emphasize a multinational or global perspective are noted by the caption (GP).

Major Requirements

Thirty-six credits which must include:

1. One 300-level United States history course from: HST-323, 325, 326, 327, 328, or another course pre-approved by the department.
2. One 300-level European history course from: HST-300, 330, 331, 332, 333, or another course pre-approved by the department.
3. One 300-level African or Asian history course from: HST-353, 360, or another course pre-approved by the department.
4. One 400-level seminar (not an independent study).
5. All 36 credits that count toward the major must be taken for a letter grade. History courses may be taken for S/F credit but only above and beyond the 36 credits taken for letter grade for the major.
6. Successful completion in student's senior year of the comprehensive examination administered by the department.
7. Honors candidates must have a minimum 3.3 overall GPA and 3.5 in the History Department, complete a one-credit advanced bibliography course, submit an honors thesis, and where possible present the thesis in an external forum.

Medieval & Renaissance Minor Requirements

Twenty-four credits which must include:

1. One four-credit American history course at any level.
2. One four-credit European history course at any level.
3. One four-credit Asian or African history course at any level.
4. At least two upper-level four-credit courses. Upper-level courses may be at the 300 or 400-level; a 400-level seminar is recommended as one of these, but not required. 200-level courses are particularly recommended when selecting the remaining courses for the minor.
5. All 24 credits that count toward the minor must be taken for a letter grade. History courses may be taken for S/F credit, but only above and beyond the 24 credits taken for a letter grade for the minor.
6. Successful completion of the comprehensive evaluation administered by the Department.

Teaching Major Requirements

Students seeking a History Teaching Major are strongly urged to have an academic advisor who is a tenured or tenure-track faculty member of the History Department.

Thirty-six credits which must include:

1. One 300-level United States history course chosen from: HST-323, 325, 326, 327, or another American history course pre-approved by the department.

2. One 300-level European history course chosen from: HST-300, 330, 331, 332, 333, or another European history course pre-approved by the department.
3. One 300-level African or Asian history course chosen from: HST-353, 360, or another history course pre-approved by the department.
4. One 400-level seminar (not an independent study).
5. HST-100, 101, 104, 105, and 206.
6. The following cognate courses, unless a student is taking one or more of the following as part of another major or minor: ECN-111, GGR-101, GGR-102, and POL-101.
7. All 36 credits that count toward the teaching major must be taken for a letter grade. History courses may be taken for S/F credit but only above and beyond the 36 credits taken for letter grade for the major.
8. Successful completion in the student's senior year of the comprehensive examination administered by the department.
9. Honors candidates must have a minimum 3.3 overall GPA and 3.5 in the History Department, complete a one-credit advanced bibliography course, submit an honors thesis, and where possible present the thesis in an external forum.

Additional Notes

100 and 200 level courses are recommended for first-year students and sophomores. HST-300 and above are recommended for sophomores, juniors and seniors; freshmen admitted only with permission of the instructor.

Four credits from HST, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Social Sciences.

HST 100 World History Survey I

SO 4 cr
Introductory overview of ancient world history from Paleolithic times until the sixteenth century, emphasizing how early civilizations developed and their relationships with each other. Goals include familiarizing students with the major (shared and unique) characteristics of early societies, highlighting the continuity and change as societies developed around the globe. (ESPIT/GP)

HST 101 World History Survey II

SO 4 cr
Introductory overview of modern world history since the 16th century, emphasizing developments within Europe and interaction with the rest of the world. Focuses on topics such as the origins of European expansion in the first "global age," rise of absolutism, Scientific Revolution and Enlightenment, age of revolution and industrialization, modern imperialism, origins and impact of the World Wars, and the Cold War and its aftermath. (ESPIT/GP)

HST 104 The Making of America to 1877

SO 4 cr
Examines American history from colonial times to Reconstruction; concentration on political, constitutional, social, economic and intellectual problems. (ESPITH/GP)

HST 105 The American Century: 1877-Present

SO 4 cr
Political, economic, social and intellectual issues from Reconstruction to the present. Focuses on 1877-1990. (ESPITH/GP)

HST 107 American Foreign Relations

SO 4 cr
Introductory survey of the rise of American power on the international stage from the 1890s to the present. Examines the expansion of its economic, political, and cultural influences in the world through trade and wars, and the spread of American values.

HST 121 American Legal History I

SO 4 cr
Introductory survey, 1620-1877. Indigenous and colonial law, crime and punishment, religion and the law, creation of the law of slavery, imperial conflicts and the Revolution, the Constitution, the Marshall and Taney courts, abolition and women's rights, and legal aspects of the Civil War and Reconstruction. (ESPI)

HST 122 American Legal History II

SO 4 cr
Introductory survey, 1877-Present. Labor and industrialization in the law, legal education and philosophies, civil rights, the New Deal and the courts, law and the economy, the growth of government and the expansion of presidential power, terrorism and the law. (ESPI)

HST 122M American Legal History II

SO 4 cr
Introductory survey, 1877-Present. Labor and industrialization in the law, legal education and philosophies, civil rights, the New Deal and the courts, law and the economy, the growth of government and the expansion of presidential power, terrorism and the law. (ESPI)

HST 130 Women in European History

SO 4 cr
Survey of Western European history, focusing on women's (and men's) roles in the family and society from Classical Greece and Rome through the French Revolution, highlighting particular women whose contributions have been celebrated through the ages as well as discussing what kinds of lives most women led. (ESPI/GP)

HST 140 American Women's History

SO 4 cr
Introductory survey and examination of problems and issues in American women's history and American feminism, colonial era to the present. Emphasizes gender, race and class as categories of historical analysis. (ESPITH)

HST 150 What Do Historians Do?

SO 2 cr
This course is open to all students, regardless of major. Students learn about how the study of history leads to a wide range of career paths, drawing especially upon the experiences of Alma College alumni. Students learn about the development of history as a profession and how various historical figures found their vocations. They reflect on the skills fostered by the study of history and consider how to market those skills effectively in a job search. Students also search for job advertisements and produce key job search materials (e.g., cover letter, résumé).

HST 180 Topics and Problems in History

SO 2-4 cr
Topical course in history.

HST 180C China: History and Culture

SO 4 cr
This course allows students to personally experience China and Chinese people by exploring their history, culture, and society. Students will meet Chinese people, exchange ideas with their Chinese counterparts, visit businesses, and rural communities. We will learn not only China's rich ancient history and culture, but also its current dynamic economic developments and social changes. China is a land of diversity that few people in the world will realize until they see it. Spring Term only. (ESPI/GP)
Prereq: Permission

HST 199 Independent Study in History

1-4 cr
Prereq: Permission

HST 200 Ancient Near East

SO 4 cr
Ancient history from its beginnings in Mesopotamia until the 4th century B.C. Includes the kingdoms and empires of the Fertile Crescent (Sumerian, Babylon, Assyria, Israel and foundations of Judaism, Phoenicia, etc.), Egypt, Persia and other Near Eastern societies. (ESPITH/GP)

HST 201 Ancient Greece

SO 4 cr
An overview of ancient Greece from Minoan through Mycenaean, the Dark Age, Archaic and Classical Greece, and the Hellenistic Period. Includes an examination of Greek culture, the Persian and

Peloponnesian Wars, Alexander and his conquests and more. (ESPITH/GP)

HST 202 Ancient Rome

SO 4 cr
History of Rome from its legendary beginnings through the Republic, the Principate and the Empire. Traces the rise of Christianity, the causes of Roman decline and Rome's legacy. (ESPITH/GP)

HST 203 Medieval World

SO 4 cr
From the 3rd through the 15th centuries. Uniqueness of medieval society and its legacy to the modern world. Origins of the Middle Ages, society and decline of the medieval world. (ESPI/GP)

HST 206 Approaches to Michigan History

SO 4 cr
An introduction to historical methodologies, focusing on the history of Michigan from the pre-contact period to the present. Native American societies, European contact and first settlements, imperial wars and the American Revolution, territorial period and statehood, economic development and reform movements, Civil War, industrialization and urbanization, immigration and race relations, the two World Wars and the Great Depression, the civil rights movement, suburbanization and the decline of the auto industry, contemporary Michigan. Course fee. (ESPITH)

HST 209 Selected Problems in Historical Research

SO 2-6 cr
Introduction to archival research. Classification and cataloging; search and retrieval methods in local, state and federal government archives; periodical literature and research in the social sciences. Problems may be selected. Examples are literature of American history, European studies, Asian studies, Latin American studies and Mediterranean studies. (ESPIT)
Prereq: Permission

HST 221 English History

SO 4 cr
Survey of English history from the Norman conquest to modern times. The principal emphasis is on political and constitutional issues and problems, but attention is also given to social, economic, legal and cultural developments. (ESPI/GP)

HST 222 Ireland's Freedom Struggle

SO 4 cr
Exploration of Irish history, with particular emphasis on the long struggle for freedom from English and later British rule, from the Middle Ages through the Protestant plantation in the north, the Penal Laws, Potato Famine, and Home Rule campaign, to the Easter Rising, War of Independence, and Northern Irish "Troubles." The course includes the complex interaction between the native Irish, English, Scots, and Welsh settlers, and the English/British state, as well as between Irish Catholics and Protestants, and the impact of this history on Irish culture and society, economic development and mass emigration, and on the changing connections between modern Irish nationalism and religion.

HST 228 Immigration & Ethnicity in American Hist

SO 4 cr
Examination of the experiences of immigrants and their transformation into ethnic Americans during the 19th and 20th centuries. Discussion of what it means to be American and the diversity of American society in a historical perspective. (ESPI/GP)

HST 238 Europe in Upheaval, 1914-45

SO 4 cr
Analysis of causes and course of World War I; Russian Revolution and Stalinism; interwar diplomacy, crisis of democracy, and Great Depression; Fascism and Nazism; special focus on causes, course, and impact of World War II. (ESPITH/GP)

HST 240 Modern Germany

SO 4 cr
Survey of German history since 1815, with emphasis on the period 1848-1945. Topics include historic characteristics of major German

regions, emergence of a modern industrial economy, the failed liberal revolution in 1848, unification, politics of Imperial Germany, promise and failure of democracy in the Weimar Republic, rise and fall of Nazism, and emergence of a united, democratic Germany out of the divided society of the postwar era. Emphasis is on the struggle between liberalism and authoritarianism in shaping modern Germany, but also explores major social, economic and cultural developments. (ESPIT/GP)

HST 249 Russian Studies

SO 4 cr
Analysis of Russian economic, social, political and intellectual development from the era of Peter the Great, with particular emphasis on the 19th and 20th centuries; origins of the Russian intelligentsia; Slavophiles and Westernizers; abolition of serfdom; Bolsheviks and the Russian Revolution; and others. (ESPI/GP)

HST 252 Modern East Asia

SO 4 cr UL
Introductory survey of the modern history and culture of Korea, Japan, and China. Examines the inter-relations of the three countries and their different experiences since the arrival of Western industrial powers in the 19th century. Major topics include imperialism and cultural interactions, science and modern political thoughts, reforms and revolutions, social transformations, and the miracles of economic growth. This new course offers new approaches to the study of regional history by making connections of shared experiences.

HST 253 Asian Studies: Modern China and Japan

SO 4 cr
Introductory study of the modern history of China and Japan. Examines the dynamic developments of political, social, economic and cultural changes, including relations with the West, from 1800 to the present. (ESPI/GP)

HST 254 Colonial Americas

SO 4 cr
Examines the development of European colonies in the Americas from 1492 to independence, including the comparative interaction of Native American, African and European cultures in the Spanish, Portuguese, French and English colonies. Analysis of the political, economic, social and intellectual changes from the early colonies to independence. (ESPI/GP)

HST 255 Latin America Since 1825

SO 4 cr
Analyzes selected countries. Caudillos and dictators, reform and revolution, neocolonialism and imperialism, economic growth and development. (ESPI/GP)

HST 256 1492 and the Spanish Empire

SO 4 cr
The year 1492 has a mixed legacy. For many, it was a triumph. But it also had a tragic side: the eventual deaths of millions of African slaves and Native Americans. This course explores the aftermath of 1492: the history of Spanish America until the start of the wars of independence in 1810. Political and religious institutions created in the "New World" are examined, and the resulting social and cultural tensions. (ESPI/GP)



HST 260 Introduction to African History

SO 4 cr
Introductory survey of African history, emphasizing the sub-Saharan region. Chief focus is on the pre-colonial peoples and cultures of the region; attention also given to the nature and impact of the trans-Atlantic trade, European colonization, and the struggle for national independence in the 20th century. (ESPIT/GP)

HST 271 Science & Public Health: A Global Study

SO 4 cr
Germ theory and bacteriology revolutionized the knowledge of disease. This course studies modern public health in a global perspective, covering details about Europe, the United States, and China. (ESPIT/GP)

HST 272M Plagues and Peoples

  SO 4 cr
 Scientific and historical approaches to explore the connections between major epidemics and world history, combining a general overview of the subject with more focused case studies. Study the social, economic, political, cultural, religious, and technological contexts in which epidemics arose, how those contexts shaped responses to them, and the impact of these epidemics on society at large. Spring Term only. (ESPITH/GP)
Prereq: Permission

HST 277 Am Studies: Civil War and Reconstruction

SO 4 cr
 Examines sectional crisis, disunion and reunion from 1845-77. Topics include significance of Civil War era for industrialization; agriculture and urbanization; emancipation of slaves and race relations; development of the Presidency; constitutional issues; and modern warfare. (ESPI)


HST 280 Topics and Problems in History

SO 2-4 cr
 Topical course in history.


HST 299 History Independent Study

1-4 cr
 300-, 400- and 500-level courses are recommended for sophomores, juniors and seniors. Freshmen admitted only with permission of the instructor.


HST 323 Creating the Republic, 1763-1815

 SO 4 cr UL
 Analysis of selected economic, social, political and intellectual issues, including the coming of the American Revolution; "state-building" during the war for Independence; the "Critical Period," ratifying the Constitution; origins and early development of political parties, ideologies of republicanism and nationalism; diplomatic problems and territorial expansion; minorities in the early republic; and the War of 1812. (ESPI/GP)
Prereq: Sophomore Standing, and one history course or Permission


HST 325 Reform and Search for Order

 SO 4 cr UL
 Urban revolution; middle class reforms; response of industry, labor, and public institutions to the progressive era; World War I; the Jazz Age; the stock market crash of 1929; and the Hoover administration. (ESPITH/GP)
Prereq: Sophomore Standing, and one history course or Permission



HST 326 The Roosevelt Revolution, 1932-45

 SO 4 cr UL
 Analysis of the Great Depression, the New Deal, American isolation in 1930s, and American involvement in World War II. Historical perspectives of the New Society which emerged from the Great Depression and World War II. (ESPITH/GP)
Prereq: Sophomore Standing, and one history course or Permission

HST 327 Constitutional History



 SO 4 cr UL
 Beginning with the debates over the ratification of the Constitution in 1788-89, this remarkable document has been contested, amended, and reinterpreted through many dramatic developments in American history. As a blueprint for a national government, it has shaped government, politics, and society; in turn, it has been influenced by changes in American politics, society, culture, technology, and the economy. The interplay between, on the one hand, the Constitution and constitutional law, and on the other, major historical events and trends, is the focus of this course. (ESPIH)
Prereq: Sophomore Standing, and one history course or Permission

HST 328 Cold War America



  SO 4 cr UL
 The Cold War dominated America and its rivalry with the Soviet Union in the world during the second half of the twentieth century.

This course examines the origins, strategies, policies, and conflicts of the Cold War that shaped American domestic development and its global involvement. (ESPITH/GP)
Prereq: Sophomore standing, and one HST course or Permission



HST 330 Europe and the Islamic World

  SO 4 cr UL
 Since 9/11, the relationship between the Islamic world and the West has become a topic of renewed interest and controversy. From one vantage point, Muslims and Christians have been at odds for centuries, engaged in what some have called a clash of civilizations. But some historians have questioned that interpretation. While Christians and Muslims have experienced much violence and tension, they have also managed to coexist for long periods of time and to engage in fruitful exchanges. This course examines how Christians and Muslims interacted with one another in the pre-Modern Mediterranean World (i.e., pre-1800). (ESPIH/GP)
Prereq: Sophomore Standing and one history course or Permission



HST 331 The Renaissance and Reformation

  SO 4 cr UL
 Analysis of European society in the crucial era of transition from the medieval to the modern world, Renaissance in Italy and northern Europe, humanism, Protestantism, the Counter-Reformation and religious wars. (ESPI/GP)
Prereq: Sophomore Standing, and one history course or Permission



HST 332 Inquisitions

  SO 4 cr UL
 Few institutions in history are as infamous as the Inquisition. It represents some of the most notorious instances of intolerance and violence produced by religious belief. Our knowledge of this institution, however, too often relies upon myth. This course, thus, explores how religious authority functioned during a time very different from our own. Readings examine inquisition documents, as well as scholarship on Spain's inquisition and other inquisitions in Europe and the Americas. (ESPIH/GP)
Prereq: Sophomore Standing, and one history course or Permission



HST 333 European Enlightenment

  SO 4 cr UL
 Perhaps the key intellectual movement to signal the dawn of the modern world, the European Enlightenment is known as an "age of reason" that spanned the seventeenth and eighteenth centuries and dismantled religion as the dominant force in European societies. But by no means did the Enlightenment spell the end of belief or superstition. Through sources from the period, we examine the ideas of several famous individuals, each of whom contributed and reacted to the European Enlightenment. While this course centers on development taking place in Europe, we also will devote some attention to the interaction between Europe and the wider world. (ESPIH/GP)
Prereq: Sophomore Standing, and one history course or Permission

HST 335 London Pre-Seminar

  SO 4 cr UL
 HST 335 is the preparatory course taken in Alma in the winter before the spring term London Research Seminar. Introduction to advanced historical research, focusing on World War II. Interpret the relevant aspects of World War II, as well as the rudiments of British culture and history. Includes major research project. Prerequisites include HST-328 or another approved HST course and instructor permission. (ESPITH/GP)
Prereq: HST 238 or another approved history course and Permission

HST 336 Rethinking World War II

  SO 4 cr UL
 Discussion and analysis of major debates on various facets of World War II, looking at multiple theaters and including consideration of the war on land, at sea, and in the air. Themes in the chosen case studies include planning, technology, strategy and tactics, intelligence, diplomacy, occupations policies,

including the Holocaust, and resistance during World War II. The course includes a major research paper, drawing in part on extensive published primary sources and documentary collections in the College library.

Prereq: Sophomore Standing, and one history course or Permission

HST 341 Presidential Elections 4 cr UL
SO

Studies the history of presidential elections focusing on the changing role of the media, campaign fundraising, electoral strategies, the role of the media in shaping campaigns, and the impact on public policy; offered especially in national election years, where the election can serve as a laboratory to test theories.

HST 352 China and the West 4 cr UL
SO

This course examines major interactions of China and the West via exchange of trade and ideas, paying particular attention to cultural perceptions and (mis)understandings. Topics of studies include the ancient Silk Road, Marco Polo and Jesuits as cultural intermediaries, encounter with imperialism, modern thoughts and Chinese transformations, and China's rise as an economic power. (This course satisfies the requirement of Asian history.)

Prereq: One history course or permission.

HST 353 China's 20th Century Revolution 4 cr UL
SO

Examines China's 20th-century revolutionary history, including the Republican Revolution of 1911, the Nationalist Revolution of the 1920s and 1930s, and the Communist Revolution of the 1920s, 1930s and 1940s, culminating with an analysis of the Communist party's revolutionary rule, 1949 to the present. (ESPITH/GP)

Prereq: Sophomore Standing, and one history course or Permission

HST 360 South African History 4 cr UL
SO

Introductory survey of main themes and problems in recent South African historiography. Focuses on early colonial roots of segregation and white supremacy, impact of British rule and mineral revolution, development of institutionalized racism through segregation and radical apartheid program, ethnic conflict, constitutional problems, industrialization and urbanization, and Afrikaner and black nationalism. Also analyzes contemporary crisis and potential for conflict resolution in this key area of confrontation between the developed and developing worlds. (ESPI/GP)

Prereq: Sophomore Standing, and one history course or Permission

HST 361 Race in South Africa and USA 4 cr UL
SO

A comparative study of South African and United States (especially Southern) history, this course examines similarities and differences in the way concepts of "race" shaped these countries' past and present, including how "race" intersected with class and ethnicity, but also gender. Topics covered include white settlement, the frontier, and subjection of indigenous peoples; racial slavery; "race mixing" and the "color line;" intra-white conflict and creation of white supremacist states; industrialization, racism, and labor relations; and Jim Crow, segregation, and apartheid.

Prereq: Sophomore Standing, and one history course or Permission;

HST 380 Topics and Problems in History 2-4 cr UL
SO

Advanced level history problem-solving. Topics include United States and China; United States and Japan; American foreign policy and world politics, 1917-73; oral history, World War II; comparative study in 20th century revolutions; the Nazi revolution; Churchill and his times; Constitutional history.

Prereq: Sophomore Standing, and one history course or Permission

HST 380CMChina: History and Culture 4 cr UL
SO

This course allows students to personally experience China and Chinese people by exploring their history, culture, and society. Students will meet Chinese people, exchange ideas with their Chinese counterparts, visit businesses, and rural communities. We will learn not only China's rich ancient history and culture, but also its current dynamic economic developments and social changes. China is a land of diversity that few people in the world will realize until they see it. Spring Term only.

Prereq: Permission

HST 385 Internship in History 4-12 cr UL

Study/work program requiring archival and/or field work in conjunction with archives, research libraries, or private or public agencies. Only eight credits may count toward the degree.

Prereq: Permission

HST 399 History Independent Study 1-4 cr UL

Prereq: Permission

HST 407 Foreign Policy Seminar 4 cr UL
SO

Research seminar examining problems and issues in American foreign relations and diplomacy with emphasis on the 20th century. Frequent discussion, limited lecture, term research paper. Fulfills history major seminar requirements. (ESPITH/GP)

Prereq: Permission

HST 425 Riot and Rebellion in America 4 cr UL
SO

This seminar will examine instances of civil disorder in American history, from the Pueblo Revolt of 1680, to Revolutionary-era mobs, slave revolts, and contemporary protests. Students will consider whether to classify each instance as a riot or a rebellion (and why that matters), and whether violence is a central characteristic of American history or an aberration.

Prereq: Permission

HST 433 World War II Seminar 4 cr UL
SO

Focuses on the Second World War, primarily but not exclusively the European theater. Introduction to advanced historical research, including developing complex bibliographies, writing a literature review, developing a hypothesis, using different kinds of primary sources, the technicalities of referencing sources, and stylistic issues in writing history. Design a major research project, written in stages, with close feedback and group discussion in weekly meetings. Also an introduction to important relevant aspects of interpreting the Second World War. (ESPITH/GP)

Prereq: Permission

HST 434 Comparative Fascism 4 cr UL
SO


Research seminar compares the varieties of fascist and semi-fascist political movements, investigating theories of fascism and a variety of case studies. Special focus on German Nazism and Italian Fascism, using a global perspective - including other European countries, the United States, South Africa, Latin America, and Japan - to enrich comparative analysis. Includes an examination of contemporary far right movements. (ESPITH/GP)

Prereq: Permission

HST 435 London Research Seminar 4 cr UL
SO

Focus on World War II, primarily in Europe, using the National Archives of the United Kingdom in London. Study various aspects of history and culture, in relation to World War II, Britain and Western civilization as a whole, by visiting selected museums, galleries, cathedrals, palaces and other historical landmarks in the greater London area and other selected British locations. Continue archival research and development of papers written in HST 335. (ESPITH/GP)

Prereq: HST-238, 335 and Permission

HST 480 Topics and Problems in History
 SO 2-4 cr **UL**
 Senior Honors Seminar. Analysis of business and economic history of East Asian- American relations; comparative revolutions; 20th century technology, geo-politics and global perspective. No more than 12 credits may count toward the degree. Only eight credits may count toward the History Major.
Prereq: Permission

HST 499 History Independent Study
 1-4 cr **UL**
 Advanced bibliography and selected problems.
Prereq: Permission

HST 500 Senior Thesis
 SO 1-4 cr **UL**
Prereq: Permission

Humanities (HUM)

HUM 110 Fine Arts Education
 AH 4 cr
 A study of the knowledge, understanding and application of the content, functions, and achievements of dance, music, theatre, and the visual arts to promote one's ability to create, perform and respond in and through the arts. While the course will be of special interest to Elementary Education majors, it is designed to be accessible to all interested students. Fall only.

HUM 180 Topics in Humanities
 AH 2-10 cr
 Courses in the humanities, often incorporating an interdisciplinary focus from two or more programs, which do not fit within current departmental boundaries. Course content varies and can be repeated for credit unless otherwise indicated.

HUM 385 Humanities Practicum
 4 cr **UL**
 Requires instructor permission.

HUM 399 Humanities Independent Study
 1-4 cr **UL**
 Requires instructor permission.

