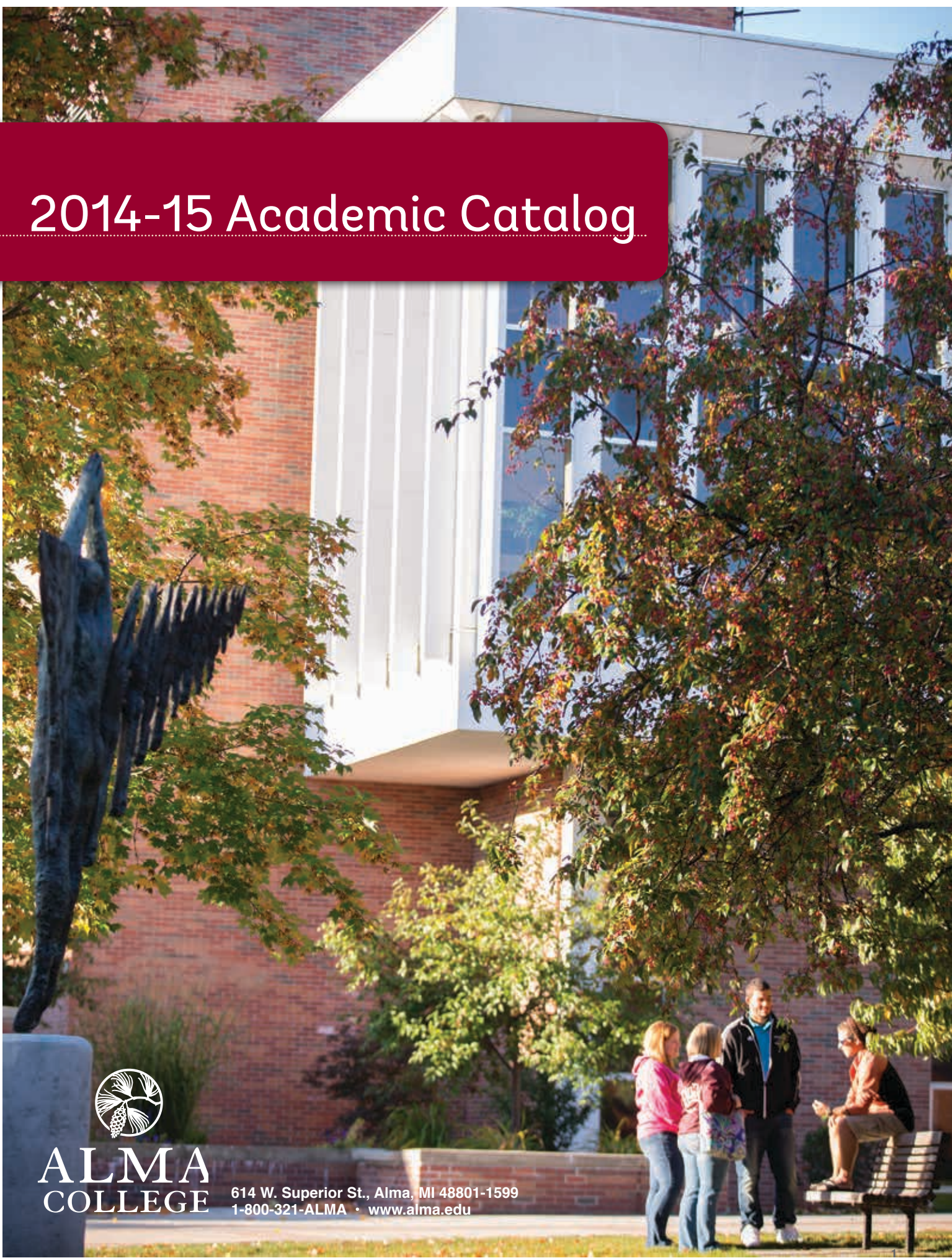


2014-15 Academic Catalog



**ALMA
COLLEGE**

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



A College of Distinction

The mission and core values of Alma College emerge from the spirit of the founding motto: “to the glory of God and the dignity of all.” Founded in 1886 by the Presbyterian Synod of Michigan, Alma College was dedicated to the pursuit of learning that reflected the Judeo-Christian heritage of its founders joined with the continually relevant aims of the liberal arts.

This dedication to uncommon achievement is as evident today as it has been throughout the College’s history.



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.

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.

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2014-15 Academic Calendar

Fall 2014

August	23	Saturday	Freshman Orientation Begins, Welcoming Convocation
September	1	Monday	Residence Halls Open, Noon
September	2	Tuesday	Classes Begin, 8 a.m.
September	5	Friday	Last Day to Add a 1st 7-week Class
September	12	Friday	Last Day to Add a 14-week Class
September	26	Friday	Last Day to Drop a 1st 7-week Class
October	11	Saturday	Homecoming
October	15	Wednesday	Middle of Term
October	16–17	Thursday–Friday	Fall Term Recess
October	20	Monday	Classes Resume, 8 a.m.
			Begin 2nd 7-week Classes
			Mid Term Grades Due, 9 a.m.
October	24	Friday	Last Day to Add a 2nd 7-week Class
October	31	Friday	Last Day to Drop a 14-week Class
November	3–7	Monday–Friday	Winter Term Advising
November	10–14	Monday–Friday	Winter Term Registration
November	14	Friday	Last Day to Drop a 2nd 7-week Class
November	17–21	Monday–Friday	Drop/Add for Winter Term
November	26	Wednesday	Thanksgiving Recess Begins, 5 p.m.
December	1	Monday	Classes Resume, 8 a.m.
December	8–12	Monday–Friday	Fall Term Exams
December	12	Friday	Residence Halls Close, 5 p.m.
December	16	Tuesday	Final Grades Due, 9 a.m.

Winter 2015

January	4	Sunday	Residence Halls Open, Noon
January	5	Monday	Classes Begin, 8 a.m.
January	9	Friday	Last Day to Add a 1st 7-week Class
January	16	Friday	Last Day to Add a 14-week Class
January	19	Monday	Martin Luther King Jr. Celebration Day
			Classes Cancelled 12:30–6:00 p.m.
January	30	Friday	Last Day to Drop a 1st 7-week Class
February	2–6	Monday–Friday	Spring Term Registration
February	18	Wednesday	Middle of Term
February	19	Thursday	Begin 2nd 7-week Classes
February	21	Saturday	Winter Term Recess Begins
February	23	Monday	Mid Term Grades Due, 9 a.m.
March	1	Sunday	Exam Preparation Day for 1st 7-week Classes
			Exam Period for 1st 7-week Classes, 7–9 p.m.
March	2	Monday	Classes Resume, 8 a.m.
March	6	Friday	Last Day to Add a 2nd 7-week Class
March	13	Friday	Last Day to Drop a 14-week Class
March	16–20	Monday–Friday	Fall Term Advising and Drop/Add for Spring Term
March	23–27	Monday–Friday	Fall Term Registration
March	27	Friday	Last Day to Drop a 2nd 7-week Class
March 30–April 3		Monday–Friday	Drop/Add for Fall Term
April	2	Thursday	Honors Day
April	3	Friday	Good Friday, No Classes after 12:30 p.m.
April	13–17	Monday–Friday	Winter Term Exams
April	17	Friday	Residence Halls Close, 5 p.m.
April	18	Saturday	Commencement, 2 p.m.
			Residence Halls Close for Graduates, 5 p.m.
April	21	Tuesday	Final Grades Due, 9 a.m.

Spring 2015

April	25	Saturday	Residence Halls Open, Noon
April	26	Sunday	Classes Begin, 1 p.m.
April	29	Wednesday	Last Day to Add a Spring Term Class
May	15	Friday	Last Day to Drop a Class or Elect Pass/Fail Option
May	21	Thursday	Spring Term Ends/Residence Halls Close, 5 p.m.
May	26	Tuesday	Final Grades Due, 9 a.m.

Summer 2015

June 1–August 28			Summer Session
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Welcome to Alma College

The 2014-15 Alma College Academic Catalog is your guide to the major, minor, program and degree requirements of Alma College. The catalog provides course descriptions, as well as details about academic rules and procedures, and your rights as a student as they relate to your academic records. The catalog is intended to help guide you in developing your personalized academic plan. This catalog is unique to your entering class; the requirements may differ from those of classes before or after yours.

Remember also that your Alma College instructors, academic advisor, and other college staff are here to assist you when you have questions. We will help you discover your academic interests, pursue unique research and internships opportunities, and ultimately, help you achieve your individual career goals.

Again, welcome to Alma College! We wish you the best in your academic pursuits and hope you will take advantage of the numerous opportunities available to you as part of the Alma Experience.

— Julie Williams
Associate Provost and Registrar

Alma College in Brief

A Liberal Arts Education

More than 125 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 and is a member of the North Central Association of Colleges and Secondary Schools. The Michigan Department of Education approves Alma programs for certification of elementary and secondary teachers. Approval of Alma programs is also given by the American Chemical Society Committee on Professional Training, the National Association of Schools of Music and the Commission on Accreditation of Athletic Training Education. Contact information follows:

Higher Learning Commission
North Central Association of Colleges and Schools
230 South La Salle Street, Suite 7-500
Chicago, IL 60604-1411
Phone: 1-800-621-7440 / (312) 263-0456
FAX: (312) 263-7462
e-mail: info@hlcommission.org
Web site: www.ncahigherlearningcommission.org

Commission on Accreditation of Athletic Training Education
6836 Austin Center Blvd., Suite 250
Austin, TX 78731-3193
Phone: (512) 733-9700
FAX: (512) 733-9701
Web site: <http://caate.net/>

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

Council for the Accreditation of Educator Preparation
2010 Massachusetts Ave. NW, Suite 500
Washington, DC 20036
Phone: (202) 223-0077
e-mail: caep@caepnet.org
Web site: <http://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: www.mde.state.mi.us

National Association of Schools of Music
11250 Roger Bacon Drive, Suite 21
Reston, VA 20190-5248
Phone: (703) 437-0700
FAX: (703) 437-6312
e-mail: info@arts-accredit.org

Emergency Procedures

Alma College has adopted an Emergency Response Plan, revised in April 2013, that provides contingency procedures for Alma College administrators, staff, faculty and students in the event of a campus emergency. The College also has implemented an Emergency Notification System that allows the College to send immediate, time-sensitive voice 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. The College supports the Family Educational Rights and Privacy Act (FERPA) of 1974, as amended. This statement of policy incorporates the rights accorded and the privacy guaranteed the student by this Act. For more information concerning this regulation please see www.ed.gov/policy/gen/guid/fpco/ferpa/index.html.

Financial Information. The College's annual financial report is available for review by prospective students, alumni and the public upon request at the Business 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 Dr. Nick Piccolo, Title IX Coordinator at (989) 463-7333 or piccolo@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 a 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.

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.

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 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 40 majors and interdepartmental majors, 32 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	Gerontology
Biochemistry	International Business
Cognitive Science	Nursing
Communication and New Media Studies	Public Affairs
Environmental Studies	Public Health
Foreign Service	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

Military Service: ROTC	Pre-Occupational Therapy
Pre-Dentistry	Pre-Physical Therapy
Pre-Engineering	Pre-Physician's Assistant
Pre-Law	Pre-Optometry
Pre-Medicine	Pre-Veterinary
Pre-Ministry	Teaching

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 results of examinations should be sent to the Registrar's Office. 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 a score of "5" or above. Alma College course credit earned by achievement on the IB HL exam with a score of "5" or above (unless otherwise indicated by the appropriate department), will satisfy distributive requirements for graduation.

Advanced Placement Courses and Qualifying Scores

AP Course Name	Minimum Scores	Alma College Course Equivalents Credit Awards*
American Government and Politics	4 C	POL 101 (4)
Art History	3 C Appr, 4 C	ART 112 (4)
Art 2D Design	4 C	ART 180 (4)
Art (Studio)	4 C	ART 180 (4)
Biology	4 C	BIO 180 (4)
Chemistry	4 C	CHM 115 (4)
Comparative Government and Politics	4 C	POL 111 (4)
Computer Science A	4 C Appr, 5 C	CSC 120 (4)
Computer Science AB	4 C, 5 C Appr	4 C = CSC 120 (4), 5 C Appr = CSC 120-220 (4-8)
Economics: Macro	4 C	ECN 201 (4)
Economics: Micro	4 C	ECN 202 (4)
English Language and Comp	3 C	ENG 100 (4)
English Literature and Comp	3 C	ENG 180 (4)
Environmental Science	4 C	ENV 180 (4)
European History	4 C	HST 180 (4)
French Language (Level 3)	4 C	FRN 221 (4)
French Literature (Level 3)	4 C	FRN 222 (4)
German Language (Level 2, 3)	4 C	GRM 221 (4)
German Literature (Level 3)	4 C	GRM 222 (4)
Human Geography	4 C	GGR 102 (4)
Math: Calculus AB	4 C	MTH 121 (4)
Math Calculus: BC	3-4 C	3 C = MTH 121 (4), 4 C = MTH 121-122 (8)
Music: Listening and Literature	3 C Appr, 4 C	MUS 180 (4)
Music Theory	4 C Appr	MUS 111-112 (4-8)
Physics B	4 C	PHY 112-113 (8)
Physics C	4 C	PHY 121-122 (8)
Psychology	4 C	PSY 180 (4)
Spanish Language	4 C	SPN 221 (4)
Spanish Literature	4 C	SPN 222 (4)
Statistics	4 C	MTH 116 (4)
U.S. History	4 C	HST 180 (4)
World History	4 C	HST 180 (4)

C=Credit Granted Automatically

C Appr=Credit with Department Approval

* 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.edu/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 a SAT combined (Critical Reading, Math and Writing) score of 1530 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 which 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. (EST) 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 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 30 total may be taken in this manner.

After 30 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 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.

College Expenses

The total charges to attend Alma College for the 2014-15 academic year are \$43,710 for students who enrolled before fall 2013 and \$44,075 for students enrolled for the first time in fall 2013 and after. As shown in the accompanying chart, these charges include tuition, board and double room, and the student activity and technology fees for the Fall and Winter terms. Spring Term charges are reflected in the schedule below. The Board of Trustees reserves the right to change any charges prior to the opening date of any term.

The tuition charge shown (\$33,825 and \$34,190 for the Fall and Winter terms) 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 at the rate of \$1,100 per credit hour for the overload.

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 Life Office.

Costs for Full-Time Students *Enrolled First Time Fall 2013 and After*

Term	Tuition	Student Activity Fee	Technology Fee	Double Room and Board	Total
Fall Term	\$17,095	\$130	\$67.50	\$4,745	\$22,037.50
Winter Term	\$17,095	\$130	\$67.50	\$4,745	\$22,037.50
TOTAL	\$34,190	\$260	\$135	\$9,490	\$44,075

Costs for Full-Time Students *Enrolled Before Fall 2013*

Term	Tuition	Student Activity Fee	Technology Fee	Double Room and Board	Total
Fall Term	\$16,912.50	\$130	\$67.50	\$4,745	\$21,855
Winter Term	\$16,912.50	\$130	\$67.50	\$4,745	\$21,855
TOTAL	\$33,825	\$260	\$135	\$9,490	\$43,710

Spring Term Expenses:

Tuition	Double Room and Board	Total
\$1,100	\$600	\$1,700

Students may elect to participate in an off-campus Spring Term program. The costs — airline, hotel, meals, fees, etc. — for these opportunities 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 2014-15 reflect double room occupancy. Students living in small single rooms will be charged \$5,245 each term for room and board.

Deposits. All accepted applicants are required to pay a Commitment Deposit of \$200, refundable until May 1. Special deposit requirements for international students are described elsewhere in this catalog. Half of the Commitment Deposit is applied as credit to the student's account for the Fall Term. The other half serves as a security reserve from which the College may recover expenses incurred by the student for damage to or loss of College property. Any unexpended portion of this fee is refunded to the student after separation from the College providing all student charges have been paid in full.

Tuition-Exempt Credits. All students are permitted to enroll in a maximum of two ensemble credits above the normal load of 18 credits without incurring a tuition overload charge. Contact the Registrar's Office for exempt courses.

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. Full details about the plan and costs are available at www.CIRStudentHealth.com/Alma or at the Wilcox Health Center.

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 will be assessed costs appropriate to their major and the program in which they are enrolled.

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 will be assessed Alma College tuition and mandatory fees for semester programs. Tuition for summer programs and all room and board fees will be assessed for either Alma College or the host institution, depending on the College's agreement with the host institution. Both Alma College and state / 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.
 - a. All students **except** those who have declared a Modern Language major are assessed the tuition and mandatory fees of the selected host program, as well as a \$500 administrative fee. Students will be assessed the room and board fee, and other fees, if applicable. Alma College pays the required fees to the host institution on behalf of the student and these costs will be added to the Alma College student account. External funding, including state and federal financial aid, may be applied to off-campus study. Alma College financial aid, including Tuition Exchange Programs, will generally not be 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 Modern Language major, which 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. Students will be assessed the room and board fee, if applicable, and other mandatory fees associated with the host program. Alma College pays the required fees to the host institution on behalf of the student and the cost is added to the Alma College student account. If the host institution's tuition cost exceeds the cost of Alma College tuition, the student will be 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. Students are assessed the room and board fee, if applicable, and other mandatory fees associated with the host program. Alma College pays the required fees to the host institution on behalf of the student and the cost is added to the Alma College student account.

Orientation. All 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.*

Technology Fee. Alma College students are charged a technology fee of \$135 per year. This fee covers the cost of wireless internet service and allows the College to enhance technology services as new technology arises.

Summer Session. Tuition for the 2015 summer session is \$550 per credit hour or \$2,200 for a four-credit course.

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 25, 2014, and January 2, 2015, 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 25, 2014, with a deferred second payment for the remaining balance on or before October 17, 2014. The first payment for Winter Term, plus a \$20 processing fee is due on or before January 2, 2015, and the deferred second payment on or before February 20, 2015. A signed Deferred Payment Agreement form must be received by the Business Office by the due date of the first payment for each term, August 25, 2014 and January 2, 2015 respectively.
3. An educational financing plan that permits payment of the annual expense over the academic year is available through Sallie Mae. Information can be obtained from Sallie Mae directly at 1-800-635-0120 or through their Web site at <https://tuitionpay.salliemae.com/alma>. Some literature is also available from the Business Office or Admissions Office.

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 Business Office Web site: 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.

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	\$200/year
Resident Students – Silver Parking	\$175/year
Commuter Students	\$150/year
Opera House Students	\$100/year
Proficiency Examination	\$275/credit
Room Change Fee	\$50
Summer Tuition (2015)	\$550/credit

All drafts and checks should be made payable to Alma College.

Advance billings are sent approximately two weeks before the start of each term. Payment may be made by mail, online or in person at the Alma College Business Office.

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

Late Payment Fees. Tuition and fees are due before classes start for each term. A late payment fee of 1% per month is assessed on all outstanding balances.

Failure to Meet Financial Obligations. In accordance with standard practice at colleges and universities, students are required to make satisfactory arrangements with the Business 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.

Withdrawals 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.

Withdrawal Refund Policy. Tuition, room fee and 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.

Refund of Federal Title IV Financial Aid. The Higher Education Amendments of 1998 require that when a student withdraws before completing 60% of the term, the institution must determine the percentage of Title IV assistance the student has earned. For Title IV financial aid regulations, the withdrawal date is the date on which the student states his or her intention to withdraw from the institution. The percentage 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 Business 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.

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. The room and board charge is refundable on a prorated basis during any term.

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

Spring Term. No refund of tuition for withdrawals which 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 which occur after the fifth day of the term.

The Family Educational Rights and Privacy Act and Alma College

Alma College students have rights under the Family Educational Rights and Privacy Act of 1974, as amended. This act, as amended, is a federal law which states that (1) a written institutional policy must be established; and (2) a statement of adopted procedures covering the privacy rights of students be made available. The law provides that the institution will maintain the confidentiality of student education records.

Records Access Policy. Alma College accords all the rights under the law to students who are declared independent. No one outside the institution shall have access to, nor will the institution disclose any information from, students' education records without the written consent of students. The only exceptions to this accord are to (1) personnel within the institution, (2) officials of other in-

stitutions in which students seek to enroll, (3) persons or organizations providing students financial aid, (4) accrediting agencies carrying out their accreditation function, (5) persons in compliance with a judicial order, and (6) persons in an emergency in order to protect the health or safety of students or other persons. Within the Alma College Community, only those faculty, administrators or support staff who are acting in the students' educational interests are allowed access to student education records. All these exceptions are permitted under the Act.

Alma College looks to federal financial aid standards to determine the independent status of students. That status governs our treatment of student information. To ease the flow of information, students can provide releases to various offices across campus.

Disclosure Policy. At its discretion, Alma College may provide Directory Information in accordance with the provisions of the Act. This information includes (1) student name, address, telephone number, and date and place of birth; (2) e-mail address; (3) major 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) the 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. Typical use of directory information includes but is not limited to media releases, publications, event programs and lists for on-campus office use. As a general rule, Alma College does not release lists of directory information to off-campus vendors or agents unless required by law to do so.

Students may withhold directory information by filing the Non-Disclosure of Directory Information Form with the Director of Communication within 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 one academic year; therefore, authorization to withhold directory information must be filed annually in the Communication and Marketing Office. Forms are available in the Communication and Marketing and Registrar's offices.

Addendum, January 3, 2012. The U.S. Department of Education's FERPA regulations expand the circumstances under which your education records and personally identifiable information (PII) contained in such records — including your Social Security Number, grades or other private information — may be accessed without your consent. First, the U.S. Comptroller General, the U.S. Attorney General, the U.S. Secretary of Education, or state and local education authorities ("federal and state authorities") may allow access to your records and PII without your consent to any third party designated by a federal or state authority to evaluate a federal- or state-supported education program. The evaluation may relate to any program that is "principally engaged in the provision of education," such as early childhood education and job training, as well as any program that is administered by an education agency or institution. Second, federal and state authorities may allow access to your education records and PII without your consent to researchers performing certain types of studies, in certain cases even when we object to or do not request such research. Federal and state authorities must obtain certain use-restriction and data security promises from the entities that they authorize to receive your PII, but the authorities need not maintain direct control over such entities. In addition, in connection with Statewide Longitudinal Data Systems, state authorities may collect, compile, permanently retain, and share without your consent PII from your education records, and they may track your participation in education and other programs by linking such PII to other personal information about you that they obtain from other federal or state data sources, including workforce development, unemployment insurance, child welfare, juvenile justice, military service and migrant student records systems.

Review Process. The law provides students with the right to (1) inspect and review information contained in their education records, (2) challenge the contents of their education records, (3) have a hearing if the outcome of the challenge is unsatisfactory, and (4) submit explanatory statements for inclusion in their files if the decision of the hearing panels are unacceptable. The Registrar at Alma College has been designated by the institution to coordinate inspection and review procedures for student education records. These records include admissions, student affairs, academic and financial files, and academic, cooperative education and placement records.

Students wishing to review their education records must make written request to the Registrar listing the item(s) of interest. Only records covered by the Act will be made available within 45 days of the request. Students may have copies made of their records with

certain exceptions, (e.g., a copy of the academic record for which a financial "hold" exists, or a transcript of an original or source document which exists elsewhere). These copies will be made at the students' expense.

Education records do not include (1) records of instructional, administrative and educational personnel which are the sole possession of the maker and are not accessible or revealed to any individual except a temporary substitute; (2) records of the law enforcement unit; (3) student health records; (4) employment records; or (5) alumni records. Health records, however, may be reviewed by physicians of the students' choosing. The administrative offices at Alma College (Registrar, Financial Aid, Center for Student Opportunity, Communication and Marketing) maintain records of requests for personally identifiable information and permit students to review those records.

Restricted Information. Students may not inspect and review the following as outlined by the Act: (1) financial information submitted by their parents; (2) confidential letters and recommendations associated with admissions, employment or job placement, or honors to which they have waived their rights of inspection and review; or (3) education records containing information about more than one student, in which case the institution will permit access only to that part of the record which pertains to the inquiring student. The institution is not required to permit students to inspect and review confidential letters and recommendations placed in their files prior to January 1, 1975, provided those letters were collected under established policies of confidentiality and were used only for the purposes for which they were collected.

Challenge Procedures. A student who believes that the education records contain information that is inaccurate or misleading, or is otherwise in violation of privacy or other rights, may discuss the problems informally with the office in question. If subsequent decisions are made that agree with the student's requests, the appropriate records will be amended. If not, the student will be notified within a reasonable period of time that the records will not be amended and will be informed by that office of the right to a formal hearing. Student requests for formal hearings must be made in writing to the Provost. This administrator will inform the student of the date, place and the time of the hearing within a reasonable period of time after receiving a request. A student may present evidence relevant to the issues raised and may be assisted or represented at the hearing by one or more persons of his/her choice, including attorneys, at the student's expense. The hearing panel which will adjudicate such challenges will be the Provost, the Vice President for Student Life and the Vice President for Finance and Administration.

Decisions of the hearing panel will be final and will (1) be based solely on the evidence presented at the hearing, (2) consist of written statements summarizing the evidence and stating the reasons for the decisions, and (3) be delivered to all parties concerned. The education records will be corrected or amended in accordance with the decisions of the hearing panel, if the decisions are in favor of the student. If the decisions are unsatisfactory to the student, the student may place with the education records personal statements commenting on the information in the records, or statements setting forth any reasons for disagreeing with the decisions of the hearing panel. These statements will be placed in the education records, maintained as part of the student's records and released whenever the records in question are disclosed.

Students who believe that the adjudications of their challenges were unfair or not in keeping with the provisions of the Act may appeal in writing within 60 days to the President of the College. If the appeal proves to be unsatisfactory, the student may file a written complaint with the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20202-5920. Revisions and clarifications will be published as experience with the law and institution's policy warrants.

Requirements for Degrees

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 must be in Science and Mathematics)	
Bachelor of Science in Nursing	136 credits
Bachelor of Fine Arts	148 credits
Bachelor of Music	136–156 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 make application to the Registrar's Office during the week of registration of the term prior to graduation. All degrees for which a student qualifies will be awarded as completed.

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 candidate 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.

Alma College Credit

An Alma College credit is equivalent to 0.9 semester hours or 1.33 quarter hours.

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.

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 Depart-

mental 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 and Bachelor of Music 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.

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, anthropology and political science, environmental policy and sustainability, and music technology. For more information, contact the Provost's Office.

Comprehensive Evaluation

Most major 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, off campus. 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.

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.

Upper Level Courses

Upper Level Courses, identified by an asterisk before the number, must total at least 44 credits. Students with Interdepartmental Majors or a POE must earn 56 credits in upper level courses.

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 cross geographical, cultural or disciplinary boundaries. 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 student's ☞ requirement. The student must still take two Spring Terms.

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.

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, 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, 386 and 387 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 or in Mathematics 099 does not count toward the 136–156 credits required for graduation.

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

The writing competency of entering students is evaluated and freshmen are required to enroll in an English composition class during their first or second term. Most students demonstrate proficiency by completing ENG 101 with a "C" (2.0) or better grade. Exceptionally qualified first year students (as determined by ACT English sub-scores) may choose ENG 201 in place of ENG 101.

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 first-year and transfer students. Students who are not exempt on the basis of the qualifying ACT sub-score are required to take a placement exam to determine a recommended initial course. MTH 101 (or demonstrated competency) is a prerequisite for many other courses. Credit for MTH 099 does not count toward the minimum degree requirements.

