

# 2021-22 Academic Catalog



ALMA COLLEGE

614 W. Superior St. • Alma, MI 48801-1599 • 1-800-321-ALMA • [www.alma.edu](http://www.alma.edu)



# 2021-22 Academic Calendar\*

## Fall 2021

August	26	Thursday	First-Year Orientation Begins, Welcoming Convocation
August	30	Monday	Classes Begin, 8 a.m.
August 30–September 3		Monday–Friday	Drop/Add Week for all Fall Classes
September	3	Friday	Last Day to Add a 1st 7-week Class
September	6	Monday	Labor Day; No Classes, Offices Closed
September	7–10	Tuesday–Friday	Additional Drop/Add Period for 14-week Classes
September	10	Friday	Last Day to Add a 14-week Class
October	1	Friday	Last Day to Drop or Elect Pass/Fail Option for a 1st 7-week Class
October	2	Saturday	Homecoming
October	12	Tuesday	Mid-Term Grades Due, 9 a.m.
October	13	Wednesday	End of 1st 7-week Classes; Final Exams on Last Meeting Day
October	14–15	Thursday–Friday	Fall Term Break; No Classes, Offices Open
October	18	Monday	Classes Resume, 8 a.m.; Begin 2nd 7-week Classes
October	19	Tuesday	1st 7-week Grades Due, 9 a.m.
October	22	Friday	Last Day to Add a 2nd 7-week Class
October	29	Friday	Last Day to Drop or Elect Pass/Fail Option for a 14-week Class
November	1–12	Two Weeks	Winter and Spring Terms 2022 Registration
November	19	Friday	Last Day to Drop or Elect Pass/Fail Option for a 2nd 7-week Class
November	22–24	Monday–Wednesday	Drop/Add for 2022 Winter and Spring Terms
November	24–26	Wednesday–Friday	Thanksgiving Recess; No Classes, Offices Closed Thursday and Friday
December	6–10	Monday–Friday	Fall Term Exams
December	14	Tuesday	Final 14-week and 2nd 7-week Grades Due, 9 a.m.
December	24–31	One Week	Alma College Break; No Classes, Offices Closed

## Winter 2022

January	3	Monday	Offices Open
January	3–7	Monday–Friday	Drop/Add Week for all Winter Classes
January	5	Wednesday	Classes Begin, 8 a.m.
January	7	Friday	Last Day to Add a 1st 7-week Class
January	10–14	Monday–Friday	Additional Drop/Add Period for 14-week Classes
January	14	Friday	Last Day to Add a 14-week Class
January	17	Monday	Martin Luther King Jr. Observance; No Classes, Offices Open
January	24–28	Monday–Friday	Additional Spring Term Registration
February	4	Friday	Last Day to Drop or Elect Pass/Fail Option for a 1st 7-week Class
February	15	Tuesday	Mid-Term Grades Due, 9 a.m.
February	18	Friday	End of 1st 7-week Classes; Final Exams on Last Meeting Day
February	21–25	Monday–Friday	Winter Term Break; No Classes, Offices Open
February	22	Tuesday	1st 7-week Grades Due, 9 a.m.
February	28	Monday	Classes Resume, 8 a.m.; Begin 2nd 7-week Classes
March	4	Friday	Last Day to Add a 2nd 7-week Class
March	11	Friday	Last Day to Drop or Elect Pass/Fail Option for a 14-week Class
March	14–25	Two Weeks	Spring and Fall Terms 2022 Registration
April	1	Friday	Last Day to Drop or Elect Pass/Fail Option for a 2nd 7-week Class
April	7	Thursday	Honors Day; No Classes, Offices Open
April	15	Friday	Good Friday; No Classes, Offices Closed at Noon
April	18–22	Monday–Friday	Winter Term Exams
April	23	Saturday	Commencement, 2 p.m.
April	26	Tuesday	Final 14-week and 2nd 7-week Grades Due, 9 a.m.