Integrative Physiology and Health Science (IPH)

IPH Major Requirements
 Thirty-six credits which must include:

- Core Courses (20 cr): IPH-220, 225, 226, 327, and 344.
- One of the following Concentration Areas (16 cr):
 - Clinical Exercise Physiology: IPH-310, 340, 417, 418, 419, 421, and 422.
 - Pre-therapy: IPH-310, 345, 346, 401 and six credits from IPH-323, 324, 328, 338, 417, 418, 419, or 430.
 - Pre-medicine: IPH-310; 270 or 331 or 430; 328 or 340; and six additional credits from the previous options or IPH-401, 417, 418, 419.
 - Public Health: IPH-330, 331, and 430 and four credits from ENV-205, IPH-265, 270, 311 or 328.
 - Pre-Sports Medicine: IPH-224, 323, 324, 335, 345, 346
- Either completion of the Senior Oral Comprehensive Examination administered by the Department, the Senior Seminar (IPH-480), or a Senior Thesis (IPH-500).
- At least one practicum experience is strongly recommended for all IPH Majors.

Note: For some concentrations, First Aid and CPR certification are required by external internship/practicum programs.

IPH Minor Requirements
 Twenty-four credits that must include: IPH 225, 226, 344, and

12 credits of electives, 8 of which must be upper-level credits.
NOTE: No activity courses (EHS-110 through 165) may count toward the non-teaching major or minor and no more than six activity course credits may be applied toward the 136 required for the bachelor's degree.

Secondary Physical Education Teaching Major Requirements
 Forty-two credits which must include:

- IPH-220, 221, 225, 226, 271, 327, 331, 334, 344, 345, 418, and 419
- One course from EHS-150, 154, 156M and 157
- Two courses from EHS-110, 112, 118, and 165A, 165B, 165S, 165V
- One course from DAN-140 and 141.
- EHS-201 is recommended.

IPH 105 Clinical Experience Athletic Training I 1 cr
 Combines the required proficiencies of a level one student with a clinical field experience.

IPH 106 Clinical Experience Athletic Training II 1 cr
 Combines the required proficiencies of a level one student with a clinical field experience.
Prereq: B or better in IPH-105 or Permission

IPH 205 Athletic Training III 1 cr
 Combines the required proficiencies of a level two student with a clinical field experience.
Prereq: B or better in IPH-106 or Permission

IPH 206 Athletic Training IV 1 cr
 Combines the required proficiencies of a level two student with a clinical field experience.
Prereq: B or better in IPH-205 or Permission

IPH 210 Health Careers 2 cr
 Examination of current information and practices relating to human health. Includes discussions, independent research, on-campus presentations by invited professionals, and off-campus visits to observe health practices, services, agencies and businesses. Pass/fail only.

IPH 212 Physiology of Aging 4 cr
 NS1
 Study of the physiological changes accompanying the aging process. Focuses on both the natural aging process and diseases that are a consequence of aging. Emphasis on lifestyle modification and aging.
Prereq: BIO-121

IPH 214 Faith and Physiology 4 cr
 NS1
 Critically evaluate the evidence suggesting a link between spirituality and health outcomes. Students are introduced to the scientific method, the current debate on science and religion, as well as basic understandings of the putative physiological basis for the observed connection. Larger questions of mind-body connections are addressed through extensive laboratory experiences. Intended for non-science majors. Laboratory.

IPH 215 Human Structure and Function 4 cr
 NS1
 Provides basic understanding of human anatomy and physiology with emphasis on applications to health and medicine. Intended for non-science majors and may not count toward an IPH Major or Minor. Students who have taken IPH-226, BIO-207, or BIO-307 should not take this course. Laboratory.

IPH 220 Nutrition 4 cr
 NS1
 Introduction to human nutrition including identification, function and food sources of required nutrients. Application of principles of normal nutrition to special issues (e.g., physical performance, obesity, pathology.) Course fee.

IPH 221 First Aid and CPR	2 cr	IPH 303 Stress Management	2 cr UL
Introduction to basic first aid and CPR. Satisfactory completion of this course qualifies student for American Red Cross Certificate. Course fee.		Investigation of stressors in the work, social and self environments. The physiology of stress and deep relaxation techniques studied as an introduction to life style redesign. <i>Prereq: Sophomore Standing</i>	
IPH 222 Principles of Athletic Training	4 cr	IPH 305 Clinical Athletic Training V	1 cr UL
Introduction to the general principles of athletic injuries. Course fee. <i>Prereq: IPH-221</i>		Combines the required proficiencies of a level three student with a clinical field experience. <i>Prereq: B or better in IPH-206 or Permission</i>	
IPH 223 Issues in Global Women's Health	2 cr	IPH 306 Clinical Athletic Training VI	1 cr UL
Develops an understanding of the full spectrum of factors which define illness or well-being in women's health from a global perspective. This includes investigating and understanding the social conditions of populations and how these conditions affect the health of women.		Combines the required proficiencies of a level three student with a clinical field experience. <i>Prereq: B or better in IPH-305 or Permission</i>	
IPH 224 Principles of Sports Medicine	4 cr	IPH 310 Introduction to IPH Research	2 cr UL
 NS1 An exploration of the key tenets of sports medicine including sub-disciplines of expertise and a study of injury and pathology at the mechanistic, population, and epidemiological levels. Course fee.		Introduction to the research process. Typically students make a formal research proposal. Students are encouraged to pursue an individual study of a particular subject in Integrative Physiology. <i>Prereq: Junior Standing or Permission</i>	
IPH 225 Human Physiology I	4 cr UL	IPH 311 Introduction to Public Health Research	2 cr
NS1 Study of physiological functions of the human body and the relationship of systems to the maintenance of homeostatic balance. Includes applications of physiological principles to practical issues in medicine and physical performance. Laboratory. Course fee. <i>Prereq: BIO-121</i>		This course is designed to provide students an overview of the research process. Especially designed for research areas in public health, such as behavioral science/health education, biostatistics/epidemiology, and environmental health.	
IPH 226 Human Physiology II	4 cr UL	IPH 323 Therapeutic Modalities	2-3 cr UL
NS1 Study of physiological functions of the human body and the relationship of systems to the maintenance of homeostatic balance. Includes applications of physiological principles to practical issues in medicine and physical performance. Laboratory. Course fee. <i>Prereq: BIO-121 and IPH-225, may take IPH-344 concurrently</i>		Physiological principles and application of various therapeutic modalities utilized in the treatment of musculoskeletal injuries. Laboratory. <i>Prereq: Permission</i>	
IPH 270 Community Health	4 cr	IPH 324 Therapeutic Exercise	2-3 cr UL
 SL A direct application class which provides hands-on experience gathering, entering, analyzing and interpreting actual health data. Students spend two weeks conducting Heart Fairs in eight local school districts with sixth-grade children. During the Heart Fairs, the children are educated and assessed on various heart disease risk factors. Course fee. <i>Prereq: Permission</i>		Methods and principles utilized in the rehabilitation of injuries of the physically active. Laboratory. <i>Prereq: IPH-226 or Permission</i>	
IPH 271A School Health and P.E.- Elementary	2 cr	IPH 327 Physiology of Exercise	4 cr UL
Designed to cover topical health and physical education content required for state teaching certification and methodology for teaching at the elementary level. Fall only. <i>Prereq: EDC-100, 120, and 160 or Permission</i>		NS1 Exploration of the physiological process in relation to exercise in everyday life, and to sports and recreational activities. Laboratory. Course fee. <i>Prereq: IPH-226 or BIO-307</i>	
IPH 271B School Health and P.E.- Secondary	2 cr	IPH 328 Pathophysiology	4 cr UL
Designed to cover topical health and physical education content required for state teaching certification and methodology for teaching at the secondary level. <i>Prereq: EDC-103 and EDC-130, or Permission.</i>		NS1 Introduction to the pathophysiologic study of disease in humans. <i>Prereq: IPH-226 or BIO-307 or Permission</i>	
IPH 280 IPH Seminar	1 cr	IPH 330 Health Data Analysis	4 cr
Topics in physiology selected by the instructor. Students expected to give a presentation. Course fee. <i>Prereq: Junior Standing</i>		 This course serves as an introduction to statistical computing and research data management.	
		IPH 331 Health Promotion	4 cr UL
		 NS1 Provides critical information for planning, implementing, and evaluating health promotion programs in the workplace, schools, community or health care setting. <i>Prereq: Junior Standing</i>	
		IPH 334 Theory and Practice of Individual Sports	4 cr UL
		Analysis of the skills of badminton, tennis and golf, and methods of instruction unique to each sport. Assumes basic proficiency in each sport. Course fee. <i>Prereq: Permission</i>	

IPH 335 Orthopedic Assessment I 4 cr **UL**

An introductory exploration of didactic and clinical application into the examination and diagnostic assessment of upper and lower body orthopedic injuries. Laboratory.
Prereq: Permission

IPH 336 Orthopedic Assessment II 4 cr **UL**

An advanced exploration of didactic and clinical application into the examination and diagnostic assessment of upper and lower body orthopedic injuries. Laboratory.
Prereq: Permission

IPH 338 Motor Control and Learning 4 cr **UL**

This course is designed to provide students an overview of theory, research, and practice in motor control and learning. Students develop an understanding of the cognitive, behavioral, neurophysiological and biomechanical approaches to motor skill learning. Special attention is given to the relationship between motor skill acquisition/motor skill learning and motor control theories.
Prereq: Junior Standing

IPH 340 Pharmacology 4 cr **UL**

Overview of the major concepts of pharmaceutical sciences. Includes the study of basic pharmacodynamic and pharmacokinetic principles as related to the major classes of drugs used in the clinical setting today.
Prereq: IPH-226 or BIO-307

IPH 342 Sport and Exercise Psychology 4 cr **UL**

This course is devoted to assisting students in learning and using theoretical and practical information related to the psychology of sport and physical activity. Effective mental training skills for successful sport and life performance are also discussed.
Prereq: Junior Standing or Permission

IPH 344 Human Anatomy 4 cr **UL**

In-depth study of human anatomy with laboratory experience. Course fee.
Prereq: IPH-226 or BIO-207 or BIO-307 may be taken concurrently

IPH 345 Biomechanics I 2 cr **UL**

Introduction to the mechanical foundations of human movement with emphasis on applications to sports techniques and activities. Quantitative analysis of static equilibrium, linear and angular motion and relevant external forces.
Prereq: IPH-344

IPH 346 Biomechanics II 2 cr **UL**

Continuation of IPH 345. Emphasis on experimental procedures in biomechanics and kinesiology. Laboratory.
Prereq: IPH-345 or Permission

IPH 380 Topics in Integrative Phys & Health Sci 1-4 cr **UL**

Designed as a variable topic and credit course.

IPH 385 Integrative Phys & Health Sci Practicum 1-4 cr **UL**

Designed for off- or on-campus placement combining academic orientation with practical preprofessional experience. Maximum of eight credits.
Prereq: Permission

IPH 390B Field Work in IPH 2-4 cr **UL**

IPH 401 Molecular Aspect of Muscle Physiology 4 cr **UL**

Detailed analysis of recent advances in our understanding of muscle function. Includes basic mechanisms of contraction, neuromuscular control and plasticity/adaption of muscle tissue. Important comparisons between the major muscle types are made. Emphasis placed on understanding these concepts at the molecular level and how these mechanisms translate to overall tissue function. Laboratory. Course fee.
Prereq: IPH-226 or BIO-307; CHM-115

IPH 405 Clinical Athletic Training VII 1 cr **UL**

Combines the required proficiencies of a level four student with a clinical field experience.
Prereq: B or better in IPH-306 or Permission

IPH 406 Clinical Athletic Training VIII 1 cr **UL**

Combines the required proficiencies of a level four student with a clinical field experience.
Prereq: B or better in IPH-405 or Permission

IPH 417 Fitness Assessment and Exercise Rx 4 cr **UL**

Hands-on assessment skills for health-related fitness components. Development and implementation of individualized exercise prescriptions based on fitness and goal assessments for healthy and diseased individuals. Laboratory. Course fee.
Prereq: Take IPH-327 previously or concurrently

IPH 417M Fitness Assessment and Exercise Rx 4 cr **UL**

Hands-on assessment skills for health-related fitness components. Development and implementation of individualized exercise prescriptions based on fitness and goal assessments for healthy and diseased individuals. Laboratory. Course fee.
Prereq: Take IPH-327 previously or concurrently

IPH 418 EKG Interpretation 2 cr **UL**

Assessment and interpretation of the normal and abnormal electrocardiogram. Includes analysis of EKG changes associated with disease states and pharmacological treatments. Laboratory.
Prereq: IPH-226 or BIO-307

IPH 419 Stress Testing 2 cr **UL**

Application and interpretation of functional capacity and diagnostic stress testing. Includes analysis of normal and abnormal EKG and hemodynamic responses to graded exercise testing. Laboratory.
Prereq: IPH-418

IPH 420 Exercise Prescription 2 cr **UL**

Develop and implement exercise prescription principles for healthy individuals as well as individuals with various diseased states. Design a comprehensive exercise program, including health and fitness screening, goal assessment, and development of an individualized exercise prescription. Laboratory.
Prereq: IPH-327 and IPH-419

IPH 421 Community Adult Fitness I 1 cr **UL**

Hands-on exercise leadership of community members. Includes skill assessment, exercise prescription, and oversight of training and progress in individual and group fitness settings.
Prereq: Take IPH-417

IPH 422 Community Adult Fitness II 1 cr **UL**

Hands-on exercise leadership of community members. Includes skill assessment, exercise prescription, and oversight of training and progress in individual and group fitness settings.
Prereq: Take IPH-417

IPH 427 Administration of Athletic Training 4 cr **UL**

Prepares the athletic training student with the organizational and administrative theories utilized in the management of an athletic training facility.

IPH 428 Exercise Testing and Prescription 4 cr **UL**
NS1

In-depth study of theoretical bases and applied knowledge required for graded exercise testing and individualized exercise prescription for normal and high risk populations, with emphasis on cardiac patients. Electrocardiograph techniques and interpretation, pharmacological considerations, test data interpretations and emergency procedures are included. Laboratory. Course fee.

Prereq: IPH-327

IPH 430 Epidemiology 4 cr **UL**
NS1

Presents concepts, principles and methods generally used in the surveillance and investigation of health-related events.

Prereq: BIO-121 and Junior Standing, or Permission

IPH 499 IPH Independent Study 2-4 cr **UL**

Research in Integrated Physiology and Health Science under the supervision of the Department culminating in a thesis or research project.

Prereq: IPH Major; Permission

IPH 500 Senior Thesis 4 cr **UL**

Requires instructor permission.

Latin (LAT)

Latin courses, as designated by the three-letter prefix LAT, are offered through the Modern Languages Department. The courses listed are offered periodically upon sufficient demand.

Four credits from LAT 112 or higher, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Humanities.

LAT 111 Elementary Latin I 4 cr

Phonetics, morphology, syntax and semantics preparatory to the translation of simple texts such as Caesar and Pinus.

LAT 112 Elementary Latin II 4 cr
AH

Continuing study of phonetics, morphology, syntax and semantics preparatory to the translation of simple texts such as Caesar and Pinus.

Prereq: LAT-111 or Permission

Library Research (LIB)

LIB 110 Introduction to Library Research 2 cr

Introduces a wide range of research and information literacy skills, including how to effectively choose a research topic, how to best use print and digital sources, and ethical information use. Most appropriate for first- and second-year students.

LIB 310 Research and Technology 2 cr **UL**

Introduction to advanced library research using catalogs, databases, and internet sources. Students are encouraged to use mobile devices (e.g., laptops, tablets, smartphones) and to evaluate the usability of these devices. Most appropriate for juniors and seniors.

LIB 385 Library Practicum 1-4 cr **UL**

Study-work program in the College Library or another library.

Mathematics (MTH)

Major Requirements

Thirty-six credits which must include:

1. MTH-121, 122, 210, 223, 310, and 421 or 431.
2. Twelve other upper-level Mathematics credits.
3. Cognates: CSC-120 and one course other than a Mathematics course, approved by the Department, with a Mathematics prerequisite numbered 113 or higher.
4. The senior comprehensive examination includes three parts: successful completion of the Major Field Test in Mathematics, submission of an approved writing sample and an approved oral presentation.
5. At least one statistics course is recommended.
6. Students interested in graduate school in mathematics should complete both MTH-421 and 431 and an honors project. Students interested in business and industrial careers should consider additional courses in Applied Mathematics, Computer Science and fields which apply mathematics in significant ways.

Minor Requirements

Twenty-four credits which must include:

1. MTH-121, 122, 210
2. At least two other upper-level Mathematics courses.

Note: MTH-100 and 202 do not count toward the Minor.

Secondary Teaching Major Requirements

Same as for the Mathematics major except that the program must include MTH-341, 411, and 421.

Secondary Teaching Minor Requirements

At least twenty-six credits which must include: MTH-120, 121, 122, 223, 411; 117 or 310; and 116 or 341.

Elementary Teaching Major Requirements

Thirty-six credits which must include:

1. MTH-110, 117, 121, 122, 202, 203, 210, 223, 341
2. Four other upper-level credits in Mathematics
3. Cognate: CSC-118 or 120
4. The senior comprehensive, which includes 1) submission of an approved writing sample, and 2) an approved oral presentation.

Elementary Teaching Minor Requirements

Twenty-four credits which must include:

1. MTH-110; 113 or 121; MTH-116 or 341; MTH-120 or 223; MTH-202
2. Four additional credits at MTH-110 or above
3. Required Cognate: CSC-118 or 120

Mathematical Sciences Major Requirements

Fifty-two credits which must include:

1. MTH-121, 122, 210, 223, 310, 336, 341, and 421 or 431
2. Computer Science 120 and 121
3. Twelve additional credits in upper-level Mathematics or Computer Science courses, at least four credits of which must be Computer Science. Courses which combine applications and theory are encouraged (e.g. MTH-211, 342, 391, 399 or 499; and CSC-240, 310, 420, 430, 440, or 499).
4. The senior comprehensive examination includes three parts: successful completion of the Major Field Test in Mathematics, submission of an approved writing sample and an approved oral presentation.

Restrictions

The following combinations of double majors are not permitted: Mathematical Sciences and Mathematics; and Mathematical Sciences and Computer Science.

Four credits from MTH 110 or higher, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Natural Sciences - Mathematics/Computation.

MTH 100 Applied Algebra

4 cr

Develops mathematical skills with an emphasis on increasing the students' ability to interpret and reason with quantitative information. Focuses on mathematical critical thinking and problem solving. Topics include variables and functions, linear, quadratic, exponential and other models, each presented in the context of applications from social and natural sciences, business, and everyday life.

MTH 110 Liberal Arts Mathematics

NS3 4 cr

Exploration of the beauty, extent and power of mathematics. Specific topics to be selected by the instructor.

Prereq: MTH-100 or Placement

MTH 112 Pre-Calculus

NS3 4 cr

Designed for students with strong high school mathematics backgrounds who plan to include a calculus course (Mathematics 113 or 121) in their programs. Investigates polynomial, rational, exponential, logarithmic and trigonometric functions. Explores the ideas of functions and graphs, with emphasis on concepts and skills central to calculus. Requires placement. May not be taken for credit by students who have successfully completed MTH-121, 122 or 210.

Prereq: MTH-100 or Placement

MTH 113 Applied Calculus

NS3 4 cr

Introduction to differential and integral calculus. Focuses on applications; theory held to a minimum. Examples from business and the natural and social sciences. Background in trigonometry not needed.

Prereq: MTH-112 or Pre-Calculus in High School

MTH 116 Elementary Statistics

NS3 4 cr

Introduction to modern elementary statistics and applications. Focuses on statistical reasoning and data analysis. Includes statistical design of experiments, estimation, hypothesis testing, regression, correlation and other selected topics.

Prereq: MTH-100 or Placement

MTH 117 Intro to Matrices and Linear Methods

NS3 2 cr

Introduction to solving systems of linear equations, linear programming, elementary matrix theory, and the modeling of situations which are linear. Applications from business and natural and social sciences. Note: The content of this course is necessary background for MTH-310. Requires placement in MTH-112 or 4 years of high school math.

Prereq: MTH-112 or Pre-Calculus in High School

MTH 118 Biostatistics

NS3 4 cr

Introduction to statistical methods used in biomedical science and public health research. Focuses on experimental design, descriptive methods, hypotheses tests, analysis of variance, regression, and other selected topics.

Prereq: MTH-100 or Placement

MTH 120 Discrete Mathematics

NS3 4 cr

Introductory survey of propositional logic, functions, relations, counting methods and graph theory. Discussion of applications to computer science.

Prereq: MTH-112 or Pre-Calculus in High School

MTH 121 Calculus I

NS3 4 cr

Introduction to the calculus of one variable. Includes limits and continuity, the derivative and applications, the integral and applications, infinite series and sequences. (Part I of II)

Prereq: MTH-112 or Pre-Calculus in High School

MTH 122 Calculus II

NS3 4 cr

Introduction to the calculus of one variable. Includes limits and continuity, the derivative and applications, the integral and applications, infinite series and sequences. (Part II of II)

Prereq: MTH-121

MTH 180 Topics in Mathematics

NS3 2-4 cr

Selected topics of current or historic importance. Prerequisites vary with topics selected.

MTH 192 Mathematical Modeling

NS3 4 cr

Development of various mathematical models used in business, social sciences and biological sciences; uses and limitations of models in practical situations. Some models use calculus and/or the computer. Computer programming not a prerequisite.

Prereq: MTH-113 or MTH-121

MTH 202 Mathematics for the Elementary Teacher

NS3 4 cr

Overview and examination of the mathematical topics in the K-8 curriculum. Includes arithmetic of integers, decimals and fractions; numeration systems; set theory; problem solving; elementary logic, elementary concepts in probability and statistics; elementary concepts in geometry; and an introduction to computing.

Prereq: MTH-100 or placement, Sophomore Standing, and Education Major

MTH 203 Math - Middle and HS Teachers

NS3 2 cr

This course will provide an overview and examination of the mathematical topics and pedagogical approaches in the middle and high school curriculum. Topics include problem solving, number theory, algebraic thinking, geometry, probability and statistics, and mathematics software applications for teaching (e.g., Geometer's Sketchpad and Tinkerplots).

Prereq: MTH-121

MTH 210 Multivariable Calculus

NS3 4 cr UL

Continuation of Math 122. Includes functions of several variables, vectors, vector-valued functions, three-dimensional analytic geometry, partial differentiation and multiple integration.

Prereq: MTH-122

MTH 211 Differential Equations

NS3 4 cr UL

Techniques and theory of solving ordinary differential equations. Includes series solutions, numerical methods and applications.

Prereq: MTH-210

MTH 220 Math Foundations of Computer Science

NS3 4 cr UL

Topics in the mathematical foundations of computer science. Includes graph theory, logic, Boolean algebras, languages and automata, and the analysis of algorithms.

Prereq: MTH-120

MTH 221 Introduction to Cryptography

NS3 4 cr UL

Introduction to the mathematics from several different branches of the subject including number theory, matrix algebra, probability, and statistics, all of which play a role in enciphering and deciphering secret messages.

Prereq: MTH-122

MTH 223 Mathematical Structures

NS3 4 cr UL

Study of predicate logic, proof techniques, set theory, relations, functions, cardinality and various discrete structures.

Prereq: MTH-120 and CSC-121, or MTH-122

MTH 241 Financial Mathematics

NS3 4 cr UL

Introduction of fundamental concepts of interest theory. Applications of those concepts in calculating present and

accumulated values for various streams of cash flows. Topics include reserving valuations, pricing, asset/liability management, investment income, and capital budgeting. Financial instruments such as derivatives will also be introduced.

Prereq: MTH-122

MTH 280 Topics in Mathematics

NS3 2-4 cr **UL**

Selected topics of current or historic importance. Prerequisites vary with topics selected.

Prereq: MTH-122 or Permission.

MTH 280M Topics in Mathematics

NS3 2-4 cr **UL**

Selected topics of current or historic importance. Prerequisites vary with topics selected.

Prereq: MTH-122 or Permission.

MTH 310 Linear Algebra

NS3 4 cr **UL**

Study of finite-dimensional real vector spaces; kernel, dimension, basis, linear transformations and their matrices, and eigenvalues.

Prereq: MTH-210; MTH-117 Strongly Recommended

MTH 323 Complex Analysis

NS3 4 cr **UL**

Introduction to the theory of functions of a single complex variable. Analytic functions, complex series, Cauchy's theorem and conformal mapping.

Prereq: MTH-210

MTH 336 Numerical Analysis

NS3 4 cr **UL**

Analysis and implementation of numerical algorithms for approximating functions, derivatives and integrals, and for solving nonlinear equations, ordinary differential equations and systems of linear equations. Discussion of standard software packages and techniques for writing efficient and reliable mathematical software in Pascal and/or FORTRAN.

Prereq: MTH-122 and CSC-120

MTH 341 Probability and Statistics I

NS3 4 cr **UL**

Introduction to mathematical theory of probability and statistical inference. Includes data analysis and presentation, discrete and continuous probability models, random variables, mathematical expectation, generating functions, estimation, hypothesis testing, sampling distributions, regression, correlation, time series and other selected topics. (Part I of II)

Prereq: MTH-210

MTH 342 Probability and Statistics II

NS3 4 cr **UL**

Introduction to mathematical theory of probability and statistical inference. Includes data analysis and presentation, discrete and continuous probability models, random variables, mathematical expectation, generating functions, estimation, hypothesis testing, sampling distributions, regression, correlation, time series and other selected topics. (Part II of II)

Prereq: MTH-341

MTH 345 Stochastic Processes

NS3 4 cr **UL**

Introduction to the theory and applications of stochastic processes, including Markov chains, Poisson processes, queuing theory, and Brownian motion. Example applications include models of random walks, DNA sequences, call centers, and the Black-Scholes option pricing formula.