Guide to General Education Distributive Requirements

To provide a broad education which 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 2 credits for all students entering Alma College as freshmen. Course may be taken in the first or second term.

II. Writing Proficiency **16 credits**

ENG 101 (or equivalent) with a grade of "C" or better, plus 12 additional credits of Quill writing courses. One of these courses must be in the major.

III. Second Language/International Awareness **8 credits**

One 4-credit course in a second language plus one of the following: an additional 4-credit course in the same or another second language, a term of study in a foreign country, or a 4-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 program. 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 one subject area) chosen from:

All courses in ART, COM, MUS, PHL, REL, THD

All ENG courses at the 110 level or higher

All language courses at the 112 level or higher

HUM 100

Social Sciences (SO) **12 credits**

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

All courses in ECN, HST, POL, SOA

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 programs.

NS-1 Life Sciences **4 credits**

4 credits chosen from:

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**

4 credits chosen from:

All courses in AST, CHM, GEO, PHY

ENV 110, PSC 101

NS-3 Mathematics/Computation **4 credits**

4 credits chosen from:

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

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, approved by the Provost, the Educational Policy Committee and the faculty. Additions to the curriculum for the ensuing year are published each fall in the Class Schedule.

Divisions, Departments and Programs of the College

Humanities

Art and Design
 Chinese
 Christian Education
 Communication
 English
 French
 German
 Greek
 Hebrew
 Humanities
 Latin
 Library Science
 Music
 New Media Studies
 Philosophy
 Religious Studies
 Spanish
 Theatre and Dance
 Women's and Gender Studies

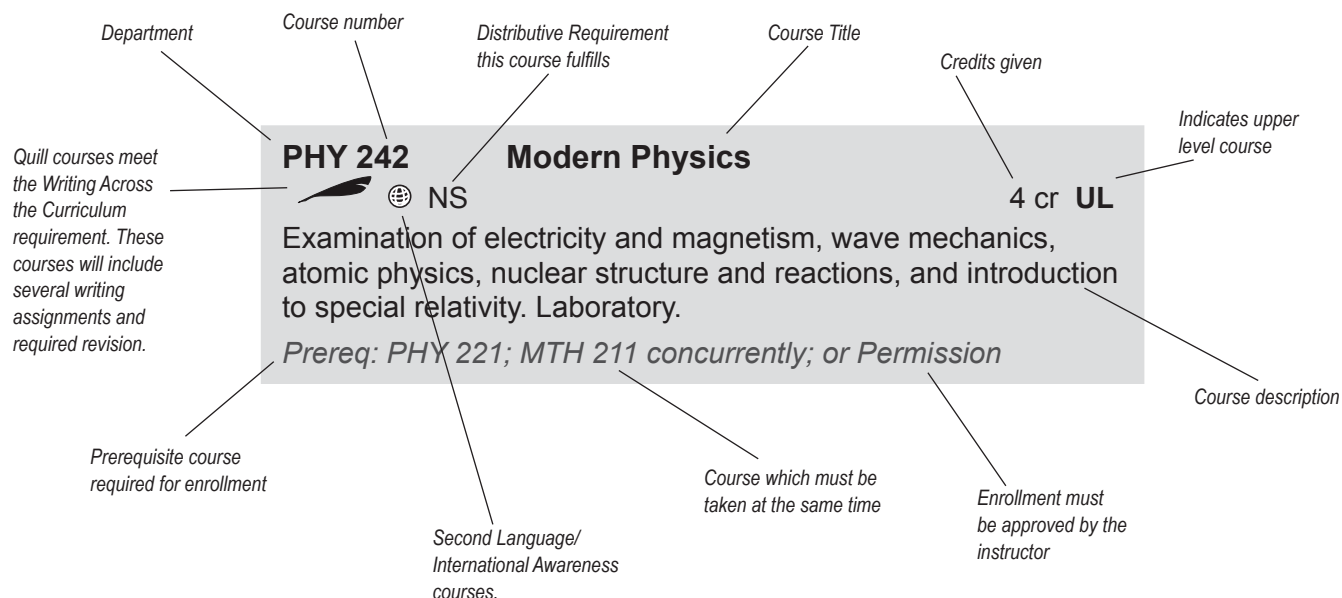
Natural Sciences

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
 Business Administration
 Economics
 Education
 Foreign Service
 Geography
 Gerontology
 History
 Political Science
 Public Affairs
 Sociology and Anthropology

Guide to Understanding Course Listings



General Studies

Exercise and Health Science (EHS)

All 100-level courses are graded pass/fail.

All courses numbered 200 and above will receive a letter grade.

EHS 110 Beginning Tennis 1 cr

This course has a course fee.

EHS 112 Beginning Golf 1 cr

This course has a course fee.

EHS 118 Racquetball 1 cr

This course has a course fee.

EHS 130 Beginning & Adv Beginning Swimming 1 cr

EHS 131 Adv Begin/Intermediate Swimming 4 cr

EHS 150 Fitness for Life 1 cr

Introduction to lifetime activities for physical fitness and cardiovascular health; includes fitness testing and personalized exercise prescription.

EHS 154 Conditioning 1 cr

EHS 156 Strength Training 1 cr

EHS 157 Aerobic Exercise 1 cr

EHS 160 Individual Activity 1 cr

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.

EHS 180 Topics in EHS 2-8 cr

EHS 199 EHS Independent Study 1-4 cr

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 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.

First Year Seminar (FYS)

As part of the General Education curriculum, first year students are required to successfully complete a minimum of two credits of a first year seminar. These 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. Some courses will apply toward the Quill requirement, as indicated on the schedule for the term.

FYS 101 First Year Seminar. Topics Vary. 2-5 cr

Foreign Service (FOR)

FOR 385 Foreign Service Practicum 1-8 cr **UL**

FOR 399 Foreign Service Independent Study 1-8 cr **UL**

FOR 400 Seminar 4 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. Requires instructor permission to register.

FOR 499 Foreign Service Independent Study 1-8 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.

Health Studies (HSS)

HSS 201 Health, Medicine and Humans 4 cr

Topics in physiology, health and medicine including a laboratory experience which emphasizes diagnostic testing. Sample topics include circulation, respiration, digestion, reproduction and excretion.

Honors Program (HNR)

Courses with this designation are open to students accepted into the Alma College Liberal Arts and Sciences Honors Program. As the foundational course in the Honors Program, the First-Year Seminar explores variable topics from a multi-disciplinary and integrative perspective while addressing essential issues of liberal education. For an explanation of the program requirements, please refer to the Honors Program

information in this catalog.

HNR 180A Honors Seminar	2-4 cr
HNR 181A Honors Seminar II	4 cr
HNR 280A Honors Seminar	4 cr
HNR 401 Honors Seminar	4 cr UL
HNR 480 Senior Honors Seminar	2-4 cr UL

Humanities (HUM)

HUM 100 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.	
HUM 180 Topics in Humanities	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.	
HUM 280 Topics in Humanities	1-4 cr
HUM 380 Topics in Humanities	4 cr UL
HUM 385 Humanities Practicum	4 cr UL
Requires instructor permission.	
HUM 399 Humanities Independent Study	1-4 cr UL
Requires instructor 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 101L Physical Science Lab	0 cr
PSC 180 Basic Physical Science	4 cr
An introductory course in physical science.	
PSC 380 Physical Science Concepts	4 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 Study 1-4 cr **UL**

Non-Departmental (STC)

Non-Departmental courses are offered during Spring Term along with a large number of departmental courses. An announcement of current Spring Term course offerings is issued each January. The following non-departmental courses have been offered. They do not count toward departmental majors.

STC 001 Ecuador	4 cr
STC 003 Cross-Cultural Learning in Scotland ☺	4 cr
International experience emphasizes active involvement with Scottish people both at home and at work. Students will carry out a research project which takes advantage of the site.	
STC 005 Interdis. Sem in Cross-Cultural Learning Cross-Cultural Learning ☺	4 cr
Cross-cultural learning experience offered in a significantly different culture. Consideration of the history, social structure, and geographic setting of the culture. Participation in community-oriented service. Location/country varies.	
STC 009 The Holocaust: Causes and Legacies ☺☺	4 cr
Team-taught service learning course. Exploration of causes and legacies of the Holocaust. Includes restoration of a Jewish cemetery in Poland. Through interaction with members of a local Jewish community and visits to former centers of Jewish culture and tradition (Berlin, Prague, Krakow), students gain first-hand experience.	
STC 012 New Zealand Experience ☺☺	4 cr
Students spend Spring Term studying natural history, flora and fauna, economics, politics, culture and other aspects of New Zealand.	
STC 014 Bustle & Grit of China and Its People ☺☺	4 cr
Explore how one of the world's most rapidly growing economies has affected the daily lives and ancient traditions of citizens in different parts of China, and the roles those citizens now play in the global economy.	
STC 017 Service Learning and Relief Efforts	4 cr

Service learning course. Introduction to relief efforts of local and global non-profit organizations (American Red Cross, United Way, Habitat for Humanity, Community Cafe and Hands to Honduras). Students perform service for local organizations, complete a service project and construct Web pages about their experiences. Journal required. Location varies.

American Studies (AMS)

Minor Requirements

1. Total credits: 30. No more than eight credits that have been applied toward another major or minor may be applied to the AMS minor.
2. Core: 22 credits. Each student must take AMS 101, 102 and 301, plus four courses from the following list (no more than one course per department): ECN 201; ENG 260 or 261; HST 104, 105, 180A or 228; POL 101; and SOA 101.
3. Advanced electives: eight credits. Each student must take two courses from the following list (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 SOA 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)." (Open only to freshmen and sophomores.)

AMS 102 Perspective American Experience 2 cr
Focuses on seminal sources for deepening one's perspectives on "America." (Open only to freshmen and sophomores.)

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

Art and Design (ART)

Three major programs are offered by the Art and Design Department. The Bachelor of Fine Arts (B.F.A.) degree is a pre-professional program in studio art or design. The B.F.A. is offered in the areas of ceramics, drawing, graphic design, digital art, painting, photography, printmaking, sculpture and three-dimensional design. The Bachelor of Arts (B.A.) degree program provides a more general study suitable for those wishing to combine their study of art with other liberal arts disciplines. The teaching major (B.A. with LQ comprehensive K-12 certification) is combined with a major in Secondary Education to prepare those planning to teach in the public schools.

Bachelor of Fine Arts Degree Requirements

1. Seventy-two credits in Art which must include ART 101, 121, 122, 220 or 223, 226, 227, and 500. An upper level quill course in the major is required for graduation.
2. Twelve credits of drawing studio including ART 101, 227 and an advanced drawing course from the 390-490 series or its equivalent.
3. A coherent area of concentration of at least 20 credits in Art made up of courses at the 200-400 level.
4. Twelve credits of Art History including ART 112, four credits of Art History from ancient art (Art Before 1300) and at least one four-credit, upper level Art History course.
5. Students must retain their portfolio of artwork created throughout their college career in order to participate in ART 500A/500B and the senior exhibition.
6. The capstone experience, composed of three essential consecutive components, is to be completed during the thesis exhibition year: ART 500A/500B; a senior exhibition acceptable to the Department; and a successful completion of your Advisory Board Review.
7. A 3.0 GPA in Art courses.
8. Acceptance to this program requires the candidate to submit a portfolio after completing 24 studio credits and to have it approved by the Department. This should be done no later than December of the junior year. The Department reserves the right to review your portfolio for acceptance into the program if the major is declared during the junior year or the overall GPA is less than 3.0.
9. A total of 148 credits.
10. A B.F.A. in a design field must include ART 230 in addition to the courses listed above.

Program Considerations for Bachelor of Fine Arts Major

It is strongly recommended that each major take at least four credits in a digitally based course appropriate to his/her area of emphasis.

Bachelor of Arts (Art Major) Degree Requirements

1. Thirty-six credits in Art which must include ART 101, 121, 122, 220 or 223, 226, and 500; eight credits of Art History including ART 112 and at least one four-credit upper level

Art History course. An upper level quill course in the major is required for graduation.

2. Students must retain their portfolio of artwork created throughout their college career in order to participate in ART 500A/500B and the senior exhibition.
3. The capstone experience, composed of three essential consecutive components, is to be completed during the thesis exhibition year: ART 500A/500B; a senior exhibition acceptable to the Department; and a successful completion of your Advisory Board Review.
4. The Department reserves the right to review your portfolio for acceptance into the program if the major is declared during the junior year or the overall GPA is less than 2.5.

Art Minor Requirements

Twenty-four credits including two courses from ART 101, 121, or 122; two courses from Art History; and two studio courses from the 200-400 level.

Art History Minor Requirements

Twenty-four credits of Art History, which must include:

1. ART 111 and 112.
2. Four upper-level Art History courses chosen from ART 250, 280 (which may be taken more than once for credit if under different topics), 341, 342, 343, 344, 345, 346, 348, 349, 385, 399, 400 or other approved course. Students may substitute up to four upper-level credits from other related disciplines with prior departmental 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 semesters of foreign language coursework in their curriculum.

B.A. or B.F.A candidates in ART may count up to eight credits toward both the major and the Art History minor requirements.

Completion of a senior thesis is strongly encouraged for students considering graduate school.

Teacher Certification Requirements

1. Forty-eight credits in Art which must include ART 101, 121, 122, 220 or 223, 226 and 500; three upper level studio courses in one studio area (these may include 220, 223, or 226); 111, 112, 345, and 346. **Note:** Candidates for the 72-credit B.F.A. in Art and Design will follow the requirements listed for that degree with the addition of a fourth course in Art History, which will be substituted for one studio elective outside the student's area of concentration. For Teacher Certification, there can be no substitutions for required courses.
2. Fourteen credits in Art Education which must include EDC 306, 345, 354 and 445a. Art majors will student teach in a secondary, grade 7-12 classroom and must take EDC 445a either in the term prior to, or in their student teaching term.
3. A second major in Secondary Education which includes other professional education courses specified by the Department of Education in the requirements for secondary certification. **Note:** Professional education course requirements reflect Michigan Department of Education standards for teacher education and are subject to change.


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 Drawing Studio

AH 4 cr
Exploration of graphic media with emphasis on developing drawing skills. Course fee.

ART 111 Art History I
 AH 4 cr
Survey of human artistic achievement from its earliest visual record to the Medieval Period. Course fee.

ART 112 Art History II
 AH 4 cr
Survey of art from the Renaissance to the 20th century. Course fee.

ART 121 2-Dimensional Design
AH 4 cr
Introduction to the elements and principles of design as the foundation needed to create conceptually and aesthetically resolved visual problems in the plastic, graphic and media arts. Course fee.

ART 122 Tools & Materials
AH 4 cr
Introduction to studio work with emphasis on three-dimensional theory and the use of basic tools and techniques. Art majors are given first preference for enrollment. Requires instructor permission. Course fee.

ART 180 Topics in Studio Art
AH 3-8 cr
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. May require a course fee.

ART 220 Sculpture Studio
AH 4 cr UL
Exploration of sculptural form through the processes of modeling, carving and assemblage. Consideration of sculptural ideas and imagery from various times and cultures with emphasis on contemporary practices. Day trip to Meijer Sculpture Gardens, Grand Rapids. Course fee.

ART 222 Printmaking Studio
AH 4 cr UL
Exploration of relief, intaglio and planographic techniques with emphasis on works of art in multiples. Some attention to the history of the print as art, the craft of printing, and print preservation and connoisseurship. Course fee.


ART 223 Ceramics Studio
AH 4 cr UL
Introduction to direct forming processes; handbuilding and wheel-throwing. Investigation of the uses of slips, glazes and other methods of surface enrichment. Participation in class kiln firings. Course fee for clay.

ART 224 Photography Studio
AH 4 cr UL
Introduction to basic 35mm traditional and digital photography techniques. Students will develop and print using traditional black and white film. Scanning and Digital Asset Management techniques will be used as means to edit, manage and archive photographic work. All final images are gelatin silver prints created using traditional wet darkroom methods. Traditional 35mm SLR camera is required. Course fee.


ART 226 Painting Studio
AH 4 cr UL
Introduction to basic procedures, tools and materials for oil and acrylic painting. Emphasis on composition, form and color. Discussion of historical development of all painting media. ART-101 or ART-121 recommended as preparation for this course. Course fee.


ART 227 Life Drawing Studio
AH 4 cr UL
Introduction to expressive drawing of the human figure including some study of anatomy. ART-101 recommended as preparation for this course. Students are charged a course fee to cover the cost of models.

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-101, 121, 224, 232 or NMS-120

ART 231 Raku Ceramics
 AH 4 cr UL
An introduction to the history, aesthetics and techniques of raku-fired ceramics. Course fee. Requires instructor permission.


ART 232 Digital Imaging Studio
AH 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. ART-101, 121 or 224 recommended as preparation for this course. Course fee.


ART 250 Contemporary Art in New York
 AH 4 cr UL
Introduction to the major artistic movements and critical theory in the last two decades. Students spend eight days in New York City exploring galleries, museums and artists' studios. Seminar includes readings, discussion and a research paper on a special topic. Requires instructor permission. Course fee.


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, art history in Rome, and world ceramics: London). Course fee.


ART 290 Directed Studio
AH 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.) Requires instructor permission. Course fee.

ART 299 ART Independent Study
1-4 cr UL
Individual study of a subject in Art or Art History. Requires instructor permission. Course fee may apply.

ART 341 Survey Ancient Art
 AH 4 cr UL
Introduction to the arts of ancient Greece and Rome with emphasis on the context in which they were produced. Survey of ancient history, literature and mythology are included to enrich students' comprehension of the artworks. Course fee.

ART 342 Medieval Art
 AH 4 cr UL
Introduction to the arts of Medieval Europe, with an emphasis on the context in which they were produced. Survey of Medieval history, literature and religion are included to enrich students' comprehension of the artworks. Course fee.

ART 343 Renaissance Art
 AH 4 cr UL
Introduction to the arts of the Renaissance in Northern and Southern Europe, with an emphasis on the context in which they were produced. Surveys of Renaissance history, literature and religion are included to enrich students' comprehension of the artworks. Course fee.

ART 345 Survey of Non-Western Art
 AH 4 cr UL
An introduction to the visual arts of India and Southeast Asia, China, Japan and Korea, the Pacific, and the Americas with emphasis on the historical and cultural contexts in which they were

created. Course requires sophomore standing to register. Course fee.

ART 346 Modern American Art
AH 4 cr UL
Survey of American artists, architects and craftsmen from the Civil War period to the present day. Consideration is given to the influences of technology, women and minority artists in the development of American art. Course fee.

ART 380 Topics in Studio Art
AH 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 taught overseas during Spring Term. Course fee.
Prereq: ART-101, 121, 224 and 232 or Permission

ART 385 ART Practicum
4 cr UL
Designed to provide on-site working experiences in the student's area of interest. Examples of typical practica 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. Practicum arranged with assistance of faculty advisor. Departmental approval is required.
Prereq: ART-101, 111, 112, 121, 122 or Permission

ART 390 Advanced Directed Studio
AH 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. Advanced Directed Studio Projects have been offered in, but are not limited to, the following: Ceramics: wheel-thrown ceramics, ceramic sculpture, glaze chemistry. Drawing: advanced drawing, life drawing, color media, scientific illustration. Graphic Design: corporate/visual identity, brochure design, digital prepress. Painting: advanced painting, color theory, airbrush painting, watercolor. Photography: small and large format camera techniques, color photography. Printmaking: intaglio, lithography, monotype, collagraphy, screenprinting. Sculpture: welded and constructed forms, casting media, carving media. Three-Dimensional Design: furniture design, jewelry, papermaking, fiber. Special Projects: performance art, bookarts, studio practices for teachers, liturgical art. Students may take up to six Advanced Directed Studio Project courses. Consult the Art Students' Miscellany for specific course offerings. Requires instructor permission. Course fee.

ART 399 ART Independent Study
4 cr UL
Individual study of a subject in Art or Art History. Requires instructor permission. Course fee may apply.

ART 400 Art History Thesis
AH 2-4 cr UL
Readings, discussion and research paper on special topics in Art History. Requires instructor permission. Course fee.

ART 490 Advanced Directed Studio
AH 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. Advanced Directed Studio Projects have been offered in, but are not limited to, the following: Ceramics: wheel-thrown ceramics, ceramic sculpture, glaze chemistry. Drawing: advanced drawing, life drawing, color media, scientific illustration. Graphic Design:

corporate/visual identity, brochure design, digital prepress. Painting: advanced painting, color theory, airbrush painting, watercolor. Photography: small and large format camera techniques, color photography. Printmaking: intaglio, lithography, monotype, collagraphy, screenprinting. Sculpture: welded and constructed forms, casting media, carving media. Three-Dimensional Design: furniture design, jewelry, papermaking, fibers. Special Projects: performance art, bookarts, studio practices for teachers, liturgical art. Students may take up to six Advanced Directed Studio Project courses. Consult the Art Students' Miscellany for specific course offerings. Requires instructor permission. Course fee.

ART 499 ART Independent Study
4 cr UL
Individual study of a subject in Art or Art History. Requires instructor permission. Course fee.

ART 500 ART Senior Show
AH 2-4 cr UL
Participation in a Senior Exhibit with an emphasis on selection and presentation of creative work. Explores all aspects of show preparation, including publicity, gallery installation, reception, production of an electronic portfolio, and Advisory Board Critique. Total of four credits required for senior Art and Design majors. Requires instructor permission. Course fee.

ART 500A Senior Show/Thesis Exhibition
AH 2 cr UL
Explores all aspects of show preparation, including emphasis on selection and presentation of creative work, publicity, gallery installation, reception and the production of an electronic portfolio. The capstone experience ends with participation in the Senior Exhibit and Advisory Board Critique in the winter semester. All three components (ART 500A/500B, Senior Exhibit and Advisory Board) must be approved and passed for completion of the BA or BFA. Students must consecutively take this course for 2 credits in the fall semester and 2 credits in the winter semester of their thesis exhibition year for a total of 4 credits. Requires instructor permission. Course fee.

ART 500B Senior Show/Thesis Exhibition
AH 2 cr UL
Explores all aspects of show preparation, including emphasis on selection and presentation of creative work, publicity, gallery installation, reception and the production of an electronic portfolio. The capstone experience ends with participation in the Senior Exhibit and Advisory Board Critique in the winter semester. All three components (ART 500A/500B, Senior Exhibit and Advisory Board) must be approved and passed for completion of the BA or BFA. Students must consecutively take this course for 2 credits in the fall semester and 2 credits in the winter semester of their thesis exhibition year for a total of 4 credits. Requires instructor permission. Course fee.

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-101

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. Requires enrollment in PHY-221 concurrently.

Biochemistry (BCM)

Major Requirements

1. Sixty-four credits consisting of the following: Biochemistry 321, 422 and 430; Biology 121, 204 and 308; Chemistry 115, 223, 224, 230, 331 and 332; Mathematics 121 and 122; Physics 121 and 122.
2. Students must consult with the Biochemistry chair in their junior year for approval of their programs if deviation from the above curriculum is being considered. Approval for such changes requires written petition of the department.
3. Successful completion of the departmental Senior Comprehensive Examination.

Program Considerations

1. Potential majors are advised to schedule Mathematics 121-122 and Physics 121-122 in the freshman and sophomore years so they may begin Chemistry 331-332 in the junior year.
2. Take note that BCM 422 and BCM 430 are offered in the winter terms of alternating years.
3. This is an excellent major for pre-medical students, but additional electives are strongly advised.
4. Students bound for graduate school should make careful course selections to support their area of emphasis. Participation in research and additional course work in biology, chemistry and mathematics is desirable.
5. Completion of an independent research project culminating in a senior thesis is encouraged.
6. 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, count towards the Distributive Requirements in the Natural Sciences - Life Sciences.

BCM 180 Topics in Biochemistry
NS1 1-4 cr
This lab-only course is for students curious for an investigational experience that uses DNA/RNA methods. You will be teamed with a junior/senior student enrolled in BCM/BIO 430, thus providing a peer-mentored experience. This class is permission only, registration is only available during drop/add. Course fee.

BCM 319 Toxicology
NS1 4 cr UL
The science and art of toxicology has ancient origins, such as our use of venoms for hunting and plant extracts for assassinations. Modern toxicology is the study of the adverse effects of xenobiotics, a general term applied to any chemical which is foreign to the organism under investigation. This field is covered in four units: general principles, system responses, toxic agents, and environmental toxicology. In addition to one or two daily lectures, students participate in an investigative laboratory using the approaches of chemical analysis, cell culture, and organismal response. 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 380 Topics in Biochemistry
NS1 1-4 cr UL
Investigation of selected topics in biochemistry, such as molecular methods and toxicology, through student participation in lecture, discussion and/or laboratory work. Course fee determined by topic. Requires instructor permission.

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.
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.
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
 4 cr UL
Independent laboratory research of an original problem resulting in a thesis and public presentation. Required for departmental honors. Course fee. Requires instructor permission.

Biology (BIO)

Major Requirements

1. Twenty credits of Biology core: BIO 121, 202, 203, 204, 290 and 490.
2. Electives in either General Studies or an Area of Concentration (indicated on transcript).
 - 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, 322, 360, and 361.
3. Completion of the MFAT examination.

Teaching Major

- Thirty-six credits from the Department which must include the following:
1. Twenty credits of BIO core: BIO 121, 202, 203, 204, 290, and 490.
 2. Four credits of BIO 302.
 3. Twelve credits of upper level BIO electives.

4. 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 Chemistry 115, 223, 224 and 230, Physics 112-113 or 121-122, and Mathematics 112-113 or 116 or 121-122. 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 BIO 121, 202, 203; and 12 credits of upper level BIO electives.

Teaching Minor Requirements

Twenty-four credits which must include BIO 121, 202, 203, 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 General 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 125 Molecular Techniques

NS1 4 cr
Introduction to basic molecular biology laboratory techniques. Prepares students for upper level courses and summer research internships in the molecular sciences. Spring Term offering. Laboratory. Course fee. Open to First-year and sophomore students only.

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 202 General Botany

NS1 4 cr UL
An introduction to the study of plant life, from algae through flowering plants, and fungi. Plants will be studied in relation to the environment and human activities. Morphology, ecology, and evolution will be stressed with some identification and collection of local flora. Laboratory. Course fee.

BIO 203 General Zoology

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.

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 Developmental Biology

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 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 and Sophomore Standing

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. Requires instructor 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.
Prereq: BIO-204

BIO 302 Ecology

NS1 4 cr UL
Investigation of population, community and ecosystem structure, dynamics and energetics. Laboratory and field studies. Course fee. Requires 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 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. Requires sophomore standing or permission. Laboratory. Course fee.

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. Requires junior or senior standing or permission. Laboratory. Course fee.

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 315 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. Spring term offering. May be elected more than once for credit. Requires instructor permission to register. Course fee.

BIO 319 Toxicology
NS1 4 cr UL
The science and art of toxicology has ancient origins, such as our use of venoms for hunting and plant extracts for assassinations. Modern toxicology is the study of the adverse effects of xenobiotics, a general term applied to any chemical which is foreign to the organism under investigation. This field is covered in four units: general principles, system responses, toxic agents, and environmental toxicology. In addition to one or two daily lectures, students participate in an investigative laboratory using the approaches of chemical analysis, cell culture, and organismal response. Course fee.
Prereq: BIO-121 and CHM-230

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 322 Plant Physiology
NS1 4 cr UL
Study of seed plant biology with an emphasis on relationships of physiology, anatomy and morphogenesis. Laboratory. Course fee.
Prereq: BIO-121 and 202

BIO 330 Immunology
NS1 4 cr UL
Examination of the immune system and its role in disease. Emphasizes current research articles and experimental procedures. Laboratory. Course fee.
Prereq: BIO-204

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-204

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-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 Permission (additional prerequisites vary with topic)

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 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. Requires instructor permission.