## Spring 2022

May	1	Sunday	Classes Begin, 1 p.m.
May	4	Wednesday	Last Day to Add a Spring Term Class
May	20	Friday	Last Day to Drop a Class or Elect Pass/Fail Option
May	26	Thursday	Spring Term Ends
May 31	31	Tuesday	Final Grades Due, 9 a.m.

## Summer 2022

May 31–June 24			Summer Session I
June	28	Tuesday	Grades Due, 9 a.m.
June 27–July 22			Summer Session II
July	26	Tuesday	Grades Due, 9 a.m.
July 25–August 18			Summer Session III
August	23	Tuesday	Grades Due, 9 a.m.

\* The 2021-22 Academic Calendar is subject to change.

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# A College of Distinction

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## The Alma College Mission

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



## Vision Statement

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

## The Core Values

### *Student-centered education in a residential setting*

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

### *Disciplinary expertise within an interdisciplinary context of learning*

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

### *Engaged learning*

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

### *Ethical integrity, aesthetic appreciation, spiritual sensitivity*

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

# Welcome to Alma College

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The Alma College Catalog for 2021-2022 provides details on all of the College's academic programs, policies, and procedures. Here you will find descriptions of courses offered; details of the requirements for each major, minor, or program; and an overview of the College's general education curriculum. We hope you will use this Catalog as a guide to your Alma College course of study and as a resource for exploring possibilities, considering all the ways you might both fulfill the requirements of your degree and enhance your academic experience.

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

Welcome to Alma!

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

## Alma College in Brief

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### A Liberal Arts Education

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

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

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

### Academic Programs and Degrees

Alma is classified as a selective Baccalaureate College: Diverse Fields by the Carnegie Foundation for the Advancement of Teaching. The College confers bachelor's degrees in four areas: arts, sciences, music and nursing; and a master's degree in creative writing.

### 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

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

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

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

Commission on Collegiate Nursing Education  
655 K Street NW, Suite 750  
Washington, DC 20001  
Phone: (202) 887-6791  
Web site: [cneaccreditation.org](http://cneaccreditation.org)

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

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

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

## Emergency Procedures

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

## Federal Compliance Statements

**Campus Security.** Alma College abides by the Student Right-to-Know, the Campus Security Act of 1990 and the Higher Education Act Reauthorization of 2008. The College makes information

concerning campus crime statistics available in printed form and electronically to the campus community each year. This information is also available to prospective students or employees upon request.

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

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

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

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

**Alma College Policy on Nondiscrimination.** Alma College adheres to all federal and state civil rights laws banning discrimination in private institutions of higher education. Alma College will not discriminate against any employee or applicant for employment, student or applicant for admission on the basis of race, color, sex, religion, national or ethnic origin, physical or mental disability, age, height, weight, marital status, sexual orientation, gender, gender identity, arrest record, genetic information, or any other protected category under applicable local, state or federal laws; including protections for those opposing discrimination or participating in any resolution process on campus or within the Equal Employment Opportunity Commission or other human rights agencies. Questions or concerns about our policies and practices regarding these matters should be directed to Amanda Duval, Associate Vice President for Human Resources and Deputy Civil Rights/Title IX Coordinator at (989) 463-7225 or [duvalal@alma.edu](mailto:duvalal@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.

**Right to Modify Policy.** 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.

Alma College shall have full academic freedom to determine the best method and manner of teaching and does not guarantee a particular method of teaching, including but not limited to, face-to-face or virtual classes.

# Admission Information

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## Freshman Admission

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 [alma.edu/apply](http://alma.edu/apply) or [commonapp.org](http://commonapp.org).

## Basis for Admission

To be considered for traditional admission, domestic high school students must submit an application, admissions essay, and at least three years of transcripted high school coursework. Students with a 2.75 high school GPA (or higher) are automatically considered for admission without the need to submit an ACT/SAT test score through the fall of 2023.