Prereq: MTH-210

MTH 351 Elementary Number Theory

NS3 4 cr **UL**

Study of integers, including divisibility, the theory of prime numbers, congruences and solutions of equations in integers.

Prereq: MTH-223

MTH 380 Topics in Mathematics

NS3 4 cr **UL**

Selected topics of current or historic importance. Prerequisites vary with topics selected.

MTH 390 Combinatorics

NS3 4 cr **UL**

Introduction to combinatorial theory. Topics include enumeration, recurrence, generating functions, graph theory and optimization.

Prereq: MTH-120 or 122

MTH 390M Combinatorics

NS3 4 cr **UL**

Introduction to combinatorial theory. Topics include enumeration, recurrence, generating functions, graph theory and optimization.

Prereq: MTH-120 or 122

MTH 391M Introduction to Graph Theory

NS3 4 cr **UL**

Introductory survey of the major concepts and applications of graphs, digraphs and networks. Application areas include transportation, traffic flow, games and puzzles. Spring Term only.

Prereq: MTH-122 or Permission

MTH 411 College Geometry

NS3 4 cr **UL**

Axiomatic systems, models, finite geometries, Hilbert's axioms, independence of the parallel postulate, and introduction to non-Euclidean geometries with emphasis on hyperbolic geometry.

Prereq: MTH-223

MTH 413 Topology

NS3 4 cr **UL**

Introduction to point-set topology. Includes topological properties of Euclidean spaces, abstract spaces and metric spaces. Explores connectedness, compactness, continuity and homeomorphisms.

Prereq: MTH-223

MTH 421 Abstract Algebra

NS3 4 cr **UL**

Introduction to the theory of algebraic structures including elementary theory of groups, rings and fields.

Prereq: MTH-223 and 310

MTH 431 Advanced Calculus

NS3 4 cr **UL**

In-depth examination of the calculus of one variable, including topology of the real line, sequences and series of functions.

Prereq: MTH-210 and 223

MTH 491 Mathematical Methods of Physics

NS3 4 cr **UL**

Survey of advanced mathematical topics for application in the physical sciences. Topics selected from Fourier series, transform calculus, partial differential equations, boundary value problems, complex variables and vector calculus. Highly recommended for students planning graduate study in the physical sciences or applied mathematics.

Prereq: MTH-211; MTH-310 recommended

MTH 499 Mathematics Independent Study

1-4 cr **UL**

Requires instructor permission.

MTH 500 Senior Thesis

4 cr **UL**

Requires instructor permission.

Medieval and Renaissance Studies (MED)

Minor Requirements

Twenty-four credits which must include:

1. Core (12 cr): HST-203; ENG-250; ART-211 or 112
 2. Electives (12 cr): Determined in consultation with the program director. Examples include but are not limited to: ART-210: Ancient Art, ENG-354: Shakespeare, FRN-371: History of French Civilization I, HST-331: Renaissance & Reformation, MUS-443: Music History I, and SPN-360: Spanish Literature to 1700. Students may substitute one of these electives with an approved independent study.
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Music (MUS)

Alma's Music Department, accredited by the National Association of Schools of Music, offers three degree options: Bachelor of Music in Performance, Bachelor of Music in Music Education and Bachelor of Arts with a major in Music.

Bachelor of Arts in Music

Forty credits which must include:

1. MUS-111, 111a, 112, 112a, 211, 212, 214, 443, 444, 500,
2. Two credits of Ensembles
3. Two credits of Applied Lessons at the 290 level and above.
4. Four credits of elective coursework subject to Departmental approval.
5. MUS 500 is a senior project and may take the form of a recital, research paper or other Department-approved project. Requests for MUS-500 projects must be received by the end of the year preceding graduation.
6. Students are strongly advised to continue their study of voice or an instrument through studio lessons and ensembles.

Bachelor of Music in Music Education

Seventy-six credits which must include:

1. MUS-111, 111a, 112, 112a, 116, 211, 212, 214, 215, 237, 337, 344, 431, 443, 444
2. Seven credits of Ensembles, one of which must be MUS-155 or 159
3. Fourteen credits of Applied Lessons at the 290 level and above on one instrument or voice, subject to Department approval.
4. Four credits of elective coursework subject to Departmental approval.
5. Students with a *vocal emphasis* must complete MUS-132, 138, and one term of an instrumental ensemble or instrumental pedagogy course.
6. Students with an *instrumental emphasis* must complete MUS-134, 135, 136, 137 and either MUS-138 or one term of a vocal ensemble.
7. All candidates must complete MUS 116 (piano proficiency) by the end of the fall term of the junior year.

Education courses required: EDC-130/103, 230/203, 240, 303, 311, 312, 346, 370, 373, 430, and 490/491. These courses are necessary towards completing a secondary education major.

Bachelor of Music in Performance

Eighty-eight credits which must include:

1. MUS-111, 111a, 112, 112a, 116, 211, 212, 214, 215, 237, 443, 444, 500
2. Eight credits of Ensembles, one of which must be MUS 155 or 159
3. Twenty-eight credits of Applied Lessons at the 290 level and above on one instrument or voice.
4. Thirteen credits of elective coursework subject to Department approval.
5. All students must also complete one pedagogy course (from MUS-131 through 138 courses) in the area of their major instrument.

6. MUS 500 must be a recital.

Minor Requirements

Twenty-four credits which must include:

1. MUS-111, 111a, 112, 112a, and 120
2. Two credits from MUS-140, 211, 214, 215, 237, 443, 444 or 445
3. Six credits of applied lessons on one instrument or voice.

Applied Lessons

Applies to: MUS-191-198, 291-298, 391-398, and 491-498.

Private lesson offerings are open to both majors and non-majors who complete an audition and receive permission to register. The 300-level (391-398) and 400-level (491-498) represent upper level performance skill and experience and require Departmental approval. Candidates for the Bachelor of Music in Performance are advised to enroll at the 400-level by the second semester of the first year. Only 400-level students may elect four hours of credits, which is open only to majors. The Department will consider all candidates for the Bachelor of Music in Performance for 400-level suitability at the end of the first term of study.

100-level lessons do not count toward the degree.

There is a private lesson instruction fee of \$165 per term for all levels (191-198, 291-298, 391-398, and 491-498). (Offered every term)

Ensembles

Applies to: MUS 150-159 and 351. Ensembles are open to all students who audition and receive permission from the instructor prior to registration. No more than eight credits of participation in all ensembles combined may be applied toward degree requirements. All ensembles are offered every year.

Four credits from MUS, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Humanities.

MUS 101 Fundamentals of Music

AH 2 cr
Music fundamentals including notation of pitch, clefs, and staff; chromatic alteration and enharmonic equivalents; accidentals; identification and notation of rhythm, meter, tempo, dynamics, and articulation; and concepts of scales and key signatures. Credits do not count toward any music degree.

MUS 106 Piano for the Non-Major I

AH 2 cr
Introductory piano course for non-majors and students without prior piano instruction. Basics of music notation and vocabulary of music, scales, technique, repertoire and performance skills including simple pieces in various keys.

MUS 107 Piano for the Non-Major II

AH 2 cr
Second semester introductory piano for non-majors. Continuation of study involving more advanced technique, expanded repertoire, and basic improvisational skills.
Prereq: MUS-106 or Audition

MUS 111 Musicianship I

AH 4 cr
Study of the structure and use of intervals and chords in a basic harmonic vocabulary including diatonic triads and their inversions in major and minor keys, functional tonal principles, harmonic cadences, embellishing tones, principles of harmonization, part-writing chords, melodic relationships and periodicity, and dominant seventh chords. (Offered every year)

MUS 111A Aural Skills I

AH 2 cr
Develops aural skills through a range of melodic, harmonic and rhythmic exercises. Introduces solfege syllables. Should be taken concurrently with MUS-111. (Offered every year)

MUS 112 Musicianship II

AH 4 cr
Continuation of MUS 111. Study of non-dominant seventh chords, secondary functions, modulation, form and dramatic shapes including binary, rounded binary, ternary, fugue, and variation. (Offered every year)

Prereq: MUS-111

MUS 112A Aural Skills II AH 2 cr Continuation of Aural Skills I. Should be taken concurrently with MUS 112. (Offered every year) <i>Prereq: MUS-111A</i>	MUS 137 Percussion Pedagogy AH 1 cr Principles of playing percussion instruments with emphasis on snare drum, mallet keyboard instruments and timpani. (Offered Winter, Odd numbered years)
MUS 114 Piano Proficiency I AH 2 cr Required of all music majors (Performance and Music Education). Fundamental skills, technique and repertoire development. Scales, simple accompaniment patterns, harmonization and improvisation. Music majors only.	MUS 138 Choral Pedagogy AH 2 cr Principles of voice production, sight reading and singing. Emphasis on the selection of choral literature particularly with regard to developing voice. (Offered Winter, Even numbered years) <i>Prereq: 2 terms of MUS-151 and/or 157 and/or 158</i>
MUS 115 Piano Proficiency II AH 2 cr Level II piano proficiency, continuations of scale and arpeggio technique, chord progressions, solo and ensemble repertoire. <i>Prereq: MUS-114 or Audition; Music Major</i>	MUS 140 Non-Western Music ☺ AH 4 cr An introductory survey of the traditional music of non-Western countries. Examines the role of music as ritual, aesthetic experience, and mode of communication in diverse cultures. No music background necessary.
MUS 116 Piano Proficiency III AH 2 cr Level III piano proficiency. Technique includes both black and white major and minor scales, arpeggios, chromatic scales, seventh chords, accompany a piece from the major instrument or voice; intermediate repertoire levels. (Offered every year) <i>Prereq: MUS-115 or Audition; Music Major</i>	MUS 150 Accompanying AH 1 cr
MUS 119 Class Guitar AH 2 cr Fundamentals for the beginning guitar player.	MUS 151 College Chorale AH 1 cr
MUS 120 Survey of Music Literature ☺ AH 4 cr Introductory survey of major musical works representative of the styles and genres of the important periods of musical development. Extensive listening. (Offered Winter, Even numbered years)	MUS 152 Alma Symphony Orchestra AH 1 cr
MUS 131 Piano Pedagogy AH 1 cr Principles of musicianship on the piano. Designed for B.M. students. Emphasis on pedagogical methods and materials used in teaching piano to beginning and intermediate students. (Offered/Considered upon request). <i>Prereq: 8 credits from MUS-196 or MUS-396</i>	MUS 153 Kiltie Band AH 1 cr
MUS 132 Vocal Pedagogy AH 2 cr Introduction to the physiology of the vocal mechanism. Development of fundamental techniques used in private voice instruction, including vocal exercises used to establish and promote vocal health, literature for young singers, and the teaching of voice lessons. (Offered Fall, Odd numbered years)	MUS 153G Winter Guard Ensemble AH 1 cr Winter Guard Ensemble will provide students with experience or interest in the color guard arts a learning and performance oriented course during the winter term. Students will develop requisite and advanced skills using flags, rifles, sabres and body movement. The ensemble will perform for select athletic events and at select winter guard competitions. Course fee. <i>Prereq: Permission</i>
MUS 134 Woodwind Pedagogy AH 1 cr Principles of tone production, fingering and embouchure for flute, oboe, clarinet and bassoon (or saxophone). Specialization on the instrument of the student's choice. (Offered Fall, Odd numbered years)	MUS 154 Scottish Arts AH 1 cr
MUS 135 Brass Pedagogy AH 1 cr Principles of tone production, fingering and embouchure for trumpet, French horn, trombone and tuba. Specialization on the instrument of the student's choice. (Offered Fall, Even numbered years)	MUS 155 Percussion Ensemble AH 1 cr
MUS 136 String Pedagogy AH 1 cr Principles of musicianship on the violin, viola, cello and double bass. Designed for music education students. Emphasis on elementary string teaching methods and large group ensemble techniques necessary for school orchestral directing. (Offered Winter, Even numbered years)	MUS 156 Jazz Ensemble AH 1 cr
	MUS 157 Glee Club AH 1 cr
	MUS 158 Handbell Choir AH 1 cr
	MUS 159 Chamber Music AH 1 cr
	MUS 159A Chamber Music Strings AH 1 cr
	MUS 159E Chamber Music Flute AH 1 cr

MUS 159F Chamber Music Strings AH	1 cr	MUS 192E Flute AH Private lessons. Course fee. <i>Prereq: MUS-192E previously or permission</i>	1 cr
MUS 159G Chamber Music Clarinet AH	1 cr	MUS 192F Oboe AH Private lessons. Course fee. <i>Prereq: MUS-192F previously or permission</i>	1 cr
MUS 159I Chamber Music Saxophone AH	1 cr	MUS 192G Clarinet AH Private lessons. Course fee. <i>Prereq: MUS-192G previously or permission</i>	1 cr
MUS 159J Chamber Music High Brass AH	1 cr	MUS 192H Bassoon AH Private lessons. Course fee. <i>Prereq: MUS-192H previously or permission</i>	1 cr
MUS 159K Chamber Music Horn AH	1 cr	MUS 192I Saxophone AH Private lessons. Course fee. <i>Prereq: MUS-192I previously or concurrent</i>	1 cr
MUS 159L Chamber Music Trombone AH	1 cr	MUS 192P Bagpipes AH Private lessons. Course fee. <i>Prereq: MUS-192P previously or permission</i>	1 cr
MUS 159M Musical THR Vocal Ensemble AH	1 cr	MUS 193J Trumpet AH Private lessons. Course fee. <i>Prereq: MUS-193J previously or concurrent</i>	1 cr
MUS 159N Chamber Music Low Brass AH	1 cr	MUS 193K Horn AH Private lessons. Course fee. <i>Prereq: MUS-193K previously or permission</i>	1 cr
MUS 159V Chamber Music Vocal AH	1 cr	MUS 193L Trombone AH Private lessons. Course fee. <i>Prereq: MUS-193L previously or permission</i>	1 cr
MUS 180 Topics in Music AH	1-4 cr	MUS 193M Euphonium AH Private lessons. Course fee. <i>Prereq: MUS-193M previously or permission</i>	1 cr
Selected topics in music. May be taken more than once if topics differ. Only two registrations count toward Music Major.		MUS 193N Tuba AH Private lessons. Course fee. <i>Prereq: MUS-193N previously or permission</i>	1 cr
MUS 191A Violin AH	1 cr	MUS 194 Percussion AH Private lessons. Course fee. <i>Prereq: MUS-194 previously or permission</i>	1 cr
Private lessons. Course fee. <i>Prereq: MUS-191A previously or permission</i>		MUS 195 Voice AH Private lessons. Course fee. <i>Prereq: MUS-195 previously or permission</i>	1 cr
MUS 191B Viola AH	1 cr	MUS 196 Piano AH Private lessons. Course fee. <i>Prereq: MUS-196 previously or Permission</i>	1 cr
Private lessons. Course fee. <i>Prereq: MUS-191B previously or permission</i>		MUS 197A Organ AH Private lessons. Course fee. <i>Prereq: MUS-197A previously or permission</i>	1 cr
MUS 191C Violoncello AH	1 cr		
Private lessons. Course fee. <i>Prereq: MUS-191C previously or permission</i>			
MUS 191D Double Bass AH	1 cr		
Private lessons. Course fee. <i>Prereq: MUS-191D previously or permission</i>			
MUS 191E Jazz Guitar AH	1 cr		
Private lessons. Course fee. <i>Prereq: MUS-191E previously or Permission</i>			
MUS 191K Electric Bass Guitar AH	1 cr		
Private lessons. Course fee. <i>Prereq: MUS-191K previously or Permission</i>			
MUS 191Y Classical Guitar AH	1 cr		
Private lessons. Course fee. <i>Prereq: MUS-191Y previously or Permission</i>			

MUS 197B Harpsichord AH Private lessons. Course fee. <i>Prereq: MUS-197B previously or permission</i>	1 cr	MUS 284 Music in Film AH This course examines the wide range of musical styles and aesthetic approaches used in narrative film. By analyzing examples from silent movies, Hollywood classics, foreign films, and recent releases, the class explores the functional and dramatic roles of music. No formal music theory experience is required. <i>Prereq: ENG-101</i>	4 cr UL
MUS 198 Composition AH Applied composition provides individual lessons in both the craft and creative process of composing for acoustic instruments. Completed projects that develop original musical ideas for various instrumental and vocal ensembles will be required. Course fee. <i>Prereq: MUS-111 and permission</i>	1 cr	MUS 291A Violin AH Private lessons. Course fee. <i>Prereq: MUS-191A previously or permission</i>	2 cr
MUS 211 Comprehensive Musicianship III AH Continuation of MUS 112. Study of advanced harmonic techniques including chromatically altered chords, mode mixture and chromatic relationships, and remote modulations. Advanced study of form including sonata, rondo, and related types. Enharmonic use of chords, expanded tonicization and harmonic sequence, and linear harmonies. (Offered every year) <i>Prereq: MUS-112</i>	4 cr UL	MUS 291B Viola AH Private lessons. Course fee. <i>Prereq: MUS-191B previously or permission</i>	2 cr
MUS 212 Comprehensive Musicianship IV AH Continuation of Music 211. Study of new musical resources and techniques in the twentieth and twenty-first centuries: new pitch bases, harmonic structures and methods, approaches to rhythm and meter, atonality, serial procedures, indeterminacy, sounds and textures (both acoustic and electronic), and jazz and related techniques and idioms. (Offered every year) <i>Prereq: MUS-211</i>	4 cr UL	MUS 291C Violoncello AH Private lessons. Course fee. <i>Prereq: MUS-191C previously or permission</i>	2 cr
MUS 214 Midi Composition and Arranging AH Designed primarily for the music major, the course examines MIDI (Musical Instrument Digital Interface) techniques and applications for recording, scoring and musical production. Covers MIDI configurations, sequencing, multi-track recording, mixing and composing/arranging techniques. Students will also be trained in use of Finale, an industry standard application for music notation. (Offered every year) <i>Prereq: Music Major or Permission</i>	2 cr UL	MUS 291D Double Bass AH Private lessons. Course fee. <i>Prereq: MUS-191D previously or permission</i>	2 cr
MUS 215 Audio Recording Workshop AH Students complete studio, field and stage recording projects. Topics and applications include digital audio recording systems and formats, sampling, critical listening, understanding acoustics, microphone techniques, EQ, compression as well as editing, final mixing and mastering. (Offered every year)	2 cr UL	MUS 291E Jazz Guitar AH Private lessons. Course fee. <i>Prereq: MUS-191E previously or Permission</i>	2 cr
MUS 225 Orchestration and Arranging AH Provides a practical, in-depth examination of acoustic instruments, and explores methods of scoring, transcribing and arranging for a variety of instrumental ensembles. Includes a final orchestration project created using Finale or Sibelius software that will be played by the Alma College band or orchestra. <i>Prereq: MUS-112</i>	2 cr	MUS 291K Electric Bass Guitar AH Private lessons. Course fee. <i>Prereq: MUS-191K previously or Permission</i>	2 cr
MUS 237 Conducting and Score Reading AH Art of conducting, rehearsal techniques and procedures, score reading, problems of interpretation, organization and activities of choral and instrumental groups. (Offered Fall, Even numbered years) <i>Prereq: MUS-112</i>	2 cr UL	MUS 291Y Classical Guitar AH Private lessons. Course fee. <i>Prereq: MUS-191Y previously or Permission</i>	2 cr
MUS 250 Musical Theatre Techniques AH The staging of and participation in the performance of a work for the musical theatre - including acting, singing and movement - which is presented at the end of the term. Course may be repeated once for credit.	4 cr UL	MUS 292E Flute AH Private lessons. Course fee. <i>Prereq: MUS-192E previously or permission</i>	2 cr
		MUS 292F Oboe AH Private lessons. Course fee. <i>Prereq: MUS-192F previously or permission</i>	2 cr
		MUS 292G Clarinet AH Private lessons. Course fee. <i>Prereq: MUS-192G previously or permission</i>	2 cr
		MUS 292H Bassoon AH Private lessons. Course fee. <i>Prereq: MUS-192H previously or permission</i>	2 cr
		MUS 292I Saxophone AH Private lessons. Course fee. <i>Prereq: MUS-192I previously or permission</i>	2 cr
		MUS 292P Bagpipes AH Private lessons. Course fee. <i>Prereq: MUS-192P previously or permission</i>	2 cr
		MUS 293J Trumpet AH Private lessons. Course fee. <i>Prereq: MUS-193J previously or permission</i>	2 cr

MUS 293K Horn AH Private lessons. Course fee. <i>Prereq: MUS-193K previously or permission</i>	2 cr	MUS 350 Opera Workshop AH Basic techniques of operatic performance: role preparation, body movement related to music, acting, and techniques. May be repeated for up to a total of four credits.	1-4 cr UL
MUS 293L Trombone AH Private lessons. Course fee. <i>Prereq: MUS-193L previously or permission</i>	2 cr	MUS 351 Alma College Choir AH Final registration subject to audition	1 cr UL
MUS 293M Euphonium AH Private lessons. Course fee. <i>Prereq: MUS-193M previously or permission</i>	2 cr	MUS 380 Topics in Music AH Selected topics in music. May be taken more than once if topics differ. Only two registrations count toward a Music Major.	2-4 cr UL
MUS 293N Tuba AH Private lessons. Course fee. <i>Prereq: MUS-193N previously or permission</i>	2 cr	MUS 391A Violin AH Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee. <i>Prereq: MUS-391A previously or permission</i>	2-4 cr UL
MUS 294 Percussion AH Private lessons. Course fee. <i>Prereq: MUS-194 previously or permission</i>	2 cr	MUS 391B Viola AH Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee. <i>Prereq: MUS-391B previously or permission</i>	2 cr UL
MUS 295 Voice AH Private lessons. Course fee. <i>Prereq: MUS-195 previously or permission</i>	2 cr	MUS 391C Violoncello AH Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee. <i>Prereq: MUS-391C previously or permission</i>	2 cr UL
MUS 296 Piano AH Private lessons. Course fee. <i>Prereq: MUS-196 previously or Permission</i>	2 cr	MUS 391D Double Bass AH Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee. <i>Prereq: MUS-391D previously or permission</i>	2 cr UL
MUS 297A Organ AH Private lessons. Course fee. <i>Prereq: MUS-197A previously or permission</i>	2 cr	MUS 391E Jazz Guitar AH Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee. <i>Prereq: MUS-391E previously or Permission</i>	2 cr UL
MUS 297B Harpsichord AH Private lessons. Course fee. <i>Prereq: MUS-197B previously or permission</i>	2 cr	MUS 391K Electric Bass Guitar AH Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee. <i>Prereq: MUS-391K previously or Permission</i>	2 cr UL
MUS 298 Composition AH Applied composition provides individual lessons in both the craft and creative process of composing for acoustic instruments. Completed projects that develop original musical ideas for various instrumental and vocal ensembles will be required. Course fee. <i>Prereq: MUS-111 and permission</i>	2 cr	MUS 391Y Classical Guitar AH Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee. <i>Prereq: MUS-391Y previously or Permission</i>	2 cr UL
MUS 337 Advanced Conducting AH Continuation of MUS 237. Emphasis on advanced analytical, interpretive, and technical conducting skills, as well as practical aspects of successfully leading instrumental and choral ensembles. (Offered every other year.)	2 cr UL	MUS 392E Flute AH Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee. <i>Prereq: MUS-392E previously or permission</i>	2 cr UL
MUS 340M Gilmore Festival AH Students attend the Gilmore International Keyboard Festival. A survey of keyboard and chamber music literature ranging from the classical to jazz repertoire. Analysis and study of works appropriate to class participants as well as critical listening, and theoretical-historical study. Spring Term only.	4 cr UL	MUS 392F Oboe AH Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee. <i>Prereq: MUS-392F previously or permission</i>	2 cr UL
MUS 344 Elementary School Music AH MUS 344 Elementary School Music Examination of methods and materials in music. Required of Music Majors who wish to be certified to teach music at elementary and secondary levels. Open also to Education students with music background. (Offered Fall, Odd numbered years) <i>Prereq: Music Education Major; Permission</i>	4 cr UL	MUS 392G Clarinet AH Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee. <i>Prereq: MUS-392G previously or permission</i>	2 cr UL

MUS 392H Bassoon
AH 2 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-392H previously or permission

MUS 392I Saxophone
AH 2 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-392I previously or permission

MUS 392P Bagpipes
AH 2 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-392P previously or permission

MUS 393J Trumpet
AH 2 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-393J previously or permission

MUS 393K Horn
AH 2 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-393K previously or permission

MUS 393L Trombone
AH 2 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-393L previously or permission

MUS 393M Euphonium
AH 2 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-393M previously or permission

MUS 393N Tuba
AH 2 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-393N previously or permission

MUS 394 Percussion
AH 2 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-394 previously or permission

MUS 395 Voice
AH 2 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MTH-395 previously or permission


MUS 396 Piano
AH 2 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-396 previously or Permission


MUS 397A Organ
AH 2 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-397A previously or permission


MUS 397B Harpsichord
AH 2 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-397B previously or permission

MUS 398 Advanced Composition
AH 2-4 cr UL
Individual lessons are provided in both the craft and creative process of composing for acoustic instruments. This advanced course focuses on completing large-scale projects that develop original musical ideas for various instrumental and vocal ensembles. Course fee.
Prereq: MUS-111 and permission

MUS 431 General Methods of Music Education
AH 4 cr UL
Principles of group process teaching and classroom management. Accompaniment skills in piano and recorder, rehearsal techniques, teaching basic instrumental and vocal skills in grades 5-12 and a pedagogical overview of the human voice and standard band and orchestral instruments including tone production, practical ranges and related functions in an ensemble. (Offered Fall, Even numbered years)
Prereq: Permission

MUS 443 Music History I
 AH 4 cr UL
Music from Antiquity through the Baroque, Classical, and Early Romantic periods.
Prereq: MUS-112

MUS 444 Music History II
 AH 4 cr UL
Music of the 19th, 20th, and 21st centuries.
Prereq: MUS-112

MUS 445 Music History III
 AH 4 cr UL
Music of the 19th and 20th centuries, including relationships between the popular, folk and art music traditions of the United States and other non-Western European cultures. (Offered every year)
Prereq: MUS-112

MUS 491A Violin
AH 4 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-391A previously or permission

MUS 491B Viola
AH 4 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-391B previously or permission

MUS 491C Violoncello
AH 4 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-391C previously or permission

MUS 491D Double Bass
AH 4 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-391D previously or permission

MUS 491E Jazz Guitar
AH 4 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-391E previously or Permission

MUS 491K Electric Bass Guitar
AH 4 cr UL
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-391K previously or Permission

MUS 491Y Classical Guitar
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-391Y previously or Permission

MUS 492E Flute
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-392E previously or permission

MUS 492F Oboe
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-392F previously or permission

MUS 492G Clarinet
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-392G previously or permission

MUS 492H Bassoon
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-392H previously or permission

MUS 492I Saxophone
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-392I previously or permission

MUS 492P Bagpipes
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-392P previously or permission

MUS 493J Trumpet
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-393J previously or permission

MUS 493K Horn
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-393K previously or permission

MUS 493L Trombone
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-393L previously or permission

MUS 493M Euphonium
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-393M previously or permission

MUS 493N Tuba
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-393N previously or permission

MUS 494 Percussion
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-394 previously or permission

MUS 495 Voice
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-395 previously or permission

MUS 496 Piano
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-396 previously or Permission

MUS 497A Organ
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-397A previously or permission

MUS 497B Harpsichord
AH 4 cr **UL**
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-397B previously or permission

MUS 498 Advanced Composition
AH 4 cr **UL**
Individual lessons are provided in both the craft and creative process of composing for acoustic instruments. This advanced course focuses on completing large-scale projects that develop original musical ideas for various instrumental and vocal ensembles. Course fee.
Prereq: MUS-111 and Permission

MUS 499 Music Independent Study
1-4 cr **UL**
Requires instructor permission.