BIO 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. Cross-listed with BCM 430. Course fee.
Prereq: BCM-321 and BIO-204 or Permission

BIO 490 Senior Capstone Seminar
NS1 2 cr UL
Students will present the results of their biology portfolio in a public forum.
Prereq: BIO-290 and 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. Requires instructor permission. Course fee.

BIO 500 Senior Thesis
4 cr UL
Independent laboratory research of an original problem culminating in a thesis. Course fee. Requires instructor permission.

Biotechnology (BTC)

Major Requirements

1. Core: 54 credits. Each student must take 20 credits of CHM 115, 223, 224, 230 and BCM 321; 8 credits of BIO 121 and 204; 8 credits of PHY 112 or 121, and 113 or 122; 8 credits of Computation including 4 credits of MTH at 112 or higher, and Biostatistics; 4 credits of BTC Techniques; 6 credits of Journal Club BTC 101, 201, and 301.
2. Successful completion of the capstone experience, BTC 401 (2 credits).
3. Electives: 12 credits. Each student must take at least 4 additional credits from BTC offerings and 8 credits from BIO 207 or IPH 226; BIO 308, 330; BCM 430; IPH 340; PSY 201.
4. Successful qualification for and completion of an intensive summer research experience in an academic or industrial setting.
5. Integrative Electives: 12 credits. Students will take at least 12 biotechnology-related credits outside the natural sciences, which must be approved by the program (See item 6 under Program Considerations).

Program Considerations

1. 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. These are currently provided in the Winter Term.
- 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 conversancy of 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 125 Molecular Techniques NS1 4 cr
Introduction to basic molecular biology laboratory techniques. Prepares students for upper level courses and summer research internships in the molecular sciences. Spring Term offering. Laboratory.

BTC 201 Biotechnology Journal Club 2 cr **UL**
Gain familiarity with, and conversancy of 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 301 Biotechnology Journal Club 2 cr **UL**
Gain familiarity with, and conversancy of 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 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 BIO-320. Course fee.
Prereq: BIO-121 and CHM-223

BTC 401 Biotechnology Journal Club 2 cr **UL**
Gain familiarity with, and conversancy of 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 500 Senior Thesis 4 cr **UL**
Independent laboratory research of an original problem resulting in a thesis and public presentation. Required for departmental honors. Requires instructor permission.

Business Administration (BUS)

Major Requirements

Thirty-six credits which must include the business Core Courses: BUS 121, 221, 222 (standard 4-credit course or 222 Modular which includes 222A and one from 222B, 222C, 222D, or 222E), 225, 309, 323, 333, 440 and 4 credits from the following: BUS 340, 341, 342 or 442; BUS 150, 151 and/or 350; BUS 385/386; BUS 299/399/499; BUS 500.

Accounting Options

1. Accounting Major: Fifty-two credits which must include the Core Courses (36 credits): BUS 121, 221, 222 (standard 4-credit course or 222 Modular which includes 222A and one from 222B, 222C, 222D, or 222E), 225, 309, 323, 333, 440 and 4 credits from the following: BUS 340, 341, 342 or 442; BUS 150, 151 and/or 350; BUS 385/386; BUS 299/399/499; BUS 500; and 16 additional credits including BUS 321, 322, 331 and 425.

2. Professional Accounting (CPA) Major: Students interested in pursuing our Professional Accounting (CPA) Major can complete the additional coursework required in order to sit for the exam. The State of Michigan requires five years of coursework in order to sit for the CPA exam (168 credit hours at Alma College). **However, with careful planning, a student is able to complete the 168 credit hours in four years at Alma College.** In addition to the courses required for the Accounting Major, students must complete the following courses for the Professional Accounting (CPA) Major: BUS 325, 326 (in place of 225), 422, 426 and 449. As part of their cognates, students must also take ECN 201 and MTH 116. Total Credit Hours: 68.

Finance Major

Forty-four credits which must include the Core Courses (36 credits): BUS 121, 221, 222 (standard 4-credit course or 222 Modular which includes 222A and one from 222B, 222C, 222D, or 222E), 225, 309, 323, 333, 440 and 4 credits from the following: BUS 340, 341, 342 or 442; BUS 150, 151 and/or 350; BUS 385/386; BUS 299/399/499; BUS 500; and 8 additional credits selected from the following: BUS 319, 410 or 429.

Management Major

Forty-four credits which must include the Core Courses (36 credits): BUS 121, 221, 222 (standard 4-credit course or 222 Modular which includes 222A and one from 222B, 222C, 222D or 222E), 225, 309, 323, 333, 440 and 4 credits from the following: BUS 340, 341, 342 or 442; BUS 150, 151 and/or 350; BUS 385/386; BUS 299/399/499; BUS 500; and 8 additional credits selected from the following: BUS 223, 301, 324, 423, 427, or other management electives.

Marketing Major

Forty-four credits which must include the Core Courses (36 credits): BUS 121, 221, 222 (standard 4-credit course or 222 Modular which includes 222A and one from 222B, 222C, 222D or 222E), 225, 309, 323, 333, 440 and 4 credits from the following: BUS 340, 341, 342 or 442; BUS 150, 151 and/or 350; BUS 385/386; BUS 299/399/499; BUS 500; and 8 additional credits selected from the following: BUS 334, 336, 337, 338, 339, 401, 428, 435, 436 or a 4-credit NMS course.

Minor Requirements

Twenty-eight credits including BUS 121, 221, 222, 309, 323, 333, and 440.

Health Care Administration Major (HCA)

Fifty-six credits that include 40 credits from BUS 121 or 131, 221, 222, 309 or 319, 323 or 329, 328, 385, 440 or 441; IPH 430; and PHL 227 or 229; and 16 credits of electives from BUS 324 or 324a, 333 or 334, 380, 450; IPH 210, 331, 340; PSY 236, 260; or SOA 234.

International Business Administration Major (IBA)

Thirty-two credits in Business Administration including BUS 121, 221, 222, 309, 323, 333, 440 and four credits of electives in BUS; 12 credits in Economics including 201, 202 and 331/332; and 24 credits (or proficiency) in a foreign language beginning at the 111 level.

Secondary Teaching Major Requirements

Thirty-six credits including BUS 121, 221, 222, 309, 323, 327, 333, 440 and one of the following: 401 or 410.

Cognate courses required for all Business Majors and Minors:

1. ECN 201 or 202;
2. 4 credits of Data/Business Analytics;
3. One course from MTH 113, 116, 121 or 341, BTC 280 (biostatistics), PSY 220 or other courses approved by the department;
4. Business Application Software (2 credits) OR successful completion of appropriate tutorials on <http://www.lynda.com/> or similar web sites;
5. One of PHL 227, 228, 229 or any other ethics course approved by the department;
6. At least one course in COM or NMS or any other communication course approved by the department (students may take any 2 or 4 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 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 clinic. 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.

BUS 150 Entrepreneurs in Action I

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 of BUS-150, 151 and BUS-350 count toward the Business Administration major.

BUS 151 Entrepreneurs in Action II

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 of BUS-150, 151 and BUS-350 count toward the Business Administration major. Permission is required for this course.

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 will not be allowed to register for this course. 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 131 or taken concurrently, MTH-101 or equivalent;

BUS 222 Managerial Accounting & Decision Making

4 cr UL

Study of accounting in the manufacturing and service sector, cost allocation and analysis, development of cash flow statements and

analysis of financial statements. Emphasis on how cost and managerial accounting concepts and methods apply to the decision-making process. Students cannot earn credit for both BUS-222 and BUS-222A-E.

Prereq: BUS-221

BUS 222A Managerial Accounting & Decision Making

2 cr UL

First seven week module of managerial accounting topics, focusing on financial statement analysis, definition of managerial accounting, Cost-Volume-Profit, incremental analysis and decision making, budgeting models, and basics of capital budgeting. Course objective is to provide analysis skills needed by managers. Students cannot earn credit for both BUS-222 and BUS-222 modular (A-E).

Prereq: BUS-221

BUS 222B Decision Models

2 cr UL

Course uses Cost-Volume-Profit and incremental analysis techniques to allow scenario analysis and sensitivity analysis in business decision cases, as well as preparing budget models for operational and capital budgets. Some basic data analytics included. Typical cases will be special orders, add/drop product line, variable/fixed cost shifts, etc. Students cannot earn credit for both BUS-222 and BUS-222 modular (A-E).

Prereq: BUS-221 and 222A

BUS 222C Healthcare Accounting

2 cr UL

Current topics in health care accounting and financial management, including revenue cycle and reimbursement, current status of government programs and regulations, cost accounting techniques relevant to health care, non-hospital providers (nursing homes, physician group), etc. Students cannot earn credit for both BUS-222 and BUS-222 modular (A-E). Elective credit for HCA majors with BUS-222 credit with permission of Department Chair.

Prereq: BUS-221 and 222A

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 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.

Prereq: BUS-121 or Permission

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 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: BUS-222, ECN-201, ECN-202, MTH-116

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, 222, and 309

BUS 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 131; BUS-221, 222 and Junior Standing

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: BUS-222

BUS 322 Intermediate Accounting II

4 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 Management

4 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: BUS-222 and ECN-202; one from MTH-113, 116, 121, 341 or PSY-220 or Permission

BUS 324 Human Resource Management

4 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 I

4 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. Requires Junior standing to register.

BUS 326 Business Law II

4 cr **UL**

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

BUS 327 Law for Educators

4 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. Requires Junior standing to register.

BUS 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 & advocacy, HIPAA/Privacy, public health laws, and other related topics.

Prereq: BUS-222, ECN-201 and 202, MTH-116, or Permission

BUS 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 131 and BUS-221 and 222 and Junior Standing

BUS 331 Cost Accounting

4 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: BUS-222

BUS 333 Marketing and Society

4 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: BUS-222; ECN-201 or 202; one of MTH-113, 116, 121, 341, PSY-220 or Permission

BUS 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: BUS-222, ECN-201 and 202, MTH-116, 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 Marketing2 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 Management4 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, 222, 309, 323 and 333

BUS 341 Applications & 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, 222, 225, 309, 323 and 333

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, 222, 309, 323 and 333

BUS 344 Health Care Human Resource Management4 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: BUS-329 or Permission

BUS 350 Entrepreneurs in Action III2 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 of BUS-150, 151 and BUS-350 count toward the Business Administration major. Permission is required for this course.

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 4 credits from BUS-222, 222A, 222B, 222C, 222D or 222E

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 405 Health Informatics4 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: BUS-329 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, 222, and 309

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. Requires senior standing to register.

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, 222, 309, 323, and 333

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: BUS-222

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: BUS-222

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 429 Multinational Finance4 cr **UL**

Analysis of foreign exchange issues and risk management, international investment and capital budgeting, global securities and capital markets.

Prereq: BUS-309

BUS 433 Exploring Health Disparities4 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 131 or Permission

BUS 435 Marketing Research4 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: BUS-222; ECN-201 or 202; one of MTH-113, 116, 121, 341 or PSY-220 or Permission

BUS 436 Personal/Sales Management4 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 Management4 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, 222, 225, 309, 323, 333

BUS 441 Strategic Planning in Health Care4 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: BUS-319, 329 and Senior Standing

BUS 442 Accounting Information Systems4 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 and Senior Standing

BUS 446 Cross-Cultural Studies4 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 Auditing4 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 450 Long-Term Care Management4 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 long-term care field in the future.

Prereq: BUS-329 or Permission

BUS 480 Topics in Business Administration2-4 cr **UL**

Current topics in Business Administration including: Business Leadership and Society, Commercial Banking, Government and Not for Profit Accounting, Personal Finances, Physical Distribution Management, Real Estate Management, Sales Management and other topics as the need arises.

BUS 499 Business Admin. Independent Study1-4 cr **UL**

Requires instructor permission.

BUS 500 Senior Thesis4 cr **UL**

Requires instructor permission. Student must have attained senior standing and a GPA of 3.5 or better that is calculated on all BUS courses taken.

Chemistry (CHM)

Major Requirements

1. Core: 28 credits consisting of CHM 115, 223, 224, 230, 320, 331, and 332.
2. Areas of Concentration:
 - a. Chemistry: 8 credits from CHM 251, 300 or 400 level courses, BCM 321 or 422. At least 4 credits must be at or above the 300 level.
 - b. American Chemical Society Certified Degree: CHM 313 and 314; BCM 321; and 4 credits chosen from CHM 399, 411, 499, or BCM 422.

- c. Pre-Medicine: BCM 321 and 4 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 Mathematics 121-122 and Physics 121-122 (or Physics 112-113) in the freshman and sophomore years so they may enroll in Chemistry 331-332 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 Chemistry 313, 314 and 411, Mathematics 210 and 211 should be considered. Experience with calculus based physics (Physics 121-122) is preferred over Physics 112-113.

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 the Chemistry Department by:

1. Having 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 with eight credits numbered 300 or above and which may include Biochemistry 321 and 422.

Teaching Major Requirements

Completion of the requirements for the Chemistry major.

Teaching Minor Requirements

Twenty-four credits that must include Chemistry 115, 223, 224, 230 and Biochemistry 321; and four credits chosen from Chemistry 320, 331 or 332.

American Chemical Society Certified Degree

Completion of Chemistry 115, 223, 224, 230, 313, 314, 320, 331, 332, 450, Biochemistry 321 and four credits chosen from Chemistry 399, 411, 499, or Biochemistry 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 103 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. Laboratory. Course fee.

Prereq: MTH-101

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.

CHM 199 Chemistry Independent Study

1-4 cr

Planned program of reading or laboratory experimentation. Course fee. Requires instructor 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 Physical Chemistry I

NS2 4 cr UL
Study of the physical principles of chemistry with emphasis on thermodynamics, quantum mechanics, statistical mechanics and kinetics. Laboratory. Course fee.
Prereq: CHM-230, MTH-122 and PHY-113 or 122

CHM 332 Physical Chemistry II

NS2 4 cr UL
Study of the physical principles of chemistry with emphasis on thermodynamics, quantum mechanics, statistical mechanics and kinetics. 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. Requires instructor permission.

CHM 411 Advanced Organic Chemistry

NS2 4 cr UL
Advanced study of modern synthetic reactions, mechanisms and theoretical perspectives. 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. Requires Senior standing and BCM or CHM major.

CHM 480 Topics in Chemistry

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. Requires instructor permission.

CHM 500 Senior Thesis

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

Cognitive Science (COG)

Minor Requirements

1. Complete a major in one of the member disciplines (Computer Science, Psychology or Philosophy) or other approved program.
2. Twenty-four credits beyond the major, including
 - a. COG 120 and 180.
 - b. Six-10 additional credits chosen from COG 180, 280, 399, 480 or 499.
 - c. 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.
3. No more than eight credits that have been applied to another minor may be applied to the Cognitive Science minor.

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

COG 499 Cognitive Science Independent Study

1-4 cr UL
Requires instructor permission.

Communication (COM)

Major Requirements

Fifty-two credits which must include:

1. COM 101, 111, 350, 385 (P/F only), and 450.
2. One ethics class selected from PHL 126, 225, 227, 228 or 229.
3. Twenty-eight credits from one of the two concentrations below.

Relational and Cultural Communication

- a. COM 201 and 220.
- b. Eight credits selected from COM 123, 223, 281, 320, 381.
- c. Four additional COM credits from the Strategic and Public area, or from NMS.
- d. Eight credits of cognate coursework selected from: COG 120, 180, 280; IPH 223; PSY 212, 236, 240, 245; PHL 240; REL 202, 210; SOA 220, 241, 243, 251, 353; WGS 101, 102, 280; or other course pre-approved by the Department. Cognates may count toward second majors

and minors.

Strategic and Public Communication

- a. COM 211 and 302.
- b. Eight credits selected from COM 202, 227, 243, 253, 282, 327, 353, 382.
- c. Four additional COM credits from the Relational and Cultural area, or from NMS.
- d. Eight credits of cognate coursework selected from: BUS 323, 333, 334, 401; IPH 270, 331; ENG 270; PAF 150, 350, 450; POL 141, 242, 341, 345; SOA 234, 326; or other course pre-approved by the Department.
Cognates may count toward second majors and minors.

Note: No more than 4 credits of COM 385 may be counted toward the COM major, and no more than 8 credits of COM coursework may be counted toward another major or interdisciplinary minor.

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, 12 of which must be upper level. Must include COM 101, 111, 450; 4 credits from the Relational/Cultural area; 4 credits from the Strategic/Public area; and 4 additional COM credits.

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 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 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
Examination of messages, roles, rules 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 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 & 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 in COM or Permission; Sophomore Standing

COM 327 Propaganda & 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.
Prereq: COM-227 or Permission

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 Sem in Relational Com Rsrch & Practice
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 Sem in Strategic Com Rsch & Practice
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
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. Computer Science 120, 204, 220, 230, 240 and 310 .
2. Fourteen additional credits from a. to c. below:
 - a. Eight credits must be chosen from CSC 410, 420, 430 or 440.
 - b. Electives may be chosen from any CSC course numbered 114 or above; MTH 336; and COG 120.
 - c. No more than six credits from CSC 114, 117, and COG 120 may be applied to satisfy major requirements.
3. Three required cognate courses: 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.

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.

Secondary Teaching Major Requirements

Thirty-six credits, which must include:

1. CSC 120, 204, 220, 230, 240, 280A, 310 and 410.
2. Eight additional credits from a. to c. below:
 - a. Four credits must be chosen from CSC 420, 430 and 440.
 - b. Elective(s) may be chosen from any CSC course numbered 114 or above; COG 120; and MTH 336.
 - c. No more than four credits from CSC 114, 117 and COG 120 may be applied to satisfy the major requirement.
3. Three required cognate courses: 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.
5. Each candidate for a teaching certificate in CSC will participate in at least two terms of internship/practica, which entails maintaining and operating computer and network systems in the CSC laboratories and tutoring students taking lower-level CSC courses. No credit is given for internships, but students are paid the same as those doing paid jobs.

Minor Requirements

Twenty-four CSC credits which must include CSC 120, 220 and at least eight upper level credits. The cognate course, MTH 120, is required.

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.

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.

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.
Prereq: MTH-101 or equivalent

CSC 114 Introduction to Web Development 4 cr

AH
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.

CSC 117 Image & 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.
Prereq: MTH-110 or above or Placement at 112 level

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 CSC-120 may not both be taken for credit in the major. Laboratory.
Prereq: MTH-110 or above or Placement at 112 level

CSC 120 Object-Oriented Programming & Design 4 cr

NS3
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.
Prereq: MTH-110 or above or Placement at 112 level

CSC 204 Social and Ethical Issues 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.
Prereq: Any CSC course or Permission

CSC 220 Data Structures and Advanced Programming Techniques 4 cr

NS3
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.
Prereq: CSC-120 and MTH-120

CSC 230 Software Engineering 4 cr UL

NS3
Software development: requirements, specification, modern design techniques, program testing methods, software metrics as used in

quality evaluation, and project management.
Prereq: CSC-220

CSC 240 Algorithms & Complexity 4 cr UL

NS3
Advanced data structures and algorithms, algorithmic analysis, and an introduction to distributed and parallel algorithms.
Prereq: CSC-220 and MTH-220

CSC 280 Topics in Computer Science 2-4 cr UL

NS3
Topical study in computer science. While topics vary, the course usually introduces a particular computer programming language (e.g., C, C++, Prolog, etc.) Requires instructor permission.
Prereq: CSC-220 or Permission

CSC 310 Computer Organization 4 cr UL

NS3
Advanced introduction to assembly languages and structure and organization of digital computers, including addressing schemes, digital representation of data and computer arithmetic.
Prereq: CSC-220

CSC 335 Computer Graphics 4 cr UL

NS3
Introduction to techniques of computer graphics including three-dimensional representations, perspective, computer animation, computer art and applications of computer graphics to various other disciplines.
Prereq: CSC-220 and MTH-220

CSC 345 Artificial Intelligence 4 cr UL

NS3
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.
Prereq: CSC-220

CSC 380 Topics in Computer Science 2-4 cr UL

NS3
Topics of current interest and importance. Requires instructor permission.
Prereq: CSC-220 or Permission

CSC 399 Computer Science Independent Study 1-4 cr UL

Requires instructor permission.

CSC 410 Database Management 4 cr UL

NS3
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.
Prereq: CSC-230

CSC 420 Operating Systems 4 cr UL

NS3
Survey of major concepts of operating systems. Investigation of relationships among the operating system, the architecture and the systems programs of a computer system.
Prereq: CSC-310

CSC 430 Theory of Computing 4 cr UL

NS3
In-depth study of the main components of the theory of computation: finite automata and computability.
Prereq: CSC-240

CSC 440 Compiler Design 4 cr UL

NS3
In-depth study of the principles of computer language processor design. Includes lexical analysis, syntactic analysis, semantic analysis, object code generation and error detection.
Prereq: CSC-310

CSC 499 Computer Science Independent Study 1-4 cr **UL**

Requires instructor permission.

CSC 500 Senior Thesis 1-4 cr **UL**

Requires instructor permission.

Economics (ECN)

Major Requirements

1. Thirty-six credits including ECN 201, 202, 301, 311, and 331; ECN 317 or 318; ECN 345 or 370; and eight additional credits of 300-level or above ECN coursework. (Economics 180 courses do not count toward the major.)
2. 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.
3. 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.
4. Prior approval is required for all transfer credit for any 300-level or above ECN coursework.
5. 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.
6. The Department recommends that students supplement the major with courses from Business Administration, Political Science, Mathematics and Philosophy. Students interested in Economics graduate work are strongly encouraged to take MTH 121-122, and/or MTH 116, 117, 192, 310, and 341-342. Students interested in law school are strongly encouraged to take BUS 325-326, HST 121-122, PHL 103, and/or POL 131, 225, 335-336. Students interested in an MBA or a career in business are strongly encouraged to take BUS 221-222, 309, 323, 333, 440, MTH 113, 116, 192, and/or PHL 227.

Minor Requirements

Twenty-four credits which must include Economics 201 and 202, plus 16 additional credits of 300-level or above ECN coursework. The 16 additional credits may not be taken for S/F credit. (Economics 180 courses do not count toward the minor.)

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

ECN 180 Readings in Economics 1-4 cr

SO
Selected readings of classic economic works in student interest area. Not counted toward Economics Major or Minor. Instructor permission required.

ECN 201 Principles of Macroeconomics 4 cr

SO
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.

ECN 202 Principles of Microeconomics 4 cr

SO
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 301 Intermediate Microeconomics 4 cr **UL**

SO
Price mechanism and elasticity concepts. Theories of consumer behavior and producer behavior. Pricing in product and resource markets. General equilibrium theory.

Prereq: ECN-201 and 202

ECN 311 Intermediate Macroeconomics I 4 cr **UL**

SO
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-201 and 202

ECN 317 Econometrics 4 cr **UL**

SO
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: MTH-116

ECN 318 Mathematical Economics 4 cr **UL**

SO
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-201 and 202; MTH-113 or 121

ECN 320 Money & Capital Markets 4 cr **UL**

SO
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-201 and 202

ECN 321 Public Finance 4 cr **UL**

SO
The economics of government. Revenue and expenditure policies of federal, state and local governments in theory and practice; tax shifting and incidence. Study of current fiscal and related public policy issues.

Prereq: ECN-201 and 202

ECN 326 Economic Development 4 cr **UL**

SO
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-201 and 202

ECN 331 International Trade 4 cr **UL**

SO
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-202

ECN 332 International Finance 4 cr **UL**

SO
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-201 and 202

ECN 339 History of Economic Thought

SO

4 cr UL

Historical development of economic ideas, paradigms and ideologies: Mercantilist, Physiocrat, Classical, Marxian, Neo-Classical, Institutional and Keynesian.

Prereq: ECN-201 and 202

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-202

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-202

ECN 355 Globalization in Latin America

SO

4 cr UL

Students spend the Spring Term in a Latin American nation living with a local family, improving their Spanish skills, participating in a two week service-learning project, attending seminar presentations by resident scholars, and studying the socioeconomic impacts of trade and globalization in the country being visited.

Prereq: ECN-201 and Permission

ECN 360 General Economic History

SO

4 cr UL

Survey of major forms of economic systems from paleolithic times to present: Stone Age economy, Ancient Egypt, Mesopotamia and Mesoamerica, Classical Greece and Rome, feudal and manorial Europe, mercantile and industrial Europe and America. Economic institutions of reciprocity, redistribution and market.

Prereq: ECN-201 and 202 or Permission

ECN 370 Regional Economics

SO

4 cr UL

Industrial/agricultural location and human migration theories and cases. Economic bases for land-use patterns, central places, regional/urban structure. Examination of urban problems. Regional and urban growth models. Business feasibility studies and public cost-benefit analysis.

Prereq: ECN-201 and 202

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-201 and 202

ECN 385 Economics Practicum

SO

4 cr UL

Requires Junior standing or permission.

ECN 499 Economics Independent Study

SO

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

SO

4 cr UL

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 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 and teaching minor, or two teaching majors, or K-12 comprehensive major in Music or Art education.

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) (or EDC 306 (2 cr) Art majors only); EDC 346 (4 cr); 370 (2 cr); 373 (3 cr);
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 Provisional Certification Requirements

This certificate allows teaching in grades 6-12 in subjects in which the candidate has a teaching major or minor. 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 grade below a C.
2. A Teaching Major and a Teaching Minor (or two teaching majors, or a K-12 comprehensive major in Art or Music), with a 2.75 GPA in each.
3. An overall GPA of 2.75.
4. Students must also pass the appropriate MTTC subject area test in their subject area major. To be recommended for certification in a minor or second major, 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.
5. Students must provide proof of valid CPR and First Aid cards as required by the Michigan Department of Education.

Secondary Teaching Majors and Minors

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

- Art (Visual Arts Education; K-12 comprehensive major only)
- Biology (major or minor)
- Business, Management, Marketing and Technology (major only)
- Chemistry (major or minor)
- Computer Science (major only)
- English (major or minor)
- French (major or minor)
- German (major or minor)
- History (major only)
- Mathematics (major or minor)
- Music (K-12 comprehensive major only)
- Physical Education (major only)
- Physics (major or minor)
- Social Studies (group major only, must also complete History major; must see EDC Department chair for advising)
- Spanish (major or minor)
- Special Education - Learning Disabilities (K-12 major only; conditional approval)

Social Studies Group Major (Secondary)

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

Forty-eight credits which must include:

1. ECN 201 (4 cr) and 202 (4 cr).
2. GGR 101 (2 cr), 102 (2 cr), and 201 (4 cr).
3. POL 101 (4 cr) and 121 (4 cr).
4. 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).
5. EDC 445s (4 cr).
6. 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 (K-12 Major only; pending approval) (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.

Elementary Education Major Requirements

The Michigan Department of Education (MDE) has approved the two program options for elementary education now offered at Alma College. The elementary education program listed here is for all students entering in Fall 2010 and later. 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.

1. 36 credits of Professional Sequence in the following required courses:
 - a. EDC 100 (2 cr), 120 (2 cr).
 - b. EDC 203 (1 cr) with 230 (3 cr); EDC 240 (4 cr).
 - c. EDC 301 (1 cr) with 311 (1 cr).
 - d. EDC 302 (1 cr) with 312 (1 cr).
 - e. EDC 370 (2 cr), 373 (3 cr), 400 (2 cr).
 - f. EDC 430e (3 cr) with 490e/491e (10 cr).