- Students should have 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 with less than a 2.75 high school GPA, or who complete a GED, are required to submit a standardized test score (SAT or ACT), complete an admissions interview with a designated test-optional interviewer, or be reviewed by the college's Faculty Reading Committee for admission.
- Students with less than a 2.5 high school GPA should contact the Admissions Office at [admissions@alma.edu](mailto:admissions@alma.edu) for more information on the application process.

Students who do not meet these requirements are considered individually for admission.

**International and transfer students** should visit [alma.edu/admissions](http://alma.edu/admissions) for more information about admissions requirements.

Alma College's non-discrimination policy includes race, color, sex, religion, national or ethnic origin, physical or mental disability, age, height, weight, marital status, sexual orientation, gender, gender identity, genetic information, or any other protected category under applicable local, state or federal laws.

## Pre-Enrollment Requirements

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

1. Submit a final transcript of high school grades, including confirmation of graduation. Transcripts are also used in academic advising.
2. Show photo identification to confirm identity.
3. Provide emergency contact information.
4. Complete medical form that will be used to establish the student's confidential medical history in the Wilcox Medical Center.

## Campus Visits

Students are encouraged to schedule a personalized visit to Alma to meet with a member of the admissions staff, tour campus, meet professors and sit in on classes. The Admissions Office is open for visits Monday through Friday from 8 a.m. to 5 p.m. (ET) and selected Saturdays; virtual visits are also available. Please consult [alma.edu/visit](http://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](mailto:admissions@alma.edu).

## Transfer Credit Evaluation

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

1. Only non-developmental courses that are graded "C" (2.0) or higher will be accepted for credit.
2. All transfer students must complete the final 52 credits for the degree in residence at Alma.
3. Transferred credit must be documented by receipt of an official transcript from each institution attended.
4. Transfer credits from courses below the 100-level do not count toward the 136-156 credits required for graduation.

Transfer students are encouraged to consult with the Registrar's Office to review transfer credit equivalencies.

## Continuing Education

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

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

## Dual Enrollment

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

## Media Use Policy

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Alma College reserves the right to use any photograph or video taken on campus or at an event sponsored by the college as well as any photo provided to the college. A student who wishes to be excluded from campus photography must contact the Associate Vice President for Marketing in writing within the first two weeks of the first day of class of the fall or winter term. Requests for non-disclosure will be honored by the institution for only the current academic year, therefore, the request must be filed annually with the Communication and Marketing Office. By failing to provide such notification, you agree that the college may use your likeness.

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

# Accelerated Programs and Advanced Placement Options

## Accelerated Program Options

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

## Advanced Placement (AP)

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

## College Level Examination Program (CLEP)

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

## International Baccalaureate (IB)

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

### Advanced Placement Courses and Qualifying Scores

AP Course Name	Scores	Alma College Course Equivalent Credits Awarded*
Art History	4 (3 w/dept. approval)	ART 112 (4)
Studio Art: 2D Design	4	ART 180 (4)
Studio Art: 3D Design	4	ART 180 (4)
Studio Art: 3D Drawing	4	ART 180 (4)
AP Research	4	HUM 108 (4)
Art (Studio)	4	ART 180 (4)
Biology	4	BIO 180 (4)
Chemistry	4	CHM 115 (4)
Comparative Government and Politics	4	POL 111 (4)
Computer Science A	5 (4 w/dept. approval)	CSC 120 (4)
Computer Science Principles	4	CSC 180 (4)
Economics: Macro	4	ECN 111 (4)
Economics: Micro	4	ECN 112 (4)
English Language and Comp	3	ENG 100 (4)
English Literature and Comp	3	ENG 180 (4)
Environmental Science	4	ENV 180 (4)
European History	4	HST 180 (4)
French Language and Culture	4	FRN 221 (4)
French Literature and Culture	4	FRN 222 (4)
German Language and Culture	4	GRM 221 (4)
German Literature and Culture	4	GRM 222 (4)
Human Geography	4	GGR 102 (4)
Math: Calculus AB	4	MTH 121 (4)
Math Calculus: BC	3	MTH 121-122 (8)
Music: Listening and Literature	4 (3 w/dept. approval)	MUS 180 (4)
Music Theory	4 (w/dept. approval)	MUS 111-112 (4-8)
Physics 1	4	PHY 112 (4)
Physics 2	4	PHY 113 (4)
Physics C: Mechanics	4	PHY 121 (4)
Physics C: Electricity and Magnetism	4	PHY 122 (4)
Psychology	4	PSY 120 (4)
Spanish Language and Culture	4	SPN 221 (4)
Spanish Literature and Culture	4	SPN 222 (4)
Statistics	4	MTH 116 (4)
U.S. Government and Politics	4	POL 101 (4)
U.S. History	4	HST 180 (4)
World History	4	HST 180 (4)