MUS 500 Senior Recital Or Thesis
AH 2 cr **UL**
Satisfies the Department's comprehensive evaluation requirement. Requires instructor permission.
Prereq: Permission

New Media Studies (NMS)

Major Requirements

Thirty-six credits which must include:

1. Core: NMS-101 and eight additional credits from NMS-118, 120, 130, 140, and 160
2. Context: At least eight credits of 200-level NMS courses and at least twelve credits of 300-level NMS courses
3. Capstone: An internship (NMS-385), taken for 0-4 credits and the Senior Studio (NMS-450)

Departmental Honors

Completion of all NMS major requirements, 3.5 GPA in the major, and completion of a senior thesis project of honors caliber (NMS-500).

Minor Requirements

Twenty-four credits which must include:

1. Core: NMS-101 and an additional eight credits from NMS-118, 120, 130, 140, 160
2. Context: At least four credits of any 200-level NMS courses and at least four credits of 300-level NMS courses
3. Capstone: Senior Studio (NMS-450)

NMS 101 Introduction to Digital Media

4 cr

Introduction to technical, social, and cultural aspects of new media. Topics include media convergence, interactivity, social networking, and participatory culture. Includes lab work exploring basic principles of effective communication employing a variety of digital media for designing and delivering graphics, audio and video.

NMS 114 Introduction to Web Development

4 cr

This course provides an introductory examination of the theory and practice of communication in a digital format, including text, hypertext, visual, audio and video. Stresses application of digital media principles to authoring for the Web. Surveys the technologies underlying the World Wide Web, including Web page construction and JavaScript programming. Laboratory.

NMS 118 Intro Media Programming and Computation

NS3

4 cr

Write programs to manipulate images, sounds and movies, developing knowledge and skills in problem solving, data representation, data manipulation, and programming principles including recursion and object-oriented design. Introduction to basic ideas in hardware, software and computing.

NMS 120 Principles of Visual Design

4 cr

Investigation of foundational elements and principles of visual design, as components of visual communication. Two dimensional design and time-based media will be explored traditionally and digitally, using programs such as Illustrator, Photoshop Lightroom, iMovie, and others. Topics include color theory, composition, narrative and non-narrative storytelling, among others. Course fee.

NMS 125 Introduction to Film Theory

4 cr

In this course, we will study a wide variety of films; we will also study characteristics of the film/video medium and see how they are illustrated by the films studied in the course. Emphasis will be on the expressiveness of film techniques, fictional films, alternatives to the live-action fictional film, and how viewers understand films.

NMS 130 Interactive Media

4 cr

In our society, interactivity has become a key component of media. We try to make our messages compelling and memorable, whether designing ad campaigns, websites, or Facebook profiles. Interactivity is widely debated, even within a single medium, and so the various approaches to it will make up the core inquiry for this course: what makes a piece of media interactive? How does meaning get communicated in interactive media? How can we design media using interactivity to deepen communication? Students will focus on social media, transmediation, and games, and will compose digital projects and deliver presentations, both individually and collaboratively.

NMS 140 Camera Media

4 cr

This course addresses the importance of the camera in the twenty-first century and prepares students for advanced production and critical work with its media. Through readings, discussions, and hands-on activities, students develop fluencies in three areas: camera histories, camera techniques, and camera rhetorics (the camera's persuasive power). Course fee.

NMS 160 Sound Design

4 cr

This course presents an overview of digital audio and video applications and the workflows designed to produce and manipulate digital sound and moving images. This includes music and sound for video, animation, and using audio and video on the Web. Additional topics will include the basics of sound design, syncing of audio and motion video and the rudiments of audio and video production systems. Students will also be introduced to important media standards such as NTSC, HDV, MIDI, QuickTime, MPEG and various SD and HD formats. (Formerly MUS 201)

NMS 180 Topics in New Media Studies

1-4 cr

Selected topics in new media innovations, issues and effects. May be taken more than once for credit. Course fee.

Prereq: 4 credits in NMS or Permission

NMS 180M Topics in New Media Studies

1-4 cr

Selected topics in new media innovations, issues and effects. May be taken more than once for credit. Course fee.

NMS 201 Media Systems and Influence

4 cr

Introductory study of the major media industries and effects. Emphasis on analyzing the way media technologies affect information flow and social networks and the influence of media on human perception, behavior and identity.

NMS 210 Motion Graphics and Animation

4 cr

Introduction to 2D and 3D visual effects, animation and compositing. Critical study and theory of motion and animation principles; concepts of key framing, applying behaviors, tweening animations, symbols, generators and particle emission, chroma keying and rotoscoping.

NMS 215 Audio Recording Studio

2 cr UL

Overview of the impact of computers and technology in the music professions. Topics include design of recording studio and lab environments, MIDI technology, fundamentals of audio technology, multimedia applications and using sound/music on the Web. Cross-listed with MUS-215. (Offered every year)

NMS 220 Intro to Media Programming & Computation

NS3

4 cr UL

Write programs to manipulate images, sounds and movies, developing knowledge and skills in problem solving, data representation, data manipulation, and programming principles including recursion and object-oriented design. Introduction to basic ideas in hardware, software and computing.

NMS 221 Intimacy and Technology

4 cr UL

Explore the way communication technologies impact and influence our relational lives. Focus on both old and new media, examining the way specific communication channels shape our romantic, platonic, familial and professional relationships. Through readings, discussion, film and scrutiny of their own technology usage, students will investigate the relationship between intimacy and technology.

NMS 225 Applied Film Theory

4 cr UL

Applied Film Theory will offer students a study in the theory of film and applied filmmaking. Course topics will include the inspirations, source materials, historical context, production process, and existing critical analyses of important films from the last century. This course combines analysis of film with hands-on digital media projects and is designed to complement other courses in the New Media Studies major.

Prereq: NMS-125 or Permission

NMS 230 Game Design I

4 cr UL

Video game development is a burgeoning creative field that requires collaboration of experts with a variety of skill sets. Students in this course will take on the intense task of designing a video game from concept through storyboarding to prototyping and playtesting a paper model. Students will develop a game design document outlining the game's mechanics and story and will create art assets for game. Each student will demonstrate proof of concept for their game in a presentation using the assets they developed. No coding experience is necessary for this course, and no coding will be required in the course.

NMS 230M Game Design I

4 cr UL

Video game development is a burgeoning creative field that requires collaboration of experts with a variety of skill sets. Students in this course will take on the intense task of designing a video game from concept through storyboarding to prototyping and playtesting a paper model. Students will develop a game design document outlining the game's mechanics and story and will create

art assets for game. Each student will demonstrate proof of concept for their game in a presentation using the assets they developed. No coding experience is necessary for this course, and no coding will be required in the course.

NMS 232 Digital Imaging 4 cr UL

Exploration of aesthetic and technical relationships between still images, multiple prints and montage as they are presented in the form of the digital straight print, narratives, and/or series. Course fee.

NMS 233 Tabletop Role-Playing Games 4 cr UL

The past several decades have seen an explosion of innovative board games, card games, miniature games, and pen-and-paper games, many of which involve role-playing (which is when players act out personas other than their own). Using theory, exposure to numerous games, and actual play, students will explore the design, mechanics, and social elements of non-digital, tabletop role-playing games.

NMS 233M Tabletop Role-Playing Games 4 cr UL

The past several decades have seen an explosion of innovative board games, card games, miniature games, and pen-and-paper games, many of which involve role-playing (which is when players act out personas other than their own). Using theory, exposure to numerous games, and actual play, students will explore the design, mechanics, and social elements of non-digital, tabletop role-playing games.

NMS 235M Computer Game Design 4 cr UL

Explores the process by which computer games go from conception through formal design to implementation and testing. Uses coursework and team projects to cover aspects of the design process including brainstorming and narrative development, game programming, art and sound design, and marketing. Spring Term only.

Prereq: CSC-121 or Permission

NMS 240 Digital Film Production 4 cr UL

Students are introduced to fundamentals of filmmaking and produce their own films. Elements covered include pre-production (financing, screenwriting and scheduling); production (cinematography, sound recording and directing); and post-production (editing, basic effects, marketing and distribution). Must be an NMS major or receive instructor permission to register for this course. Course fee.

Prereq: NMS Major or Permission

NMS 250 Media, Power and Ownership 4 cr UL

Introduction to the business practices and regulations that shape the American media industry. Emphasis is placed on the roles of audience characteristics and media technology in shaping the content of media, and the role of the First Amendment as the basis for media regulation.

NMS 250T Media, Power and Ownership 4 cr UL

Introduction to the business practices and regulations that shape the American media industry. Emphasis is placed on the roles of audience characteristics and media technology in shaping the content of media, and the role of the First Amendment as the basis for media regulation.

NMS 260 Visual Communication 4 cr UL

Focus on understanding images in culture from a psychological, photojournalistic and communication perspective. Work from a range of disciplines, including anthropology, communication, media and cultural studies, sociology, psychology and design.

NMS 280 Topics in New Media Studies 2-4 cr UL

Selected topics in new media innovations, issues and effects. May be taken more than once for credit. Students may need to buy materials for their projects at a cost up to \$100.

NMS 282 Network Analysis 4 cr UL

Examination of tools and techniques used in analyzing social relations, focusing on substantive and theoretical origins and applications of these techniques. Emphasizes basic network concepts and common approaches to network analysis. Introduces advanced methodologies for analyzing social networks.

NMS 299 NMS Independent Study 1-4 cr UL

Requires instructor permission.

NMS 300 Media Theory and Culture 4 cr UL

Survey key benchmarks and texts in the history of media and new media technologies, while also introducing critical readings of 20th and 21st century media culture, both from the theoretical field of media studies and the creative works of artists, filmmakers and writers.

NMS 310 Social Media 4 cr UL

Social media is a core component of new media studies, and having a course dedicated to covering social media communication is crucial for students across disciplines for their development as ethical individuals and as participants in the business world.

Prereq: Sophomore standing

NMS 330 Game Design II 4 cr UL

Video game development is a burgeoning creative field that requires collaboration of experts with a variety of skill sets. Students in this course will build on their experiences in Game Design I to undertake a more thorough and developed game design. Students will develop a game design document and partial game walk-through outlining the game's mechanics and story and will create art assets for the game using Adobe Illustrator. The end-game of the course is for each student to demonstrate proof of concept for their game in a studio-style pitch/presentation using the assets they developed. No coding experience is required for the course, no coding will be required in the course.

Prereq: NMS-230

NMS 380 Topics in New Media Studies 2-4 cr UL

Selected topics in new media innovations, issues, and effects. *Prereq: NMS-101 or Permission*

NMS 381 Advanced Documentary 2 cr UL

Combines theory, history and practice, exploring documentary video production through an overview of the history and major styles, field exercises, screening, discussion and critique. Participating in collaborative work with classmates, students are exposed to a range of storytelling, production, aesthetic, and artistic issues. Hands-on demonstrations, field exercises, screenings, readings, lectures and discussion prepare students to produce short documentary videos.

NMS 382 Advanced Mixing and Mastering 2 cr UL

In-depth, project-oriented class that explores the creative and technical issues involved in multitrack sound editing, mixing and mastering. Topics include mono, stereo and multichannel audio formats, understanding mixing consoles, signal flow and busses, sound analysis and metering plug-ins, controlling levels and gain, advanced EQ, compression and "brick wall" limiting, automation and time-based effects. Tools include popular DAW applications Logic Pro, Pro Tools and Reason.

Prereq: NMS-204

NMS 385 New Media Studies Internship 1-8 cr **UL**

NMS 399 NMS Independent Study 1-4 cr **UL**
Requires instructor permission.

NMS 450 Senior Studio 4 cr **UL**
This capstone studio serves as a bridge between work at Alma and a professional post-graduate career. Students will independently plan and execute a capstone project that applies their specialized skills in new media to a challenging problem. The goal is to develop projects with lasting impacts while deepening the students' own methods of design. Course also addresses how these skills might fit into post-graduate life through resume and portfolio workshops, as well as seminar discussions about new media's role in the world. At the end of the term, capstones are assessed by a panel of faculty and industry judges at a public exhibition, which the class organizes and hosts.
Prereq: Senior Standing

NMS 499 NMS Independent Study 1-4 cr **UL**
Requires instructor permission.

NMS 500 Studies Senior Thesis 2-4 cr **UL**
Development and completion of original scholarly/creative work. May be applied, interpretive, critical, empirical or theoretical. Required for departmental honors. Requires senior standing and permission.
Prereq: Senior Standing and Permission

NUR 201 Integrative Seminar 3 1 cr
Provides the theoretical base to further prepare nurses to become competent to care for the health of people. This course further develops the concepts discussed and learned in NUR 101 and 102. This course continues to integrate the knowledge; skills; and attitudes learned from the concurrent semester courses with that of the nursing process to provide a foundation for the clinical-decision-making process. The concept of servant leadership with is further developed in this course.
Prereq: NUR-102

NUR 202 Integrative Seminar 4 1 cr
Provides the theoretical base to further prepare nurses to become competent to care for the health of people. This course further develops the concepts discussed and learned in NUR-101, NUR-102 and NUR-201. This course continues to integrate the knowledge, skills and attitudes learned from the concurrent semester courses with that of the nursing process to provide a foundation for the clinical decision-making process. Servant leadership is further developed in this course.
Prereq: NUR-201

NUR 210 Clinical Skills, Medical Math and Emr 2 cr
Provides the theoretical base for nursing therapeutics (clinical skills, medical math and EMR) to provide safe-effective patient centered care. Patient centered caring practices are expanded to include issues of privacy, confidentiality, and responses to diversity. Quality and safety standards/competencies for nursing therapeutics are introduced and practiced within a laboratory setting. Students must also enroll in NUR-211. Course fee.
Prereq: NUR-202

NUR 211 Physical Assessment 2 cr
Provides the theoretical base for a comprehensive health history and physical assessment utilizing the nursing process for a well adult patient. Incorporates spiritual, socio-cultural, psychological and physical dimensions of the patient for the health history and physical assessment. Patient centered caring practices are expanded to include issues of privacy, confidentiality, and responses to diversity. Quality and safety standards/competencies for the physical assessment are introduced and practiced within a laboratory setting. Student must also enroll in NUR 210. Course fee.
Prereq: NUR-202

NUR 280 Population Health 2 cr
Course Description: This course will explore occurrences and distribution of health events across populations: local, national, and global. The student will examine health outcomes related to morbidity, mortality, quality of life and disparities through the reciprocal determinant factors of health, individual behavior, social and physical environment, culture, and genomics. Epidemiological principles will be identified and used to examine a current health issue. Lastly, students will consider the impact of health policies, and programs, related to current health issues.

NUR 301 Integrative Seminar 5 1 cr **UL**
Provides the theoretical base to further prepare nurses to become competent to care for the health of people. This course further develops the concepts discussed and learned in NUR 101, 102, 201 and 202. The servant leadership goal is allocated in this course.
Prereq: NUR-211

NUR 302 Integrative Seminar 6 1 cr **UL**
Provides the theoretical base to further prepare nurses to become competent to care for the health of people. Additionally an introduction to servant leadership with service to the community is introduced in this course.
Prereq: NUR-301

Nursing (NUR)

Bachelor of Science in Nursing

1. Professional Sequence (32 cr): NUR-210, 211, 310, 311, 360; IPH-310, 430; MTH-116; PSY-121, 231
2. Nursing Content/Practice (26 cr): NUR-350, 351, 353, 355, 452, 454, 500
3. Natural Science Core (36 cr): BIO-121, 308; CHM-115; IPH-220, 225*, 226*, 328*, 340*, 344* (*Student must earn a grade of BC or higher in courses noted with an *.*)
4. Integrative Core (25 cr): SOC-101; PHL-229; POL 141; CRL/PAF; NUR-101, 102, 201, 202, 301, 302, 401, 402

Candidates for the Bachelor of Science in Nursing must earn a total of 136 credits, and must satisfy all general education and other Alma College graduation requirements.

NUR 101 Integrative Seminar 1 1 cr
Provides the theoretical base to further prepare nurses to become competent to care for the health of people. Integrates knowledge, skills and attitudes learned from the concurrent semester courses with that of the nursing process to provide a foundation for the clinical-decision-making process. Additionally an introduction to servant leadership with service to the community is introduced in this course.

NUR 102 Integrative Seminar 2 1 cr
Provides the theoretical base to further prepare nurses to become competent to care for the health of people. This course further develops the concepts discussed and learned in NUR 101. This course continues to integrate the knowledge; skills; and attitudes learned from the concurrent semester courses with that of the nursing process to provide a foundation for the clinical-decision-making process. Servant leadership is further developed in this course. This course is taught in the hospital SIM lab
Prereq: NUR-101

NUR 310 Fundamentals Nursing Practice4 cr **UL**

Provides the theoretical base for scientific inquiry/nursing process (assessment, diagnosis, planning, interventions and evaluation) to provide patient-centered care. Quality and safety standards/competencies of nursing practice are employed for the fundamental care of a patient within the framework of health care delivery systems. Nursing Fundamental Practicum Students practice learned assessment, fundamental and nursing skills in community and hospital settings under the supervision of clinical instructors. Leadership and system thinking concepts are expanded and practiced in the clinical setting. Laboratory/practicum. Course fee.

*Prereq: NUR-211***NUR 311 Nursing Theory and Professional Practice**2 cr **UL**

Provides a theoretical base for the concepts of the meta-paradigm of nursing theory (patient/person, nurse, health, and environment), the core values of Alma College, the BSN essentials and the QSEN initiatives to guide the development of a professional nursing practice. Development of a philosophy of a professional nursing role is approached from a perspective of the Alma College tradition, social justice, reflective thinking and a values-centered professional education.

*Prereq: NUR-211***NUR 350 Medical Surgical Nursing I W.Practicum**4 cr **UL**

Provides the theoretical base to prepare professional nurses to administer safe-effective, evidenced based practice care for the medical-surgical adult patient. The interrelationship of the patient, health, nursing and the environment are explored and practiced within a medical-surgical setting. Quality and safety standards/competencies of nursing practice are employed for the adult medical-surgical population within the framework of health care delivery systems. Laboratory/practicum. Course fee.

NUR 351 Mental Health Nursing With Practicum4 cr **UL**

Provides the theoretical base to prepare professional nurses to become competent to care for the mental health needs of the patient. The interrelationship of the patient, health, nursing and the environment are explored and practiced within the mental health setting. Quality and safety standards/competencies of nursing practice for the adult mental health population are explored and practiced within the framework of health care delivery systems. Course is taught at hospital Room 1177. Laboratory/practicum. Course fee.

NUR 353 Pediatric Nursing3 cr **UL**

Provides the theoretical base to prepare professional nurses to become competent to care for children and their families. The interrelationship of the patient, health, nursing and the environment are explored and practiced within the critical care setting. Quality and safety competencies of nursing practice for the pediatric population are explored and practiced within the framework of health care delivery systems. Course is taught at hospital Room 1177. Laboratory/practicum. Course fee.

*Prereq: NUR-211***NUR 355 Maternal Health Nursing**3 cr **UL**

Provides the theoretical base to prepare nursing students to become competent to care for childbearing women. The interrelationship of the patient, health, nursing and environment are explored within the maternal health setting. Quality and safety competencies of nursing practice for the maternal health population are explored within the framework of health care delivery systems. Laboratory/practicum. Course fee.

*Prereq: NUR-211***NUR 355M Maternal Health Nursing**3 cr **UL**

Provides the theoretical base to prepare nursing students to become competent to care for childbearing women. The interrelationship of the patient, health, nursing and environment

are explored within the maternal health setting. Quality and safety competencies of nursing practice for the maternal health population are explored within the framework of health care delivery systems. Laboratory/practicum. Course fee.

*Prereq: NUR-211***NUR 360M Community/Global Nursing Experience**4 cr **UL**

Provides the theoretical base to prepare professional nurses to become competent to care for the needs of patients from a designated community. The interrelationship of the patient, health, nursing and the environment are explored and practiced within a designated community setting. This course explores the health outcomes of a group of individuals, including the distribution of such outcomes within the group. The outcomes of mortality, quality of life and disparities will be examined through the reciprocal determinant factors of health care, individual behavior, social environment, physical environment, and genomics. The student will examine how policies and programs impact outcomes and determinants within current urban and global health care settings. Laboratory/practicum.

NUR 380 Nursing Seminar1-4 cr **UL**

Topics in Nursing decided by instructor

NUR 401 Integrative Seminar 41 cr **UL**

Provides the theoretical base to further prepare nurses to become competent to care for the health of people. This course further develops the concepts discussed and learned in NUR 302.

*Prereq: NUR-201***NUR 402 Capstone Seminar**2 cr **UL**

Provides a theoretical base for implementing learned nursing interventions through theory into professional practice. Theories derived from multiple disciplinary perspectives (arts and sciences) and research methods are employed to assist populations at risk. Social justice, women's issues, abuse and violence, substance abuse, social and health policies, disparities, access problems, and integrity of basic units of society are explored with the Alma Core Values embedded in the process of the project.

NUR 452 Medical Surgical Nursing II W Practicum4 cr **UL**

Provides the theoretical base to prepare professional nurses to become competent to care for critical care needs of the adult and geriatric population. The interrelationship of the patient, health, nursing and the environment are explored and practiced within the critical care setting. Quality and safety standards/competencies of nursing practice for the adult critical care population are explored and practiced within the framework of health care delivery systems. Laboratory/practicum. Course fee.

NUR 454 Community Health Nursing W Practicum4 cr **UL**

Provides the theoretical base to prepare professional nurses to become competent to care for patients in the community. The interrelationship of the patient, health, nursing and the environment are explored within the community setting. Quality and safety standards/competencies of nursing practice are explored for care of the patient in the community within the framework of health care delivery systems. Laboratory/practicum. Course fee.

NUR 480 Nursing Seminar1-4 cr **UL**

Topics in Nursing decided by instructor

NUR 500 Clinical Immersion Practicum4 cr **UL**

Provides for the transition of the student nurse to a professional baccalaureate nurse within an interdisciplinary, population-based model of care. The practicum is an immersion experience in which the student has the opportunity to practice the role of an entry-level baccalaureate nurse under the guidance of faculty and the direct supervision of an experienced clinician. Seminars are held to examine issues facing entry-level practitioners, such as ethical

challenges, role transition, team building, conflict management, delegation, population-based care and community outreach, along with cost and quality outcomes in health care. Course fee.