2. 24 credits of Elementary Education Content and Pedagogy in the following required courses:
 - a. EDC 160 (4 cr); 262 (4 cr).
 - b. EDC 360 (3 cr) with 362 (3 cr).
 - c. EDC 361 (3 cr) with 363 (3 cr).
 - d. EDC 460 (4 cr).

3. Experimental Program: Non-certifiable minor option

Teacher certification candidates may apply for the Education Department's Experimental Program which allows a student to waive the requirement for **one** teaching minor and replace it with a non-teaching Alma College minor. **A candidate who completes a non-teaching minor will not have that subject area listed on the Michigan teaching certificate and will not be certified to teach in that non-teaching minor subject in Michigan.** Interested teaching candidates must meet with an advisor to discuss the implications and options, and fill out an Education Department APPLICATION and PETITION. See the Education Department for more details.

Michigan Elementary Provisional 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.

Option 1: Core Subject 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 classes, or be graded below a 2.0 (C).*
2. Either a Teaching Major or two Teaching Minors selected from the following (as programs are approved by the Michigan Department of Education - check with EDC Department):
 - a. Social Studies Group Major.
 - b. Integrated Science Group Major or Group Minor.
 - c. Language Arts Group Major or Group Minor.
 - d. Elementary Mathematics Minor (Major pending approval).

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).
3. As Cognates, a Planned Program of Elementary Education Content courses which must include the following:
 - a. MTH 202 (4 cr).
 - b. HUM 100 (4 cr).
 - c. HST 104, 121 or 254 (American History, 4 cr).
 - d. IPH 271a (2 cr).
 - e. BIO 101 (4 cr).

The Planned program must also include:

- a. PSC 101 (4 cr) for non-Integrated Science majors/minors.
 - b. HST 206 (4 cr) for non-Social Studies majors.
 - c. ENG 225 (4 cr) for non-Language Arts majors/minors.
- No cognate course required for certification may be taken Pass/Fail or be graded below a 2.0 (C).*
4. An overall GPA of 2.75 is required for Alma College to recommend a student for certification.
 5. The Michigan Test for Teacher Certification (MTTC) Test in Elementary Education (passing score required). **Note:** Elementary candidates must pass State tests in their subject area majors and/or minors to be certified in these subjects. 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.

Language Arts Major (Elementary only)

Forty credits which must include:

1. ENG 120 (4 cr), 190 (4 cr), 225 (4 cr); EDC 160 (4 cr); four credits of any 300-level literature course.

- Four credits from the following Literature courses: ENG 250 (4 cr), 251 (4 cr), 260 (4 cr), 261 (4 cr).
- Eight credits from the following Writing courses: ENG 201 (4 cr), 202 (4 cr), 210 (4 cr), 220 (4 cr), 270 (4 cr), 291 (4 cr), 293 (4 cr).
- Four credits from the following Communication Arts courses: COM 101 (4 cr), 111 (4 cr); NMS 201 (4 cr).
- Four credits from the following Multicultural and Interpersonal perspective courses: 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).
- For certification, take and pass the MTTC Language Arts test.

Language Arts Minor (Elementary only)

Twenty-eight credits which must include:

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

Integrated Science Group Major (Elementary only)

Forty credits which must include:

- BIO 101 (4 cr) and 121 (4 cr); CHM 103 (4 cr).
- ENV 105 (4 cr) and 110 (4 cr); GEO 113 (4 cr); PSC 380 (4 cr).
- Two elective classes from the following: 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.
- For certification, take and pass the MTTC Integrated Science test.

Integrated Science Group Minor (Elementary only)

Twenty-eight credits which must include:

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

Social Studies Group Major (Elementary only)

Forty-four credits which must include:

- ECN 201 (4 cr) and 202 (4 cr).
- POL 101 (4 cr) and 121 (4 cr).
- GGR 101 (2 cr), 102 (2 cr), and 201 (4 cr).
- HST 100 (4 cr), 101 (4 cr), 104 (4 cr), 105 (4 cr), and 206 (4 cr).
- For certification, take and pass the MTTC Social Studies test.

Elementary Education Minor in mathematics (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.

Option 2: Comprehensive Major 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 classes, or be graded below a 2.0 (C).*
- Either a Teaching Major (36 cr) or Teaching Minor (24 cr) in World Language - French, German or Spanish; or a Minor in Early Childhood (ZS) (24 cr) or Special Education - Learning

Disabilities (K-12 Major; conditional approval) (36 cr). *A 2.5 GPA is required for each certification major and/or minor and no course for certification may be taken Pass/Fail or be graded below a 2.0 (C).*

- As Cognates, a Comprehensive Program of 30 credits of required Elementary Education Content courses which must include the following:
 - BIO 101 (4 cr).
 - PSC 101 (4 cr).
 - MTH 202 (4 cr).
 - HST 104, 121 or 254 (4 cr).
 - HST 206 (4 cr).
 - HUM 100 (4 cr).
 - IPH 271a (2 cr).
 - ENG 225 (4 cr).

No 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). **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.

Minor in Early Childhood Education (ZS) (Elementary only)

Students working toward elementary certification requirements may choose to complete an Early Childhood Education minor (ZS) by meeting the following requirements (*Please see the Education Department for more information*):

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

Special Education - Learning Disabilities (K-12 Major only; conditional approval) (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.

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 Human Services (DHS) in Ithaca, Mich. prior to beginning in their assigned classroom. This service is free of charge and DHS records must be current. See the Education Department Field Experience Coordinator 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 June 1 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 chair for more details.

Admission to the Teacher Education Program (TEP)

The Teacher Education Committee (TEC) reviews all applicants and judges their suitability for entrance to the program during the student's sophomore year. Judgment of this suitability is based on the following:

1. Formal application for admission to the TEP, including completion of a writing component, submitted by the deadline posted in the Education Department Office located in the lower level of the library. This must be completed during the sophomore year. 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 Grade Point Average of at least 2.75 and a grade of "C" or above in ENG 101 and MTH 101 or proficiency and evidence of proficiency in basic writing and mathematics skills. Proficiency is a grade of "C" or above in ENG 101 and MTH 101.
3. Passing scores on the Professional Readiness Exam or Alternative Passing Scores.
4. Evidence that the student is making an effort to acquire competence in the humanities, natural sciences and social sciences.
5. Evidence that the applicant has personal characteristics conducive to success in the teaching profession.
6. Good standing (not on academic, social or administrative probation).

Admission to Student Teaching

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

1. Admission to the TEP.
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 (Major field[s]) of 2.75. For elementary: a GPA in the major(s) of 2.5 with C or above in all courses.
5. A 2.5 GPA in Education courses and a grade of C or above in all courses.
6. Passing scores on the Professional Readiness Exam or Alternative Passing Scores as required by the State of Michigan.
7. Endorsement of the Department chair in each Teaching Major.
8. In compliance with State of Michigan specifications, satisfactory demonstration of
 - a. high academic achievement.
 - b. successful group work with children in classroom placements.
 - c. knowledge of research-based teaching.
 - d. working knowledge of modern technology and use of computers. This requirement will be met as students progress through the TEP.

Additional Endorsements

Holders of Michigan Secondary or Elementary Certificates who wish to add Elementary, Early Childhood, or Secondary Endorsements shall present a Planned Program approved by Alma's Education Department.

Additional Notes

1. Admission to the Teacher Education Program is a prerequisite for all classes at the 300 level and above.
2. Note on scheduling: it is expected that students take *no more than one* placement class in any semester.

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):
 - a. EDC 100 (2 cr) and 120 (2 cr) or 103 (1 cr) with 130 (2 cr); EDC 203 (1 cr) with 230 (3 cr).
 - b. EDC 311 (1 cr) and 312 (1 cr); 370 (2 cr); 400 (2 cr).
2. Concentration of at least 12 credits in one of the following or a concentration approved by the department:
 - Young Children: 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 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. Capstone: EDC 485 (5 cr) Internship/experience in an appropriate setting as approved by the department.
4. 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 at least 8 upper level credits in EDC and must include:

1. Core courses:
 - a. EDC 100 (2 cr) and 120 (2 cr) or EDC 103 (1 cr) with 130 (2 cr).
 - b. 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.

EDC 090 Professional Readiness Exam I-M

1 cr

Preparation for the Michigan Department of Education mandated Professional Readiness Exam (PRE) Mathematics section. Curriculum is based on the PRE mathematics test standards. A pretest and post-test are given. Recommended only for those students pursuing teacher certification. Credit does not count toward graduation.

EDC 091 Professional Readiness Exam II-R/W

1 cr

Preparation for the Michigan Department of Education mandated Professional Readiness Exam (PRE) Reading and Writing sections. Curriculum is based on the PRE reading and writing test standards. A pretest and post-test are given. Recommended only for those students pursuing teacher certification. Credit does not count toward graduation.

EDC 100 Introduction to Diverse Learners

2 cr

A Level One introductory course for the Elementary Education major and certification program. It is required for all elementary certification candidates.

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

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. Must take EDC-150 concurrently. Winter only.

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. Must take EDC-103 concurrently. Fall/Winter

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. Must take EDC-105 concurrently. Winter only.

EDC 160 Children's Literature

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.

EDC 183 Intro to Early Childhood Education

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. 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 & Education - Field

1 cr

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. Requires concurrent enrollment in EDC-230 and sophomore standing. Fall/Winter

EDC 205 Intro to Learning Disabilities - Field

1 cr

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-2 major. Fall only.
Prereq: EDC-105 and 150; EDC-250 concurrently

EDC 230 Child Development and Education

3 cr

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. Requires EDC-203 concurrently and sophomore standing. Fall/Winter

EDC 240 Learning Env and Reflective Teaching

4 cr

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. Requires sophomore standing to register. Fall/Winter

EDC 250 Introduction to Learning Disabilities

3 cr

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. Fall only.
Prereq: EDC-105 and 150; EDC-205 concurrently

EDC 255 Transition Mgmt in Special Education

4 cr

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.
Prereq: EDC-105 and 150

EDC 262 Mathematical Thinking & Learning

4 cr

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. Required for elementary certification. Requires sophomore standing to register. Fall only.

EDC 281 Child Dev and Learning: Birth - Age 8

4 cr

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. Fall only. Course fee. Requires sophomore standing to enroll.
Prereq: EDC-183

EDC 282 School, Family & Community Partnerships

2 cr

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. Winter only. Requires sophomore standing to register.

EDC 283 The Care & 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. Fall only. Requires sophomore standing to register.
Prereq: EDC-183, Sophomore standing

EDC 301 Elem Science & 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. TEP approval required. Requires EDC-311, 361 and 363 concurrently. Fall only.

EDC 302 Teaching Elem Lang Arts & 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. TEP approval required. Also requires EDC-312, 360 and 362 concurrently. Winter only.

EDC 303 Secondary Ed Methods & Experience 1 cr UL
Topics and issues in instructional planning, teaching, and instruction 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 both their major(s) and minor content areas, and will have specialized teaching methods support in those subjects with an emphasis on best practices. Required for secondary certification, except K-12 ART majors who will take EDC-346. Must take EDC-311 concurrently and be admitted to the TEP to take this course. Fall only.

EDC 306 Elementary Art-Field 2 cr UL
Classroom observation and participation in teaching art at the elementary level. Required for Art and Design Majors seeking K-12 certification. Pass/fail only. Includes 72 hours of classroom placement. Requires EDC-345 concurrently. Must be ART major; TEP or Permission.

EDC 311 Topics Seminar A 1 cr UL
Introduction to issues and topics in instructional planning, teaching, and assessment. Required for elementary and secondary certification. TEP approval required. Elementary students must enroll concurrently in EDC-301, 361, and 363. Secondary students must enroll in EDC-303 concurrently, except K-12 ART majors.

EDC 312 Topics Seminar B 1 cr UL
Introduction to issues and topics in instructional planning, teaching, and assessment. Required for elementary certification. TEP approval required. Requires concurrent enrollment in EDC-302, 360 and 362. Winter only.

EDC 345 Art for Elementary Teachers 4 cr UL
Examination of art materials and the construction of art programs in the elementary classroom. Required for Art and Design Majors seeking K-12 certification. Requires EDC-306 concurrently. Course fee.

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. Includes a 10-hour off-campus service-learning component. Required for secondary

certification. Requires admission to TEP. Fall/Winter

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.
Prereq: EDC-105, 150, 205, 250, 255; TEP or Permission

EDC 354 Art for Diverse Learners 4 cr UL
Explorations of inclusive methods of teaching students with different abilities and diverse social and cultural backgrounds. Lectures, discussions, reading and classroom experiences deal with the nature of disabilities and giftedness. Curriculum, evaluation, space planning and classroom management techniques are studied in relation to the range of abilities that students bring to the contemporary art classroom. Open to students at junior level or above and majoring in art teacher education. Requires TEP or Permission. Required for Art and Design Majors seeking K-12 certification.

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.
Prereq: EDC-105, 150, 205, 250, 255; TEP or Permission

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. TEP approval required. Also requires concurrent enrollment in EDC-302, 312 and 362. Winter only.

EDC 361 Teaching Elementary Science 3 cr UL
Examination of methods and materials in elementary science education. Includes service learning project and action research project. Required for elementary certification. TEP approval required. Also requires concurrent enrollment in EDC-301, 311 and 363. Fall only.

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: MTH-202 and EDC-262; EDC-302, 312, 360 concurrently; TEP Approval

EDC 363 Teaching Elementary Social Studies 3 cr UL
Examination of methods and materials in elementary social studies education. Required for elementary certification. TEP approval required. Also requires concurrent enrollment in EDC-301, 311 and 361. Fall only.

EDC 370 Instructional and Assistive Technology2 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 certification. Prerequisite modules must be completed before taking this course. It is recommended that this course be taken concurrently with EDC-373. Fall/Winter

EDC 373 Special Education for Classroom Teachers3 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. Admission to TE Program required. Concurrent with EDC-370 and/or 460 recommended. Fall/Winter

EDC 383 Curriculum & Methods: Early Childhood4 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 handicapping conditions. 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. Fall only. Classroom placement included.
Prereq: EDC-183, 281, 282, 283 and acceptance into the Teacher Education Program

EDC 385 Education Practicum1-4 cr **UL**

Requires instructor permission.

EDC 399 Education Independent Study1-4 cr **UL**

Individual investigation of an educational problem planned with faculty in Alma's Education Department. Requires junior standing and permission.

EDC 400 Issues and Contexts2 cr **UL**

Research into current topics and perennially important issues in education. Required for elementary certification. Requires senior standing or permission to register. Fall only.

EDC 405 Curriculum Mthds in Special Ed - Field1 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. Requires EDC-450 concurrently.

Prereq: EDC-105, 150, 205, 255, 350, 355; TEP or Permission

EDC 430 Student Teaching Seminar3 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 and secondary certification. Taken concurrently with EDC-490e or s and EDC-491e or s; must be approved for student teaching. Fall/Winter

EDC 445A Methods Secondary Art Teachers4 cr **UL**

Examination of art media and the construction of art programs in secondary, grades 7-12, classrooms. Topics include multicultural influences on world art, uses of technology in the classroom and current standards and practices in art education. Required for Art and Design Majors seeking K-12 certification. Requires TEP or Permission to register. Course fee.

EDC 445F Secondary Methods in Foreign Language2 cr **UL**

Survey of special teaching methods in student's major field. May be taken prior to or concurrently with Education 490-491s. Required for certification.

EDC 445S Secondary Methods in Social Studies4 cr **UL**

Survey of special teaching methods in student's major field. May be taken prior to or concurrently with Education 490-491s. Required for certification.

EDC 450 Curriculum Methods in Special Education3 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. Must take EDC-405 concurrently.

Prereq: EDC-105, 150, 205, 255, 350, 355; TEP or Permission; EDC-405 concurrently

EDC 453 Assess & Remediation in Special Ed4 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.

Prereq: EDC-105, 150, 205, 250, 255, 350, 355, 405 and 450; TEP and EDC-455 and 495 concurrently

EDC 455 Special Ed Student Teaching Seminar3 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.

Prereq: EDC-105, 150, 205, 250, 255, 350, 355, 405, 450; TEP; and EDC-453 and 495 concurrently

EDC 460 Teaching the Struggling Reader4 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. Requires senior standing or permission.

Fall/Winter

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.

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; Junior standing and Permission

EDC 480 Topics in Education

2-4 cr **UL**

Survey of a selected topic chosen for study. May be taken more than once for credit. Requires permission.

EDC 490E Directed Teaching - Elementary

5 cr **UL**

Teaching under the direction of a cooperating teacher in the public schools. With Department's permission, graduates may enroll in 490e or s only. Applications must be filed by November 15 of the year prior to directed teaching. Pass/fail only. Required for certification. Requires senior or post-graduate standing. Must be approved by TEC for student teaching. Fall/Winter

EDC 490S Directed Teaching - Secondary

5 cr **UL**

Teaching under the direction of a cooperating teacher in the public schools. With Department's permission, graduates may enroll for 490S only. Applications must be filed by November 15 of the year prior to directed teaching. Pass/fail only. Required for certification. Must be approved by TEC for student teaching. Fall/Winter

EDC 491E Directed Teaching - Elementary

5 cr **UL**

Teaching under the direction of a cooperating teacher in the public schools. With Department's permission, graduates may enroll for 490e or s only. Applications must be filed by November 15 of the year prior to directed teaching. Pass/fail only. Required for certification. Fall/Winter

EDC 491S Directed Teaching - Secondary

5 cr **UL**

Teaching under the direction of a cooperating teacher in the public schools. With Department's permission, graduates may enroll for 490e or s only. Applications must be filed by November 15 of the year prior to directed teaching. Pass/fail only. Required for certification. Fall/Winter

EDC 493 Directed Teaching: Early Childhood

5 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. Spring or summer of junior or senior year. Must apply for student teaching by November 15 of junior year and be approved prior to beginning ECE student teaching. P/F only.

Prereq: EDC-183, 281, 282, 283, 383, SOA-220

EDC 495 Special Education Student Teaching

6 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.

Prereq: EDC-105, 150, 205, 250, 255, 350, 355, 405 and 450 and TEP; EDC-453 and 455 concurrently

EDC 499 Education Independent Study

4 cr **UL**

Individual investigation of an educational problem or development of a creative, usable project. Requires senior standing, EDC major and permission.

EDC 500 Senior Thesis

2-4 cr **UL**

Required for departmental honors. Requires instructor 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, 356, 360, 361, 364, 365, 366, 367, 368, 380L, 381, 382, and 383.
4. Required 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: English 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 upper level literature courses at the 300-level chosen from: ENG 340, 351, 353, 354, 356, 360, 361, 364, 365, 366, 367, 368, 380L, 381, 382, and 383.
5. Note: English 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 additional credits chosen from ENG 201, 210, 270, 290, 291, 292, 293, 301, 370, 390, or 391.

Program Considerations

Prospective majors should plan to take English 120 in the first year, English 220 in the sophomore year, English 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

AH

4 cr

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

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.

ENG 180 Studies in Literature & Language

AH

1-4 cr

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.

ENG 181 Diversity Studies in Literature

AH

4 cr

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 Studies: American Experience Experience: Literary and Cultural Voices

AH

4 cr

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

AH

4 cr

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.

ENG 190 Introduction to Creative Writing

AH

4 cr

Writing in different genres, including poetry, short fiction, drama and creative nonfiction. Critiquing of student and professional writing.

ENG 201 Advanced Rhetoric

AH

4 cr UL

Exploring the principles of invention, arrangement and style beyond the level of English 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

AH

4 cr UL

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

AH

4 cr UL

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

AH

4 cr UL

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

AH

4 cr UL

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

AH

4 cr UL

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 to 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.
Prereq: ENG-101 or Proficiency

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.
Prereq: ENG-190 and Permission

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 THD-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 and 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 & 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 & 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 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 & 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 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. Requires instructor 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 399 English Independent Study
2-4 cr UL
Requires 24 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, and Permission

ENG 499 English Independent Study
2-4 cr UL
Requires 30 credits completed in the English department with 'B' average, and permission.

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

Environmental Studies (ENV)

Major Requirements

Potential majors are highly recommended to consult with the ENV program chair(s) 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.

1. The ENV major consists of 30 core credits and 28 credits in one of three tracks of study according to the student's interest.
2. Core: ENV 105; ENV 110 or GEO 101; BIO 120 or BIO 121; CHM 115; and three courses selected from: POL 141, PHL 225, COM 253, and ECN 340; Capstone experience: ENV 480.
3. Tracks: Complete 28 credits in one of the following tracks:
 - a. **Environmental Health:** Eight upper-level credits in science including: BIO 207 or IPH 226; BIO 308 or 309; four additional upper-level credits in an environmental topics course (ENV 380); 12 credits from: IPH 270, 328, 331, 430; four credits from: COM 243 or 343.
 - b. **Environmental Policy:** Twelve credits selected from: PAF 150, 350, POL 131, 217, 225, 242 and 341; four credits from: HST 122 or POL 335; four credits from: COM 227 or 327; four credits from: PHL 228 or SOA 325; four credits from: ECN 340.
 - c. **Environmental Science:** Twenty upper-level credits from programmatic coursework from IPH, BIO, CHM, BCM, PHY, MTH/CSC; eight additional, upper-level elective credits that refine the student's interest in the realm of environmental studies.

Minor Requirements

Twenty-six credits which must include: ENV 110; 8 credits from ENV 105, BIO 120, 121; CHM 115; 12 credits from: POL 141, PHL 225, ECN 340 and COM 253; and two credits from ENV 480.

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 380 Environmental Problems & Issues
NS1 4 cr UL
Examination of selected environmental issues and problems. Content varies. Topics may include pollution, energy, natural resources, land use planning and recycling.
Prereq: ENV-105, 110 and 1 additional course from the ENV curriculum or Permission

ENV 385 Environmental Studies Practicum
1-4 cr UL
Practicum in the field of Environmental Studies.
Prereq: ENV-105, 110 and 1 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 1 additional course from the ENV curriculum

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-099 or 101

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-101

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-101

Gerontology (GER)

Minor Requirements

Core of 24-26 credits: IPH 212 or BIO 101, GER 385, GER 480, PHL 229, PSY 260, PSY 280 (Advanced Psychology of Aging), SOA 234, and at least two elective credits from any course(s) deemed relevant by the Gerontology Advisory Committee.

GER 385 Gerontology Practicum
1-8 cr UL
Requires instructor permission.

GER 480 Senior Seminar
2-4 cr UL
Multidisciplinary capstone seminar for gerontology minors. Requires instructor permission.

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

1. Thirty-six credits which must include HST 323, 325, 326 or another 300-level American history course pre-approved by the Department; HST 300, 330, 331 or another 300-level European history course pre-approved by the Department; HST 353, 360 or another 300-level non-Western history course pre-approved by the Department; and one 400-level seminar (not an independent study).
2. All 36 credits that count toward the major must be taken for 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.
3. No more than eight credits may be taken by proficiency to count toward the 36 credits required for the major. Students seeking credit by proficiency must obtain permission from the instructor for the courses in question and from a History Department committee. Students seeking credit by proficiency must pay the appropriate fee(s) and show proof of such payment to the Department chair. The instructor must prepare a written statement indicating what a student must do to obtain credit for proficiency.

- Successful completion in the student's senior year of the comprehensive examination administered by the Department is mandatory.
- Honors candidates must have a minimum overall of 3.3 GPA and a 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.

Teaching Major Requirements

- Thirty-six credits which must include HST 323, 325, 326 or another 300-level American history course pre-approved by the Department; HST 300, 330, 331 or another 300-level European history course pre-approved by the Department; HST 353, 360 or another 300-level non-Western history course pre-approved by the Department; and one 400-level seminar (not an independent study).
- HST 100, 101, 104, 105, 206.
- The following cognate courses, unless a student is taking one or more of the following as part of another major or minor the student is completing: ECN 201, GGR 101, GGR 102, POL 101.
- Students seeking a history teaching major are strongly urged to have an academic advisor who is a tenured or tenure-track member of the History Department.

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.

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.

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. (ESPI/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 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, 1877-2001. 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.

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 180 Topics & Problems in History

SO 2-4 cr
Analysis of special topics: Age of Global Power 1938-80, Japanese-American relations, comparative studies in economic and diplomatic history, 20th century business and economic history, and the Marshall Court. No more than six credits may count toward the History Major. (ESPIT/GP)

HST 199 Independent Study in History

Requires instructor permission. 1-4 cr

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 Mycenae, 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.


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.


HST 207 American Foreign Relations

SO 4 cr
Introductory survey and examination of the American foreign relations, including policy-making process and implementation, from 1890s to the present. Analyzes the expansion of American Empire, World Wars I and II, the Vietnam War, the Cold War and the Post-Cold War era. (ESPITH/GP)

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. Requires instructor permission. (GP)


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.


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 253 Asian Studies: Modern China & 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.

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 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.

HST 272 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. Requires instructor permission to register.

HST 277 Am Studies: Civil War & 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
Analysis of topics which include military and naval history; global economy, multinational corporation and foreign relations; and Supreme Court in modern era. No more than six credits may count toward the History Major. Requires instructor permission. (ESPIT/GP)


HST 299 History Independent Study

1-4 cr UL
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 & 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)
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.

Prereq: Sophomore Standing, and one history course or Permission

HST 330 The Medieval Mediterranean  SO 4 cr UL


Examines the historical background of the ancient Mediterranean then proceeds to the rise and expansion of Islam through contact, commerce, conflict and crusade. Discuss political, economic and religious narratives alongside equally important developments in the roles that culture, gender, piracy, slavery, and technology played in shaping the peoples of the Mediterranean.

Prereq: Sophomore Standing and one history course or Permission

HST 331 The Renaissance & 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 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.

Prereq: HST 238 or another approved history course and Permission

HST 353 China's 20th Century Revolution  SO 4 cr UL


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  SO 4 cr UL

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 380 Topics and Problems in History  SO 2-4 cr UL

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 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. Requires instructor permission.

HST 399 History Independent Study 1-4 cr UL

Requires instructor permission.

HST 407 Foreign Policy Seminar  SO 4 cr UL

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. Requires instructor permission. (ESPITH/GP)

HST 433 World War II Seminar  SO 4 cr UL

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. Requires instructor permission.


HST 434 Comparative Fascism  SO 4 cr UL

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. Requires instructor permission. (ESPITH/GP)

HST 435 London Research Seminar  SO 4 cr UL

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. Requires instructor permission.

HST 499 History Independent Study 1-4 cr UL

Advanced bibliography and selected problems. Requires instructor permission.

HST 500 Senior Thesis  1-4 cr UL

Requires instructor permission.

Integrative Physiology and Health Science (IPH)

IPH Major Requirements

1. Core: 20 credits consisting of IPH 220, 225, 226, 327, and 344.
2. Concentration: 16 credits from one of the following:
 - a. Clinical Exercise Physiology: IPH 310, 328, 340, 418, 419, and 420.
 - b. Pre-therapy: IPH 310, 345, 346, 401 and 6 credits from IPH 323, 324, 328, 418, 419, and 420.
 - c. Pre-medicine: IPH 310; 270 or 331 or 430; 328 or 340; and 6 credits from the previous options or IPH 270, 328, 340, 345, 346, 401, 418, 419, 420, or 430.
 - d. Public Health: IPH 270, 331, and 430 and 4 credits from IPH 223, 310, 328, or 340.
3. Either completion of the Senior Oral Comprehensive Examination administered by the Department, completion of Senior Seminar (IPH 480) or completion of a Senior Thesis (IPH 500).
4. 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 which must include IPH 225, 226, 327 and 344.