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



# College Expenses

The total charges to attend Alma College for the 2021-22 academic year are as follows:

Residence and Term	Tuition	Room*	Meals	Meal Plan**	Student Activity Fee	Total
Bruske, Gelston, Mitchell Newberry, Brazell/Brazell West, Carey/Bonbright						
Fall Term	\$21,801	\$3,341	\$2,728	A or B	\$135	\$28,005
Winter Term	\$21,801	\$3,341	\$2,728	A or B	\$135	\$28,005
<b>TOTAL</b>	<b>\$43,602</b>	<b>\$6,682</b>	<b>\$5,456</b>		<b>\$270</b>	<b>\$56,010</b>
Small Housing						
Fall Term	\$21,801	\$3,655	\$2,728	A or B	\$135	\$28,319
Winter Term	\$21,801	\$3,655	\$2,728	A or B	\$135	\$28,319
<b>TOTAL</b>	<b>\$43,602</b>	<b>\$7,310</b>	<b>\$5,456</b>		<b>\$270</b>	<b>\$56,638</b>
Wright Hall, Wright Ave. apts.						
Fall Term	\$21,801	\$4,221	\$2,188	C	\$135	\$28,345
Winter Term	\$21,801	\$4,221	\$2,188	C	\$135	\$28,345
<b>TOTAL</b>	<b>\$43,602</b>	<b>\$8,442</b>	<b>\$4,376</b>		<b>\$270</b>	<b>\$56,690</b>
Opera House						
Fall Term	\$21,801	\$4,478	\$2,188	C	\$135	\$28,602
Winter Term	\$21,801	\$4,478	\$2,188	C	\$135	\$28,602
<b>TOTAL</b>	<b>\$43,602</b>	<b>\$8,956</b>	<b>\$4,376</b>		<b>\$270</b>	<b>\$56,204</b>

## Spring Term

All Residences	\$1,816		\$600	E		\$2,416
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## Summer Expenses

	2021	2022
Tuition on campus/online	\$275/credit	\$275/credit
off campus	\$125/credit	\$125/credit
Room	\$70/week	\$70/week

\* Room charge is for a standard double room. A limited number of single rooms are available for an additional \$1,000 per term.

### \*\* Meal Plans

Plan A – 19 meals per week with \$175 Munch Money per term.

Plan B – 210 meals per term with \$400 Munch Money per term.

Plan C – 160 meals per term with \$400 Munch Money per term.

Plan D – 120 meals per term with \$900 Munch Money per term – only for career-path students working off campus.

Plan E – 50 meals per term with \$75 Munch Money.

Plan F – Seven meals per week with \$750 Munch Money – seniors only.

**Note:** Students in Wright Hall, Wright Avenue apartments, or the Opera House can purchase Meal Plans A or B for an additional \$540 per term. Non-resident students can purchase any plan for the cost indicated above.

The tuition charge is before any financial aid awards, which represent a significant cost reduction for most students. The Board of Trustees reserves the right to change any charges prior to the opening date of any term.

The Fall and Winter terms tuition charge shown is for a term load of 13 to 18 credit hours. Students registering for more than the normal allowable credit hours per term are charged an overload rate of \$1,362 for each credit hour over 18. See the Tuition-Exempt Credits section on the next page for exception to this rule.

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

Students enrolled full time are required to live in Alma College residences and dine at the College's food service. Exceptions to this policy must be approved through the Residence Life Office.