NUR 500M Clinical Immersion Practicum

4 cr **UL**

Provides for the transition of the student nurse to a professional baccalaureate nurse within an interdisciplinary, population-based model of care. The practicum is an immersion experience in which the student has the opportunity to practice the role of an entry-level baccalaureate nurse under the guidance of faculty and the direct supervision of an experienced clinician. Seminars are held to examine issues facing entry-level practitioners, such as ethical challenges, role transition, team building, conflict management, delegation, population-based care and community outreach, along with cost and quality outcomes in health care. Course fee.

NUR 500T Clinical Immersion Practicum

4 cr **UL**

Provides for the transition of the student nurse to a professional baccalaureate nurse within an interdisciplinary, population-based model of care. The practicum is an immersion experience in which the student has the opportunity to practice the role of an entry-level baccalaureate nurse under the guidance of faculty and the direct supervision of an experienced clinician. Seminars are held to examine issues facing entry-level practitioners, such as ethical challenges, role transition, team building, conflict management, delegation, population-based care and community outreach, along with cost and quality outcomes in health care. Course fee.

Philosophy (PHL)

Major Requirements

Thirty-six credits which must include:

1. PHL-102, 103, 111 or 112, 126 and 500
2. Sixteen credits at the upper level; typically some are independent studies developed in consultation with the Department.
3. Successful completion of the thesis and oral examination administered by the Department.

Minor Requirements

Twenty-four credits which must include: PHL-102, 103, 111 or 112, and 126 and other courses selected in consultation with the Department.

Four credits from PHL, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Humanities.

PHL 102 Issues in Philosophy

 AH

4 cr

Exploration of issues in and development of individual positions in respect to basic philosophical questions.

PHL 103 Critical Thinking

AH

4 cr

Introduction to Logic. Elementary semantics, common fallacies in inference, the analysis of arguments, and the logic of induction and deduction. Emphasis primarily on reasoning as it occurs in everyday contexts.

PHL 111 Western Philosophy I

  AH

4 cr

Survey of major ideas which have helped shape the Western tradition and the thinking of contemporary persons. The timeframe covered includes the beginnings in Greece to Renaissance, including meeting of Greek and Christian worldviews.

PHL 112 West Philosophy II

  AH

4 cr

Survey of major ideas which have helped shape the Western tradition and the thinking of contemporary persons. The timeframe includes the Renaissance to 20th century.

PHL 126 Introduction to Values

AH

4 cr

Exploration of moral values, nature of moral judgments, and bases for moral decisions. Practice in decision making. Study of such controversial contemporary issues as capital punishment, abortion, privacy, death with dignity, racism and sexism. Focus on person as individual and member of society.

PHL 131 Introduction to Political Theory

AH

4 cr

Introduction to normative political theory, both historical and contemporary. Includes analysis of central concepts of politics such as power, freedom, justice, democracy and equality. Explore key modern ideologies, such as liberalism, conservatism, socialism, fascism and political Islam. (Cross-listed as POL-131)

PHL 180 Topics in Philosophy

AH

2-6 cr

Selected topics in philosophy. Subject, credits and applicability to distributive requirements and to Major or Minor to be announced in advance.

PHL 202 Feminist Philosophy

AH

4 cr

Examination of recent feminist studies in philosophy and religion. Focus on method, style, approach and arguments of the feminist critique.

PHL 215 Philosophy of Religion

 AH

4 cr

Examination of classical and contemporary issues in the philosophy of religion such as arguments for and against the existence of God, religious language, the relation between faith and reason, the evidential value of religious claims, and the relationship between morality and religion. (Cross-listed as REL-215.)

PHL 216 Themes in Existentialist Literature

  AH

4 cr

Examination, evaluation and discussion of selected subjects - the individual, freedom, responsibility, anxiety, hope, death, meaning of life - as treated in various essays, short stories and dramas. Focus on analysis and interpretation of texts. (Cross-listed as REL-216.)

PHL 217 Asian Philosophy and Religion

 AH

4 cr

Exploration of the history, thought and contemporary roles of the major religious and philosophical traditions of Asia, including Hinduism, Buddhism, Confucianism and Taoism. (Cross-listed as REL-217.)

PHL 224 Aesthetics

AH

4 cr

Exploration of values pertaining to the arts. Study of principal aesthetic views, major issues in the philosophy of art, application to various art works and nature of aesthetic judgments, creative activity and aesthetic qualities of experience.

PHL 225 Environmental Ethics

AH

4 cr

Examination of conceptual and moral issues about nature and humans' relationship to it. Focus is on both theoretical frameworks about humans' responsibility for the environment and on contemporary environmental controversies, such as global warming, population issues, pollution, global justice and sustainability.

PHL 227 Ethics and Business

AH

4 cr

Exploration of the nature of moral values, moral judgments and ethical decisions. Analysis of selected issues in modern business. Test cases used for practice in decision making. Especially pertinent for those planning business careers but designed for all interested students.

PHL 228 Ethics and Law
AH 4 cr
Exploration of conceptual and ethical issues in the making and administration of law. Introduction to ethical theory. Study of such topics as criminals' rights, justification of punishment, death penalty, nature of legal responsibility, extent of justifiable government interference with freedom and relation between law and morality. Especially pertinent for Pre-Law students, but designed for all interested students.

PHL 229 Ethics and Medicine
AH 4 cr
Exploration of nature of moral values, moral judgments and ethical decisions. Analysis of selected issues in medicine and other health fields. Test cases used for practice in decision-making. Especially pertinent for those planning careers in health professions, but designed for all interested students.

PHL 230 Religion and Science
AH 4 cr
Examination of the relationship between religion and science through both historical and contemporary issues. (Cross-listed as REL-230.)

PHL 232 Ancient Political Thought
AH 4 cr
Exploration of key ideas in ancient and medieval political thought. The works of Socrates, Plato, Aristotle, the Stoics, Epicurus, Augustine and Aquinas are considered. Key questions addressed include: Is democracy superior to rule by the enlightened few? Are humans by nature political creatures? What is the proper relation between the individual and the state? Is the state a natural entity? (Cross-listed as POL-232.)

PHL 234 Modern Political Thought
AH 4 cr
Analysis of selected original works of Machiavelli, Hobbes, Locke, Rousseau, the American founders, Bentham, Mill, Marx and Nietzsche. Emphasis on relevance to contemporary political thought and issues. (Cross-listed as POL-234.)

PHL 235 Ethics and Education
AH 4 cr
Examination of ethical issues and education. Emphasis on the ethics of education, such as the very idea of compulsory education; and ethics in education, such as the tension between moral education and indoctrination, and issues pertaining to multiculturalism, gender and disability. Of special interest to students planning to become elementary or secondary teachers, but accessible to all interested students.

PHL 236 Contemporary Political Thought
AH 4 cr UL
This course explores contemporary debates in political theory regarding justice, democracy, freedom, equality, and rights. Do contemporary democracies distribute resources and opportunities fairly? Do they treat all citizens equally? Are they sufficiently democratic? Is capitalism a just economic system? Does it support or undermine democracy, freedom, and equality?
Prereq: POL-131

PHL 240 Philosophy of Love and Sex
AH 4 cr
Examination of conceptual and moral issues related to love and sex. Conceptual issues include the nature of love and of sexual desire. Moral issues include marital fidelity, exclusivity in romantic relationships, sex without love, homosexuality, romantic relationships that involve power differentials, sexual harassment, date rape, prostitution and pornography.

PHL 242 Philosophy of Sport
AH 4 cr
Examination of conceptual and moral issues that arise in sport. Conceptual issues include the relationship between play, games and sport, and the nature of competition. Moral issues include the role of sport in education, sportspersonship, performance-enhancing drugs, violence in sport, hunting and gender equity in sport.

PHL 280 Topics in Philosophy
AH 2-4 cr UL
Selected topics in philosophy in such areas as historical studies, epistemology, metaphysics and values. May be taken more than once if different topic.

PHL 280M Topics in Philosophy
AH 2-4 cr UL
Selected topics in philosophy in such areas as historical studies, epistemology, metaphysics and values. May be taken more than once if different topic.

PHL 299 Philosophy Independent Study
4 cr
Planned program of individual study of a particular subject in philosophy, developed with the supervising professor.
Prereq: Permission

PHL 303 Symbolic Logic
AH NS3 4 cr UL
In-depth examination of symbolic logic, extending the propositional logic developed in PHL 103 to include predicate logic and logic of identity. Study of translation into notation, test validity by such methods as deduction, truth tables and truth trees. Examination of logical concepts: logical truth, consistency, equivalence, interpretations and the properties of relations.

PHL 305 Philosophy of Science
AH 4 cr UL
Analysis of the nature of science. What justifies the view that science is the most objective source of human knowledge? What makes a scientific theory true? Examination of rival accounts of science and their relation to actual practice of scientists. Especially pertinent to science majors, but designed for all interested students. Extensive background not required.

PHL 326 Virtue Ethics
AH 4 cr UL
In-depth examination of "virtue ethics." Is virtue based on reason alone, or does it also involve feeling and sentiment? What kind of character traits should I try to cultivate? What kind of person should I try to become? Consideration of such virtues and vices as honesty, friendship, loyalty, selfishness, gossip and greed, ending on the ultimate ethical question: What makes my life worthwhile or meaningful?
Prereq: One philosophy course or Permission

PHL 347 Philosophy of Mind
AH 4 cr UL
Exploration of rival views on relation between mind and body, beginning with dualism, the view which is most hospitable to belief in life after death. Emphasis on various materialist theories which explain human actions without any reference to non-physical entities. Exploration of implications of theories of mind for issues such as immortality and human freedom.
Prereq: Any Philosophy course or COG-120 or Permission

PHL 380 Seminar
AH 2-4 cr UL
Selected topics in philosophy which arise in various fields. Generally interdisciplinary, team-taught. Reading, discussion, papers and critiques. Subjects and credits to be announced.
Prereq: Permission

PHL 399 Philosophy Independent Study
1-4 cr UL
Planned program of individual study of a particular subject in philosophy, developed with the supervising professor. Major can include more than one enrollment in independent study.
Prereq: Permission

PHL 499 Philosophy Independent Study
4 cr UL
Planned program of individual study of a particular subject in philosophy, developed with the supervising professor.
Prereq: Permission

PHL 500 Senior Thesis

AH

1-4 cr **UL**

Individual research culminating in preparation of a major paper and departmental oral examination.

Prereq: Permission

Physical Science (PSC)

PSC 101 General Physical Science

NS2 4 cr

An introduction to the basic concepts in physical science in the areas of physics, chemistry, earth science and astronomy. Meets standards for elementary certification. Laboratory.

PSC 180 Basic Physical Science

4 cr

An introductory course in physical science.

PSC 380 Physical Science Concepts4 cr **UL**

A standards-based class and laboratory experience in physics and astronomy that supports K-8 pre-service teachers in understanding the physical sciences and expanding their repertoire of teaching and assessment techniques suitable for science subject areas.

PSC 399 Physical Science Independent Study1-4 cr **UL**

Physics (PHY)

Major or Teaching Major Requirements

Thirty-six credits which must include:

1. PHY-121, 122, 212, 221, 312, 321, 323, 421; and either 333, 380, 399, 480, 499, 500 or AST-225
2. Required Cognates (16 cr): MTH-121, 122, 210, 211
?CSC-120 and MTH-310 are highly recommended for the major.

Minor or Teaching Minor Requirements

Twenty-four credits which must include:

1. PHY-121, 122, 212, and 221;
2. Eight credits from Physics and Astronomy courses numbered 200 or above;
3. Required Cognates (16 cr): MTH-121, 122, 210 and 211

Four credits from PHY, with the exception of practicum or independent study courses, may count toward the Distributive Requirements in the Natural Sciences - Physical Sciences.

PHY 101M Making of the Atomic Bomb

NS2 4 cr

Review of the scientific, engineering, military and social factors involved in the development of the atomic bomb from 1900-1945. Does not count toward Physics major. MTH-100 or 101 recommended.

Prereq: MTH-100 or higher recommended

PHY 112 General Physics I

NS2 4 cr

First half of an introductory survey of physics with emphasis on problem-solving. Uses algebra and trigonometry but not calculus. Appropriate for students who plan no further study in physics. Topics include motion, forces, rotation, conservation laws and thermal physics. Laboratory. Course fee.

Prereq: MTH-112, 113, or 121 or Permission

PHY 113 General Physics II

NS2 4 cr

Second half of the introductory survey of physics started with PHY 112. Uses algebra and trigonometry but not calculus. Topics include vibrations and waves, sound, electricity and magnetism, optics and modern topics. Laboratory. Course fee.

Prereq: PHY-112

PHY 121 Introduction to Physics I

NS2 4 cr

Calculus-based treatment of one and two-dimensional mechanics, vectors, force, work, energy, momentum, torque, and static equilibrium. Offered every Fall. Laboratory. Course fee.

Prereq: MTH-113 or MTH-121 previously or concurrently

PHY 122 Introduction to Physics II

NS2 4 cr

Continuation of PHY 121. Topics include oscillations and waves, sound, Doppler effect, introductory electricity and magnetism, introductory optics. Offered every Winter. Laboratory. Course fee.

Prereq: PHY-121

PHY 140 Machine Shop

NS2 2 cr

Introduction to machine shop tools and techniques. Offered every winter. Course fee.

Prereq: Permission

PHY 212 Mechanical SystemsNS2 4 cr **UL**

Rotational kinematics, dynamics, and advanced static equilibrium; fluids and introduction to thermal physics. Offered Winter, Even numbered years)

Prereq: PHY-121 and MTH-121

PHY 221 Modern PhysicsNS2 4 cr **UL**

Survey of fundamentals of modern physics; special relativity, atomic physics, nuclear physics, and introductory quantum wave mechanics. Laboratory. Course fee.

Prereq: PHY-121

PHY 225 AstrophysicsNS2 4 cr **UL**

Study of the physics of stellar constituents of the universe: distances, magnitudes, colors, spectra and motions of stars; multiple and variable stars; stellar structure and evolution, star clusters, structure and rotation of the Milky Way galaxy, galaxies and cosmology.

Prereq: PHY-221

PHY 299 Physics Independent Study1-8 cr **UL**

Planned program of study. Topic selected by instructor and student.

Prereq: Permission

PHY 312 DynamicsNS2 4 cr **UL**

Study of motion. Includes particle dynamics, central force motion, rigid body motion, Lagrange's and Hamilton's equations of motion. (Offered Fall, Even numbered years)

Prereq: PHY-212, MTH-211

PHY 321 Advanced ElectromagnetismNS2 4 cr **UL**

Study of electric and magnetic fields. Introduces and uses vector calculus. Includes integral and differential forms of Maxwell's equations; electric, scalar and vector potentials; radiation; and electric and magnetic properties of matter. (Offered Fall, Odd numbered years)

Prereq: PHY-122, MTH-210

PHY 323 Thermal/Statistical PhysicsNS2 4 cr **UL**

Study of thermodynamics as seen and derived from a quantum statistics perspective. Includes first, second and third laws of thermodynamics; kinetic theory of gasses; Maxwell-Boltzman

statistics; thermal equilibrium; and fluctuations and irreversibility.
(Offered Winter, Odd numbered years)
Prereq: PHY-212, 221 and MTH-210;

PHY 333 Optics 4 cr **UL**
NS2
Study of geometric and physical optics. Includes mirror and lens systems, apertures and stops, photography, fiber optics, Fourier techniques, interference and diffraction, limits of resolution, optical image processing, electro optics, lasers and holography. Laboratory. Course fee.
Prereq: PHY-122

PHY 380 Topics in Physics 4 cr **UL**
NS2
Study of topic of current or historical importance chosen by instructor. Prerequisites vary with selections. May require instructor permission. Students may need to buy materials for their projects at a cost up to \$100.

PHY 399 Physics Independent Study 1-4 cr **UL**
Planned program of study. Topic selected by instructor and student.
Prereq: Permission

PHY 421 Quantum Mechanics 4 cr **UL**
NS2
Study of wave and matrix mechanics, the harmonic oscillator, the hydrogen atom and angular momentum and spin. (Offered Winter, Even numbered years)
Prereq: PHY-221, MTH-210; MTH-310 is recommended

PHY 480 Topics in Physics 4 cr **UL**
NS2
Study of topic of current or historical importance chosen by instructor. Prerequisites vary with selections.
Prereq: May require Permission

PHY 499 Physics Independent Study 1-4 cr **UL**
Planned program of study. Topic selected by instructor and student. Requires instructor permission.

PHY 500 Senior Thesis 2-4 cr **UL**
NS2
Planned program of research performed on campus or as part of research group at major university or national laboratory. Course fee.
Prereq: Permission

Political Science (POL)

Major Requirements

Thirty-six credits which must include:

1. POL-401
2. At least twenty additional upper level credits. (*No more than eight credits from POL 226/227 and 328/329 may count toward the major.*)
3. Successful completion of the departmental comprehensive examination. The exam will require that students demonstrate competency in three of the following four subfields of political science: American politics and public policy (APP), Comparative politics (CMP), International Relations (INR) and Political Theory (THE). Students can determine the subfield to which a course belongs by noting the explanatory caption that appears in parentheses at the end of the course description.
4. For topics courses designated POL-180, 280, and 380, consult with the instructor or political science chair to determine which subfield the course falls under.
5. Departmental honors requires the completion of a senior thesis, successful defense before the department, and public presentation of the thesis

Minor Requirements

Twenty-four credits which must include:

At least sixteen upper level credits in POL (*No more than eight credits from POL 226/227 and 328/329 may count toward the major.*)

Four credits from POL, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Social Sciences.

Course Subfield Designation Summary: American Politics/Public Policy (APP):
POL-101, 141, 233, 241, 243, 245, 305, 341 and 345
Comparative Politics (CMP):
POL-111, 115, 211, 212, 215, 217 and 315
International Relations (INR):
POL-121, 127, 221, 225, 226, 227, 325, 326, 327, 328 and 329
Political Theory (THE):
POL-131, 231, 232, 234 and 235

POL 101 The American Political System 4 cr
SO
Study of institutions and processes of politics and government. Contemporary political problems. Primary focus on federal government with some attention to state and local politics. (APP)

POL 111 Introduction to Comparative Politics 4 cr
SO
Examines concepts and approaches to comparative political study, comparative functions, processes and structures. Explores issues and concerns such as political change, democracy, effectiveness and stability. (CMP)

POL 115M Ethnic Politics Case Studies 4 cr
SO
Explore the nature of ethnic identity, its potential for and actualization of political activism and violence, and survey the role political institutions play in mitigating or eliminating ethnopolitical activism. Spring Term only. (CMP)

POL 121 World Conflicts and Problems 4 cr
SO
Examines a selection of world conflicts in terms of their causes and prospects for war, control or settlement. Explores world-wide problems, needs and efforts among states to deal cooperatively. (INR)

POL 127M Presidential Library Research 4 cr
SO
Introduction to normative political theory, both historical and contemporary. Includes analysis of central concepts of politics such as power, freedom, justice, democracy and equality. Explore key modern ideologies, such as liberalism, conservatism, socialism, fascism and political Islam. Spring Term only. (INR)

POL 131 Modern Ideals and Ideologies 4 cr
SO
This course examines the most influential ideologies of the modern era including liberalism, conservatism, socialism, communism, fascism, and liberation ideologies. (Cross-listed as PHL-131) (THE)

POL 141 Intro to Public Mgt and Policy Analysis 4 cr
SO
Study of leadership and administration in public organization, including relationship between bureaucracy and the executive, judicial and legislative branches; development of organizational theory; policy-making and implementation process; bureaucratic ethics; and reconciliation of democracy and bureaucracy. Recommended for those considering careers in public service or jobs affected by public policy. (APP)

POL 180 Topics in Political Science 2-4 cr
SO
Examines special political subjects in both the foreign/international and American realms.

POL 211 Western European Politics 4 cr **UL**
SO
Comparative study of the main political systems of Western Europe. Examination of European Union and its policies,

processes and outcomes. Comparative analysis of short- and long-term implications of European economic integration for the rest of the world. (CMP)

POL 212 Eastern European Politics

SO 4 cr UL

A survey of contemporary Eastern European politics at a turbulent time that often attracts international attention to that region. Analysis of some of the transformation and continuity in the region's politics and society. (CMP)

POL 215 Making and Breaking Nations

SO 4 cr UL

Regionalism and nationalism represent two persistent and significant political forces in most countries today. Indeed, for many countries they pose the most significant threat to these state's continued viability. This course explores these political phenomenon in Europe through hands-on research as students contribute to building a database of European regions, build GIS maps of regional data, and engage in both quantitative and qualitative analyses of these areas. (CMP)

POL 217 Democracy's Slow Death

SO 4 cr UL

This course tests hypotheses regarding increasing dissatisfaction with democracy around the world.

POL 221 Analysis of International Politics

SO 4 cr UL

Study roles of the state, international and non-state actors in international politics; theories of conflict, conflict control and resolution; and prospects for world community. (INR)

POL 225 International Law and Organizations

SO 4 cr UL

Analyzes historical evolution of international law, its purposes, principles and relationship to the international arena. Study of international organizations and their impact on international legal order. (INR)

POL 226 Model United Nations "A"

SO 2 cr UL

Preparation to represent an assigned country at a Model UN competition through examination of current international issues and UN organizational structures and processes. Course fee. (INR)

POL 227 Model United Nations "B"

SO 2 cr UL

Preparation to represent an assigned country at a Model UN competition through examination of current international issues and UN organizational structures and processes. (INR)

POL 231 American Political Thought

SO 4 cr UL

Explores American political thought from the founding to the present. Key themes considered include majority rule and minority rights, participatory versus elite theories of democracy, the tensions between democracy, freedom and equality, and civil disobedience. (THE)

POL 232 Ancient Political Thought

SO 4 cr UL

Exploration of key ideas in ancient and medieval political thought. The works of Socrates, Plato, Aristotle, the Stoics, Epicurus, Augustine and Aquinas are considered. Key questions addressed include: Is democracy superior to rule by the enlightened few? Are humans by nature political creatures? What is the proper relation between the individual and the state? Is the state a natural entity? (Cross-listed as PHL-232.) (THE)

POL 233 Current Controversies U.S. Politics

SO 4 cr UL

Examine the ethical and empirical dimensions of some current political controversies in the U.S., such as the death penalty, gay marriage, torture, terrorism, affirmative action and euthanasia. Introduction to relevant concepts in ethical theory, law, political philosophy and empirical inquiry in order to provide the framework

to think knowledgeably and critically about these issues. (APP)

POL 234 Modern Political Thought

SO 4 cr UL

Analysis of selected original works of Machiavelli, Hobbes, Locke, Rousseau, the American founders, Bentham, Mill, Marx and Nietzsche. Emphasis on relevance to contemporary political thought and issues. (Cross-listed s PHL-234.) (THE)

POL 236 Contemporary Political Thought

SO 4 cr UL

This course explores contemporary debates in political theory regarding justice, democracy, freedom, equality, and rights. Do contemporary democracies distribute resources and opportunities fairly? Do they treat all citizens equally? Are they sufficiently democratic? Is capitalism a just economic system? Does it support or undermine democracy, freedom and equality? (THE)

Prereq: POL-131

POL 241 U.S. Presidential Elections

SO 4 cr UL

Studies the links of elections and the media, campaign fundraising, electoral strategies, the role of the media in shaping campaigns, and the impact on public policy; offered especially in national election years, where the election can serve as a laboratory to test theories. (APP)

POL 242 Comparative Environmental Health Policy

SO 4 cr UL

Comparative analysis of the environmental-health policy process. Emphasis on applied research related to current government or non-governmental organization projects or concerns.

POL 243 Public Opinion and Voting

SO 4 cr UL

The course explores how Americans form their political beliefs and values, and how those beliefs and values influence their voting behavior. The impact of ideology, economic class, ethnicity, religion, and education are considered. (APP)

POL 245 The Political Experience

SO 4 cr UL

Explores nature of elective and administrative politics in state and local governments. Integrates cognitive and experiential learning. Includes field trips and interviews with state/local leaders in government, interest groups and media. (APP)

POL 280 Topics in Political Science

SO 2-4 cr UL

Variable topics in political analysis.

POL 305 Constitutional Law

SO 4 cr UL

Case law study of the Supreme Court's interpretations of U.S. Constitution in the areas of the governmental structures and processes and civil rights and liberties. Different approaches to interpreting the Constitution are also considered. (APP)

POL 315M Ethnic Politics Case Studies

SO 4 cr UL

Explore the nature of ethnic identity, its potential for and actualization of political activism and violence, and survey the role political institutions play in mitigating or eliminating ethnopolitical activism. Spring Term only. (CMP)

Prereq: POL-215

POL 317 Politics of Fear and Hate

SO 4 cr UL

This course explores the rise of "Radical Right" political parties across Europe in recent years. We explore the large literature on such political movements, which focus primarily on either economic grievance or xenophobia. We build a cross-national dataset to test hypotheses using time-series regression analysis. We will use both Microsoft Excel and SPSS as a central part of the course.

Prereq: One political science course or permission.