NOTE: No activity courses (EHS 110-165) 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.

Athletic Training Major (ATH)

The Athletic Training Education Program (ATEP) is an accredited program by the Commission on Accreditation of Athletic Training Education. Each Athletic Training Student (ATS) is required to complete a minimum of four semester-long clinical assignments and accumulate a minimum of 1,000 clinical experience hours during their clinical experiences with 250 hours completed in an intensive equipment sport. The ATS will gain valuable practical experience in the practice, game coverage and rehabilitation of the varsity and junior varsity intercollegiate sports at Alma College. Other clinical rotations include a physical therapy clinic, family practice medicine clinic, high school, corporate wellness program and orthopedic medicine practice.

Admission Requirements: Students must apply to the ATEP. The program is competitive and acceptance is based on the number of available clinical positions. Students must complete the following to be reviewed for admittance: apply and be accepted into Alma College; and a separate application to the ATEP is required. Contact Phil Andre, MS, AT, ATC for an application packet. The admission process takes place once a year and admission occurs by April 1 of each year.

Selection Criteria for the Athletic Training Education Program: Each entering class is admitted to the ATEP in the fall semester. Admission to Alma College is required for, but does not guarantee, acceptance into the ATEP. The program is selective and can accommodate a limited number of students each year. This number may vary depending on the number of preceptors, available clinical assignments, and Alma College's Athletic Training facilities. Prospective students must have all application materials completed to be considered for admission. Applications for Provisional Admission to the ATEP will be reviewed beginning March 1 and continue until the class is filled.

The applicant will be notified of their status by April 1 for fall admission.

Preference will be given to those applicants who have:

1. Completed the Athletic Training Application
2. High college grade point average
3. High grade point average in high school

4. Three letters of recommendation
5. Interviewed by the Athletic Training staff. These interviews will take place following submission of application material. After being provisionally accepted into the ATEP, students must complete the following to achieve full admittance:
 1. Pass IPH 105, Clinical Experience I, with a minimum GPA of 3.0.
 2. Pass IPH 221, First Aid and CPR and IPH 222, Principles of Athletic Training with a minimum GPA of 2.50.
 3. Achieve a minimum cumulative GPA of 2.50 for all completed course work (based on all college-level work computed both at Alma College and at other institutions).
4. Hold the following valid certifications (or their equivalents):
 - a. Standard First Aid and Safety - American Red Cross.
 - b. CPR for the Professional Rescuer - American Red Cross.
5. Complete a minimum of 65 voluntary observational hours under the direct supervision of a preceptor within the ATEP at Alma College. These hours need to be recorded on the appropriate form, which is provided and does not count toward the 1,000-hour clinical requirement. Transfer students may complete documented observational clinical hours under the direct supervision of a Certified Athletic Trainer at the institution from which they are transferring. These supervised clinical hours must comply with the guidelines as outlined by the Commission on Accreditation of Athletic Training Education (CAATE).
6. Receive a positive observation evaluation from the Program Director and preceptors of the ATEP. This evaluation reflects the student's performance in the clinical setting, potential as a student athletic trainer, and the student's potential to become a professional in the athletic training field.
7. Pass a pre-admittance physical examination.
8. Submit a health insurance/history form.
9. Acceptance of the Technical Standards.
10. Demonstrate a recent Hepatitis B vaccination or a signed waiver form.
11. Receive a TB screening.

Once admitted to the program the ATS is required to meet certain standards for retention including a minimum GPA and successful completion of required clinical skills. In addition, there are some financial costs involved with the ATEP. The specific policies are located in the ATS handbook or contact the ATEP Director.

Transfer Students: Transfer students must fulfill all the program requirements as indicated. The ATEP Director and the Registrar will evaluate the coursework from the previous institution to determine the courses that meet the requirements of Alma College and the ATEP. In addition the ATEP Director will determine which Athletic Training courses meet the program's proficiencies and competencies. Transfer students need to show proof of the clinical proficiencies and clinical experiences that were taught by a preceptor. The ATEP reserves the right to give the transfer student a comprehensive exam to test the educational level of the student.

Athletic Training Major Requirements

Core: 20 credits consisting of IPH 220, 225, 226, 327 and 344.

Concentration: 38 credits consisting of IPH 221, 222, 323, 324, 325, 326, 328, 340, 345, 427, 480 and eight credits of Clinical Experiences IPH 105, 106, 205, 206, 305, 306, 405 and 406.

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 from EHS 150, 154, 156M and 157; two from EHS 110, 112, 118, and 165A, B, S, V; and one from THD 140 and 141. Recommended, but not required, is IPH 201.

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: 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: 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: 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

NS1

4 cr

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 & Physiology

NS1

4 cr

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

NS1

4 cr

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 or BIO 207 should not take this course. Laboratory.

IPH 220 Nutrition

NS1

4 cr

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

Introduction to basic first aid and CPR. Satisfactory completion of this course qualifies student for American Red Cross Certificate.

IPH 222 Principles of Athletic Training

4 cr

Introduction to the general principles of athletic injuries. Course fee.

Prereq: IPH-221

IPH 223 Issues in Global Women's Health

2 cr

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.

IPH 225 Human Physiology I

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.

Prereq: BIO-121

IPH 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.

Prereq: BIO-121 and IPH-225

IPH 270 Community Health

4 cr

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. Requires instructor permission.

IPH 271A School Health and P.E.- Elementary

2 cr

Designed to cover topical health and physical education content required for state teaching certification and methodology for teaching at the elementary level.

Prereq: EDC-100, 120, and 160 or Permission

IPH 271B School Health and P.E.- Secondary

2 cr

Designed to cover topical health and physical education content required for state teaching certification and methodology for teaching at the elementary level.

Prereq: EDC-100, 120, and 160 or Permission

IPH 280 IPH Seminar

1 cr

Topics in physiology selected by the instructor. Students expected to give a presentation. Requires junior standing.

IPH 303 Stress Management

2 cr UL

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. Requires sophomore standing.

IPH 305 Clinical Athletic Training V

1 cr UL

Combines the required proficiencies of a level three student with a clinical field experience.

Prereq: IPH-206 or Permission

IPH 306 Clinical Athletic Training Vi

1 cr UL

Combines the required proficiencies of a level three student with a clinical field experience.

Prereq: IPH-305 or Permission

IPH 310 Introduction to IPH Research

2 cr UL

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 Exercise Science. Requires junior standing or permission.

IPH 323 Therapeutic Modalities

2-3 cr UL

Physiological principles and application of various therapeutic modalities utilized in the treatment of musculoskeletal injuries. Laboratory. Requires instructor permission.

IPH 324 Therapeutic Exercise

2-3 cr UL

Methods and principles utilized in the rehabilitation of injuries of the physically active. Laboratory. Requires instructor permission.

IPH 325 Orthopedic Assessment I 4 cr **UL**

Knowledge and practical application of theory and assessment methods necessary for the recognition of signs and symptoms of upper extremity injuries. Laboratory. Requires instructor permission.

IPH 326 Orthopedic Assessment II 4 cr **UL**

Knowledge and practical application of theory and assessment methods necessary for the recognition of signs and symptoms of lower extremity injuries. Laboratory. Requires instructor permission.

IPH 327 Physiology of Exercise NS1 4 cr **UL**

Exploration of the physiological process in relation to exercise in everyday life, and to sports and recreational activities. Laboratory. Course fee.

Prereq: IPH-226 or BIO-207

IPH 328 Human Diseases NS1 4 cr **UL**

Introduction to the pathophysiologic study of disease in humans.

Prereq: IPH-226, BIO-207 or Permission

IPH 331 Health Promotion NS1 4 cr **UL**

Provides critical information for planning, implementing, and evaluating health promotion programs in the workplace, schools, community or health care setting. Requires junior standing.

IPH 334 Theory & 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. Requires instructor permission.

IPH 340 Pharmacology NS1 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-207

IPH 344 Human Anatomy NS1 4 cr **UL**

In-depth study of human anatomy with laboratory experience. Course fee.

Prereq: IPH-226

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 which may include adaptive and corrective physical education, injury rehabilitation, environmental physiology and sports medicine.

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. Requires instructor permission.

IPH 390A Senior Fitness 2-4 cr **UL**

Instructor permission required.

IPH 390B Field Work in IPH 2-4 cr **UL**

IPH 401 Molecular Aspect of Muscle Physiology NS1 4 cr **UL**

Detailed analysis of recent advances in our understanding of muscle function. Includes basic mechanisms of contraction, neuromuscular control and plasticity/adaptation 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 and 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: 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: IPH-405 or Permission

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 Permission

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.

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. Requires instructor permission.

IPH 428 Exercise Testing & Prescription NS1 4 cr **UL**

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 NS1 4 cr **UL**

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. Open to Majors only. Requires instructor permission.

IPH 500 Senior Thesis 4 cr **UL**
Requires instructor permission.

Public Health (PBH)

Minor Requirements

1. Core of 16 credits consisting of IPH 270, 331 and 430; MTH 116.
2. Two courses from the following: COM 243, ENV 105, PHL 229, POL 141 and SOA 234; other elective courses as approved by the program coordinator.
3. A four-credit practicum experience in a public health setting is strongly encouraged.

PBH 385 Public Health Practicum 1-8 cr **UL**

PBH 399 Public Health Independent Study 1-4 cr **UL**

Library Research (LIB)

LIB 110 Introduction to Library Research 2 cr
Beginning academic research skills.

LIB 180 Special Topics 1-4 cr
Introduces a wide range of research and information literacy skills, including defining and narrowing a research topic, effectively using print and electronic sources, and ethical information use.

LIB 380 Topics in Library Science 1-4 cr **UL**
Courses in advanced library research skills offered to those preparing for senior theses or graduate study.

LIB 385 Library Practicum 1-4 cr **UL**
Study-work program in the College Library or another library.

Mathematics (MTH)

Major Requirements

1. Thirty-six credits which must include:
 - a. Mathematics 121, 122, 210, 223, 310, and 421 or 431.
 - b. Twelve other upper-level Mathematics credits.
2. Two required cognate courses:
 - a. Computer Science 120.
 - b. A course, other than a Mathematics course, approved by the Department, with a Mathematics prerequisite numbered 113 or higher.
3. 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.
4. At least one statistics course is recommended.
5. Students interested in graduate school in mathematics should complete both Mathematics 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 Mathematics 121, 122, 210 and at least two other upper-level Mathematics courses. (Mathematics 099, 101 and 202 do not count toward the Minor.)

Secondary Teaching Major Requirements

Same as for the Mathematics major except that the program must include Mathematics 341, 411, and 421.

Secondary Teaching Minor Requirements

Twenty-six or 28 credits in Mathematics that must include MTH 120, 121, 122, 223, 411; 117 or 310; and 116 or 341.

Elementary Teaching Minor Requirements

Twenty-four credits which must include Mathematics 110; 116; 120; 113 or 121; and CSC 120 or NMS 114 and four additional credits at the MTH 110 level or above. (Mathematics 099, 101 and 202 do not count toward the Elementary Teaching Minor.)

Mathematical Sciences Major Requirements

Fifty-two credits which must include Mathematics 121, 122, 210, 223, 310, 336, 341, and 421 or 431; Computer Science 120 and 220, and 12 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. Mathematics 211, 342, 391, 399 or 499; and Computer Science 240, 310, 420, 430, 440, or 499). 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 099 Basic Core Mathematics 4 cr

Designed for students with very weak backgrounds in mathematics. Focuses primarily on skills development, including the arithmetic of real numbers, construction and interpretation of graphs, introduction to linear relationships and simple notations from statistics. Credits do not count toward graduation. Pass/fail only.

MTH 101 Basic Algebra 4 cr

Fundamentals of elementary algebra. Includes addition, subtraction and multiplication of polynomials, factoring of polynomials, the quadratic formula, graphing of equations, systems of equations and inequalities. May not be taken for credit by students who have successfully completed Mathematics 112 or a higher course.

Prereq: MTH-099 or Placement

MTH 110 Liberal Arts Mathematics 4 cr

NS3
Exploration of the beauty, extent and power of mathematics. Specific topics to be selected by the instructor.

Prereq: MTH-101 or Placement

MTH 111 Mathematics in Art & Nature 4 cr

NS3
Mathematics in the visual and musical arts and the plant and animal worlds. Topics include Fibonacci sequence, the golden section, Archimedean and logarithmic spirals, one- and two-point perspective, tessellations of the plane, and Escher-like constructions.

Prereq: MTH-101 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 Mathematics 121, 122 or 210.

MTH 113 Brief 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 Placement

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-101 or Placement

MTH 117 Intro to Matrices & 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 Mathematics 310. Requires placement in MTH 112 or 4 years of high school math.

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 Placement or 4 years of high school math

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.
Prereq: MTH-112 with "C" or better or 4 years of high school math

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.
Prereq: MTH-121

MTH 130 Beyond the 3rd Dimension
NS3 4 cr
A reading and writing course about dimensions greater than three with emphasis on Euclidean four-dimensional space. In addition to a mathematical text, readings include works from other disciplines. The goal is to gain a better understanding of four (or more) dimensions through various ways of thinking, both mathematical and otherwise. Requires instructor permission.
Prereq: MTH-110 or above or Permission

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. Sophomore Standing. Education Major

MTH 202T 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. Sophomore Standing. Education Major
Prereq: MTH-101 or Placement; Sophomore Standing; EDC major

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-220 or MTH-122

MTH 280 Topics in Mathematic
NS3 2-4 cr UL
Selected topics of current or historic importance. Prerequisites vary with topics selected.

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 & Statistics I 4 cr UL
NS3

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.

Prereq: MTH-210

MTH 342 Probability and Statistics II 4 cr UL
NS3

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.

Prereq: MTH-341

MTH 351 Elementary Number Theory 4 cr UL
NS3

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 4 cr UL
NS3

Selected topics of current or historic importance. Background prerequisites vary with topics.

MTH 390 Combinatorics 4 cr UL
NS3

Introduction to combinatorial theory. Topics include enumeration, recurrence, generating functions, graph theory and optimization.

Prereq: MTH-120 or 122

MTH 391 Introduction to Graph Theory 4 cr UL
NS3

Introductory survey of the major concepts and applications of graphs, digraphs and networks. Application areas include transportation, traffic flow, games and puzzles.

Prereq: MTH-122 or Permission

MTH 411 College Geometry 4 cr UL
NS3

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 4 cr UL
NS3

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 4 cr UL
NS3

Introduction to the theory of algebraic structures including elementary theory of groups, rings and fields.

Prereq: MTH-223 and 310

MTH 431 Advanced Calculus 4 cr UL
NS3

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 4 cr UL
NS3

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.

Modern Languages

Department Honors

Students may achieve honors in the Modern Languages 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

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.

French (FRN)

Major Requirements

1. Thirty-six credits beyond FRN 112 which must include at least four credits from each of these two groups: FRN 301, 371, 372, 377; FRN 350, 354, 355, 356, 360.
2. Language proficiency must be demonstrated by passing the DELF B2 exam or its equivalent.
3. A minimum of one semester of approved international study in a French speaking country.
4. Successful completion of English 201.
5. Write an acceptable reflective paper of moderate length and defend it in open forum.

Majors may earn honors in the department by writing a quality senior thesis and defending it in open forum.

Minor Requirements

1. Twenty-four credits in French, which includes one upper-level course in civilization or literature.
2. Language proficiency must be demonstrated by passing the DELF B1 exam or its equivalent.
3. A semester or Spring Term of study in a French-speaking country is highly recommended.

Teaching Major Requirements

1. Thirty-four of Alma's 36-credit-hour major must be beyond FRN 222 and include at least 4 credits from each of these groups: Civilization - FRN 301, 371, 372, 377; and Literature - FRN 350, 354, 355, 356, 360.
2. A minimum of one semester of approved international study in a French-speaking country.
3. Successful completion of ENG 225 (formerly 220) and EDC 445f.
4. Write and defend in open forum an acceptable paper of moderate length reflecting on their study of French, their study abroad experience and how they 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 French as well as the American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Exam at the Advanced Low level. The Teacher Education Program is proactive about informing students of opportunities for taking these tests.

Teaching Minor Requirements

- Twenty-three of Alma's 24-credit-hour minor must be beyond FRN 222 and include at least four credits from each of these groups: Civilization - FRN 301, 371, 372, 377; and Literature - FRN 350, 354, 355, 356, 360.
- A semester or Spring Term of study in a French-speaking country is highly recommended.
- Successful completion of ENG 225 (formerly 220) and EDC 445f.
- In order to be recommended for teacher certification, students must pass the Michigan Test for Teacher Certification subject area test in French as well as the American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Exam at the Advanced Low level. The Teacher Education Program is proactive about informing students of opportunities for taking these tests.

The course numbers FRN 291-391, 292-392, 293-393, 294-394, and 295-395 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.

FRN 111 Beginning French I

LA 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 LA 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 visitations, and limited excursions. Requires instructor permission. Course fee. Spring term.

FRN 170 Paris in May

☺ ☺ AH LA 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. Requires instructor permission. Course fee. Spring Term.

FRN 207 French Conversation I

☺ AH LA 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 LA 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 LA 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

☺ 4 cr
A study of representative literary works in translation from the French canon. Readings/lecture/discussion in English.

FRN 291 French Language Studies

☺ 2-4 cr
Further study of grammar and development of reading, writing, speaking and listening skills.

FRN 292 Targeted French Language Studies

☺ 2-4 cr
Targeted study of written French, oral French, or pronunciation.

FRN 293 Studies in History & Civilization

☺ 2-4 cr
Topics in French, Francophone, or regional history, culture, art, or film.

FRN 294 Studies in French & 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 & 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 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, museum visitations, and limited excursions. Requires instructor permission. Course fee. Spring term.

FRN 370 Paris in May
 🌐 🇫🇷 AH LA 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. Requires instructor permission. Course fee. Spring Term.

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
 🌐 2-4 cr UL
 Further study of grammar and development of reading, writing, speaking and listening skills.

FRN 392 Targeted French Language Studies
 🌐 2-4 cr UL
 Targeted study of written French, oral French, or pronunciation.

FRN 393 Studies in History & Civilization
 🌐 2-4 cr UL
 Topics in French, Francophone, or regional history, culture, art, or film.

FRN 394 Studies in French & 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. Requires instructor permission.

FRN 499 French Language Independent Study
 🌐 4 cr UL
 Requires senior standing and permission.

FRN 500 Senior Thesis
 🌐 4 cr UL
 Requires instructor permission.

German (GRM)

Major Requirements

1. Thirty-six credits in German language, civilization and literature beyond GRM 112.
2. A minimum of one semester of approved international study in a German-speaking country.
3. Completion with a passing grade of *Goethe-Zertifikat B2*, *Diplom des Europa-Kollegs* or their equivalents.
4. Successful completion of ENG 201 or ENG 225.
5. Write and defend in open forum an acceptable paper of moderate length reflecting on their study of German, their study abroad experience and how they combine with the mission of a liberal arts education.

Majors may earn honors in the department by writing a quality senior thesis and defending it in open forum.

Minor Requirements

1. Twenty-four credits in German, which includes one upper-level course in civilization or literature.
2. Completion with a passing grade of the *Zertifikat Deutsch B1*, the *Zertifikat des Europa-Kollegs* or their equivalents.
3. A semester of international study in a German-speaking country is highly recommended.

Teaching Major Requirements

1. Thirty-four of Alma's 36-credit-hour major must be beyond GRM 222.
2. A minimum of one semester of approved international study in a German-speaking country.
3. Successful completion of ENG 225 (formerly 220) and EDC 445f.
4. Write and defend in open forum an acceptable paper of moderate length reflecting on their study of German, their study abroad experience and how they combine with the mission of a liberal arts education.
5. In order to be recommended for teacher certification, students must pass the Michigan Test for Teacher Certification subject area test in German as well as the American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Exam at the Advanced Low level. The Teacher Education Program is proactive about informing students of opportunities for taking these tests.

Teaching Minor Requirements

1. Twenty-three of Alma's 24-credit-hour minor must be beyond GRM 222.
2. A semester of international study in a German-speaking country is highly recommended.
3. Successful completion of ENG 225 (formerly 220) and EDC 445f.
4. In order to be recommended for teacher certification, students must pass the Michigan Test for Teacher Certification subject area test in German as well as the American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Exam at the Advanced Low level. The Teacher Education Program is proactive about informing students of opportunities for taking these tests.

Four credits from GRM 112 or higher, with the exception of practicum or independent study courses, count towards the

Distributive Requirements in the Humanities.

GRM 111 Beginning German I

LA 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 LA 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 Permission

GRM 200 German Masterpieces

AH 4 cr UL
Reading and discussion of selected works of German literature in English translation, including Böll, Brecht, Fontane, Goethe, Grass, Hesse, Hochhuth, Hauptmann, Kafka, Th. Mann, Maron, Plenzdorf. Does not count toward major or minor. (Alma)

GRM 221 Language and Culture

AH LA 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 LA 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 LA 4 cr UL
Systematic study of grammar and further development of speaking and writing skills through reading, discussion, intensive laboratory and classroom drill; 24 class periods a week. (Germany)
Prereq: GRM-112 or Permission

GRM 232 Composition and Conversation II

AH LA 4 cr UL
Systematic study of grammar and further development of speaking and writing skills through reading, discussion, intensive laboratory and classroom drill; 24 class periods a week. (Germany)
Prereq: GRM-112 or Permission

GRM 252 Aspects of German Culture II

AH LA 4 cr UL
Intermediate level investigation of various aspects of contemporary German civilization and culture through speaking, writing, laboratory exercises, reading exercises and discussion. (Germany)
Prereq: GRM-112 or Permission

GRM 299 Readings in the Arts and Sciences

AH LA 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 LA 4 cr UL
Refinement and extension of language skills through consideration of contemporary issues and experiences from newspapers, magazines and audio-visual material. Expanded oral composition, extensive and intensive written composition. Review of selected grammatical problems. Laboratory exercises. (Alma and Germany)
Prereq: GRM-222 or Permission

GRM 312 Advanced Conversation and Composition II

AH LA 4 cr UL
Refinement and extension of language skills through consideration of contemporary issues and experiences from newspapers, magazines and audio-visual material. Expanded oral composition, extensive and intensive written composition. Review of selected grammatical problems. Laboratory exercises. (Alma and Germany)
Prereq: GRM-222 or Permission

GRM 313 Intensive Language Practice

AH LA 4 cr UL
Review of selected grammatical problems; refinement of speaking, reading and writing skills through extensive classroom and laboratory practice. (Germany)
Prereq: GRM-222 or Permission

GRM 315 Selected 20th Century Authors

AH LA 4 cr UL
Representative authors of the 20th century such as Mann, Hesse, Grass and Böll. 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 LA 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, Storm, Stifter, Droste-Hülshoff, Hauptmann, Kafka and Mann. (Alma)
Prereq: GRM-222 or Permission

GRM 321 German Culture and Civilization I

AH LA 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 German Culture and Civilization II

AH LA 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 LA 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 LA 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 401 Advanced Composition and Stylistics I

AH LA 4 cr UL
Concentration on areas of composition and style, both oral and written, which pose difficulty for the advanced student; emphasis also given to advanced oral practice. (Germany)
Prereq: GRM-312 or Permission

GRM 402 Advanced Composition and Stylistics II

AH LA 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 LA 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 LA 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 and Weiss. (Alma)
Prereq: GRM-341 or Permission

GRM 420 Advanced German for Teachers
 🌐 SO 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
 Requires senior standing and permission.

GRM 500 Senior Thesis
 🌐 4 cr UL
 Requires instructor permission.

Spanish (SPN)

Major Requirements

- Thirty-six credits beyond SPN 112 which must include SPN 321 plus 16 credits of upper-level Spanish classes with a minimum of 4 credits at the 400 level.
- A minimum of one semester of approved international study in a Spanish-speaking country.
- Successful completion of ENG 201 or ENG 225.
- Language Proficiency must be demonstrated by taking the American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Exam, the *Examen Básico of the Diploma de Español como Lengua Extranjera* (DELE) or equivalent. Majors are expected to perform at the B2 level or equivalent.
- Write and defend in open forum an acceptable paper of moderate length reflecting on their study of Spanish, their study abroad experience and how they combine with the mission of a liberal arts education.
 Majors may earn honors in the department by writing a quality senior thesis and defending it in open forum.

Minor Requirements

- Twenty-four credits in Spanish which must include SPN 321, 350 or 352 and at least 4 additional credits at the 300 level.
- A semester or Spring Term of study in a Spanish-speaking country is highly recommended.
- Language Proficiency must be demonstrated by taking the American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Exam, the *Examen Básico of the Diploma de Español como Lengua Extranjera* (DELE) or equivalent. Minors are expected to perform at the B1 level or equivalent.

All courses are taught in Spanish unless otherwise indicated. Courses taught internationally may have a different emphasis from those offered on the Alma campus.

Teaching Major Requirements

- Thirty-four of Alma's 36-credit-hour major must be beyond SPN 222 and include SPN 321, at least 4 credits at the 400 level, and at least 4 credits from each of these groups: Spain Culture and Civilization - SPN 350, 355, 261/361; Latin American Culture and Civilization - SPN 334, 352, 364, 374, 263/363; and Literature - SPN 331, 340, 343, 344, 360, 362, 370, 372, 460, 462.
- A minimum of one semester of approved international study in a Spanish-speaking country.
- Successful completion of ENG 225 and EDC 445f.
- Write and defend in open forum an acceptable paper of moderate length reflecting on their study of Spanish, their study abroad experience and how they 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 the American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Exam at the Advanced Low level. The Teacher Education Program is proactive about informing students of opportunities for taking these tests.

Teaching Minor Requirements

- Twenty-three of Alma's 24 credit minor must be beyond SPN 222 and include SPN 321 and at least 4 credits from each of these groups: Spain Culture and Civilization - SPN 350, 355, 261/361; Latin American Culture and Civilization - SPN 330, 334, 352, 364, 374, 263/363; and Literature - SPN 331, 340, 343, 344, 360, 362, 370, 372, 460, 463.
- A semester or Spring Term of study in a Spanish-speaking country is highly recommended.
- Successful completion of ENG 225 and EDC 445f.
- 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 the American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Exam at the Advanced Low level. The Teacher Education Program is proactive about informing students of opportunities for taking these tests.