Students may elect to participate in an off-campus Spring Term program. The costs — airline, hotel, meals, fees, etc. — are in addition to the Spring Term tuition charge. Meal plan charges are assessed for the days spent on campus.

The students of Alma College have elected to assess a student activity fee on themselves at the rate of \$270 per year. This fee is used to sponsor social events such as dances, movies and live entertainment; support the yearbook and student newspaper; and admit each student to athletic events. *All students enrolled for eight or more credits are charged this fee.*

Full time students who are ineligible to file the Free Application for Federal Student Aid (FAFSA) and do not receive Alma College institutional financial aid; therefore, paying the full time full-tuition rate, will have the fee for room and board waived if they live on Alma's campus. This waiver is available to students only during their first eight semesters on campus. Students will not receive credit or reimbursement if they are eligible for this waiver and live off campus or if they are not charged a fee for any reason. The waiver applies to standard room and board fees only, which are set each year by the Board of Trustees. Additional fees associated with premium housing and/or special meal plans are not included.

Other charges that students may experience are described below.

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

### Miscellaneous Fees

Auditing – no credits earned	\$550/credit
Continuing Education	\$199/credit
Early Examination Fee	\$125
Late Registration Fee	\$125
Motor Vehicle Registration	
Resident Students	\$300/year
Resident Students – Silver Parking	\$250/year
Commuter Students	\$180/year
Church and St. Mary's School lots	\$150/year
Baseball parking lot	\$50/year
Proficiency Examination	\$275/credit
Room Change Fee	\$50

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

**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 undergraduate 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 meal plan, hospital miscellaneous, surgery (inpatient and outpatient), wellness benefits and a 24-hour Nurse Advice Line. This plan is not available for low-residency graduate students. The annual premium cost for the 2021-22 academic year is \$1,829. Full details about the plan are available at the [Wilcox Medical 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 are assessed a \$490 administrative fee and costs appropriate to their major and the program in which they are enrolled. Those who study off campus at the same host program for two or more consecutive terms are not assessed an additional administrative fee. However, those who study at different host programs or for non-consecutive terms are charged \$490 for each program or term.

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

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

**Payment of Tuition and Fees.** Charges for tuition, room, meal plan and fees are billed to students each term. There are three alternatives for paying these charges:

1. Full payment is due on or before August 27, 2021, and January 3, 2022, 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 27, 2021, with a deferred second payment for the remaining balance on or before October 15, 2021. The first payment for Winter Term, plus a \$20 processing fee is due on or before January 3, 2022, and the deferred second payment on or before February 18, 2022. An electronic Deferred Payment Agreement form must be received by the Financial Services Office by the due date of the first payment for each term, August 27, 2021 and January 3, 2022 respectively.
3. An educational financing plan that permits payment of the annual expense over the academic year is available through Cash-net. Information is available from the [Financial Services Office](#).

Advance billings are available to be viewed and/or downloaded from the student portal approximately one month before the start of each term. Payment *must* be received by the College prior to the first day of classes.

Payment of tuition and fee charges can be made with cash, personal checks, bank drafts, or money orders by mail or in person at the Alma College Financial Services Office. Payments can also be made [online](#) with a Visa, Mastercard, American Express or Discover card, or with an e-check at the Financial Services Office. 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.

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

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

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

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

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

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

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

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

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

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

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

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

**Withdrawal from College.** Students who wish to withdraw from Alma College must complete the withdrawal process by contacting the Center for Student Opportunity (CSO). 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 meal plan charges for the term. If a student has registered for a future term and decides not to attend that term, the student must contact the CSO to formally withdraw and be removed from those classes. Failure to do so will result in the student being responsible to pay for tuition, fees, and room and meal plan for the term, in its entirety.

For students meeting the withdrawal requirements, tuition and the student activity fee are refunded according to the following table.

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

College scholarships, grants and/or loans received by the student will be refunded on a comparable percentage basis. Refunds for other non-College financial aid will be made in accordance with the rules and regulations applicable to those programs.