POL 325 U.S. Foreign Policy
SO 4 cr UL
Study of goals of American foreign policy and U.S. role in changing world; structure, processes and politics of foreign policy-making; and U.S. foreign policy since end of WWII. Analysis of selected current U.S. foreign policy concerns. (INR)

POL 326 U.S. National Security Policy
SO 4 cr UL
Analyzes emergence and evolution of post- WWII national security state. Assesses impact of changing international environment on conceptions of "national security." (INR)

POL 327M Presidential Library Research
SO 4 cr UL
Research visit to a presidential library. Lower level focuses on primary source investigations on topics of student interest. Upper level is preparation for a substantial research paper potentially leading to a senior thesis and/or published article. Spring Term only. (INR)

POL 328 Advanced Model UN "A"
SO 2 cr UL
Examine in detail the functioning of the central bodies of the UN community, including the General Assembly, Security Council, ECOSOC and specialized agencies. Also address the role of nongovernmental organizations, regional and subregional organizations and individual states. Only four credits may count toward the major. (INR)
Prereq: POL-226 and 227

POL 329 Advanced Model UN "B"
SO 2 cr UL
Examine in detail the functioning of the central bodies of the UN community, including the General Assembly, Security Council, ECOSOC and specialized agencies. Also address the role of nongovernmental organizations, regional and subregional organizations and individual states. Only four credits may count toward the major. Course fee. (INR)
Prereq: POL-226 and 227

POL 341 Public Policy Analysis
SO 4 cr UL
Study of policy process, particularly policy evaluation. Focuses on such policies as educational, environmental, economic and social welfare. Emphasis on learning evaluation methodologies through application to current public policy issues. (APP)

POL 345 Public Administration History and Theory
SO 4 cr UL
Study of the development of modern public bureaucracies and the relationship of bureaucracy and other governmental institutions, particularly through analysis of original works on public administration from Woodrow Wilson and Max Weber to more recent commentaries. (APP)

POL 380 Topics and Problems in Political Science
SO 4 cr UL
Courses on special political subjects in both the foreign/international and American realms.

POL 381 Washington Semester
SO 4 cr UL
Credit awarded for student participation in seminars and coursework. (American University)

POL 382 Washington Semester
SO 4 cr UL
Credit awarded for student participation in seminars and coursework. (American University)

POL 385 Political Science Practicum
1-4 cr UL
Placements in government, political institutions and related agencies may be made available by the Department or may be arranged by students in consultation with the Department.

POL 401 Senior Seminar
SO 4 cr UL
Comprehensive capstone study of politics within the context of a distinct theme in political science.

POL 499 POL Independent Study: Readings
1-4 cr UL
Individual study of particular topic or problem area; intensive reading; problem formulated with instructor consent.

POL 500 Senior Thesis
SO 4 cr UL
Under supervision, student formulates a project topic or research program, conducts research, then prepares and publicly presents a senior thesis. Required for departmental honors.

Psychology (PSY)

Major Requirements

Thirty-six credits which must include:

1. PSY-120 or 121; 201 or 203 or 204; 212 or 276 or 336; 220; 225; 305 or 308 or 310; 314; 331; 421 or 500 (2 credits).
2. Two elective credits in PSY.
3. The ETS Major Field Test for Psychology is required for the comprehensive evaluation.

Minor Requirements

Twenty-four credits from Psychology courses.

Four credits from PSY, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Natural Sciences - Life Sciences.

Neuroscience Major Requirements (NSC)

Fifty-six credits which must include:

1. Core Content: PSY-121, 201, 220, and 356; BIO-121; CHM-115; PSY-203 or ENV-319 or IPH-340; BIO-207 or IPH-225; two credits of research (PSY-399, 499, or 500, or any upper-level independent research); four additional credits from Psychology.
2. At least 18 credits (twelve consisting of upper-level courses) from the following: BIO-204, 301, 320, 360, 361, BCM-321, CHM-223, 224, CSC-120, ECN-314, IPH-338, MTH-121, PHL-229, PHY-112 or 121, or other courses approved by the program director.
3. Potential majors are strongly recommended to consult with the program director to develop a more specialized program of courses. Additional courses may be required for certain graduate schools and different courses are recommended dependent on interests in specific subfields of neuroscience (i.e. computational, behavioral, cognitive, developmental, social, and molecular).
4. Neuroscience is considered an interdisciplinary major, which requires 56 upper-level credits to graduate in accordance with the guidelines in the academic catalog.

PSY 120 Foundations of Psychology
NS1 4 cr
Learn why people think, feel, and act as they do. Explore the mind, brain, and body connection.

PSY 121 Introduction to Psychology
NS1 4 cr
Survey of major areas of psychology: learning, perception and cognition, human development, individual differences, social psychology and abnormal psychology. Laboratory. Course fee.

PSY 121M Introduction to Psychology
NS1 4 cr
Survey of major areas of psychology: learning, perception and cognition, human development, individual differences, social psychology and abnormal psychology. Laboratory. Course fee.

PSY 201 Physiological Psychology
NS1 4 cr UL
Study of physiological processes and structures underlying behavior and development. Laboratory techniques for investigation

of electrical and chemical brain activity. Laboratory. Course fee.
Prereq: PSY-121

PSY 203 Psychopharmacology
NS1 4 cr UL
Examination of the behavioral and biological effects of psychoactive substances with an emphasis on how drugs affect the brain. This course will explore legal and illegal substances as well as pharmaceuticals used in the treatment of mental disorders.
Prereq: PSY-121

PSY 204 Sensation and Perception
NS1 4 cr UL
Study of sensory processes and their relationship to human perception. Concentrates on vision and audition with attention to recent theoretical approaches to perception. Laboratory. Course fee.
Prereq: PSY-121

PSY 212 Personality I
NS1 4 cr UL
Comparison of major conceptual and research strategies in study of personality: psychoanalytic tradition, trait and social learning theories, and humanistic, cognitive and biological approaches. Introduction to psychological testing and journal literature.
Prereq: PSY-121

PSY 220 Statistics
NS3 4 cr UL
Introduction to descriptive and inferential statistics, and factorial analysis of variance. Appropriate for both life and social sciences.
Prereq: PSY-121 or Permission

PSY 225 Research Methods
NS1 4 cr UL
Development of skills in conduct and assessment of experimental and field research and of sensitivity to ethical and social aspects of scientific inquiry. For students in psychology, education and business. Course fee.
Prereq: PSY-121 and 220

PSY 234 Psychological Problems of Childhood
NS1 SL 2 cr UL
The nature, consequences, causes, treatment, and prevention of problems psychologically affecting children and adolescents (such as child abuse, delinquency, depression, drug abuse, hyperactivity, and poverty). Service learning component.
Prereq: PSY-121

PSY 244 Positive Psychology
NS1 2 cr UL
Positive Psychology is the scientific study of happiness, strengths, and optimal functioning. The field also involves applications to counseling, education, business, and other areas.
Prereq: PSY-121

PSY 245 Human Sexuality
NS1 4 cr UL
Examination of variety and origins of human sexuality from physiological, evolutionary and social-learning perspectives.
Prereq: PSY-121

PSY 260 Psychology of Aging
NS1 SL 2 cr UL
Examination of current psychological theory and research concerning physical changes, cognition, personality and psychopathology in the later years of life. Service learning component included in course.
Prereq: PSY-121

PSY 275 Psychological Testing and Measurement
NS1 2 cr UL
Consideration of principles involved in construction, use and evaluation of tests of ability and personality. Application to such issues as personnel selection, sex differences and therapeutic practice. Emphasis on actual clinical data, ethical and value issues in test construction and use.
Prereq: PSY-121

PSY 276 Industrial Organization
NS1 4 cr
Students will examine human behavior in the workplace from a scientist-practitioner view and learn how applied psychology research can improve hiring, management, and development decisions in business.

PSY 279M Origins of Psychology
NS1 4 cr UL
The course will examine the historical, cultural, and societal events that have resulted in the development of modern psychology. Among the topics examined will be: the technological innovations that led to the founding of the first psychology lab in Leipzig in 1879; the zeitgeist of 1900 Vienna that led to the development of the psychoanalytic tradition; the rise of the Nazis and the holocaust leading to many developments in social psychology. Spring Term only.
Prereq: PSY-121 and permission

PSY 280 Topics in Psychology
NS1 2-4 cr UL
Exploration of areas of mutual interest to instructor and students. Topics include depression, stress and coping, clinical interviewing and counseling, psychological problems of childhood, and neurological disorders. May be taken more than once for credit. May have other prerequisites in addition to PSY-121.
Prereq: PSY-121

PSY 305 Learning
NS1 4 cr UL
In-depth study of methods of learning among human and non-human species.
Prereq: PSY 120 or PSY 121

PSY 305M Learning
NS1 4 cr UL
In-depth study of methods of learning among human and non-human species.
Prereq: PSY 120 or PSY 121

PSY 310 Cognition
NS1 4 cr UL
Consideration of the psychology of thinking: input, processing, storage and retrieval of information. Also explores categorization, concept formation, mental structure, language, reasoning, and problem solving.
Prereq: Three courses in PSY or Permission

PSY 312 Personality II
NS1 4 cr UL
In-depth examination of personality theory and of major controversial issues in the contemporary literature.
Prereq: PSY-121 and 212

PSY 314 Abnormal Psychology
NS1 4 cr UL
Examination of characteristics, causes and treatment of such disorders as depression, schizophrenia and stress-related illness. Discussion of social and ethical issues. Application of material to actual case histories.
Prereq: PSY-121 and 212

PSY 315 Clinical Interviewing
NS1 2 cr UL
Students develop skills in a mainstream approach to clinical interviewing, including applications to counseling with kids, resistant adults, couples and families, trauma survivors, and people from diverse backgrounds.
Prereq: PSY-121

PSY 331 Developmental Psychology
NS1 4 cr UL
Consideration of current theoretical perspectives and research on attachment, language acquisition, cognitive and moral development. Attention to role of ideological and philosophical commitments in study of development.
Prereq: PSY-121

PSY 336 Social Psychology
NS1 4 cr **UL**
Consideration of current theory and research on person perception, social influence, attitude formation, intergroup relations, altruism and aggression. Emphasis on ethical and social issues in conduct and application of social psychological research.
Prereq: PSY-121 and SOC-101

PSY 356 Neuroscience Seminar
NS1 4 cr **UL**
In-depth examination of neuronal mechanisms involved in complex animal and human behaviors and of the methodology used in molecular, cognitive, clinical, behavioral, and developmental neuroscience.
Prereq: PSY-201 or PSY-203, or permission

PSY 385 Psychology Practicum
SL 2-4 cr **UL**
Participation in community institutions, agencies, schools and businesses combined with individual faculty supervision to allow students to apply concepts and locate literature relevant to their own experiences.
Prereq: PSY-121

PSY 390 Clinical Field Experience
NS1 SL 4 cr **UL**
Participation in programs in hospitals, agencies, schools, businesses or the judicial system. Faculty and on-site professionals provide intensive supervision. Students improve abilities to apply concepts, principles and techniques and reflect on significant conceptual, ethical and personal aspects of the experience in written papers and oral discussions.
Prereq: PSY-121; 212; 240 or 280; and 314; or Permission

PSY 399 Psychology Independent Study
NS1 1-4 cr **UL**
Either (1) an individually-designed program of reading on a topic not covered by formal courses or (2) research experience on a faculty-directed project.

PSY 421 Senior Seminar
NS1 2 cr **UL**
Students will build knowledge and skills needed to pursue their next steps following degree completion including applying to graduate school and seeking employment. Students will work with the instructor to plan successful entry into the workforce. Professional and career development will serve as the foundation for this course.
Prereq: PSY-120 or PSY-121; PSY-220; PSY-225; and at least junior standing

PSY 499 Psychology Independent Study
NS1 2-4 cr **UL**
Planned program of reading in preparation for senior thesis.

PSY 500 Senior Thesis
NS1 2-4 cr **UL**
Development and conduct of original, independent, empirical investigation. Required for departmental honors.
Prereq: PSY-499, Senior Standing and Permission

Public Affairs Institute (PAF)

Alma's Public Affairs Institute offers interdisciplinary experiences for students who, regardless of particular majors, have common academic and vocational interests in public affairs. The program includes workshops, visiting speakers, scholars-in-residence, professional consulting and advising.

Requirements

To earn certification in the Public Affairs Program, students must earn a minimum of eighteen credits drawn from the following classes: PAF-150, 160, 350, 360, 385, 450 and 499; and POL-141 or comparable classes, independent studies or seminars in other disciplines pre-approved by the Director of Public Affairs as alternatives of PAF-385, 450, or 499.

Participants are encouraged to satisfy general education requirements by completing coursework in HST-105 or 121; PHL-126, 225, 227, 228, 229, 235 or REL-210; ECN-111 and 112, POL-101, or SOC-101; and ENV-105 or PSY-121. Elective coursework will be recommended by the program advisor to enhance skills and broaden perspectives. Candidates who complete Alma's degree requirements and all Institute components will graduate with a bachelor's degree in the major subject and will have the following noted on their permanent record: *Completed the Public Affairs Program*. Candidates who satisfy the requirements prescribed above and who achieve a 3.0 overall GPA together with a 3.25 GPA in the Institute Program will have the designation *Public Affairs Fellow* inscribed on their permanent record. Admission to the Institute requires formal application and acceptance.

PAF 150 Public Affairs Colloquium
SL 1-2 cr **UL**
Introduction to selected, critical public affairs issues through multidisciplinary and case-study approaches. Presentations by visiting speakers, other resource people and students.

PAF 160 Community Issues & Public Leadership I
SL 1-4 cr **UL**
Investigation and implementation of projects related to economic and social development issues in local, regional and global community. Graded Pass/Fail.

PAF 350 Public Affairs Seminar I
2-4 cr **UL**
Provides exposure to leadership of those working currently, or historically, to secure minimum standards for protecting human rights and limiting or ending conflict. Course will study institutions created to address the need for international law and protection of rights and dignity. Students will be immersed in the reasons for and implementation of international standards and institutions to protect human rights, especially related to rules of war. A core component of this course is students develop a plan to address challenges and further build on solutions observed during the course.

PAF 360 COM Issues and Pub Leadership II
SL 1-4 cr **UL**
Advanced investigation and continuing implementation of projects related to economic and social development issues in local, regional and global community. Graded Pass/Fail.
Prereq: PAF-150, 160 or Permission

PAF 380 Topics and Problems in Public Affairs
2-4 cr **UL**
Courses on special topics both substantive and procedural in public affairs and leadership in both the international and domestic realms. Objectives will vary with each offering, but in general will be at the upper level, requiring previous study of the political process, civic life and leadership. May have a course fee.
Prereq: Permission

PAF 385 Public Affairs Practicum
4-12 cr **UL**
Internship with public or private agencies arranged in consultation with the Public Affairs Institute advisor. Minimum of four credits required for all Public Affairs program participants although no more than eight may count toward the degree.
Prereq: PAF-450 and Permission

PAF 450 Public Affairs Seminar II
4 cr **UL**
Provides exposure to leadership of those working currently, or historically, to secure minimum standards for protecting human rights and limiting or ending conflict. Course will study institutions created to address the need for international law and protection of rights and dignity. Students will be immersed in the reasons for and implementation of international standards and institutions to protect human rights, especially related to rules of war. A core component of this course is students develop a plan to address challenges and further build on solutions observed during the course.
Prereq: PAF 350

PAF 499 Public Affairs Independent Study 2-8 cr **UL**

Interdisciplinary or multidisciplinary research arranged in consultation with the Public Affairs Institute advisor and supervised by faculty from at least two different departments. All Public Affairs program participants are required to have a minimum of two credits of Independent Study.

Prereq: PAF-385 and Permission

PAF 500 Senior Thesis 1-4 cr **UL**

Development and conduct of original, independent investigation concluding with a significant research paper, which should be presented and defended publicly.

Prereq: PAF-350, 360 or 450 and Permission

Public Health (PBH)

Minor Requirements

Twenty-four credits which must include:

1. Core (16 cr): IPH-270, 331 and 430; MTH-116
2. Two courses from: COM-243, ENV-105, PHL-229, POL-141 and SOC-234
3. Other elective courses as approved by the program coordinator
4. A four-credit practicum experience in a public health setting is strongly encouraged.

PBH 385 Public Health Practicum 1-8 cr **UL**

Requires instructor permission.

PBH 399 Public Health Independent Study 1-4 cr **UL**

Requires instructor permission.

Religious Studies (REL)

Major Requirements

Thirty-six credits which must include:

1. REL-100
2. REL-205 or 305; 217 or 317; and 219 or 319 (*200 level recommended for first-years and sophomores; 300 level recommended for juniors and seniors*)
3. REL 400
4. REL 500
5. Twelve additional credits in REL to be determined by student and academic advisor.

Because Religious Studies is an inherently interdisciplinary field, majors are strongly encouraged to consider adding a minor or major in another department, in order to gain expertise in a particular method or discipline.

Minor Requirements

Twenty-four credits which must include:

1. REL-100 and 400
2. Remaining program of study will be constructed on an individual basis in consultation with members of the Department.

Four credits from REL, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Humanities.

REL 100 Introduction to World Religions 4 cr

An introduction to the histories, major figures, sacred texts and belief systems of selected "world religions" such as Hinduism, Confucianism, Daoism, Judaism, Buddhism, Christianity, Islam, and/or newer religious movements such as Mormonism or Baha'i Faith.

REL 101 Introduction to the Hebrew Bible 4 cr

A literary and historical introduction to the books of the Tanakh or Hebrew Bible (what Christians call the Old Testament), including the Torah, prophets, wisdom literature, and other writings.

REL 102 Introduction to the New Testament 4 cr

An introduction to the writings of the New Testament (including gospels, epistles, and apocalypse) as well as its first-century historical context and early canonical formation.

REL 103 Vocation in Christian Traditions 4 cr

Examination of history of Christian thought and traditions from early church through modern period. Analysis and interpretation of selected documents.

REL 130 Creation Stories and Religious Themes 4 cr

Examination of diverse creation myths from many cultures and the role cosmologies play in forming a culture's worldview.

REL 150 Good Life in the World's Religions 4 cr

Examination of what constitutes a good life according to Judaism, Hinduism, Buddhism, Islam and Christianity.

REL 180 Topics in Religion 2-4 cr

Special topics in religious studies. May be repeated for distinct topics.

REL 181 Topics in Biblical Studies 2-4 cr

Special topics in biblical studies. May be repeated for distinct topics.

REL 202 Women, Gender and Religion 4 cr

This course addresses questions about women in various religious traditions and examines the ways feminist theory interacts with the study and practice of religion.

REL 205 Christianity 4 cr

An introduction to Christian thought and practice from the first century to the present. Course includes reading, discussion, and written analysis of a variety of primary and secondary texts; individual and group work; off-campus site visits; and/or academic service learning.

REL 206 Reformation 4 cr

An examination of the theological debates surrounding the Protestant and Catholic Reformations of 16th century Europe. Includes reading, discussion, and written analysis of various primary and secondary texts.

REL 207 Religion in America 4 cr **UL**

Examination of history of religious thought and traditions in America. Analysis and interpretation of selected documents. Non-traditional forms of religion also included.

REL 210 Biblical Ethics and Community Service 4 cr

Examines the Biblical ethic underlying the religious understanding, worship and community service of Jewish and Christian religious communities. Opportunities to participate in community service agencies and programs.

REL 215 Philosophy of Religion 4 cr

Examination of classical and contemporary issues in the philosophy of religion such as arguments for and against the existence of God, religious language, the relation between faith and reason, the evidential value of religious claims, and the

relationship between morality and religion. (Cross-listed as PHL-215.)

REL 216 Existentialism
AH 4 cr
Examination, evaluation and discussion of selected subjects - the individual, freedom, responsibility, anxiety, hope, death, meaning of life - as treated in various essays, short stories and dramas. Focus on analysis and interpretation of texts. (Cross-listed as PHL-216.)

REL 217 Asian Philosophy and Religion
AH 4 cr
Exploration of the histories and roles of the most influential religious traditions and philosophical systems in Asia: Hinduism, Buddhism, Confucianism, and Daoism. (Cross-listed as PHL-217.)

REL 219 Judaism and Islam
AH 4 cr
An examination of Jewish and Islamic thought and practice from the formative periods to the present, including contemporary debates. Includes reading, discussion, and written analysis of various primary and secondary texts.

REL 220 Bible and Society
AH 4 cr UL
Explores how the social context (ethnic, economic, class, etc.) of faith communities shapes the study, understanding, and use of scripture in worship and impacts the values and daily lives. Emphasis on lectionary readings shared by Protestants and Roman Catholics, and the Hebrew scriptures. (Cross listed as SOC-221.)

REL 225 Religion, Business, and the Environment
AH 4 cr
Business and ecological ethics in religious perspective.

REL 230 Religion and Science
AH 4 cr
Examination of the relationship between religion and science through both historical and contemporary issues.

REL 240M Jesus in Gospel and Film
AH 4 cr
An introduction to the context, life, and teaching of Jesus of Nazareth through the media of film, primary texts (canonical and non-canonical gospels), and secondary texts in biblical criticism. Spring Term only.

REL 250 Christian Ethics
AH 4 cr
An exploration of current Christian debates on ethical issues such as human reproduction, homosexuality, pacifism and just war, racism, nationalism, genetic engineering, and/or economic and environmental justice. Prior knowledge of Christian traditions is helpful but not required.

REL 280 Topics in Religion
AH 2-4 cr
Special topics in Religious Studies.

REL 280M Topics in Religion
AH 2-4 cr
Special topics in Religious Studies.

REL 281 Topics in Biblical Studies
AH 2-4 cr UL
Special topics in biblical studies.

REL 299 Religious Studies Independent Study
1-4 cr
Individual study of a particular subject in religion.

REL 302 Women, Gender and Religion
AH 4 cr UL
This course addresses questions about women in various religious traditions and examines the ways feminist theory interacts with the study and practice of religion.
Prereq: One Religious Studies course or Permission

REL 305 Introduction to Christian Thought
AH 4 cr UL
An introduction to Christian thought and practice from the first century to the present. Course includes reading, discussion, and written analysis of a variety of primary and secondary texts; individual and group work; off-campus site visits; and/or academic service learning.
Prereq: One Religious Studies course or Permission

REL 306 Reformation
AH 4 cr UL
An examination of the theological debates surrounding the Protestant and Catholic Reformations of 16th century Europe. Includes reading, discussion, and written analysis of various primary and secondary texts.
Prereq: One Religious Studies course or Permission

REL 307 Religion in America
AH 4 cr UL
Examination of history of religious thought and traditions in America. Analysis and interpretation of selected documents. Non-traditional forms of religion also included.
Prereq: One Religious Studies course or Permission

REL 315 Philosophy of Religion
AH 4 cr UL
Examination of classical and contemporary issues in the philosophy of religion such as arguments for and against the existence of God, religious language, the relation between faith and reason, the evidential value of religious claims, and the relationship between morality and religion. (Cross-listed as PHL-215.)
Prereq: One Religious Studies course or Permission

REL 316 Existentialism
AH 4 cr UL
Examination, evaluation and discussion of selected subjects - the individual, freedom, responsibility, anxiety, hope, death, meaning of life - as treated in various essays, short stories and dramas. Focus on analysis and interpretation of texts.
Prereq: One Religious Studies course or Permission

REL 317 Asian Philosophy and Religion
AH 4 cr UL
Exploration of the histories and roles of the most influential religious traditions and philosophical systems in Asia: Hinduism, Buddhism, Confucianism, and Daoism.
Prereq: One Religious Studies course or Permission

REL 319 Judaism and Islam
AH 4 cr UL
An examination of Jewish and Islamic thought and practice from the formative periods to the present, including contemporary debates. Includes reading, discussion, and written analysis of various primary and secondary texts.
Prereq: One Religious Studies course or Permission

REL 330 Religion and Science
AH 4 cr UL
Examination of the relationship between religion and science through both historical and contemporary issues.
Prereq: One Religious Studies course or Permission

REL 340M Jesus in Gospel and Film
AH 4 cr UL
An introduction to the context, life, and teaching of Jesus of Nazareth through the media of film, primary texts (canonical and non-canonical gospels), and secondary texts in biblical criticism. Spring Term only.
Prereq: One Religious Studies course or Permission

REL 350 Christian Ethics
 AH 4 cr UL
 An exploration of current Christian debates on ethical issues such as human reproduction, homosexuality, pacifism and just war, racism, nationalism, genetic engineering, and/or economic and environmental justice. Prior knowledge of Christian traditions is helpful but not required.
Prereq: One Religious Studies course or Permission

REL 380 Topics in Religion
 AH 2-4 cr UL
 Selected topics in religious studies. May be taken more than once. Only two registrations count toward a Major in Religious Studies.
Prereq: One Religious Studies course or Permission

REL 381 Topics in Biblical Studies
 AH 2-4 cr UL
 Topics may include Torah, Paul's Letters, Prophetic and Wisdom Literature, Synoptic Gospels, and/or Biblical Ethics and Social Problems. May be repeated for credit for distinct topics.
Prereq: One Religious Studies course or Permission

REL 385 Religious Studies Practicum
 1-4 cr UL

REL 399 Religious Studies Independent Study
 2-6 cr UL
 Individual study of particular subject in religion. Intensive acquaintance with selected part of the literature through planned program of reading.