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

SPN 111 Beginning Spanish I

LA 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. Students who have earned credit for three or more years of high school Spanish may not enroll in SPN-111 or 112. (Alma, Alma Programs Abroad)

SPN 112 Beginning Spanish II

🌐 AH LA 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. Students who have earned credit for three or more years of high school Spanish may not enroll in SPN 111 or 112. (Alma, Alma Programs Abroad)
Prereq: SPN-111 or Permission

SPN 185 Service Learning in Spanish

🌐 AH LA 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 221 Intermediate Spanish Language I**
 🌐 AH LA 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. Students who have earned credit for three or more years of high school Spanish will have a default placement of SPN 221. These students are encouraged to take the placement test to continue their study at a higher level. (Alma, Alma Programs Abroad)
- SPN 222 Intermediate Spanish Lang II**
 🌐 AH LA 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. Students who have earned credit for three or more years of high school Spanish will have a default placement of SPN 221. These students are encouraged to take the placement test to continue their study at a higher level. (Alma, Alma Programs Abroad)
Prereq: SPN-221 or Placement
- SPN 223 Intermediate Spanish Language III**
 🌐 AH LA 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. (Mexico)
- SPN 224 Intermediate Spanish Language IV**
 🌐 AH LA 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 230 Hispanic Readings**
 🌐 AH 4 cr
 Development of reading and vocabulary skills necessary for success in upper level study in Spanish. Practice of strategies and techniques to become more efficient and better readers, deciphering the meaning of unfamiliar vocabulary from structure and context, and improving comprehension of texts representative of a variety of genres.
- SPN 255 Peninsular Literature in Translation**
 🌐 AH 4 cr **UL**
 Reading and discussion of selected representative works of Spanish Peninsular literature in English translation. Content may vary. Does not count toward the Spanish majors or minors. (Alma)
- SPN 261 Language & Culture in Spain**
 🌐 AH LA 4 cr
 Spanish language instruction, investigation and comparative studies of social and ethnic issues. Students live with a host family. Destination may vary. Requires instructor permission. Course fee. (Spring Term course)
- SPN 263 The Other America**
 🌐 AH LA 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. Requires instructor permission. Course fee. (Spring term course)
- SPN 265 Hispanic-American Lit in Translation**
 🌐 🗏 AH 4 cr **UL**
 Reading and discussion of selected representative works of Hispanic-American literature in English translation. Content may vary. Does not count toward the Spanish majors or minors. (Alma)
- SPN 281 Conversation**
 🌐 AH LA 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)
Prereq: SPN-221 or Permission
- SPN 299 Independent Reading**
 🌐 1-4 cr **UL**
 Supervised study and research of an area not covered in available courses. Requires instructor permission.
- SPN 311 Spanish Grammar I**
 🌐 AH LA 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)
- SPN 312 Spanish Grammar II**
 🌐 AH LA 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)
- SPN 313 Spanish Grammar III**
 🌐 AH LA 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)
- SPN 314 Spanish Grammar IV**
 🌐 AH LA 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)
- SPN 315 Advanced Spanish Language**
 🌐 AH LA 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)
- SPN 316 Advanced Spanish Language**
 🌐 AH LA 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)
- SPN 321 Advanced Composition**
 🗏 🌐 AH LA 4 cr **UL**
 Advanced composition in a variety of genres aimed at developing skills appropriate to professional as well as academic contexts. (Alma)
Prereq: SPN-222 or Placement
- 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.
- SPN 325 Investigation of Grammar**
 🌐 AH LA 2-4 cr **UL**
 Intensive review of Spanish grammatical theory and structures. Prerequisites are SPN 321 and overseas study completed.
Prereq: SPN-321 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 or Permission

SPN 331 Introduction to Hispanic Literature

☺ AH LA 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: SPN-321 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: SPN-222 and Placement

SPN 335 Spanish for Business & Commerce

☺ AH LA 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: SPN-222 and Placement

SPN 340 Survey of Hispanic-American Literature

☺ AH LA 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 or Permission

SPN 343 Survey of Spanish Literature

☺ AH LA 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: SPN-222 and Placement

SPN 344 Survey of Regional Hispanic Literature

☺ AH LA 4 cr UL

Reading and discussion of regional literature, poetry, novels and epics. Themes and authors include pre-Columbian legend, Romanticism, Modernism.

Prereq: SPN-222 and Placement

SPN 350 History of Spanish Civilization

☺ AH LA 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 or Permission

SPN 352 Hispanic-American Culture & Civilization

☺ AH LA 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 affect on the United States. Readings, lectures, compositions and discussions in Spanish. (Alma, Alma Programs in Hispanic-America)

Prereq: SPN-321 or Permission

SPN 355 History of Art and Architecture

☺ AH LA 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: SPN-222 and Placement

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, 331 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, 331 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: SPN-222 and Placement

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, 331 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, 331, or Permission

SPN 373 Hispanic-American Theater

☺ LA 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.

Prereq: SPN-321 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: SPN-222, Permission and Placement

SPN 377 Studies in Hispanic Film

☺ LA 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 or Permission

SPN 380 Topics in Spanish

☺ AH 2-4 cr UL

Requires instructor permission. Prerequisites vary by topic.

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, 331 or Permission

SPN 462 Seminar in Hispanic-American Literature 4 cr UL
AH
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, 331 or Permission

SPN 495 Thesis Preparation 1 cr UL
AH
Requires instructor permission.

SPN 499 Spanish Independent Study 1-4 cr UL
Supervised reading and research in an area not covered by available courses. Requires senior standing and instructor permission. (Alma)

SPN 500 Senior Thesis 4 cr UL
Definition of a question, thesis paper and oral defense in Spanish. Requires senior standing and permission. (Alma)

Chinese (CHN), Greek (GRK), Hebrew (HEB) and Latin (LAT)

Chinese (CHN)

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

The courses listed are offered periodically upon sufficient demand.

CHN 111 Beginning Chinese I 4 cr
LA
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 4 cr
AH LA
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 4 cr
AH LA
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 Placement

CHN 222 Intermediate Chinese II 4 cr
AH LA
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 Placement

Greek (GRK)

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

The courses listed are offered periodically upon sufficient demand.

GRK 111 Classical Greek I 4 cr
LA
Study of basic Greek grammar, morphology and vocabulary, culminating in the reading of elementary classical and New Testament texts.

GRK 112 Classical Greek II 4 cr
AH LA
Study of basic Greek grammar, morphology and vocabulary, culminating in the reading of elementary classical and New Testament texts.
Prereq: GRK-111 or Permission

Hebrew (HEB)

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

The courses listed are offered periodically upon sufficient demand.

HEB 111 Biblical Hebrew 4 cr
LA
Introduction to Old Testament Hebrew. Includes grammar and elementary reading.

HEB 112 Advanced Biblical Hebrew 4 cr
AH LA
Advanced reading of a variety of styles of Old Testament Hebrew with emphasis on grammatical form analysis and word study as related to critical-literary examination of the Old Testament.
Prereq: HEB-111

Latin (LAT)

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

The courses listed are offered periodically upon sufficient demand.

LAT 111 Elementary Latin I 4 cr
LA
Phonetics, morphology, syntax and semantics preparatory to the translation of simple texts such as Caesar and Pinius.

LAT 112 Elementary Latin II 4 cr
AH LA
Phonetics, morphology, syntax and semantics preparatory to the translation of simple texts such as Caesar and Pinius.
Prereq: LAT-111 or Permission

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 MUS 111, 111a, 112, 112a, 211, 212, 214, 443, 444, 445, 500, two credits of Ensembles and two credits of Applied Lessons. 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. 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 including MUS 111, 111a, 112, 112a, 116, 211, 212, 214, 215, 237, 337, 344, 431, 443, 444, 445; seven credits of Ensembles, one of which must be MUS 155 or 159; and 14 credits of Applied Lessons on one instrument. Students with a *vocal emphasis* must complete MUS 132, 138, and one

term of an instrumental ensemble or instrumental pedagogy course. Students with an *instrumental emphasis* must complete MUS 134, 135, 136, 137 and either MUS 138 or one term of a vocal ensemble. 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.

Bachelor of Music in Performance

Eighty-eight credits including MUS 111, 111a, 112, 112a, 116, 211, 212, 214, 215, 237, 443, 444, 445, 500; eight credits of Ensembles, one of which must be MUS 155 or 159; 28 credits of Applied Lessons on one instrument or voice and 9 credits of elective coursework subject to Department approval. All students must also complete one pedagogy course (from MUS 131-138 courses) in the area of their major instrument. MUS 500 must be a recital.

Minor Requirements

Twenty-four credits including MUS 111, 111a, 112, 112a, and 120; two credits from MUS 140, 211, 214, 215, 237, 443, 444 or 445; and six credits of applied lessons on one instrument or voice.

Performance Courses

Applies to: MUS 191/*391, 192/*392, 193/*393, 194/*394, 195/*395, 196/*396, 197/*397, and 198/*398. (Offered every term)

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) represents upper level performance skill and experience and requires Departmental approval. Candidates for the Bachelor of Music in Performance are advised to enroll at the 300-level by the second semester of the first year. Only 300-level students may elect four hours of credit. The Department will consider all candidates for the Bachelor of Music in Performance for 300-level suitability at the end of the first term of study.

There is a private instruction fee, assessed each term lessons are taken, for all levels (191-198, 391-398).

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.

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.
Prereq: MUS-111A

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.

MUS 115 Piano Proficiency II

AH 2 cr
Level II piano proficiency, continuations of scale and arpeggio technique, chord progressions, solo and ensemble repertoire.
Prereq: MUS-114 or Audition; Music Major

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.
Prereq: MUS-115 or Audition; Music Major

MUS 117 Class Voice I

AH 2 cr
Basic principles of singing for the student with little or no previous training. (Offered every year)


MUS 118 Class Voice II

AH 2 cr
Basic principles of singing for the student with little or no previous training. (Offered every year) Requires instructor permission.

MUS 119 Class Guitar

AH 2 cr
Fundamentals for the beginning guitar player.

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 every other year)

MUS 131 Piano Pedagogy

AH 1 cr
Principles of musicianship on the piano. Designed for music education students. Emphasis on pedagogical methods and materials used in teaching piano to beginning and intermediate students.
Prereq: 8 credits from MUS-196 or MUS-396

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 every other year)

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 every other year)

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 every other year)

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 every other year)

MUS 137 Percussion Pedagogy

AH 1 cr
Principles of playing percussion instruments with emphasis on snare drum, mallet keyboard instruments and timpani. (Offered every other year)

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 every other year)
Prereq: 2 terms of MUS-151 and/or 157 and/or 158

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 150 Accompanying

AH 1 cr

MUS 151 College Chorale

AH 1 cr

MUS 152 Alma Symphony Orchestra

AH 1 cr

MUS 153 Kiltie Band

AH 1 cr

MUS 154 Scottish Arts

AH 1 cr

MUS 155 Percussion Ensemble

AH 1 cr

MUS 156 Jazz Ensemble

AH 1 cr

MUS 157 Women's 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 159G Chamber Music Clarinet

AH 1 cr

MUS 159I Chamber Music Saxophone

AH 1 cr

MUS 159J Chamber Music High Brass

AH 1 cr

MUS 159K Chamber Music Horn

AH 1 cr

MUS 159L Chamber Music Trombone

AH 1 cr

MUS 159N Chamber Music Low Brass

AH 1 cr

MUS 180 Topics in Music

AH 1-4 cr
Selected topics in music. May be taken more than once if topics differ. Only two registrations count toward Music Major.

MUS 191A Violin

AH 2 cr
Private lessons. Course fee.
Prereq: MUS-191A previously or Permission

MUS 191B Viola

AH 2 cr
Private lessons. Course fee.
Prereq: MUS-191B previously or Permission

MUS 191C Violoncello

AH 2 cr
Private lessons. Course fee.
Prereq: MUS-191C previously or Permission

MUS 191D Double Bass

AH 2 cr
Private lessons. Course fee.
Prereq: MUS-191D previously or Permission

MUS 191E Jazz Guitar

AH 2 cr
Private lessons. Course fee.
Prereq: MUS-191E previously or Permission


MUS 191K Bass Guitar

AH 2 cr
Private lessons. Course fee.
Prereq: MUS-191K previously or Permission

MUS 191Y Classical Guitar AH Private lessons. Course fee. <i>Prereq: MUS-191Y previously or Permission</i>	2 cr	MUS 197A Organ AH Private lessons. Course fee. <i>Prereq: MUS-197A previously or Permission</i>	2 cr
MUS 192E Flute AH Private lessons. Course fee. <i>Prereq: MUS-192E previously or Permission</i>	2 cr	MUS 197B Harpsichord Private lessons. Course fee. <i>Prereq: MUS-197B previously or Permission</i>	2 cr
MUS 192F Oboe AH Private lessons. Course fee. <i>Prereq: MUS-192F previously or Permission</i>	2 cr	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>	2 cr
MUS 192G Clarinet AH Private lessons. Course fee. <i>Prereq: MUS-192G previously or Permission</i>	2 cr	MUS 201 Music and Sound for Digital Media AH Examines theoretical and technical elements of digital sound and music, including sound design and synthesis, sound editing, Musical Instrument Digital Interface (MIDI) sequencing, studio recording techniques, digital signal processing, computer-based music publishing, sound effect and narration tracks for video and the role of sound in interactive development. Emphasis on sound in digital media projects with layers of media data in formats such as the World Wide Web, Power Point presentations, Flash, QuickTime CD-ROM and DVD. (Offered every year) (Cross-listed with NMS-204)	4 cr UL
MUS 192H Bassoon AH Private lessons. Course fee. <i>Prereq: MUS-192H 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 192I Saxophone AH Private lessons. Course fee. <i>Prereq: MUS-192I 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 192P Bagpipes AH Private lessons. Course fee. <i>Prereq: MUS-192P previously or Permission</i>	2 cr	MUS 214 MIDI Composition & 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. Music major or permission. (Offered every year)	2 cr UL
MUS 193J Trumpet AH Private lessons. Course fee. <i>Prereq: MUS-193J 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.	2 cr UL
MUS 193K Horn AH Private lessons. Course fee. <i>Prereq: MUS-193K previously or Permission</i>	2 cr	MUS 225 Orchestration & 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 193L Trombone AH Private lessons. Course fee. <i>Prereq: MUS-193L previously or Permission</i>	2 cr		
MUS 193M Euphonium AH Private lessons. Course fee. <i>Prereq: MUS-193M previously or Permission</i>	2 cr		
MUS 193N Tuba AH Private lessons. Course fee. <i>Prereq: MUS-193N previously or Permission</i>	2 cr		
MUS 194 Percussion AH Private lessons. Course fee. <i>Prereq: MUS-194 previously or Permission</i>	2 cr		
MUS 195 Voice AH Private lessons. Course fee. <i>Prereq: MUS-195 previously or Permission</i>	2 cr		
MUS 196 Piano AH Private lessons. Course fee. <i>Prereq: MUS-196 previously or Permission</i>	2 cr		

MUS 237 Conducting & Score Reading
 AH 2 cr **UL**
 Art of conducting, rehearsal techniques and procedures, score reading, problems of interpretation, organization and activities of choral and instrumental groups. (Offered every year)
Prereq: MUS-112

MUS 250 Musical Theatre Techniques
 AH 4 cr **UL**
 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.

MUS 284 Music in Film
 AH 4 cr **UL**
 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.
Prereq: ENG-101

MUS 337 Advanced Conducting
 AH 2 cr **UL**
 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 year)

MUS 340 Piano and Chamber Music Literature
 AH 4 cr **UL**
 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. (Offered every other year)

MUS 344 Elementary School Music
 AH 4 cr **UL**
 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 every other year) Requires MUS major or minor or training.

MUS 350 Opera Workshop
 AH 1-4 cr **UL**
 Basic techniques of operatic performance: role preparation, body movement related to music, acting, and techniques. May be repeated for up to a total of 4 credits.

MUS 351 Alma College Choir
 AH 1 cr **UL**
 Final registration subject to audition

MUS 380 Topics in Music
 AH 2-4 cr **UL**
 Selected topics in music. May be taken more than once if topics differ. Only two registrations count toward a Music Major. (Offered every year)

MUS 391A Violin
 AH 2-4 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 391B Viola
 AH 2-4 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 391C Violoncello
 AH 2-4 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 391D Double Bass
 AH 2-4 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 391E Jazz Guitar
 AH 2-4 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 391K Bass Guitar
 AH 2-4 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 391Y Guitar
 AH 2-4 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 392E Flute
 AH 2-4 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 392F Oboe
 AH 2-4 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 392G Clarinet
 AH 2-4 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 392H Bassoon
 AH 2-4 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 392I Saxophone
 AH 2-4 cr **UL**
 Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.
Prereq: MUS-192I previously or Permission

MUS 392P Bagpipes
 AH 2-4 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 393J Trumpet
 AH 2-4 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 393K Horn
 AH 2-4 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 393L Trombone
 AH 2-4 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 393M Euphonium

AH 2-4 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 393N Tuba

AH 2-4 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 394 Percussion

AH 2-4 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 395 Voice

AH 2-4 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 396 Piano

AH 2-4 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 397A Organ

AH 2-4 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 397B 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 398 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 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 every other year) Requires instructor permission.


MUS 443 Music History I

 AH 4 cr UL
Antiquity, the Middle Ages and the Renaissance. (Offered every other year)
Prereq: MUS-112

MUS 444 Music History II

 AH 4 cr UL
Baroque and classical music. (Offered every year)
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 499 Music Independent Study

1-4 cr UL
Requires instructor permission.

MUS 500 Graduation Recital Or Senior Thesis

2 cr UL
Satisfies the Department's comprehensive evaluation requirement. Requires instructor permission.

New Media Studies (NMS)

Major Requirements

Fifty-two credits which must include:

1. NMS 101, 120, 201, 203 or 204, 220, 385 (P/F only), and 450.
2. Twelve credits (8 of which must be upper level) from NMS 114, 210, 240, 250, 260, 282, 300, 320, 381.
3. Twelve credits from ART 224, 230, 232, 390; COM 327; CSC 204, 335; ENG 202, 270, 370; MUS 215; PHL 224; SOA 328 or other course pre-approved by the Department. Cognates may count toward second majors and minors.

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-eight credits that must include:

1. NMS 101, 201, 450, and one of 120, 203, 204 or 220.
2. Eight credits (4 of which must be upper level) from NMS 114, 210, 240, 250, 260, 282, 300, 320, 381.
3. Four credits from ART 224, 230, 232, 390; COM 327; CSC 204, 335; ENG 202, 270, 370; MUS 215; PHL 224; SOA 328 or other course pre-approved by the Department.

NMS 101 Introduction to Digital Media

AH 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. (formerly NMS 210)

NMS 114 Introduction to Web Development

AH 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 120 Principles of Visual Design

AH 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 180 Topics in New Media Studies

AH 1-4 cr
Selected topics in new media innovations, issues and effects. May be taken more than once for credit.
Prereq: 4 credits in NMS or Permission

NMS 201 Media Systems & Influence

AH 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 203 Camera Media

AH 4 cr
This course seeks a fluency in the camera as an instrument for communication, industry, and inquiry in the twenty-first century. Students acquire skills in the critique and authorship of camera media through perspectives from the arts, humanities, and sciences. Theories are wed to hands-on practices with photography, time-based narratives, virtual environments, video chat, citizen journalism, microscopy, telescopy, and wearable media. Course fee.

NMS 204 Sound Design

AH 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 210 Motion Graphics & Animation

AH 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

AH 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 240 Digital Film Production

AH 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.

NMS 250 Media, Power and Ownership

AH 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

AH 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

AH 2-4 cr UL
Selected topics in new media innovations, issues and effects. May be taken more than once for credit.


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

 AH 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. (formerly COM 303)

NMS 320 Computer Game Design & Interactive Narr

4 cr UL
Using coursework and team projects, students explore the process by which games go from conception to formal design to implementation. Explore all facets of the game development process, from brainstorming techniques, to art and sound design, to testing and marketing. Laboratory.
Prereq: NMS-120 and NMS-220 or CSC-120

NMS 380 Topics in New Media Studies

AH 2-4 cr UL
Selected topics in new media innovations, issues and effects.
Prereq: NMS-101 or Permission

NMS 381 Documentary Video

AH 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 Sem in Media Apps & Implications

 AH 4 cr UL
Explores proposed and possible digital media forms, functions, contents and systems. Investigates applications of media tools and how new developments in media may both represent and transgress cultural and professional assumptions about the nature of media and mediated communication. Requires completion of a senior studio or research project. Requires senior standing.

NMS 499 NMS Independent Study1-4 cr **UL**

Requires instructor permission.

NMS 500 Studies Senior Thesis2-4 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.

Nursing (NUR)

Program Requirements for the Bachelor of Science in Nursing (119 total credits):

1. Professional Sequence (32 credits): NUR 210, 211, 310, 311, 360; IPH 310, 430; MTH 116; PSY 121, 231.
2. Nursing Content/Practice (26 credits): NUR 350, 351, 352, 353, 354, 355, 500.
3. Natural Science Core (36 credits): BIO 121, 308; CHM 115; IPH 220, 225, 226, 328, 340, 344.
4. Integrative Core (25 credits): SOA 101; PHL 239; 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 con-current semester courses with that of the clinical decision making process for application to nursing practice.

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. These concepts are: patient-centered care, communication, collaboration and interdisciplinarity, critical thinking and clinical decision-making, nursing therapeutics (informatics), clinical prevention and population health, nursing management of disease processes, professional leadership (health, policy, finance and regulatory environments, quality and patient safety), ethical practice, evidence-based practice, and global cultural scholarship. 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-101

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. These concepts are: patient-centered care, communication, collaboration and interdisciplinarity, critical thinking and clinical decision-making, nursing therapeutics (informatics), clinical prevention and population health, nursing management of disease processes, professional leadership (health, policy, finance and regulatory environments, quality and patient safety), ethical practice, evidence-based practice, and global cultural scholarship. 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 is further developed in this course.

Prereq: NUR-101 and 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. These concepts are: patient-centered care, communication, collaboration and interdisciplinarity, critical thinking and clinical decision-making, nursing therapeutics (informatics), clinical prevention and population health, nursing management of disease processes, professional leadership (health, policy, finance and regulatory environments, quality and patient safety), ethical practice, evidence-based practice, and global cultural scholarship. 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-101, 102, and 201

Philosophy (PHL)

Major Requirements

1. Thirty-six credits, including PHL 102, 103, 111 or 112, 126 and 500. Sixteen credits at the upper level; typically some are independent studies developed in consultation with the Department.
2. Successful completion of the thesis and oral examination administered by the Department.

Minor Requirements

Twenty-four credits, including PHL 102, 103, 111 or 112, and 126. Others 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 with 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. Also 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. Also 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. Also 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. Also 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 with 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 with 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 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 299 Philosophy Independent Study**
4 cr
Planned program of individual study of a particular subject in philosophy, developed with the supervising professor. Requires instructor permission.
- PHL 303 Symbolic Logic**
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: Any ethics course from PHL-126, 202, 225, 227, 228, 229, 235, 240 or 242 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. Requires instructor 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. Requires instructor 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. Requires instructor permission.

PHL 500 Senior Thesis
1-4 cr UL
Individual research culminating in preparation of a major paper and departmental oral examination. Requires instructor permission.

Physics (PHY)

Major or Teaching Major Requirements

1. Thirty-six credits, including PHY 121, 122, 220, 221, 312, 321, 323, 421; and either 333, 380, 499, 500 or Astronomy 225.
2. Twenty cognate credits, including Mathematics 121, 122, 210, 211 and Computer Science 120.

Minor or Teaching Minor Requirements

Twenty-four credits, including Physics 121, 122, 220, 221 and eight credits from Physics and Astronomy courses numbered 200 or above. Twenty cognate credits, including Mathematics 121, 122, 210, 211 and Computer Science 120.

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

PHY 101 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-101 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
First half of introductory survey of physics with emphasis on problem-solving. Uses calculus. Appropriate for physics, chemistry or mathematics majors, pre-engineering students, and pre-medical students who have had calculus. Includes mechanics, dynamics and rotation. Requires MTH-121 concurrently or permission. Permission will be granted immediately to students who already have credit for MTH-112 or 113. Laboratory. Course fee.

PHY 122 Introduction to Physics II
NS2 4 cr
Second half of the introductory survey of physics started with PHY 121. Uses calculus. Includes oscillations, gravity, waves, sounds, fluids and thermal physics. Completion of MTH-122 or concurrent enrollment in MTH-122 is strongly recommended. Laboratory. Course fee.
Prereq: PHY-121

PHY 140 Machine Shop
NS2 2 cr
Introduction to machine shop tools and techniques. Requires instructor permission to register. Course fee.

PHY 212 Mechanics I: Statics
NS2 4 cr UL
Study of static equilibrium of rigid bodies. Includes translational and rotational equilibrium; stresses, strains and deformations; strengths of materials.
Prereq: PHY-121 and CSC-120; MTH-210 concurrently

PHY 220 Introduction to Electromagnetism
NS2 4 cr UL
Continuation of survey of physics begun in PHY 121-122. Study of fundamentals of electricity and magnetism: charge, current, fields, potentials, resistance, capacitance, and an introduction to electromagnetic waves. Laboratory. Course fee.
Prereq: PHY-122; MTH-210 or Permission

PHY 221 Modern Physics
NS2 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-122; MTH-210 or Permission


PHY 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. Requires PHY-221 concurrently.

PHY 299 Physics Independent Study
1-8 cr UL
Planned program of study. Topic selected by instructor and student. Requires instructor permission.

PHY 312 Dynamics
NS2 4 cr UL
Study of motion. Includes particle dynamics, central force motion, rigid body motion, Lagrange's and Hamilton's equations of motion. See Catalog for prerequisites.
Prereq: PHY-122 and MTH-210; PHY-251 strongly recommended

PHY 321 Advanced Electromagnetism
NS2 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.
Prereq: PHY-220 and MTH-210; PHY-251 strongly recommended

PHY 323 Thermal/Statistical Physics
NS2 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-Boltzmann statistics; thermal equilibrium; and fluctuations and irreversibility.
Prereq: PHY-221 and MTH-210; PHY-251 strongly recommended

PHY 333 Optics
 NS2 4 cr UL
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-220 recommended


PHY 380 Topics in Physics
NS2 4 cr UL
Study of topic of current or historical importance chosen by instructor. Prerequisites vary with selections. May require instructor permission.

PHY 399 Physics Independent Study 1-4 cr UL
Planned program of study. Topic selected by instructor and student. Requires instructor permission.

PHY 421 Quantum Mechanics
NS2 4 cr UL
Study of wave and matrix mechanics, the harmonic oscillator, the hydrogen atom and angular momentum and spin.
Prereq: PHY-221 and MTH-310

PHY 480 Topics in Physics 4 cr UL
Study of topic of current or historical importance chosen by instructor. Prerequisites vary with selections. May require instructor 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
 NS2 2-4 cr UL
Planned program of research performed on campus or as part of research group at major university or national laboratory. Requires instructor permission. Course fee.

Political Science (POL)

Major Requirements

1. Common core - POL 201, 202, 302 and 401 (12 credits total).
2. Disciplinary breadth - one course from each of the following groups (16 credits total):
 - a. American Politics: 100, 101, 141, 241, 242, 243, 245, 335, 341, 345;

- b. Comparative Politics: POL 100, 111, 115, 211, 212, 215, 217;
 - c. International Relations: POL 100, 121, 127, 221, 225, 226/227, 325, 326, 327 and 328/329;
 - d. Political Theory: POL 100, 131, 231, 232, 233, 234;
3. POL 100 may only be used to satisfy **one** group. With instructor approval based on content, the following courses may be used to satisfy any group: POL 381, 382 (Washington Semester); POL 385, 386, 387; POL 499; or POL 500. Only 8 credits of POL 226/227 and 328/329 may count towards the major.
 4. Sub-disciplinary expertise - 8 credits: Students must complete two additional upper-level courses, 200 or higher, both taken from **one** group;
 5. Major Cognates: MTH 116, PSY 220 or BTC 280 (Biostatistics);
 6. At least 24 credits must be upper-level (200 or higher);
 7. Minimum 2.75 cumulative GPA;
 8. Satisfactory completion of the Graduate Record Advanced Examination, MFAT, or departmental comprehensive evaluation;
 9. Departmental honors: Completion and public presentation of a senior thesis; minimum 3.5 GPA in Political Science, and 3.3 GPA overall.