Other fees are refunded as follows:

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

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

**Room Charges.** Cancellations and charges are as follows:

Cancellation Date	Fee
On or before July 15, 2021	\$0
July 16, 2021 until date student moves into assigned housing	\$500
After student moves in	Full room cost for the remainder of term in which departure occurs.

**Meal Plan Charges.** Costs are prorated to equal the number of meals and Munch Money used.

**Spring Term Tuition and Trip Fees.** No refund of tuition for withdrawals that occur *after* the fifth business day from the start of the term. A full refund is provided for withdrawals during the first five business days of classes. Spring Term trip fees will be refunded only if the trip costs, such as airlines, hotels and other travel fees can be recovered.

**Summer Session.** No refund of tuition for withdrawals that occur after the fifth business day from the start of the term. A full refund is provided for withdrawals during the first five business days of classes.

**Veterans Pending Payment Compliance.** In accordance with Title 38 US Code 3679 subsection (e), this school adopts the following additional provisions for any students using U.S. Department of Veteran Affairs (VA) Post 9/11 G.I. Bill (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA. This school will not:

- Prevent the student's enrollment;
- Assess a late penalty fee;
- Require student secure alternative or additional funding;
- Deny their access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Provide Chapter 33 Certificate of Eligibility (or its equivalent) or for Chapter 31, VA VR&E's contract with the school on VA Form 28-1905 by the first day of class.

**Note:** Chapter 33 students can register at the VA Regional Office to use E-Benefits to get the equivalent of a Chapter 33 Certificate of Eligibility. Chapter 31 students cannot get a completed VA Form 28-1905 (or any equivalent) before the VA VR&E case-manager issues it to the school.

- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies.

## 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 online during the summer months preceding fall enrollment. Course selections are 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 by completing drop/add paperwork. Students may also drop and add courses when the portal is open for course adjustments. Courses may be added during the first week of each term if approved by the advisor and during the second week if approved by both the advisor and the instructor. No courses, except for those scheduled for the last seven weeks of the term, may be added after the second week.

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

**Class Load.** The class load for a 14-week term shall be no fewer than 13 and no more than 18 credits for full-time status. A bachelor's degree from Alma College requires the completion of 136 credits to graduate in four years: 16 credits per term/eight full-time terms; and two four-credit Spring Terms. Students are advised to

consider this total when selecting classes/credits for each term as it's possible to take more or fewer credits in a term. Students who wish to qualify for full benefits from the Veterans Administration, Social Security or other financial aid sources are advised to enroll for no fewer than 13 credits. Athletes should be aware that Alma College requires a 13-credit course 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 and the grading period has closed.

**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 are certified as regularly enrolled students and classification is 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 cumulative 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).

Students making unsatisfactory progress are 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.

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**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 that 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 may be deemed ineligible for further VA benefit 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 from the Registrar’s Office.

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

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

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

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

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

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

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## Special Programs

### Interdisciplinary Programs

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

### Interdisciplinary Programs

American Studies  
Biochemistry  
Communication and New Media Studies  
Environmental Studies  
Foreign Service  
Gerontology  
International Business  
Neuroscience  
Nursing  
Public Affairs  
Public Health  
Women’s and Gender Studies

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## 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.

<b>Pre-Professional Programs</b>	Pre-Ministry
Education	Pre-Occupational Therapy
Military Service: ROTC	Pre-Optometry
Pre-Dentistry	Pre-Physical Therapy
Pre-Engineering	Pre-Physician Assistant
Pre-Law	Pre-Sports Medicine
Pre-Medicine	Pre-Veterinary

## Presidential Honors Program

The Presidential Honors Program is designed to establish a cohort of campus leaders who are role models to their peers in pursuit of a liberal arts education and engagement in the Alma College community and beyond.

Honors program activities consist of reading groups, seminars, special courses and other activities. Prospective honors program students may consult the [Presidential Honors Program](#) website for more information.