REL 400 Theory and Method in Religious Studies
 AH 4 cr UL
 Upper level seminar addresses current issues in the field of religious studies (such as postmodernism, postcolonialism, disability studies, and/or queer theory), approaching these issues with a variety of disciplinary methods (such as historical, theological, phenomenological, ethical, and/or anthropological). Required for, but not limited to, majors and minors in religious studies.
Prereq: REL-100 or Junior Standing

REL 500 Senior Thesis
 AH 4 cr UL
 Individual research culminating in preparation of major paper and departmental oral examination. Requires instructor permission to register.

Sociology (SOC)

Sociology courses, as designated by the three-letter prefix SOC, are offered through the Sociology and Anthropology Department.

Sociology Major Requirements

Thirty-six credits which must include:

1. Core: SOC-101, 301, and 302.
2. Two concentrations, with eight credits in each area (a total of 16 credits):
 - Self and Society: SOC-224, 234, 236, 238, or 243
 - Social Structure and Inequality: SOC-141, 225, 226, 229, or 341
 - Social Institutions: SOC-220, 228, or 353
3. Eight credits of SOC electives. No more than four credits of approved SOC-180 may count towards the major.
4. Required Cognate Course: ANT-111
5. The senior comprehensive evaluation for the major is the successful completion of the Major Field Test in Sociology.
6. Department Honors: Successful completion of SOC-500 and a minimum of 3.5 GPA in Sociology.

Sociology Minor Requirements

Twenty-four credits which must include SOC-101 and 236.

In total, only 4 credits from SOC and ANT may count toward the Distributive Requirements in the Social Sciences; practicum and independent study courses do not count.

SOC 101 Principles of Sociology
 SO 4 cr
 Identify sociology as a tool to widen perspective and understanding, employ basic sociological concepts in the observance of social behavior, and identify the basic social institutions and their functions. Prerequisite for all other SOC courses.

SOC 141 Social Problems
 SO 4 cr
 Examination, evaluation and discussion of contemporary social problems providing theoretical orientations and analytical skills to understand their complexities and ramifications. For example: poverty, health issues, crime and ways of dealing with crime.

SOC 180 Topics in Sociology
 SO 1-4 cr
 Investigation of a selected topic. May be taken only once for credit toward the ANT major.

SOC 220 Sociology of Family
 SO 4 cr UL
 Examines how family life is structured by broader social, political, and economic changes. Analysis organized historically around clan, lineage, nuclear and post-nuclear family structures. Contemporary family problems also studied. Fall Term.
Prereq: SOC-101

SOC 224 Women, Work, and Calling
 SO 4 cr UL
 Examines the concepts of work, vocation, and calling as they apply to the lives of women, from a sociological perspective. Students are encouraged to apply insights from this course to their own vocational journeys.
Prereq: SOC-101

SOC 225 Conflict and Class
 SO 4 cr UL
 Examination of class and its consequences. Topics may include ideology, the middle class, social movements, and social order (e.g., war and peace). Class intersects with gender and race issues. Cross-cultural settings will be examined.
Prereq: SOC-101

SOC 226 The Color of Justice
 SO 4 cr UL
 Uses socio-historical and cultural awareness to investigate connections between the history of Jim Crow, courtroom relationships, spaces of incarceration, race, family, and community.
Prereq: SOC-101

SOC 228 Media: Impact and Consequences
 SO 4 cr UL
 Examination of changes in media (from oral to print to electronic) with emphasis on the implications of electronic media from essentially a social structural (institutional) perspective. Traces the implications of this for other institutional areas, culture, and self.
Prereq: SOC-101 or Permission

SOC 228M Media: Impact and Consequences
 SO 4 cr UL
 Examination of changes in media (from oral to print to electronic) with emphasis on the implications of electronic media from essentially a social structural (institutional) perspective. Traces the implications of this for other institutional areas, culture, and self.
Prereq: SOC-101 or Permission

SOC 229 Population Dynamics
 SO 4 cr UL
 Population dynamics mirror plate tectonics - they move slowly, but are very powerful. They influence societies and individuals and are international in scope. One need understand them to better view social problems.
Prereq: SOC-101


SOC 234 Aging and Health Institutions
SO 4 cr UL
Examines key concepts, main theories, and important substantive issues related to aging and health institutions from a sociological perspective. Among the central issues explored are gender and racial inequality in aging, as well as social institutions connected to aging and public policy.
Prereq: SOC-101


SOC 236 Social Psychology
SO 4 cr UL
Exploration of the intersection of sociology and psychology via such topics as social influence, social cognition, self, and attitudes as they impact areas such as intergroup relations, pro-social behavior, and aggression. Cross-cultural comparisons are made.
Prereq: SOC-101 and PSY-121 or Permission.

SOC 238 Popular Cultures
SO 4 cr UL
This course examines American popular culture through a sociological lens. Cultural analysis will be the primary method used to examine patterns in pop culture, though other approaches such as critical analysis will also be explored.
Prereq: SOC-101 or ANT-111

SOC 243 Social Deviance
SO 4 cr UL
Examination, evaluation and discussion of major theories and approaches to deviance, forms of deviance, their institutional relationships, as well as implications for individuals and applications of concepts to "real world" events.
Prereq: SOC-101


SOC 280 Topics in Sociology
SO 2-4 cr UL
Examines special subjects in Sociology.
Prereq: SOC-101

SOC 301 Methods of Social Research
 SO 4 cr UL
Fundamentals of basic principles, logic, and procedures of social research. Examines survey, unobtrusive, and qualitative methodologies as well as research ethics and policy.
Prereq: 12 credits from SOC

SOC 302 Sociological Theory
 SO 4 cr UL
Exploration of sociology's theoretical foundations up to developments in the mid-1900s and their implications for social order, human agency, perceptions of social problems, and policy.
Prereq: 12 credits from SOC

SOC 328M Media: Impact and Consequences
SO 4 cr UL
Examination of changes in media (from oral to print to electronic) with emphasis on the implications of electronic media from essentially a social structural (institutional) perspective. Traces the implications of this for other institution areas, culture and self. Spring Term only.
Prereq: SOC-101.

SOC 341 Race and Ethnic Relations
SO 4 cr UL
Examines racism in American society; dominant-subordinate group relations with particular emphasis on African Americans, Native Americans, Latinos, Asian Americans and White Ethnics; political, economic, social and cultural consequences.
Prereq: SOC-101 or SOC-141


SOC 353 Sociology of Gender
 SO 4 cr UL
Explores the social construction of gender and the myriad ways gender influences individuals, interpersonal relationships, popular culture, sexuality, race, social class, the life course, and social institutions such as work and family.
Prereq: SOC-101

SOC 380 Topics in Sociology
SO 2-4 cr UL
Examines special subjects in Sociology.
Prereq: SOC-101

SOC 385 Sociology Practicum
1-8 cr UL
Participation in community institutions, agencies, schools, and business with individual faculty supervision. Applications of concepts through experience. About 11-14 hours of field work per week for each four credits. Includes paper report.
Prereq: Permission.

SOC 399 SOC Independent Study
1-4 cr UL

SOC 499 Sociology Independent Study
2-4 cr UL
Supervised reading or project in special area of sociology.
Prereq: Permission.

SOC 500 Sociology-Senior Thesis
 SO 2-4 cr UL
Designed for senior Sociology majors with the consent of the Department. Program of empirical and theoretical research.
Prereq: Permission.

Spanish (SPN)

Spanish courses, as designated by the three-letter prefix SPN, are taught in Spanish. World Languages and Cultures courses, as designated by the three-letter prefix WLC, are taught in English. Courses taught internationally may have a different emphasis from those offered on campus.

Major Requirements

Thirty-six credits at the 200 level or above which must include:

1. Sixteen credits (16 cr) of upper-level Spanish classes with at least four credits at the 400 level
2. Successful completion of WLC 101
3. Successful completion of English cognate: 4 credits from ENG 201, ENG 202, ENG 220, or ENG 320.
4. Students should be aware that a maximum of 6 credits (including WLC 101) may be taken wherein the primary language of instruction is English; course should be pre-approved by the WLC department.
5. A minimum of one semester of approved international study in a Spanish-speaking country.
6. Language Proficiency must be demonstrated by taking an approved external proficiency exam. Majors are expected to perform at the American Council on the Teaching of Foreign Languages (ACTFL) Advanced Low proficiency level as (averaged across the four skills listening, speaking, reading, writing).
7. Students will write and defend, in open forum, an acceptable paper of moderate length reflecting on their study of Spanish, study abroad experience and how the role of language and culture combines with the mission of a liberal arts education.

Minor Requirements

Two credits of WLC 101 and twenty-four SPN credits which must include:

1. At least twelve SPN credits at the 300 level.
2. A semester or Spring Term of study in a Spanish-speaking country is highly recommended.
3. Language Proficiency must be demonstrated by taking an approved external proficiency exam. Spanish minors are expected to perform at the American Council on the Teaching of Foreign Languages (ACTFL) Intermediate High proficiency level as averaged across the four skills (listening, speaking, reading, writing).

Teaching Major Requirements

Thirty-six credits (thirty-four of which must be beyond SPN-203) and which must include:

1. Successful completion of SPN-321.
2. At least four credits at the 400 level.
3. At least four credits from each of the following groups:
 - Spain Culture and Civilization - SPN-350, 355, 261/361
 - Latin American Culture and Civilization - SPN-334, 352, 364, 374, 263/363
 - Literature - SPN-331, 340, 343, 344, 360, 362, 370, 372, 373, 460, 462
1. Successful completion of ENG-225 and EDC-445F.
2. A minimum of one semester of approved international study in a Spanish-speaking country.
3. Students will write and defend in open forum an acceptable paper of moderate length reflecting on their study of Spanish, study abroad experience and how both concepts combine with the mission of a liberal arts education.

In order to be recommended for teacher certification, students must pass the Michigan Test for Teacher Certification subject area test in Spanish as well as ACTFL's OPI at the Advanced-Low level. The Teacher Education Program is proactive about informing students of opportunities for taking these tests.

Four credits from SPN 105 or higher, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Humanities.

Department Honors may be achieved in the World Languages and Cultures Department by:

1. Having a 3.5 GPA in all classes applied to the major.
2. Performing beyond minimum requirements on the Language Exam portion of the Departmental Comprehensive Evaluation.
3. Presenting a senior thesis of honors caliber.

Advanced Credit in a second language may be earned by:

1. Scoring at the 4 level or higher on the Advanced Placement (AP) exam.
2. Successfully completing the International Baccalaureate Program (IB) or the National Foreign Language Examination with a score of 5.

SPN 100 Foundations of Spanish

2 cr

Language acquisition course with an intensive focus on foundational structures in all four skills (listening, speaking, reading, writing) at the ACTFL novice low proficiency level. Designed for students with no previous Spanish language experience. NOTE: Open to students who have earned up to one year of high school Spanish.

SPN 101 Beginning Spanish Language

2 cr

Beginning level language acquisition course which includes an introduction to present and past tenses and high frequency vocabulary in all four skills (listening, speaking, reading, writing) at the ACTFL novice mid proficiency level. Designed for students with limited previous Spanish language experience. NOTE: Open to students with up to two years of high school Spanish.

SPN 105 Spanish Language and Culture

2 cr

Novice level course designed to practice communication, emphasizing conversational skills at the ACTFL novice mid to high proficiency levels.

Prereq: SPN-100 or SPN-101 (SPN-101 may be taken concurrently), or Permission

SPN 109 Spanish Reading Club

1 cr

Guided reading at the 100, 200, or 300 levels. 100 and 200 level texts are generally written for language learners, while 300 level texts are written for native speakers, be they literary works, popular novels, or peer-reviewed articles. May be repeated for credit.

Prereq: Permission only

SPN 111 Beginning Spanish I

4 cr

Intensive course for beginners in Spanish. Primary objective: to help students begin early and meaningful communication in

Spanish by acquiring necessary basic skills. Emphasizes all four language skills: reading, writing, and especially listening and speaking. Secondary objective: to provide insight into Hispanic culture and society through readings, discussions and activities. NOTE: Students who have earned credit for three or more years of high school Spanish may not enroll in SPN-111 or 112. (Offered by Alma Programs Abroad only)

SPN 112 Beginning Spanish II

☺ AH

4 cr

Intensive course for beginners in Spanish. Primary objective: to help students begin early and meaningful communication in Spanish by acquiring necessary basic skills. Emphasizes all four language skills: reading, writing, and especially listening and speaking. Secondary objective: to provide insight into Hispanic culture and society through readings, discussions and activities. NOTE: Students who have earned credit for three or more years of high school Spanish may not enroll in SPN-111 or 112. (Offered by Alma Programs Abroad only)

Prereq: SPN-111 or Permission

SPN 150 Cultural Topics

☺ AH

2 cr

Topics-based approach to developing intercultural awareness and increasing Spanish proficiency in all four skills (listening, speaking, reading, writing) at the ACTFL Novice-high/Intermediate low proficiency levels. Topics vary; may be repeated for credit. NOTE: Open to students who have had up to three years of high school Spanish.

SPN 185 Service Learning in Spanish

☺ AH

1-4 cr

May be repeated for credit with a maximum of four credits applied toward the major or minor. Requires permission and placement.

SPN 201 Intermediate SPN Language I

AH

2 cr

Language acquisition course aimed at understanding how the present tenses, object pronouns, and other high frequency structures work in context. Designed to support the development of all four skills (listening, speaking, reading, writing) at the ACTFL intermediate low-mid proficiency levels.

SPN 202 Intermediate SPN Language II

AH

2 cr

Language acquisition course aimed at understanding how simple and compound past tenses, and other high frequency structures work in context. Designed to support the development of all four skills (listening, speaking, reading, writing) at the ACTFL intermediate-mid proficiency level.

SPN 203 Intermediate SPN Language 3

AH

2 cr

Language acquisition course aimed at understanding how subjunctive moods, and other high frequency structures work in context. Designed to support the development of all four skills (listening, speaking, reading, writing) at the ACTFL intermediate mid-high proficiency levels.

SPN 207 Spanish for Health Care I

☺ AH

2 cr

Part I of a 2-credit, 2-course sequence that introduces basic vocabulary and cultural information specific to health care contexts in all four skills (listening, speaking, reading, writing). This sequence will not be sufficient for translation or interpretation certification, nor for practicing medicine in Spanish, but it provides basic communication skills that students could build on if they so choose. SPN 207 is not appropriate for students with no previous Spanish experience, nor for students who have the equivalent of SPN 202 or higher.

SPN 208 Spanish for Health Care II

☺ AH

2 cr

Part II of a 2-credit, 2-course sequence that introduces basic vocabulary and cultural information specific to health care contexts in all four skills (listening, speaking, reading, writing). This sequence will not be sufficient for translation or interpretation certification, nor for practicing medicine in Spanish, but it provides

basic communication skills that students could build on if they so choose. SPN 208 is not appropriate for students with no previous Spanish experience, nor for students who have the equivalent of SPN 203 or higher.

SPN 209 Spanish Reading Club

☺ AH 1 cr
Guided reading at the 100, 200, or 300 levels. 100 and 200 level texts are generally written for language learners, while 300 level texts are written for native speakers, be they literary works, popular novels, or peer-reviewed articles. May be repeated for credit.

Prereq: Permission only

SPN 221 Intermediate Spanish Language I

☺ AH 4 cr
Continuing study of the Spanish language with additional emphasis on reading and writing skills. Study of Hispanic culture and close reading of selected Hispanic texts from various genres. Extensive grammar review, composition, and oral-aural practice. (Alma Programs Abroad)

Prereq: SPN-112 or Placement

SPN 222 Intermediate Spanish Lang II

☺ AH 4 cr
Continuing study of the Spanish language with additional emphasis on reading and writing skills. Study of Hispanic culture and close reading of selected Hispanic texts from various genres. Extensive grammar review, composition, and oral-aural practice. (Alma Programs Abroad)

Prereq: SPN-221

SPN 223 Intermediate Spanish Language III

☺ AH 4 cr
Intermediate level study of Spanish. Designed for students who have completed second year college Spanish but whose language skills need strengthening before they enter upper level courses while studying at the Universidad Iberoamericana. Requires placement into this course. (Alma Programs Abroad)

SPN 224 Intermediate Spanish Language IV

☺ AH 4 cr
Intermediate level study of Spanish. Designed for students who have completed second year college Spanish but whose language skills need strengthening before they enter upper level courses while studying at the Universidad Iberoamericana. Requires placement. (Alma Programs Abroad)

SPN 250 Cultural Topics

☺ AH 2 cr
Topics-based analysis of culture focused on the development of intercultural competencies and language proficiency in all four skills (listening, speaking, reading, writing) at the ACTFL Intermediate low-mid proficiency levels. Topics vary; may be repeated for credit.

SPN 260 Cultural Topics

☺ AH 2 cr
Topics-based analysis of culture focused on the development of intercultural competencies and language proficiency in all four skills (listening, speaking, reading, writing) at the ACTFL Intermediate mid proficiency level. Topics vary; may be repeated for credit.

SPN 261 Language and Culture in Spain

☺ AH 4 cr
Spanish language instruction, investigation and comparative studies of social and ethnic issues. Students live with a host family. Destination may vary. Course fee. (Spring Term course)

Prereq: Permission

SPN 263 The Other America

☺ AH 4 cr
Travel and study in "The Other America." Spanish language instruction, investigation and comparative studies of social and ethnic issues. Students live with a host family. Destination may vary. Course fee. (Spring term course)

Prereq: Permission

SPN 281 Conversation

☺ AH 2 cr
Fluency in oral expression developed through extensive class discussion. May include oral reports, summaries of reading and viewing materials, phonetics and pronunciation exercises, colloquial expressions and creative dramatic performance. May be repeated for a total of four credits. (Alma, Alma Programs Abroad)

SPN 299 Independent Reading

☺ 1-4 cr UL
Supervised study and research of an area not covered in available courses.

Prereq: Permission

SPN 309 Spanish Reading Club

AH 1 cr UL
Guided reading at the 100, 200, or 300 levels. 100 and 200 level texts are generally written for language learners, while 300 level texts are written for native speakers, be they literary works, popular novels, or peer-reviewed articles. May be repeated for credit.

Prereq: WLC 101 or permission

SPN 311 Spanish Grammar I

☺ AH 4 cr UL
Intermediate level study of Spanish. Designed for students who have completed third year college Spanish but whose language skills need strengthening as they pursue upper level courses while studying abroad. Requires placement. (Alma, Alma Programs Abroad)

Prereq: WLC 101 or permission

SPN 312 Spanish Grammar II

☺ AH 4 cr UL
Intermediate level study of Spanish. Designed for students who have completed third year college Spanish but whose language skills need strengthening as they pursue upper level courses while studying abroad. Requires placement. (Alma, Alma Programs Abroad)

Prereq: WLC 101 or permission

SPN 313 Spanish Grammar III

☺ AH 4 cr UL
Advanced level study of Spanish. Designed for students who have completed third year college Spanish and who are pursuing upper level courses while studying abroad. Requires placement. (Alma Programs Abroad)

Prereq: WLC 101 or permission

SPN 314 Spanish Grammar IV

☺ AH 4 cr UL
Advanced level study of Spanish. Designed for students who have completed third year college Spanish and who are pursuing upper level courses while studying abroad. Requires placement. (Alma Programs Abroad)

Prereq: WLC 101 or permission

SPN 315 Advanced Spanish Language

☺ AH 4 cr UL
Advanced level study of Spanish. Designed for students who have completed third year college Spanish and who are pursuing upper level courses while studying abroad. Requires placement. (Alma Programs Abroad)

Prereq: WLC 101 or permission

SPN 316 Advanced Spanish Language

☺ AH 4 cr UL
Advanced level study of Spanish. Designed for students who have completed third year college Spanish and who are pursuing upper level courses while studying abroad. Requires placement. (Alma Programs Abroad)

Prereq: WLC 101 or permission

SPN 321 Advanced Composition in Spanish
AH 4 cr UL
Advanced composition in a variety of genres aimed at developing skills appropriate to professional as well as academic contexts. Course fee. (Alma)
Prereq: WLC 101 or permission

SPN 322 Written Expression
AH 4 cr UL
Development of written skills and creative expression in a variety of genres. Taught in programs abroad. Prerequisite is placement during study abroad.
Prereq: WLC 101 or permission

SPN 325 Investigation of Grammar
AH 2-4 cr UL
Intensive review of Spanish grammatical theory and structures. Prerequisites are SPN 321 and overseas study completed.
Prereq: SPN-321 and WLC 101 or permission

SPN 329 Translation/Interpretation
AH 4 cr UL
This is a service-learning course in which students will study and practice theories and techniques of translation and interpretation. Students will apply their developing skills to Spanish translations of English-language materials submitted by a variety of community organizations.
Prereq: WLC 101 or permission

SPN 330 Myths, Tales and Legends
AH 4 cr UL
Reading and discussion of Hispanic folktales and traditional stories. Focus on cultural context and narrative tradition, combined with principles of orality and storytelling.
Prereq: SPN-321 and WLC 101 or permission

SPN 331 Introduction to Hispanic Literature
AH 4 cr UL
Combines practical and theoretical approaches to reading and understanding literature from Spain and the Americas. Study of the attributes of various genres as well as selected works representative of the same. Provides the basic analytical foundation necessary for advanced study and interpretation of Hispanic literature required for the major. (Alma)
Prereq: WLC 101 or permission

SPN 334 Mexican Culture and Civilization
AH 4 cr UL
Introduction to the society and culture of Mexico from a historical perspective: political, religious and social institutions.
Prereq: WLC 101 or permission

SPN 335 Spanish for Business and Commerce
AH 4 cr UL
Acquisition of specific commercial concepts and vocabulary in Spanish and the study of worldwide and local economic factors. (Alma, Alma Programs Abroad)
Prereq: WLC 101 or permission

SPN 340 Survey of Hispanic-American Literature
AH 4 cr UL
Reading and discussion of selections from major works of Hispanic-American Literature and their relationships to contemporary and subsequent society and culture.
Prereq: SPN-321 and WLC 101 or permission

SPN 343 Survey of Spanish Literature
AH 4 cr UL
Reading and discussions of selections from the major works of Spanish literature and their relationship to contemporary and subsequent society and culture. (Segovia)
Prereq: WLC 101 or permission

SPN 344 Survey of Regional Hispanic Literature
AH 4 cr UL
Reading and discussion of regional literature, poetry, novels and epics. Themes and authors include pre-Columbian legend, Romanticism, Modernism.
Prereq: WLC 101 or permission

SPN 350 History of Spanish Civilization
AH 4 cr UL
Introduction to the history of Spanish civilization and culture. Political, religious and social institutions; art, architecture, literature and music. Readings, lectures, compositions and discussions in Spanish. (Alma, Alma Programs in Spain)
Prereq: SPN-321 and WLC 101 or permission

SPN 352 Hispanic-American Culture & Civilization
AH 4 cr UL
Introduction to society and culture of contemporary Hispanic-America through examination of political, social, religious and artistic forces. Emphasis on social-political problems and their effect on the United States. Readings, lectures, compositions and discussions in Spanish. (Alma, Alma Programs in Hispanic-America)
Prereq: SPN-321 and WLC 101 or permission

SPN 355 History of Art and Architecture
AH 4 cr UL
Period and manner studies of the great Spanish and Hispanic-American painters. Vision of aesthetic ideas through painting. Architectural concepts and styles. Site visits in Madrid and the surrounding area. (Alma Programs Abroad)
Prereq: WLC 101 or permission

SPN 360 Spanish Literature to 1700
AH 4 cr UL
Reading and discussion of the major works of the Medieval, Renaissance and Baroque periods in Spain: the Cantar del Mio Cid, La Celestina, Lazarillo de Tormes; poetry of Garcilaso, San Juan de la Cruz, Gongora and Quevedo; drama of Lope de Vega, Tirso de Molina and Calderon. (Alma)
Prereq: SPN-321 or 331 and WLC-101 or Permission

SPN 362 Hispanic-American Literature to 1888
AH 4 cr UL
Reading and discussion of principal works in Hispanic-American literature from pre-Columbian to Modern: chronicles of the Conquest, poetry of the Colonial period, poetry and prose of Romanticism, Realism and Naturalism. (Alma)
Prereq: SPN-321 or 331, WLC-101 or Permission

SPN 364 Indigenous Cultures
AH 4 cr UL
Period, cultural, economic, and ethnic studies of the people of a specific country in Hispanic America. (Alma Programs Abroad)
Prereq: WLC 101 or permission

SPN 370 Spanish Literature Since 1700
AH 4 cr UL
Reading and discussion of representative works from the Romantic period to the present in Spain: Becquer, Galdos, Unamuno, Ortega y Gasset, Garcia Lorca and others. (Alma, Alma Programs in Spain)
Prereq: SPN-321 or 331, WLC-101 or Permission

SPN 372 Hispanic-American Literature Since 1888
AH 4 cr UL
Reading and discussion of representative works in Hispanic-American literature from Modernism to the present: Dario, Marti, Borges, Neruda, Paz, Cortazar, Vargas Llosa, Fuentes, Garcia Marquez and others. (Alma, Alma Programs in Hispanic America)
Prereq: SPN-321 or 331, WLC-101 or Permission

SPN 373 Hispanic-American Theater
AH 4 cr UL
This course introduces students to select texts and movements of twentieth and twenty-first century Hispanic-American drama and performance. We will analyze and engage with dramatic texts,

performances, and key theoretical perspectives to approach questions of theater practices and intersections with society and politics, representations of race/ethnicity, class, gender/sex/sexuality. Although the course includes all four skill areas (reading, writing, speaking, and listening), the course emphasizes oral production through class presentations, dramatic readings, performance, etc.