Minor Requirements


Twenty-four credits which must include POL 100 and 201 and at least 16 credits at the upper level. POL 401 is recommended. Only four credits from 226/227 and 328/329 may count for the Political Science Minor.

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


POL 100 Introduction to Political Science 4 cr
SO
Introduction to the discipline of political science. Explores certain key themes and concepts of the discipline, such as politics and power, and considers some of the different approaches that political scientists use to study the political world. Introduces the discipline's four subfields of political theory, comparative politics, international relations and American politics, and explores the connections between them.


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.

POL 103 Reel Politics 2 cr
SO
Exploration of the portrayal of American politics in historical and contemporary films.

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.

POL 115 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.

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.

POL 127 Presidential Library Research 4 cr
 SO
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.

POL 131 Introduction to Political Theory
SO 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 with PHL-131.

POL 141 Intro to Public Mgt & Policy Analysis
SO 4 cr
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.

POL 180 Topics in Political Science
SO 2-4 cr
Examines special political subjects in both the foreign/international and American realms.

POL 201 Nature of Political Inquiry
SO 4 cr UL
An introduction to political science research, including the nature of political inquiry and research methodology. Development of an actual research project.

POL 202 Political Science Journal Club
SO 2 cr UL
The journal club introduces students to contemporary research in Political Science; concurrent sections of 202 and 302 will meet jointly. This seminar will evaluate recent peer-reviewed articles published in top-tier political science journals, helping students become familiar with contemporary research across a variety of topics. At the 202 level, students will be expected to engage with the material and actively participate in discussion.
Prereq: Four credits from Political Science

POL 211 Western European Politics
SO 4 cr UL
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.

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.

POL 215 Making and Breaking News
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.

POL 217 Arctic Politics and Science
SO 4 cr UL
Survey the current state of scientific research examining polar melting. Explore the international legal and strategic implications of polar melting globally, with particular emphases on the five countries claiming polar waters (the U.S., Russia, Canada, Denmark and Norway).

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.

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.

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.

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.

POL 231 American Political Thought
SO 4 cr UL
Historical and contemporary meanings of democracy, its assumptions and implications: tensions between theory and practice, majority rule and minority rights, civil disobedience, economic-political democracy, institutionalization of democratic procedures, and the future of democracy.

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 with PHL-232.

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.

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 with PHL-234.

POL 241 Presidential Leadership
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.

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.

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.

POL 280 Topics in Political Science

SO 2-4 cr UL
Variable topics in political analysis.

POL 302 Political Science Journal Club

SO 2 cr UL
The journal club introduces students to contemporary research in Political Science; sections of 202 and 302 will meet jointly. This seminar will evaluate recent peer-reviewed articles published in top-tier political science journals, helping students become familiar with contemporary research across a variety of topics. At the 302 level, students will be responsible for article selection and leading discussion of the material. Students will prepare a substantive research proposal, including literature review, which can then be further developed into a senior thesis.

Prereq: POL-202

POL 315 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.

Prereq: POL-215

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.

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."

POL 327 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.

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.

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.

Prereq: POL-226 and 227

POL 335 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.

Prereq: POL-100

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.

POL 345 Public Administration History & 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.

POL 380 Topics & 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

1. Thirty-six credits in Psychology which must include Psychology 121; 201 or 204; 212; 220; 225; 231 or 236; 305; 314 and 4 additional elective credits in PSY.
2. The Graduate Record Examination Psychology Subject Test is required for the comprehensive evaluation.
3. The Department recommends that students supplement the major with adjunct courses from Biology, Computer Science, Sociology and Anthropology, Mathematics and Philosophy.
4. Psychology 310, 390 and 500 are strongly recommended to students considering graduate study in Psychology or Cognitive Science.

Minor Requirements

Twenty-four credits of Psychology.

Four credits from PSY, with the exception of practicum or independent study courses, count towards the Distributive

Requirements in the Natural Sciences - Life Sciences.

PSY 121 Introduction to Psychology

NS1 4 cr UL
Survey of major areas of psychology: learning, perception and cognition, human development, individual differences, social psychology and abnormal psychology. Laboratory. Course fee.

PSY 200 Animal Behavior

NS1 4 cr UL
Introduction to the ethological approach: aggression, courtship, cooperation, social structure and means of communication in a variety of species. Includes laboratory and field experience in observation and recording of behavior.


Prereq: PSY-121 or BIO-120 and Permission

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 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 231 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 236 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 SOA-101

PSY 240 Behavior Modification

NS1 4 cr UL
Application of psychological principles to human concerns including teaching, child care, stress management, study skills, self-control and persuasion.

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 2 cr UL
Examination of current psychological theory and research concerning physical changes, cognition, personality and psychopathology in the later years of life.

Prereq: PSY-121

PSY 275 Psychological Testing & Measurement

NS1 2 cr UL
Consideration of principles involved in constructions, 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 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 Motivation & Learning

 NS1 4 cr UL
In-depth study of theoretical background and current research on motivation and learning among human and non-human species.

Prereq: PSY-201 or 204; PSY-220, 225 or Permission

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 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 and 212

PSY 385 Psychology Practicum

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 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 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 499 Psychology Independent Study 2-4 cr **UL**
Planned program of reading in preparation for senior thesis.

PSY 500 Senior Thesis 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 18 credits drawn from the following classes: Public Affairs 150, 160, 350, 360, 385, 450 and 499; and Political Science 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 History 105 or 121; Philosophy 126, 225, 227, 228, 229, 235 or Religious Studies 210; Economics 201 and 202, Political Science 101, or Sociology and Anthropology 101; and Environmental Studies 105 or Psychology 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 1-2 cr
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 1-4 cr
Investigation and implementation of projects related to economic and social development issues in local, regional and global community.

PAF 350 Public Affairs Seminar I 2-4 cr **UL**
Topical study of public affairs issues examined from interdisciplinary and multidisciplinary perspectives. Focus on formulation, implementation and effects of selected decisions and

programs in public and private sectors. Provides preparation for PAF 450. May have a course fee.

PAF 360 Community Issues & Public Leadership II 1-4 cr **UL**
Advanced investigation and continuing implementation of projects related to economic and social development issues in local, regional and global community.
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. Requires instructor 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**
Investigation of selected public affairs issues, policies and programs from interdisciplinary and multidisciplinary perspectives. May require a course fee.
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. Requires instructor permission.
Prereq: PAF-350, 360 or 450 and Permission

Religious Studies (REL)


Major Requirements

1. Thirty-six credits in Religious Studies including REL 100 and 400.
2. Remaining program of study will be constructed on an individual basis in consultation with members of the department.
3. Foreign language study (either ancient or modern, depending on the student's academic interests) is strongly encouraged for all majors.

Minor Requirements

1. Twenty-four credits in Religious Studies including 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
 AH
An introduction to the histories, major figures, sacred texts and belief systems of selected "world religions" such as Hinduism,

Confucianism, Daoism, Judaism, Jainism, Buddhism, Christianity, Islam, and/or newer religious movements such as Mormonism or Baha'i Faith.

REL 101 Introduction to the Hebrew Bible
☺ AH 4 cr
Introduction to the Hebrew Bible from its origins to the Babylonian Exile (587-6 B.C.); focuses on history, literature and interpretation. Examination of assumptions and methodology.

REL 102 Introduction to the New Testament
☺ AH 4 cr
Introduction to the New Testament, its history, environment, literature and interpretation. Formative years of Judaism and growth of the Christian community.

REL 103 Vocation in Christian Traditions
☺ AH 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 & the Religious Themes
☺ AH 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 World's Religions
☺ AH 4 cr
Examination of what constitutes a good life according to Judaism, Hinduism, Buddhism, Islam and Christianity.

REL 180 Topics in Religion
☺ AH 4 cr
Special topics in Religious Studies will be explored.

REL 181 Topics in Biblical Study
AH 4 cr
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.

REL 202 Women, Gender & Religion
☺ AH 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
☺ AH 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
☺ AH 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 210 Biblical Ethics & Community Service
AH 4 cr
Examines the Biblical ethic which underlies 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
☺ 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 with 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 with 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 with PHL-217.

REL 219 Judaism and Islam
☺ AH 4 cr
An examination of Judaism 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. Requires instructor permission to register. Cross listed as SOA-221.

REL 225 Environmental Ethics
AH 4 cr
Examination of ideas of nature, relation of humans to nature and human responsibilities to, for and with nature from Western (inherited and current), alternative Western (deep-ecology, ecofeminism, Gaia) and Eastern perspectives. Focus on understanding various environmental ethical perspectives and their personal, social and environmental consequences.

REL 230 Religion and Science
☺ AH 4 cr
Examination of the relationship between religion and science through both historical and contemporary issues.

REL 240 Jesus in Gospel & 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.

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 1-8 cr
Special topics in Religious Studies will be explored.

REL 299 Religious Studies Independent Study
1-4 cr
Individual study of a particular subject in religion.

REL 302 Women, Gender & 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 Christianity
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. Also 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 Judaism 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 340 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.

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 4 cr UL

Selected topics in religious studies. May be taken more than once. Only two registrations count toward a Major in Religious Studies.

REL 381 Topics in Biblical Studies

AH 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 & 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

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 and Anthropology (SOA)

Sociology Major Requirements

1. Thirty-six credits that must include SOA 101, 111, 251, 301 and 302; 16 credits chosen from SOA 141 or 180, 220, 224, 234, 241, 243, 280, 325, 326, 328, 353, 380, 385, 386, 499 or 500 or no more than four credits from the Anthropology sequence SOA 212, 213, 214, 215, 216, 311, 312, or 315. No more than four credits of approved SOA 180 may count towards the major.
2. The Comprehensive Evaluation for the Sociology major is the successful completion of the Major Field Aptitude Test.

Sociology Minor Requirements

Sociology 101, 111 and 251 plus 12 additional credits with the restriction that only four credits beyond SOA 111 of the Anthropology/Archaeology sequence may count.

Anthropology Major Requirements

1. Thirty-six credits which must include SOA 101, 111, 212, 213, 214 and 498. The 12 remaining credits must be chosen from 215, 216, 220, 241, 311, 312 or 315; preapproved SOA 180, 280, 380 topics courses; or up to eight preapproved credits from other disciplines appropriate to the student's sub-disciplinary interests.
2. The Comprehensive Evaluation for the majors with an emphasis in Anthropology is the successful completion of SOA 498.

Anthropology Minor Requirements

SOA 111, four credits of SOA 498, at least one of SOA 212, 213, and 214, and additional elective credits from Anthropology/Archaeology courses to total 24 credits. To satisfy the Anthropology elective credit, students may, with permission, take up to four credits of Sociology courses that have not been used to satisfy a Sociology major or minor. With prior SOA permission, students may substitute up to four credits from other departments as elective Anthropology credit.

Four credits from SOA, with the exception of practicum or independent study courses, count towards the Distributive

Requirements in the Social Sciences.

SOA 101 Principles of Sociology

SO 4 cr
Introduction to concepts and methods of sociology: society and its institutions, social and cultural change, and their implications. Prerequisite for all other Sociology courses except those in the Anthropology sequence. Computer laboratory; no prior computer experience required.

SOA 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. May require a course fee.

SOA 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. Prereq: SOA-101

SOA 180 Topics in Sociology & Anthropology

SO 1-8 cr
Investigation of a selected topic. May be taken only once for credit toward the major. Prereq: SOA-101

SOA 212 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. SOA-111 recommended before taking SOA-212.

SOA 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. Course fee. SOA-111 recommended before taking SOA-213.

SOA 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: SOA-111 or BIO-120 or Permission

SOA 215 Michigan Archaeological Fieldwork

SO 4 cr UL
Survey and excavation of a local archaeological site. Field methods and record-keeping, preservation of finds, laboratory experience, record-keeping, and public education. Includes classroom, field, and laboratory work including a service-learning component. SOA-111, 115 or 312 recommended. May require a course fee.

SOA 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. SOA-111 recommended.

SOA 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: SOA-101

SOA 221 Bible & Society

SO 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 values and daily lives. Emphasis on lectionary readings shared by Protestants and Roman Catholics, and the Hebrew scriptures. (Cross listed as REL-220). Prereq: SOA-101 or Permission

SOA 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: SOA-101

SOA 234 Aging and Health Institutions

SO 4 cr UL
Examine 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 differences in aging, ethnic minorities and institutions connected to aging and public policy. Prereq: SOA-101

SOA 241 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: SOA-101

SOA 243 Deviance

SO 4 cr UL
Examination, evaluation and discussion of major theories and approaches to deviance, forms of deviance, their institutional relationships, implications for individuals and applications of concepts to "real world" events. Prereq: SOA-101

SOA 251 Social Psychology

SO 4 cr UL
Consideration of current theory and research on self, 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: SOA-101 and PSY-121

SOA 301 Methods of Social Research

SO 4 cr UL
Fundamentals of logic and procedures of social research. Emphasis on research design, measurements of attitudes and behavior, techniques of scaling, coding and analysis of data. Prereq: Twelve credits of SOA or Permission

SOA 302 Sociological Theory

SO 4 cr UL
Examination, evaluation and discussion of major concepts and theories developed since mid-19th century with concentration on those thinkers whose work is relevant to contemporary society. Prereq: Twelve credits of SOA or Permission

SOA 311 Topics in Anthropology

SO 2-4 cr UL
Analysis of selected anthropological problems and/or culture areas, acculturation, applied anthropology and ethnography. Prereq: SOA-111


SOA 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: SOA-111 or 213 or Permission

SOA 315 Michigan Archaeological Field Work
 SO 4 cr **UL**
 Research in 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: SOA-215 or Permission

SOA 325 Conflict and Class
 SO 4 cr **UL**
 Examination of class inequality and its consequences. Topics may include ideology, social movements, and issues in war and peace. Attention is paid to how race and gender issues intersect with class in both national and international settings.
Prereq: SOA-101


SOA 326 Complex Organizations
 SO 4 cr **UL**
 In-depth examination of organizational theory with special focus on organizational metaphors and the social construction of structure, behavior and quality.
Prereq: SOA-101

SOA 328 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.
Prereq: SOA-101

SOA 353 Sociology of Gender
 SO 4 cr **UL**
 How gender practices are socially constructed and enacted. Examine through ethnographic and observation methods how family, religion, race/ethnicity and social class have shaped gender relations. Explore movements to change and resist change in gender arrangements.
Prereq: SOA-101


SOA 380 Topics in Sociology
 SO 2-4 cr **UL**
 Selected topics such as population and ecology, social and cultural change, sociology of education, or alternative life styles. May be taken more than once for credit. Only eight credits count toward the major in Sociology.
Prereq: SOA-101 and 4 additional credits in SOA

SOA 385 SOA Practicum
 SO 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 or report. Requires instructor permission.

SOA 498 Research Seminar
 SO 2-4 cr **UL**
 Designed as a culminating experience for junior or senior sociology majors. Emphasizes student synthesis and application of cumulative sociological knowledge. Students facilitate classes and engage in an original research project culminating in a public presentation of their work.

SOA 499 Independent Study
 2-4 cr **UL**
 Supervised reading or project in special area of sociology, general sociology, social psychology or anthropology. Requires instructor

permission.

SOA 500 Senior Thesis
 SO 4 cr **UL**
 Designed for senior Sociology majors with the consent of the Department. Program of empirical or theoretical research. Projects are generally begun during the first term of the senior year.

Theatre and Dance (THD)

Major Requirements

Emphasis in Dance: Thirty-six credits which must include eight credits of Dance Studio Technique choosing from Theatre and Dance 140, 142, 144, 145, 240, 242, 244, 245, 340, 342, 344 and 345 (any of which may be repeated for credit); 12 credits of Dance Theory 220, 350 and 351; eight credits of Choreography 201, 301; four credits of Theatre; and four credits of Dance electives.

Emphasis in Theatre: Thirty-six credits which must include THD 125, 170, 171 and 232; eight credits from among THD 261, 262 and 263; four credits from Dance Studio Technique courses which include: THD 140, 142, 143, 144, 145, 147, 240, 242, 243, 244, 245 (any of which may be repeated for credit) and THD 141 (which may not be repeated for credit); plus eight credits in advanced-level Theatre courses.

All Majors are required to take the departmental comprehensive examination which is administered by the Department on campus at the end of the Winter Term of the senior year.

Minor Requirements

Emphasis in Dance: Twenty-four credits which must include six credits of Dance Studio Technique choosing from THD 140, 142, 144, 145, 240, 242, 244, 340, 342, 344 and 345 (any of which may be repeated for credit); eight credits of Dance History 350, 351; four credits of Theatre; four credits of Choreography 201 plus two credits of dance 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 desirable.

Emphasis in Theatre: Twenty-four credits which must include THD 125; 170 or 171; THD 232; four credits from THD 261, 262 or 263; four credits from THD 146 or Dance studio (technique) courses; plus four credits of Theatre electives.

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

THD 125 Acting 4 cr
 AH
 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 performance.

THD 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.

THD 141 Social Dance 4 cr
 AH
 Application of basic steps and variations of the cha cha, Charleston, jitterbug, polka and waltz.

THD 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.

THD 143 Yoga I AH	1 cr	live performance; their unifying aesthetic principles and distinctions. Culminates in class presentation of student designs for particular plays.
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.		
THD 144 Ballet I Beginning AH	1 cr	THD 199 Theatre and Dance Independent Study 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.		Supervised reading, research or projects.
THD 145 Jazz Dance I Beginning AH	1 cr	THD 201 Choreography I AH
Development of jazz dance as a performing art. Principles of basic jazz dance. May be repeated for credit.		Analysis of choreographic styles. Principles of various choreographers examined and experienced. Development of individual skills for choreographing.
THD 146 Dance/Theatre Experience AH	4 cr	THD 211 Partnering 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.		Introduction to partnering through participation in exercises in a hands-on environment. Build strength, develop body awareness, learn specific partnering skills. May be repeated for credit. Requires instructor permission.
THD 147 Male Repertoire AH	1 cr	THD 220 Creative Movement for Children AH
Development of the male repertoire of dance as a performing art. Building strength, developing body carriage/posture, and learning the skills of the specific male repertoire of movement. May be repeated for credit.		Exploration of movement as a means to improve communication, body/kinetic awareness, creative expression and perceptual-motor development. Focuses on the learning/teaching process, creativity, dance materials, methods and lesson planning. Observation and assisting in elementary school classrooms to facilitate student understanding of components listed above. Requires sophomore standing.
THD 148 Highland Dance I AH	1 cr	THD 225 Intermediate Acting 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.		Continuation of THD 125 through exercises and scene study with emphasis on actions, objectives and characterization. Exercises and character analysis with scenes from the "Realists" and "Post-Realists." <i>Prereq: THD-125</i>
THD 149 Pointe I Beginning AH	1 cr	THD 226 Voice and Language on Stage AH
Development of classical ballet skill techniques pointe. Principles of beginning pointe technique are displayed and discussed. May be repeated for credit. <i>Prereq: THD 144 or Permission</i>		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.
THD 150 Theatre Company AH	1 cr	THD 227 Stage Combat AH
Participation in acting and technical work on departmental productions with actual rehearsal and performance. May be elected more than once for credit.		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.
THD 151 Alma College Dance Company AH	1 cr	THD 232 Directing 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.		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. <i>Prereq: THD-125</i>
THD 152 Theatre Administration AH	1 cr	THD 240 Modern Dance II Intermediate AH
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 elected more than once for credit.		Continuation of Modern Dance I. Emphasis on movement patterns and development of body alignment. May be repeated for credit.
THD 170 Theatre Crafts AH	4 cr	THD 242 Tap Dance II Intermediate AH
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.		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. <i>Prereq: THD-142 or Permission</i>
THD 171 Design for the Theatre AH	4 cr	THD 243 Yoga II AH
Introduction to the design of the physical environment in the theatre. Consideration of scenery, costume, lighting and sound for		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.

THD 244 Ballet II Intermediate

AH 1 cr
Continuation of Ballet I. Development of ballet combinations and concentration on body alignment. May be repeated for credit. Requires instructor permission.

THD 245 Jazz Dance II Intermediate

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

THD 246 The World of Theatre I

AH 2 cr UL
Introduction to the theatre as a unique artistic activity which reflects and transforms life experiences by shaping them into popular theatre forms: comedy, farce, tragedy and melodrama.

THD 247 The World of Theatre II

AH 2 cr UL
Consideration of the work of those who create the theatre event: actor, playwright, director and designer. The theatre experience as a communal experience resulting from collaboration of artists in dynamic interaction with audience.


THD 248 Highland Dance II

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


THD 249 Pointe II Intermediate

AH 1 cr
Continued development of classical ballet skill technique en pointe. Principles of intermediate pointe technique are displayed and discussed. May be repeated for credit.
Prereq: THD-149 or Permission

THD 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.

THD 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.

THD 263 Modern Drama

AH 4 cr
Survey of major plays written and produced in last 100 years. From Isben, Shaw and Chekhov through Williams, Miller, Beckett and Albee. Consideration given to staging.

THD 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.

THD 272 Lighting Design

AH 4 cr UL
Exploration of lighting as an expressive tool in live performance. Intensive work in color theory, distribution, intensity, focus, and

motion with light; advanced presentation techniques. Culminates in a student presentation of selected lighting moments for a play chosen by the student from approved list.

THD 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.

THD 274 Sound Design

AH 4 cr UL
Exploration of sound as an expressive tool in live performance. Gives students an understanding of the science, technology and historical usage of sound in theatre. Emphasis in script analysis and design and production process.

THD 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.

THD 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.

THD 280 Topics in Theatre and Dance

AH 4 cr
Special topics and projects selected by instructor. Background prerequisites vary with selections.

THD 292 Playwriting

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. Requires instructor permission.

THD 299 Theatre and Dance Independent Study

1-4 cr UL
Supervised reading, research or projects.

THD 301 Choreography II

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

THD 325T 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: THD-125 and Permission

THD 326 Meisner Activity Exercise

AH 4 cr UL
Continuation of THD 125 through in depth work with the Meisner Activity Exercise. The interdependent steps of the activity exercise reinforces the process of really doing something with a purpose and deepens the actor's sense of creating truthful behavior on stage.

THD 327 Meisner Action Exercise

AH 4 cr UL
Continuation of THD 125 through exploration of the Meisner Nursery Rhyme Exercise to help deepen the concept of justifying words and playing actions.

THD 332 Intermediate Directing
AH 4 cr **UL**
Continuation of THD 232. Principles and techniques of stage directing culminating in the analysis, casting and direction of a one-act play for public presentation.
Prereq: THD-232

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

THD 342 Tap Dance III Advanced
AH 1 cr **UL**
Continued exploration into rhythms and steps basic to the art form of tap dancing. Study of terminology and technique. Advanced tap routines with advanced progressions. May be repeated for credit.
Prereq: THD-242 or Permission

THD 343 Yoga III - the Experience
AH 1 cr **UL**
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.


THD 344 Ballet III Advanced
AH 2 cr **UL**
Continuation of Ballet II. Emphasis on further development of style and technique. May be repeated for credit. Requires instructor permission.


THD 345 Jazz III Advanced
AH 1 cr **UL**
Continuation of Jazz Dance II with emphasis on advanced rhythmic patterns and isolations. May be repeated for credit.
Prereq: THD-245 or Permission

THD 346 Dance/Theatre Trip
AH 4 cr **UL**
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. Requires instructor permission.

THD 347 Dance Criticism
AH 4 cr **UL**
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. Requires sophomore standing.

THD 349 Pointe III Advanced
AH 1 cr **UL**
Continued development of classical ballet skill technique *pointe*. Principles of advanced *pointe* displayed and discussed. Includes classical variations *pointe*. May be repeated for credit.
Prereq: THD-149, 249 or Permission

THD 350 Dance History I
 AH 4 cr **UL**
Survey of culture, styles and methods of dance from its beginnings until the end of the Baroque period. Primitive rituals and liturgical, theatrical, Western and non-Western dance forms.

THD 351 Dance History II
 AH 4 cr **UL**
Survey of culture, styles and methods of dance from the Baroque period to the Modern period. Ethnic, concert and interpretative

forms. Emphasis on theatrical ballet and 20th century contemporary dance.

THD 371T 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: THD-271 and Permission

THD 372T 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: THD-272 and Permission

THD 375T 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: THD-170 and Permission


THD 385 Theatre and 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 theatre and dance. Culminates in written report. Requires instructor permission.

THD 399 Theatre and Dance Independent Study
1-4 cr **UL**
Supervised reading, research or projects.

THD 432T 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: THD 232 and Permission

THD 480 Topics in Theatre and Dance
AH 4 cr **UL**
Special topics and projects selected by the instructor. Background prerequisites vary with selections.

THD 499 Theatre and Dance Independent Study
1-4 cr **UL**
Supervised reading, research or projects.

THD 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.

Women's and Gender Studies (WGS)

Minor Requirements

Twenty-four credits which must include:

1. WGS 101 and 102 (eight credits).
2. At least four credits elected from the following: WGS 280, 385 or 399.

3. At least 12 credits elected from the following, eight of which must be at least 200 level or higher: COM 123 or 301; ENG 340; IPH 223, 301 or 303; HST 140, 228 or 253; POL 141, 231, or 381/382; REL 202; SOA 220, 234, 353, or additional approved course.

WGS 101 Introduction to Women's Studies

4 cr

Brings together 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

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 & 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

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

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- James R. Jenkins,** Senior Vice President and General Counsel, Deere and Company; Moline, Illinois.
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- David F. Lau,** Owner/Director, Lau and Lau Associates, LLC; Bloomfield Hills, Michigan.
- Michael A. Leonard '59,** Retired Managing Partner, Executive Consultants, Inc.; Tucson, Arizona.
- Donald A. Lindow,** Senior Managing Director, Azimuth Capital Management, LLC; Bloomfield Hills, Michigan.
- Judith L. Maze;** Kalamazoo, Michigan.
- Antje Newhagen '67,** Retired Director of Publications and Communications, Altera Corporation; Los Altos, California.
- Calvin P. Owen,** Retired President, Owen-Ames-Kimball Company; Grand Rapids, Michigan.
- Glenda D. Price,** Retired President, Marygrove College; Detroit, Michigan.
- David T. Provost '76,** Chairman, President and Chief Executive Officer, Talmer Bank and Trust; Troy, Michigan.
- Fred G. Secret,** Retired Executive Vice President, Ford Motor Company; Dearborn, Michigan.
- Eugene C. Yehle,** Retired Director, Investor Relations and Pension Investments, The Dow Chemical Company; Midland, Michigan.
- R.C. Youngdahl Sr.,** Retired President and Chief Operating Officer, Long Island Lighting Company; Jackson, Michigan.

Administration 2014-15

With the exception of the Officers, the members of the administration are listed in sector and office groups indicating the organization of the College. The year of appointment is given after each name. The appointments indicated are for the academic year 2014-15.