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## 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 at least a 3.5 GPA 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 four full (Fall or Winter) terms at Alma College and demonstrated scholastic superiority to receive the President's Outstanding Senior Award.

### President's Cup

Juniors, sophomores and first-year students who have been at Alma College for one academic 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 52 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)

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## Requirements for Degrees

### Alma College Credit

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

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

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

- (1) One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately 15 weeks for one semester or trimester hour of credit, or 10–12 weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or

- (2) At least an equivalent amount of work as required in paragraph (1) of this definition for other activities as established by an institution, including laboratory work, internships, practica, studio work, and other academic work leading toward the award of credit hours.

### Contact Hours

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

### Major Declaration

Each student must declare a major field of study before the end of the sophomore year by completing the major declaration form found online and at the Registrar's Office. Students may select a Departmental Major (at least 36 credits as prescribed by the department), an Interdepartmental Major (56 credits in courses approved by two or more departments and the Educational Policy Committee), or a Program of Emphasis [POE] (56–68 credits in courses selected by the student to meet a specific educational goal as approved by the POE Committee no later than November of the junior year).

Students are required to earn at least a 2.0 (“C”) cumulative GPA in their chosen major field of study for the Bachelor of Arts, Bachelor of Science and Bachelor of Music degrees. The Bachelor of Science in Nursing degree requires a 2.5 cumulative GPA and a minimum 3.0 GPA in all nursing (NUR) courses. For teacher certification purposes, a 2.75 GPA is required for all coursework. Additional certification and other requirements are found in the Education Department section of this catalog. To satisfy degree requirements, courses completed outside the major area must total a minimum of 68 credits.

### **Comprehensive Evaluation**

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

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

### **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 are not incorporated into this evaluation. Credits earned with a grade of “C” (2.0) or better at other institutions and accepted for transfer by Alma College will count toward the 136–156 credits required for the degree.

### **Degrees Awarded**

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

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

Specific requirements for the B.M. degree in Music Education are listed in the Music section of the catalog.

Master of Fine Arts

### **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 desire multiple degrees must notify the Registrar’s Office by the end of the term prior to the one in which they plan to graduate. All degrees for which a student qualifies are awarded as completed.

### **Double-counting Credits**

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

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

### **Graduation Requirements and Full Time Enrollment**

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

### **Limitations**

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

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

### **Programs of Emphasis (POEs)**

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

### **Residency Requirement**

In accordance with the Residency Policy and Transfer Credit Policy, a minimum of 52 credits applied toward graduation must be earned at Alma College or through Alma College-approved programs. Credit earned by enrollment in Alma College courses, or transfer credits earned at another institution, below the 100-level do not count toward the 136–156 credits required for graduation.

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.



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## Spring Term Requirements

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

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

## Statute of Limitation for Degree Requirements

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

## Upper Level Courses

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

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# 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.


## Literacy

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

## Composition

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

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

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

## Mathematics

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

# Guide to General Education Distributive Requirements


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


## **I. First Year Seminar** **2 credits**

Minimum of 2 credits for all first-year students entering Alma College and incoming transfer students with fewer than 25 credits awarded. Course is typically taken during the first term.

## **II. Writing Proficiency** **16 credits**

ENG 101, 201, 202 or 220 with a grade of "C" or higher, plus 12 additional credits of Quill writing courses. One of these courses must be in the major. Quill courses are designated with a .

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

Four credits taken in a second language plus one of the following: an additional 4 credits taken 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 subject area as designated by three-letter prefix. Practicum and independent study credits cannot be counted toward this requirement.

### **Arts and Humanities (AH) 12 credits**

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

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

All ENG courses at the 110 level or higher

All language courses at the 112 level or higher

All HUM courses at the 110 level or higher

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

WLC courses 101, 180, 280 and 380

### **Social Sciences (SO) 12 credits**

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

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

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

### **Natural Sciences (NS) 12 credits**

At least 4 credits in each of the following three areas; must include at least one laboratory course.