Prereq: SPN-321 and WLC 101 or permission

SPN 374 Regional History of Hispanic America
 AH 4 cr UL

A comprehensive study of the history of specific regions of Hispanic America including pre-Columbian through contemporary issues. (Quito)

Prereq: WLC 101 or permission

SPN 377 Studies in Hispanic Film
 AH 4 cr UL

This course, taught in Spanish, examines contemporary Hispanic cultural issues through a critical analysis of Hispanic film. Goals include learning to watch film critically to understand how cinematographic elements contribute to a deeper analytic understanding of the film. Additionally, students will critically examine the ways films engage with history and culture, analyzing them as sources of knowledge. Possible course fee.

Prereq: SPN-321 and WLC 101 or permission

SPN 380 Topics in Spanish
 AH 2-4 cr UL

Requires instructor permission. Prerequisites vary by topic.

Prereq: WLC 101 or permission

SPN 381 Public Speaking in Spanish
 AH 4 cr UL

This course, taught in Spanish, focuses on developing effective oral communication skills in a variety of contexts, with emphasis on diagnosing rhetorical situations, inventing and delivering informative and persuasive presentations, and facilitating public discussion. Students will become more effective communicators through researching, outlining, writing, presenting, discussing, critiquing, and revising their own work, as well as that of their peers and of other public speakers. The structure of the course allows students to pair other majors/interests with Spanish.

Prereq: WLC 101 (may be taken concurrently), SPN 321, or Permission

SPN 460 Seminar in Spanish Literature
 AH 4 cr UL

Advanced study of a specialized area, movement, writer or work in Peninsular literature; for example, Don Quijote, the picaresque, the post-Civil War novel. (Alma)

Prereq: SPN-321 or 331, WLC-101 or Permission

SPN 462 Seminar in Hispanic-American Literature
 AH 4 cr UL

Advanced study of a specialized area, movement, writer or work in Hispanic-American literature; for example, Literature of the Conquest, the gaucho in Argentine society and literature, and the literature of the "Boom." (Alma)

Prereq: SPN-321 or 331, WLC-101 or Permission

SPN 495 Thesis Preparation
 AH 1 cr UL

Requires instructor permission.

Prereq: WLC 101 or permission

SPN 499 Spanish Independent Study
 AH 1-4 cr UL

Supervised reading and research in an area not covered by available courses. Requires senior standing and instructor permission. (Alma)

Prereq: WLC 101 or permission

SPN 500 Senior Thesis
 AH 4 cr UL

Definition of a question, thesis paper and oral defense in Spanish. Requires senior standing and permission. (Alma)

Prereq: WLC 101 or permission

Theatre (THE)

Theatre courses, as designated by the three-letter prefix THE, are offered through the Theatre and Dance Department. Theatre courses were offered under the prefix THD through the 2016-17 academic year.

Students wishing to pursue a concentration in either Performance or Design/Technology may complete a twelve-credit concentration beyond the major's thirty-six credit core requirements.

Theatre Major Requirements

Thirty-six credits that include:

1. Complete THE 125, 170, 202, 232, 261, 262, 497 and 498;
2. Four credits from the following: THE 120, THE 263, THE/ENG 292, ENG 354, ENG 364;
3. Four credits of THE electives, excluding THE 150 Theatre Company.

Theatre Major with Concentration in Design Technology

Forty-eight credits which include:

1. Complete all Theatre Major requirements (36 cr);
2. Successful Completion of THE 171;
3. Eight credits from the following: THE 271, 272, 273, 275.

Required prerequisites: ART 101 (for THE 271, 272, 273 and 275)

Theatre Major with Concentration in Performance

Forty-eight credits which must include:

1. Complete all Theatre Major requirements (36 cr);
2. Complete THE 225, THE 226, DAN 139;
3. Two credits of Dance Technique (DAN 140, 144, 145).

Theatre Minor Requirements

Twenty-four credits which must include:

1. THE-125, THE-170 or 171, and THE-232
2. Four credits from THE-261, 262 or 263
3. Four credits from DAN-146 or Dance studio (technique) courses
4. Four credits of Theatre electives excluding THE 150, Theatre Company.

****A maximum of 4-credits from THE or DAN may count toward the distributive requirements in the Arts and Humanities area. Practicum and independent study courses do not fulfill these requirements.**

THE 101 Introduction to Theatre
 AH 4 cr
 An exploration of theatre as an art form and how dramatic literature becomes theatre.

THE 120 Introduction to Dramatic Literature
 AH 4 cr
 Preparation for advanced study of literature and language, including vocabulary, critical approaches, and writing strategies employed in literary analysis. This course is required for a major or minor in English, but open to all students with a solid foundation in reading and writing.

THE 123 Performing Advocacy
 AH SL 4 cr
 Explores the relationships among identity, power and culture. Students learn how to become advocates through the use of Everyday Life Performance and other performance techniques, engaging in perspective taking and service learning with marginalized groups. (Also listed as COM 123)

THE 125 Acting
 AH 4 cr
 Introduction to acting through participation in exercises which emphasize moment-to-moment acting from the actor's impulse in contact with a partner. Culminates with class performances.

THE 150 Theatre Company
 AH 1 cr
 Participation in acting and technical work on departmental productions with actual rehearsal and performance. May be

repeated more than once for credit.


THE 152 Theatre Administration

AH 1 cr
Participation in business areas required to create, manage and address audience needs for all departmental productions: publicity, programs, box office and house management. May be repeated more than once for credit.

THE 170 Stagecraft

AH 4 cr
Introduction to the terminology, technology and techniques of technical production in the performing arts. Laboratory sessions in the theatre, workshops and backstage assignments on department productions ensure practice of the topics discussed in class. Laboratory.

THE 171 Design for the Theatre

 AH 4 cr
Introduction to the design of the physical environment in the theatre. Consideration of scenery, costume, lighting and sound for live performance; their unifying aesthetic principles and distinctions. Culminates in class presentation of student designs for particular plays.

THE 202 Script Analysis

AH 4 cr
This course develops bedrock skills in "discovering meaning" by examining various analytical models.
Prereq: THE-125 or THE-170 or Permission

THE 225 Acting II

AH 4 cr UL
Continuation of THE 125 expanding to explore period styles and dialect work.
Prereq: THE-125

THE 226 Voice and Language on Stage

AH 4 cr UL
Development and training of the student actor's vocal instrument for theatrical performance. Principles and exercises to free, develop and strengthen the actor's voice.



THE 227 Stage Combat

AH 4 cr UL
Study of the art of physical combat in a theatrical setting using the Society of American Fight Director's guidelines. The focus will be on performing a hand to hand combat scene and a rapier fight scene. Laboratory.



THE 232 Directing

AH 4 cr UL
Study of basic procedures for the director: script analysis, communication and working with actors, and technical use of the stage. Students direct one or two short scenes emphasizing script analysis and the director's collaboration with actors.
Prereq: THE-125

THE 261 Great Ages of Theatre I

  AH 4 cr UL
Survey of the physical structure, production methods and styles of theatre and the cultures that produced them from their beginnings to the Elizabethan Period. Considers primitive rituals and Eastern Theatre as well as Western Theatre. Includes reading representative plays and their place in the theatrical development of the period.

THE 262 Great Ages of Theatre II

  AH 4 cr UL
Survey of the physical structure, production methods and styles of theatre and the cultures that produced them from Elizabethan England to the Modern Period. Considers Renaissance Spain and France, Restoration England, and Baroque and Romantic Europe through the Modern Theatre. Includes the reading of representative plays and their place in the theatrical development of the period.

THE 263 Modern Drama

AH 4 cr
Survey of major plays written and produced in last 100 years. From Ibsen, Shaw and Chekhov through Williams, Miller, Beckett, and Albee. Consideration given to staging.

THE 271 Scene Design

AH 4 cr UL
Exploration of scenery as a tool for expression in live performance. Exploration of visualization of the intellectual concept of a production, research for scenic design development, advanced presentation techniques. Culminates in assembly of a portfolio of scenic designs for plays chosen by the student from approved list.

THE 272 Lighting and Sound Design

AH 4 cr UL
Exploration of lighting and sound as expressive tools in live performances.
Prereq: ART 101 or Permission

THE 273 Costume Design

AH 4 cr UL
Exploration of costumes as an expressive tool in live performance. Intensive work in color theory, line, mass, texture; survey of historical fashion; advanced presentation techniques. Culminates in assembly of a portfolio of student renderings for plays chosen by the student from approved list.
Prereq: ART 101 or Permission

THE 275 Stage Management

AH 4 cr UL
Study of the basic procedures for the stage manager: organization skills, communication skills, supervisory skills, scheduling, budgeting, and theatre technology as they pertain to the stage manager.

THE 276 Scene Painting

AH 4 cr UL
Learn basic scene painting techniques such as marble, stone work and wood grains and apply them to scene painting projects. Course culminates in a major project including multiple techniques.

THE 277 Props Design and Construction

AH 4 cr
Learning basic props design and construction including casting, molding, sculpting and woodworking.

THE 280 Topics in Theatre

AH 4 cr
Special topics and projects in theatre selected by instructor. Background prerequisites vary with selections.

THE 280M Topics in Theatre

AH 4 cr
Special topics and projects in theatre selected by instructor. Background prerequisites vary with selections.

THE 292 Playwriting Workshop

AH 4 cr UL
Students write several brief etudes in addition to writing and revising a more substantial script. The course uses staged readings and feedback from actors and audience members to help students learn the craft of writing for performance. Emphasizes revision and collaboration in the production process. May be repeated once for credit. (Also listed as ENG-292.)
Prereq: Permission

THE 325 Theatre Studio: Acting

AH 2-4 cr UL
Advanced participation as an actor cast in a public performance of a theatre production under the direction of a faculty supervisor. The student must be cast in a major role, submit a written character analysis and journal of rehearsals and performances of that role. May be repeated for credit.
Prereq: THE-125 and Permission

THE 332 Intermediate Directing
AH 4 cr UL
Continuation of THE 232. Principles and techniques of stage directing culminating in the analysis, casting and direction of a one-act play for public presentation.
Prereq: THE-232

THE 371 Theatre Studio: Scenery
AH 2-4 cr UL
Advanced tutorial in scenic design. Students responsible for all research materials, production drawings, models, plots and schedules for a theatre or dance production working in close consultation with a faculty member. Culminates in the realization of a scenic project. May be repeated for credit.
Prereq: THE-271 and Permission

THE 372 Theatre Studio: Lighting
AH 2-4 cr UL
Advanced tutorial in lighting design. Students responsible for all research materials, production drawings, plots, and schedules for a theatre or dance production working in close consultation with a faculty member. Culminates in the realization of the lighting atmosphere for a public performance and a written analysis of the project. May be repeated for credit.
Prereq: THE-271 and Permission

THE 375 Theatre Studio: Management
AH 2-4 cr UL
Advanced participation as a stage manager of a theatre production under the tutelage of a faculty supervisor. Students organize and run auditions, rehearsals, technical rehearsals and performances of a major production for public performance. May be repeated for credit.
Prereq: THE-273 and Permission

THE 380 Topics in Theatre and Dance
AH 4 cr UL
Special topics and projects selected by instructor. Background prerequisites vary with selections.

THE 385 Theatre Practicum
4 cr UL
Study-work participation in community institutions, schools or professional organizations combined with faculty supervision. Practical experience in teaching, directing or performance of theatre. Culminates in written report. Also offered as THE 386.
Prereq: Permission

THE 432 Theatre Studio: Directing
AH 2-4 cr UL
Advanced tutorial in the principles and techniques of stage directing culminating in the analysis, casting and directing of a full-length play.
Prereq: THE-232 and Permission

THE 497 Capstone I
AH 2 cr UL
Focuses on the scholarly research required to prepare for the performance/practical element of the capstone experience. THE 497 usually culminates in an advanced research paper that explores and explains a specific topic in theatre studies chosen by the student in conjunction with his or her capstone advisor. The project may include designing an element of mainstage production. In such cases, the designer will provide his or her research portfolio at the end of Capstone I in lieu of the research paper.
Prereq: 30 credits in THE and second semester Junior standing

THE 498 Capstone II
AH 2 cr UL
Students apply the practical skills developed while pursuing the theatre major. THE 498 usually culminates in the presentation of scenes related to the topic studied in THE 497. Depending on the student's area of interest, scenes will be directed, designed, and/or acted in by the capstone student. In some cases, special projects such as directing or designing a main stage production may provide the content of THE 497 and 498 and fulfill the capstone requirement. At the end of 498, the student will be

required to complete a paper or project reflecting on their Capstone and Alma Experience.
Prereq: THE-497 and Senior standing

THE 500 Senior Thesis
AH 4 cr UL
Students with honors in Theatre and Dance must complete a Senior Thesis, approved and directed by the Department. In some cases, THE 500 may replace THE 497 and 498 to fulfill the capstone requirement.

Women's and Gender Studies (WGS)

Minor Requirements

Twenty-four credits which must include:

1. WGS-101 and 102
2. At least four credits from: WGS-280, 385 or 399.
3. At least twelve credits (eight of which must be at the 200 level or higher) from the following: COM-123 or 301; ENG-340; IPH-223, 301 or 303; HST-140, 228 or 253; POL-141, 231, or 381/382; REL-202; SOC-220, 234, 353, or additional approved course.

WGS 101 Introduction to Women's Studies 4 cr
Studies of a rich and varied selection of classic and contemporary works from the humanities and social sciences centered on women's images, realities and choices. Interdisciplinary survey of women's contributions, concerns, perspectives and theories. Diversity of class, ethnicity, race and sexual orientation addressed from feminist perspectives which counterbalance traditional biases.

WGS 102 Introduction to Feminist Thought 4 cr
Studies of historical and contemporary works examining feminist theoretical approaches to explaining experiences, representations and relative positions of women in society. Overview of American feminist thought which includes the varieties of liberal, cultural, Freudian, socialist, existential and radical feminism. Also considers the theoretical contributions of women of color, postmodernists and poststructuralists.

WGS 280 Topics in Women's and Gender Studies 1-4 cr UL
Specific topics concerning gender issues, choices, realities and self-expression chosen by the instructor. May be taken more than once for credit with no more than four credits counted toward the minor.
Prereq: WGS 101 or 102 or Permission

WGS 385 WGS Practicum 2-4 cr UL
Internship designed to provide on-site personal and service-oriented learning and experiences in a wide variety of areas related to women's studies, issues and concerns. Practicums must be taken through a relevant department, with permission of the women's studies coordinator and the department chair.
Prereq: WGS-101 and Permission

WGS 399 WGS Independent Study 2-4 cr UL
In-depth study in the student's major area as related to the Women's Studies minor; under faculty member's direction.
Prereq: WGS-101; one of ENG-340, HST-140, REL-202, PHL-202, SOA-353, WGS-102 or WGS-280 and; Permission

World Languages and Cultures (WLC)

The World Languages and Cultures (WLC) Department offers several kinds of majors. Students can pursue traditional language majors in French (FRN), German (GRM), or Spanish (SPN), each of which requires a semester study abroad.

WLC also offers two additional majors that do not require study abroad: WLC Single Language and Culture and WLC Dual Languages and Cultures.

WLC Single Language and Culture Major Requirements: 36 credits which must include:

1. Declaration of a concentration in one Target Language (FRN, GRM, or SPN);
2. Successful completion of WLC 101;
3. Students should be aware that a maximum of 10 credits (including WLC 101) may be taken wherein the primary language of instruction is English; courses must be pre-approved by WLC department.
4. Of the minimum 26 credits in the target language, no more than 4 credits from the 100 level may count towards the major, and a minimum of 12 credits must be upper-level coursework.
5. Study in a country where the target language is spoken is highly recommended.
6. Language Proficiency must be demonstrated by taking an approved external proficiency exam. Majors are expected to perform at the American Council on the Teaching of Foreign Languages (ACTFL) Intermediate High proficiency level (as averaged across the four skills listening, speaking, reading, writing).
7. Students will write and defend in open forum an acceptable paper of moderate length in the target language reflecting on their language and culture study, study abroad experience (if applicable), and how the role of language and culture combines with the mission of a liberal arts education. Details and linguistic expectations will be determined in consultation with WLC faculty.

WLC Dual Languages and Cultures Major Requirements: 36 credits which must include:

1. Declaration of a concentration in two (or more) target languages (CHN, FRN, GRM, or SPN).
2. Complete at least 4 credits of 300 level coursework in both languages;
3. Successful completion of WLC 101;
4. Students should be aware that a maximum of 10 credits (including WLC 101) may be taken wherein the primary language of instruction is English; courses must be pre-approved by WLC department.
5. Of the minimum 26 credits in the target languages, no more than 4 credits from the 100 level may count towards the major.
6. Study in a country where each target language is spoken is highly recommended.
7. Language Proficiency must be demonstrated by taking an approved external proficiency exam. Majors are expected to perform at the American Council on the Teaching of Foreign Languages (ACTFL) Intermediate Mid level (as averaged across the four skills listening, speaking, reading, writing) in both languages.
8. Students will write and defend in open forum an acceptable paper of moderate length reflecting on their languages and cultural study, study abroad experience (if applicable), and how the role of language and culture combines with the mission of a liberal arts education. Details and linguistic expectations will be determined in consultation with WLC faculty.

Studying abroad is not a requirement in the WLC Single or Dual Language and Culture Majors. However, study in a country where the target language is spoken is highly recommended.

Department Honors may be achieved in the World Languages and Cultures Department by:

1. Having a 3.5 GPA in all classes applied to the Major.
2. Performing beyond minimum requirements on the Language Exam portion of the Departmental Comprehensive Evaluation, and
3. Presenting a senior thesis of honors caliber.

Advanced Credit in a second language may be earned by:

1. Scoring at the 4 level or higher on the Advanced Placement (AP) exam.
2. Successfully completing the International Baccalaureate Program (IB) HL exam with a score of 5.

WLC 101 Introduction to Cultural Analysis

🌐 AH 2 cr

An introductory course that focuses on tools for cultural analysis of a variety of genres (literature, film, art, performance, etc.) from multi-disciplinary perspectives. Taught in English. This course is a pre- or co-requisite for 300 level content courses in target languages.

WLC 180 Topics in World Languages and Cultures

🌐 AH 2-4 cr

Various topics in World Languages and Cultures. Taught in English. May be repeated for credit if topic varies. Prerequisites vary by topic.

WLC 185 Service Learning

1 cr

May be repeated for credit with a maximum of four credits applied toward the major or minor. Requires permission and placement.

WLC 280 Topics in World Languages and Cultures

🌐 AH 2-4 cr

Various topics in World Languages and Cultures. Taught in English. May be repeated for credit if topic varies. Prerequisites vary by topic.

WLC 299 Independent Study

🌐 1-4 cr

Supervised study and research of an area not covered in available courses. Requires instructor permission.

Prereq: Permission

WLC 380 Topics in World Languages and Cultures

🌐 AH 2-4 cr **UL**

Various topics in World Languages and Cultures. Taught in English. May be repeated for credit if topic varies. Prerequisites vary by topic.

WLC 399 Independent Study

🌐 1-4 cr **UL**

Supervised study and research of an area not covered in available courses. Requires instructor permission.

Prereq: Permission

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Antje Newhagen '67, Los Altos, California. (2004–2013)

Calvin P. Owen, Retired President, Owen-Ames-Kimball Company; Grand Rapids, Michigan. (1981–1995)

Glenda D. Price, Retired President, Marygrove College; Detroit, Michigan. (2000–2009)

David T. Provost '76, President and Chief Executive Officer, Chemical Financial; Troy, Michigan. (1994–2013)

Ron R. Sexton '68, Retired Treasurer, Dow Corning Corporation; Midland, Michigan. (2004–2016)

Judith K. Van Solkema; Kalamazoo, Michigan. (1972–1999)

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- Michael L. Selmon**, Professor of English. *Provost Emeritus and Vice President for Academic Affairs, 2004-2018*. B.A., M.S., Miami University; M.A., Ph.D., University of Maryland. (1991)
- Marc B. Setterlund**, Professor of Psychology. B.A., Gustavus Adolphus College; M.A., Ph.D., Johns Hopkins University. (1997)
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- Brandi Stupica**, Associate Professor of Psychology. B.S., Otterbein College; M.S., Ph.D., University of Maryland. (2012)
- Natashia Swalve**, Assistant Professor of Psychology. B.A., Winona State University; M.A., Ph.D., University of Nebraska-Lincoln. (2016)
- Sarah E. Taylor**, Assistant Professor of Economics. B.S., Carnegie Mellon University; M.A., Ph.D., University of Michigan. (2015)
- Andrew Thall**, Associate Professor of Mathematics and Computer Science. B.A., Kalamazoo College; M.S., Ph.D., University of North Carolina at Chapel Hill. (2008)
- Peggy Thelen**, Professor of Education. B.S., M.A., Central Michigan University; Ph.D., Michigan State University. (2004)
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- Jeffrey A. Turk**, Associate Professor of Chemistry. B.S., Cleveland State University; M.S., Ph.D., University of Cincinnati. (2006)
- Steven T. Vest**, Professor of Library Science and Head of Reference and Instruction Services. B.F.A., Bowling Green State University; M.F.A., Indiana University; M.S.L.S., Clarion University of Pennsylvania. (1999)
- Robert Vivian**, Professor of English. B.A., M.A., University of Nebraska at Omaha; Ph.D., University of Nebraska at Lincoln. (2001)
- Jennifer Vranish**, Assistant Professor of Integrative Physiology and Health Science; B.S., Lyman Briggs College-Michigan State University; B.S., M.S., Ph.D., University of Arizona. (2018)
- Laura von Wallmenich**, Associate Professor of English. B.A., Colby College; M.A., Ph.D., University of Washington at Seattle. (2001)

- Daniel Wasserman**, Assistant Professor of History. A.B., University of Chicago; M.A., Ph.D., University of Virginia. (2013)
- Bradford S. Westgate**, Assistant Professor of Mathematics and Computer Science. B.S., Franklin W. Olin College of Engineering; M.S., Ph.D., Cornell University. (2015)
- Lauren Woolbright**, Instructor of New Media Studies. B.A., University of North Carolina; M.A., Clemson University. (2016)
- Peggy A. Yates**, Assistant Professor of Education. B.A., Alma College; M.A., Central Michigan University; M.A.T., Saginaw Valley State University; Ed.S., University of Michigan–Flint. (2015)
- David Zerbe**, Paul Cameron Russell Professor of Music. B.M., M.M., Central Michigan University. (2004)

Part-Time

- Jeff Ayres**, Music. M.M., Central Michigan University. (2006)
- Amy Beatty**, Physics. B.S., Alma College. (1997)
- Kristen Bennett**, Dance. B.A., Grand Valley State University. (2008)
- Michael Bishop**, Biology and Laboratory Coordinator. M.S., Central Michigan University. (1998)
- Dianne Borrello**, Geology and Environmental Studies. B.S., Michigan Technological University. (1998)
- Barbara Burdick**, Music. D.M.A., University of Cincinnati College–Conservatory of Music. (2005)
- Karla Cartrite**, Education. M.Ed., Wayne State University. (2015)
- Katherine DeGood Cassidy**, Dance. M.S., Wayne State University. (2011)
- Sheryle Dixon**, Education and Philosophy. Ph.D., University of Manitoba. *Also Director of Grants and Sponsored Programs.* (2007)
- Rory Douglas**, Geography. Ed.S., Michigan State University. (2007)
- Jamie Fiste**, Music. D.M.A., University of Illinois, Urbana-Champaign. (2005)
- Tincy Goggin**, Mathematics and Computer Science. M.B.A., Michigan State University (2005)
- Lani Kelly**, Music. M.M., Michigan State University. (2009)
- Carlos Melendez**, Music. (2007)
- Tess Miller**, Music. D.M.A., Michigan State University. (2008)
- Aaron Munderloh**, Integrative Physiology and Health Science. M.S., University of Indianapolis. (1997)
- Kathy Paul**, Education. M.A., Central Michigan University. (2011)
- Joseph Radtke**, Music. M.M., Central Michigan University. (2015)
- Karen Stiffler**, Communication and New Media Studies. M.S., Central Michigan University. (2005)
- Robin VonWald**, Music. M.M., University of Wisconsin–Madison. (2010)
- Victoria Walker**, Music. M.M., Michigan State University. (1995)
- Randy Westmoreland**, Music. M.M., University of Notre Dame. (2008)
- Keith Wise**, History and Religious Studies. Ph.D., American University. (1994)
- Andrea Worful**, Music. M.M., Michigan State University. (2005)

Emeriti

- John W. Arnold**, Professor Emeritus of German. B.A., M.A., Ph.D., Michigan State University. 1977–2006.
- Julie Wegner Arnold**, Professor Emeritus of French. B.A., Alma College; M.A., University of Illinois; Ph.D., Michigan State University. 1981–2017.
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