Officers

President

Jeff Abernathy, B.A., Longwood College; M.A., Virginia Commonwealth University; Ph.D., University of Florida. (2010)

Provost and Vice President for Academic Affairs

Michael L. Selmon, B.A., M.S., Miami University; M.A., Ph.D., University of Maryland. *Also Professor of English.* (1991)

Vice President for Advancement

Carol Hyble, B.A., Alma College; M.A., Central Michigan University. (1998)

Vice President for Communication and Marketing

E. Ann Hall, B.S., M.S., Central Michigan University. (2006)

Vice President for Enrollment

Bob Garcia, B.A.A., Central Michigan University. (2009)

Vice President for Student Life

Nicholas A. Piccolo, B.S. Mansfield State College; M.S., Shippensburg State College; Ed.D., Indiana University. (2003)

Vice President for Finance and Administration

David L. Nelson, B.A., Michigan State University; M.B.A., M.A., University of Detroit Mercy. (2014)

Executive Assistant to the President

Sandra A. Gadde, B.A., Alma College. (2002)

Academic Affairs Staff

Associate Vice President for Academic Affairs;

Director of Center for Student Opportunity

Karen S. Klumpp, B.A., Alma College; M.B.A., Central Michigan University; Ph.D., Michigan State University. (1978)

Assistant Director of Center for Student Opportunity — Career Services

Laurie DeYoung, B.A., Alma College; M.B.A., University of Michigan-Flint. (2005)

Assistant Director of Center for Student Opportunity — Academic Support and Disability Services

Nate Payovich, B.A., University of Notre Dame; M.A., University of Chicago. (2010)

Assistant Director of Center for Student Opportunity — Venture Programs and Off-Campus Studies

Carla Jensen, B.A., McGill University; M.A., University of North Carolina at Chapel Hill. (2013)

Associate Provost

Steward Jensen, B.S., Harvey Mudd College; Ph.D., University of Chicago. *Also Assistant Professor of Physics.* (2009)

Associate Provost and Registrar

Julie M. Williams, B.A., Alma College; M.Ed., Loyola University Chicago; Ph.D., Indiana University. (2011)

Assistant Provost

Susan M. Deel, B.A.A., M.A., Central Michigan University. (1988)

Assistant Director of Responsible Leadership Institute

Sallie Scheide, B.S., Presbyterian College; M.S., Louisiana State University. (2003)

Remick Heritage Center Building Coordinator

Michael Sheldon, B.S., Northern Michigan University; M.F.A., University of Alabama. (2006)

Music and Dance Staff Accompanist

Anthony Patterson, B.F.A., Ohio University. (1995)

Costume Designer/Costume Shop Supervisor

Tina Vivian, B.F.A., Alma College; M.F.A., Central Michigan University. (1999)

Library Director

Carol Zeile, B.A., Alma College; M.A. Indiana University; M.L.S., Western Michigan University. (1998)

Science Laboratory Coordinator

Mark A. Bunce, B.S., Alma College. (1984)

Laboratory Coordinator

Michael Bishop, B.S., University of Texas at Austin; M.S., Central Michigan University. (2004)

Service Learning Coordinator

Anne Ritz, B.A., M.A., Saginaw Valley State University. (1997)

Grants and Government Reports Specialist

Sheryle Dixon, B.Ed., M.A., Ph.D., University of Manitoba. *Also Instructor of Education and Philosophy.* (2007)

Institutional Research Analyst

John MacArthur, B.A., M.S., Mississippi State University. (2014)

Advancement Staff

Director of Alumni Engagement

Lou Ecken, B.S., Alma College; M.A., University of Michigan. (2007)

Associate Director of Alumni and Parent Engagement

Robyn Carr, B.M., Alma College; M.S., Eastern Illinois University. (2013)

Director of Annual Giving and Community Relations

Brent Neubecker, B.A., Alma College; M.A., Central Michigan University. (2006)

Director of Planned Giving

Robert W. Murray, CFRE; B.S., Alma College; M.S., Central Michigan University. (1995)

Regional Director of Advancement

Brent F. Domine, B.S., Northwood University; M.S., Western Michigan University. (1998)

Regional Advancement Officer

Matthew Brown, A.A., Gogebic Community College; B.A., Laurentian University. (2014)

Prospect Research Specialist

TBD

Athletics Staff

Athletic Director

John W. Leister, B.A., Michigan State University. (1993)

Assistant Athletic Director; Senior Women's Administrator; Volleyball Coach

Sarah Dehring, B.S., Ferris State University; M.A., Lakeland College. (2011)

Sports Information Director

Mike Hanson, B.A., University of Minnesota. (2008)

Assistant Sports Information Director; Multimedia Coordinator

Robert W. Christe, B.A., University of Pittsburgh; M.S., California University of Pennsylvania. (2013)

Baseball Coach

Scott Kingston, B.S., Columbus State University. (2012)

Men's Basketball Coach

Sam Hargraves, B.A., Calvin College; M.A., Central Michigan University. (2011)

Women's Basketball Coach

Kris L. Johnson, B.A., Alma College; M.A., Central Michigan University. (2014)

Women's Bowling Coach

Kyle Woodcock. (2014)

Cheer and STUNT Coach

Michelle Sabourin, B.S., Grand Valley State University. (2012)

Cross Country Coach; Track and Field Coach

Matthew Chovanec, B.A., Alma College. (2002)

Football Coach

Gregory S. Pscodna, B.A., Adrian College; M.A., Michigan State University. (2012)

Assistant Football Coach; Recruiting Coordinator; Assistant Track and Field Coach

Mark Merlo, B.A., Alma College. (2010)

Assistant Football Coach

Drew Burton, B.S., Grand Valley State University; M.S., University of Wisconsin-Stevens Point. (2014)

Assistant Football Coach

Nathaniel Jensen, B.S., Defiance University. (2012)

Men's and Women's Golf Coach

Charles W. Goffnett, B.A., Central Michigan University. (1991)

Men's Lacrosse Coach

Jason Levesque, B.A., Canisius College. (2011)

Interim Women's Lacrosse Coach

Christie Hanes, B.A., Alma College. (2014)

Men's Soccer Coach

Joshua Oakley, B.A., Monmouth College; M.S., Eastern Illinois University. (2010)

Women's Soccer Coach

Matthew Saul, B.A., Southampton Solent University. (2014)

Assistant Women's Soccer Coach

Annette Stromberg, B.S., Alma College. (2014)

Softball Coach

Dennis Griffin, B.A., Hope College; M.A., Western Michigan University; A.T., C. (1989)

Men's and Women's Swimming and Diving Coach

William L. Copland, B.A., Alma College. (2013)

Men's and Women's Tennis Coach

Chris Sandro, B.A., Hope College; M.A., Central Michigan University. (2005)

Associate Athletic Director for Advancement, Wrestling Coach

Todd W. Hibbs, B.A., Mount Union College; M.A., Michigan State University. (2011)

Assistant Wrestling Coach

Jeremiah Tobias, B.A., University of Michigan. (2011)

Director of Athletic Training Program

Phillip H. Andre, B.S., The Pennsylvania State University; M.S., Michigan State University; A.T., C. *Also Instructor of Integrative Physiology and Health Science.* (2007)

Assistant Athletic Trainer; Integrative Physiology and Health Science Laboratory Coordinator

Drew Curry, B.S., Alma College; M.S., East Stroudsburg University. (2009)

Head Athletic Trainer

Brett D. Knight, B.S., Alma College; M.S., Western Michigan University. (2011)

Athletic Trainer, Director of Clinical Instruction of Athletic Training

Danielle Knight, B.S., Alma College; M.S., California University of Pennsylvania. (2012)

Athletic Trainer

Brady Hopkins, B.A., Coe College; M.S., Western Illinois University. (2013)

Athletic Trainer

Allison Strouse, B.S., Aquinas College; M.S., University of Toledo. (2013)

Business Affairs Staff

Director of Business Services and Controller

Daniel Henris, C.P.A.; B.S., Ferris State College. (2007)

Assistant Controller

Cassie Tennant, C.P.A.; B.A., Alma College. (2007)

Business Office Specialist

Paulette Moerdyk, B.S., M.A., Western Michigan University. (2011)

Payroll Specialist

Heidi Holland, B.A., University of Phoenix. (2012)

Student Accounts Specialist

Denise McCracken, B.S.B.A., Central Michigan University; J.D., Cooley Law School. (2011)

Director of Human Resources

Kenneth L. Borgman, B.A., Alma College. (1990)

Employment Specialist

Kathleen Sommerville. (2004)

Benefits Specialist

Ali Cnudde, B.A., Alma College. (2013)

Director of Facilities and Service Management

Doug Dice, A.E.T., Ferris State College. (2008)

Associate Director, Facilities and Service Management

Scott Dennison, B.S., B.A.M., Tri-State University. (2009)

Energy Management Engineer

Brandon S. Smith, B.S., Michigan Technological University. (2010)

Chief Technology Officer

Keith Nelson, B.S., Northern Illinois University, M.A., Ph.D., University of Iowa. (2010)

Director, Enterprise Information Systems

Alan L. Crowley, B.S., M.S., Central Michigan University. (1992)

Assistant Director, Enterprise Information Systems

Larry Elliott, B.A., B.S., Alma College; M.B.A., Central Michigan University. (2004)

Director for Systems and Networking

Kyle A. Warner, B.S., M.S., Central Michigan University. (2011)

Assistant Director, Instructional Technologist

Andrew Bare, B.A., Central Michigan University; M.A., Michigan State University. (2006)

Associate Web and Database Developer

Katie Conner, B.A., Saginaw Valley State University. (2011)

Senior Programmer/Analyst

Darrell Waldron, B.E.E.T., DeVry Institute of Technology. (2007)

Advancement Programmer/Analyst

Jana McSweyn, B.S., Ferris State University. (2013)

Network Manager

Justin J. Barnaby, B.S., Northern Michigan University. (2011)

Technical Support Specialist

Jay M. Chapin, B.S., Alma College. (1999)

Technical Support Specialist

David McCallister, B.S., Park College; M.A., Saginaw Valley State University. (2001)

System Specialist

Joshua Gustavison, A.A.S., B.A.S., Davenport University. (2012)

Media Services Coordinator

Susan Clark, B.F.A., Central Michigan University. (1989)

Manager, User Services

Anthony King, A.A.S., Community College of the Air Force; B.S., Indiana Institute of Technology, Fort Wayne. (2007)

General Manager – College Corner Coffee and Books

Donna Sinclair. (2011)

Wholesale Book Specialist

Rob DuVall, B.A.A., Central Michigan University. (2011)

Manager of College Corner Retail Sales/Auxiliary Services

Ashley Strawn, B.S., University of Phoenix. (2011)

Communication and Marketing Staff**Director of Communications**

Michael J. Silverthorn, B.A., Central Michigan University. (2005)

Director of Marketing

Bethany J. Pellerito, B.A., Central Michigan University. (2004)

Graphic Designer

Aimee J. Brasseur, B.A.A., Central Michigan University. (2005)

Web Editor

TBD

Copywriter / Social Media Strategist

Erica L. Shekell, B.A., B.A., Michigan State University. (2014)

Digital Media Coordinator

Daniel P. Tuma, B.S., Ferris State University. (2014)

Enrollment Staff**Director of Admissions**

Amanda Slenski, B.A., Alma College, M.S., Miami University. (2010)

Senior Associate Director of Admissions

Karen Jezewski, B.A., Lycoming College. (1996)

Senior Assistant Director of Admissions

Jessie DeHaan, B.A., Alma College. (2008)

Senior Assistant Director of Admissions

Anneliese Fox, B.A., Hope College; M.S.W., Michigan State University. (2008)

Senior Assistant Director of Admissions

Ruth Majerle, B.A., Hope College. (1990)

Senior Assistant Director of Admissions

Rugelio Rameriez, B.A., Alma College. (2010)

Senior Assistant Director of Admissions

Margaret Hajduch, B.S., Indiana University. (2013)

Assistant Director of Admissions

Annalyse Hargraves, B.S., St. Ambrose University. (2012)

Assistant Director of Admissions

Rebecca Otto, B.A., Northwestern University. (2012)

Assistant Director of Admissions

Madeleine Randolet, B.A., Alma College. (2013)

Assistant Director of Admissions

Katie Yourchock, B.A., Alma College. (2013)

Assistant Director of Admissions for International**Recruitment and Programs**

Andrew Davis, B.A., Cedarville University; M.S., Central Michigan University. (2013)

Admissions Representative

Carrie Frame, B.A., Alma College. (2013)

Faculty 2014-15

Enrollment Data Analyst and Systems Coordinator

Courtney Koch, B.S., Alma College. (2013)

Director of Financial Aid

Michelle McNier, B.B.A., Northwood University. (2010)

Assistant Director of Financial Aid

Laura Kohn, B.A., Alma College; M.B.A., Central Michigan University. (2013)

Student Life Staff

Director of Diversity and Inclusion

Denelle N. Brown, B.A., M.S., Southern Illinois University. (2013)

Coordinator of Financial Counseling

Cindy Smith, B.S., Michigan State University; M.A., Central Michigan University. (2013)

Director of Counseling, Health and Wellness

Anne Lambrecht, B.S., University of Wisconsin-Stout; M.A., Northern Michigan University; L.P.C. (2009)

Licensed Professional Counselor

Anna Grajek, B.A., Lake Superior State University; M.A., Central Michigan University. (2004)

Limited License Professional Counselor

Jennifer Showers, B.A., Alma College; M.A., Central Michigan University; L.L.P.C. (2007)

Director of Campus Life

David K. Blandford, B.S., University of Idaho. (2000)

Greek Advisor

Danielle E. Brandreth, B.S., Northern Michigan University. (2012)

Hall Director

Jalani Jackson, B.S., M.A., Eastern Michigan University. (2012)

Hall Director

Willard Korson, B.S., Central Michigan University; M.A., Michigan State University. (2006)

Hall Director

David L. Lewis, B.A., Alma College; M.S.A., Central Michigan University. (2012)

Hall Director

Alice M. Richard, B.A., Alma College. (2013)

Hall Director

Morgan Bauman, B.S., Alma College. (2014)

Chaplain

Noel A. Snyder, B.A., Hope College; M.Div., Ph.D., Fuller Theological Seminary. (2013)

Director of Campus Recreation and Conferences

Tammy Rees, B.S., Western Michigan University; M.S., Eastern Michigan University. (2007)

Assistant Director of Campus Recreation

Garrett Thelen, B.A., Alma College. (2013)

With the exception of the President and the Provost, the members of the faculty are listed alphabetically, with the year of appointment given after each name. The academic ranks indicated are for the academic year of 2014-15.

Jeff Abernathy, President. B.A., Longwood College; M.A., Virginia Commonwealth University; Ph.D., University of Florida. (2010)

Michael L. Selmon, Provost and Vice President for Academic Affairs, Professor of English. B.A., M.S., Miami University; M.A., Ph.D., University of Maryland. (1991)

Robyn Lin Anderson, Professor of Integrative Physiology and Health Science. B.S., M.S., Indiana University of Pennsylvania; M.P.H., Ph.D., University of Pittsburgh. (1993)

Lynn Andrews, Visiting Assistant Professor of Dance; B.A., Luther College; M.F.A., University of Iowa. (2014)

Victor Argueta, Assistant Professor of Physics; Pre-Engineering Coordinator. B.S., National Autonomous University of Mexico; M.S., Ph.D., The Ohio State University. (2009)

Julie Wegner Arnold, Professor of French. B.A., Alma College; M.A., University of Illinois; Ph.D., Michigan State University. (1981)

Dana Aspinall, Associate Professor of English. B.A., University of Maine at Fort Kent; M.A., University of South Carolina; Ph.D., University of Connecticut. (2008)

Gregory Baleja, Professor of Business Administration. B.A., M.B.A., Michigan State University. (1988)

Henry Balfanz, Visiting Assistant Professor of Business Administration. B.S., Southern Illinois University; M.B.A., Bradley University. (2013)

Karen L. Ball, Professor of Integrative Physiology and Health Science. B.A., Alma College; Ph.D., University of Illinois at Chicago. (1995)

Thomas Batchelder, Assistant Professor of Psychology. B.A., Princeton University; M.A., Michigan State University. (1978)

Gwyneth Hill Beagley, Professor of Psychology. B.A., Middlebury College; M.A., Bryn Mawr College; Ph.D., Michigan State University. (1985)

Walter Beagley, Professor of Psychology. B.A., Middlebury College; M.A., Ph.D., University of Pennsylvania. (1976)

Joe D. Beckmann, Professor of Biochemistry. B.S., University of Nebraska-Lincoln; Ph.D., Medical College of Wisconsin. (1996)

Carol Bender, Professor of English. B.A., M.A., Central Michigan University; Ph.D., Michigan State University. (1986)

Kathryn Blanchard, Associate Professor of Religious Studies. B.A., Kenyon College; M.Div., Princeton Theological Seminary; Ph.D., Duke University. (2006)

Mary Theresa Bonhage-Freund, Associate Professor of Sociology and Anthropology. B.A., University of Pennsylvania; M.A.T., Duke University; M.B.A., University of Connecticut; M.A., Ph.D., The Pennsylvania State University. (1999)

- Murray C. Borrello**, Instructor of Geology and Environmental Studies. B.A., Albion College; M.S., University of Massachusetts. (1987)
- Feler Bose**, Assistant Professor of Economics. B.S., Hope College; M.S., Georgia Institute of Technology; Ph.D., George Mason University. (2008)
- Dirk Brines**, Instructor of English. B.A., University of Michigan–Flint; M.A., Central Michigan University. (2009)
- Mary Ellen Brines**, Instructor of Spanish. B.S., Central Michigan University; M.S., Pontificia Universidade Catolica de Sao Paulo. (1997)
- Liping Bu**, Professor of History. B.A., M.A., Beijing University; M.S., Ph.D., Carnegie Mellon University. (1999)
- Barbara Burdick**, Assistant Professor of Music. B.M., M.M., Indiana University; D.M.A., University of Cincinnati College–Conservatory of Music. (2005)
- Eric Calhoun**, Assistant Professor of Biology. B.S., Truman State University; Ph.D., Mayo Graduate School. (2008)
- Elizabeth A. Cameron**, Professor of Business Administration. B.B.A., M.B.A., Saginaw Valley State University; J.D., Thomas M. Cooley Law School. (1988)
- Janise Cardinal-Donnelly**, Visiting Instructor of Education. B.A., Alma College; M.S., Walden University; Ed.S., Central Michigan University. (2012)
- Britt Cartrite**, Associate Professor of Political Science. B.A., M.A., University of Denver; M.A., Ph.D., University of Colorado at Boulder. (2005)
- Chih-Ping Chen**, Associate Professor of English. B.A., National Chengchi University; M.A., National Taiwan University; Ph.D., University of Massachusetts. (2000)
- George Dorian Choksy**, Associate Professor of Economics. B.A., Roanoke College; M.A., Ph.D., University of Tennessee, Knoxville. (1989)
- David L. Clark**, Charles A. Dana Professor of Biology. B.S., M.S., Central Michigan University; Ph.D., University of Cincinnati. (1992)
- Anthony J. Collamati**, Assistant Professor of Communication and New Media Studies. B.A., St. Anselm College; M.A., Loyola University of Chicago; Ph.D., Clemson University. (2012)
- Daniel K. Connolly**, Assistant Professor of Art and Design, and Gallery Director. B.A., Trinity University; M.A., University of Texas; Ph.D., University of Chicago. (2011)
- Scott Cornelius**, Visiting Instructor of Biology and Environmental Studies. B.S., M.S., Michigan State University. (2014)
- Robert Cunningham**, Associate Professor of Economics. B.A., The Pennsylvania State University; M.A., Ph.D., Binghamton University. (1999)
- Zhewei Dai**, Associate Professor of Mathematics and Computer Science. B.S., Wuhan University; M.S., Ph.D., Michigan State University. (2005)
- John E. Davis**, Charles A. Dana Professor of Integrative Physiology and Health Science. B.A., Kenyon College; M.S., Ed.D., State University of New York at Buffalo. (1985)
- Janie Diels**, Associate Professor of Communication. B.A., University of Wisconsin-Madison; M.S., Ph.D., Cornell University. (2006)
- Nicholas John Dixon**, Elma C. and Wesley C. Dykstra Professor of Philosophy. B.A., University of Leeds; M.A., Ph.D., Michigan State University. (1986)
- Joel Dopke**, Associate Professor of Chemistry. B.S., St. Norbert College; Ph.D., University of Wisconsin-Madison. (2007)
- Nancy Dopke**, Assistant Professor of Chemistry. B.S., Millikin University; Ph.D., University of Wisconsin-Madison. (2007)
- Prathim “Maya” Dora-Laskey**, Instructor of English. B.A., M.A., Stella Maris College; M.Phil., University of Madros. (2012)
- Deborah A. Dougherty**, Professor of Spanish. B.A., Aquinas College; M.A., Ph.D., Michigan State University. (1996)
- Brian J. Doyle**, Assistant Professor of Biology and Biochemistry. B.S., Ph.D., University of Illinois. (2010)
- Thomas Ealey**, Professor of Business Administration. B.S., M.A., Bowling Green State University. (2006)
- Nicola Findley**, Professor of Education. B.Ed., University of Bristol; Ph.D., Michigan State University. (2001)
- Catherine Fobes**, Professor of Sociology. A.B., Muhlenberg College; M.Div., Yale University; M.S., Ph.D., Florida State University. (1998)
- Patrick J. Furlong**, Professor of History. B.A., M.A., University of Cape Town; Ph.D., University of California, Santa Barbara. (1993)
- Adam Giambrone**, Assistant Professor of Mathematics. B.S., Hobart and William Smith Colleges. (2014)
- Joanne R. Gilbert**, Charles A. Dana Professor of Communication. B.A., M.A., University of North Carolina at Chapel Hill; Ph.D., University of Texas at Austin. (1994)
- William Gorton**, Associate Professor of Political Science. B.A., College of William and Mary; Ph.D., University of Minnesota. (2005)
- Murray Gross**, Associate Professor of Music. B.A., M.M., Oberlin Conservatory of Music; D.M.A., Michigan State University. (2004)
- E. Ashley Hall**, Assistant Professor of English and Writing Center Director. B.A., M.A., Old Dominion University; Ph.D., University of North Carolina at Chapel Hill. (2014)
- Scott T. Hill**, Professor of Chemistry. B.A., Gettysburg College; Ph.D., University of Pittsburgh. (1988)
- Michael Howart**, Visiting Assistant Professor of Chemistry. B.S., University of Michigan-Flint; Ph.D., Michigan State University. (2014)
- Derick Hulme**, Arthur L. Russell Professor of Political Science. B.A., St. Lawrence University; M.A.L.D., Ph.D., Tufts University. (1992)
- Steward Jensen**, Associate Professor of Physics. *Also Associate Provost*. B.S., Harvey Mudd College; Ph.D., University of Chicago. (2009)

- Joseph A. Jezewski**, Associate Professor of Theatre and Dance. B.A., Lycoming College; M.A., University of Kentucky; M.F.A., Rutgers University. (1993)
- Geoffrey A. Johns**, Visiting Assistant Professor of English. A.A., Southwestern Michigan College; B.A., M.A., Ph.D., Michigan State University. (2014)
- Timothy P. Keeton**, Associate Professor of Biology. B.A., Wittenberg University; Ph.D., University of Cincinnati College of Medicine. (1998)
- Angela Kelleher**, Associate Professor of Library Science. B.A., Michigan State University; M.L.S., Wayne State University. (2003)
- Ronald Lemmon**, Assistant Professor of Business Administration. B.A., Aquinas College; M.B.A., Western Michigan University. (2002)
- Holly Liu**, Associate Professor of German. B.A., M.A., Peking University; M.A., Texas Tech University; Ph.D., Vanderbilt University. (2006)
- C. Sandy Lopez-Isnardi**, Professor of Art and Design. B.S., SUNY College at New Paltz; M.F.A., University of Cincinnati. (1995)
- Edward C. Lorenz**, Reid-Knox Professor of History and Professor of Political Science. B.S., Towson State University; M.A., Georgetown University; Ph.D., University of Chicago. (1989)
- Brittany Luckett**, Visiting Instructor of Integrative Physiology and Health Science. B.A., Adrian College; M.S., Pennsylvania State University College of Medicine. (2012)
- Maurie Luetkemeier**, Professor of Integrative Physiology and Health Science. B.S., M.A., Ball State University; Ph.D., The Ohio State University. (2001)
- James Mazzuca**, Assistant Professor of Chemistry. B.A., Saint Mary's University of Minnesota; Ph.D., University of South Carolina. (2014)
- Megan McCullen**, Visiting Instructor of Anthropology. A.B., University of Illinois at Urbana-Champaign; M.A., Michigan State University. (2010)
- Judith McKenna**, Associate Professor of Nursing Education, Director of Nursing Education. R.N., St. Joseph Mercy School of Nursing; B.S.N., Mercy College of Detroit; M.S.N., D.N.P., Oakland University. (2013)
- Myles Frances McNally**, Professor of Mathematics and Computer Science. B.S., Drexel University; Ph.D., Temple University. (1992)
- Scott Messing**, Charles A. Dana Professor of Music. B.A., Rutgers University; M.A., Ph.D., University of Michigan. (1982)
- Robert R. Molina**, Professor of Mathematics and Computer Science. B.S., Southern Oregon State College; M.S., Ph.D., Colorado State University. (1993)
- Sarah McCarthy Neumann**, Assistant Professor of Biology. B.S., University of the South; Ph.D., Michigan State University. (2014)
- William Nichols**, Secret Professor of Music. B.M., Western Michigan University; M.M., D.M.A., Michigan State University. (1983)
- Melvin Andrew Nyman**, Professor of Mathematics and Computer Science. B.S., Ferris State University; M.S., Ph.D., Michigan State University. (1981)
- Kristin Olbertson**, Associate Professor of History. B.A., Carleton College; J.D., University of Michigan Law School; Ph.D., University of Michigan. (2006)
- William W. Palmer**, Charles A. Dana Professor of English. B.A., M.A., Central Michigan University; Ph.D., Michigan State University. (1977)
- Carrie Anne Parks-Kirby**, Professor of Art and Design. B.F.A., Wesleyan College; M.F.A., Virginia Commonwealth University. (1982)
- James Peterson**, Visiting Assistant Professor of Mathematics. B.A., St. Olaf College; Ph.D., Rice University. (2013)
- B. Cameron Reed**, Charles A. Dana Professor of Physics. B.S., University of Waterloo; M.S., Queen's University; Ph.D., University of Waterloo. (1992)
- Marcus Richter**, Assistant Professor of Library Science. M.Th., Seminary of the ELFK, Leipzig, Germany; M.L.S., College of St. Catherine/Dominican University. (2009)
- Raymond Riley**, Professor of Music. B.M., University of Illinois; M.M., DePaul University; D.M.A., Michigan State University. (1988)
- Tina M. Rolling**, Visiting Assistant Professor of Business Administration. B.S., M.B.A., Central Michigan University. (2012)
- John Rowe**, William R. Angell Professor of Biology. B.S., Central Michigan University; M.S., Eastern Michigan University; Ph.D., University of Nebraska at Lincoln. (2002)
- Robert L. Rozier**, Associate Professor of Art and Design. B.A., St. Mary's Seminary College; M.F.A., Michigan State University. (1983)
- Hazel Sabas**, Assistant Professor of Theatre and Dance. M.F.A., New York University – Tisch School of Arts. (2013)
- Dale L. Sanders**, Assistant Professor of Health Care Administration and Business Administration, Director of Health Care Administration. B.A., University of Tennessee; M.B.A., Northwood University; D.O., University of Health Sciences College of Osteopathic Medicine. (2010)
- Mark Seals**, Professor of Education. B.S., Eastern Oregon University; M.S., Ph.D., Purdue University. (1999)
- Marc B. Setterlund**, Professor of Psychology. B.A., Gustavus Adolphus College; M.A., Ph.D., Johns Hopkins University. (1997)
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