#### **NS-1 Life Sciences: 4 credits**

All courses in BCM, BIO, PSY

ENV 105\*

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

#### **NS-2 Physical Sciences: 4 credits**

All courses in AST, CHM, EGR, GEO, PHY

ENV 110\*, PSC 101

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

CSC 120 or higher; DAT 115, 116, 315; MTH 110 or higher; NMS 220; PHL 303; PSY 220

\* Completion of ENV 105 and 110 completes the NS-1 and NS-2 distributive requirements.

# Courses of Instruction

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

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

## Academic Divisions and Courses of Instruction

### Humanities

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

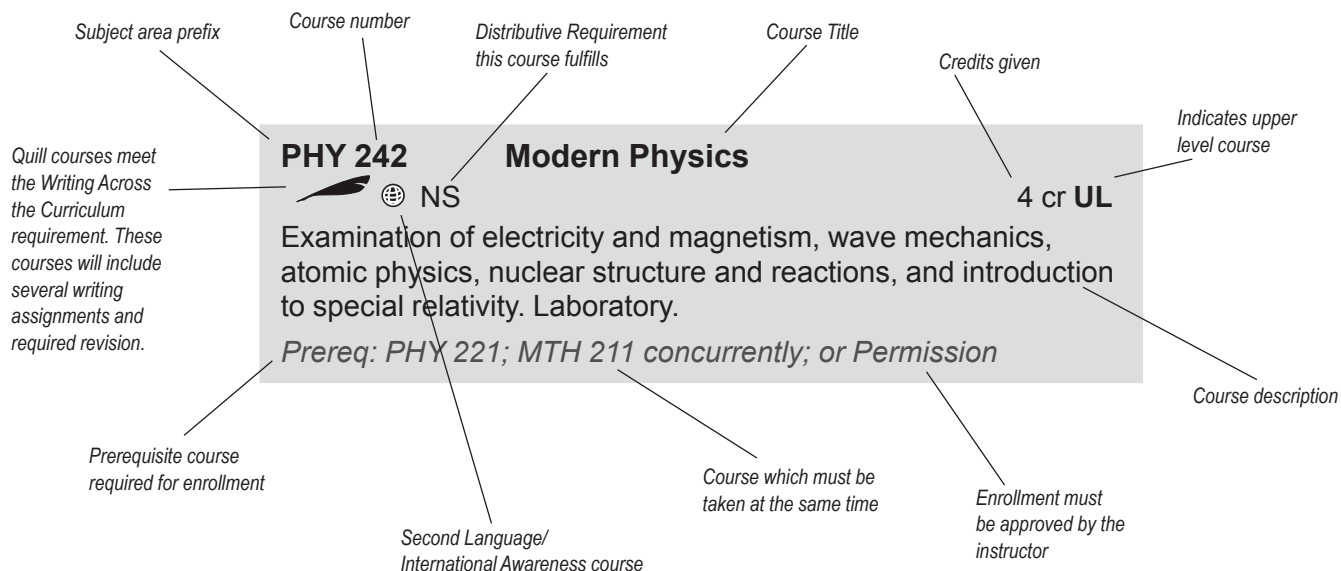
### Natural Sciences

Astronomy  
 Biochemistry  
 Biology  
 Biotechnology  
 Chemistry  
 Computer Science  
 Data Analytics  
 Environmental Studies  
 Geology  
 Health Studies  
 Integrated Science  
 Integrative Physiology and Health Science  
 Mathematics  
 Nursing  
 Physics and Engineering Science  
 Psychology  
 Public Health

### Social Sciences

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

## Guide to Understanding Course Listings



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## General Studies

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### First Year Seminar (FYS)

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

#### FYS 101 First Year Seminar

4 cr

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

### Honors Program (HNR)

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

#### HNR 100 Honors Seminar

1 cr

Seminar designed to foster active engagement in the Alma College community: academics, arts, athletics, guest speakers, service, special events, etc. Students will attend, discuss, and maintain a reflective journal on a variety of designated campus events. Open to students accepted into the Presidential Honors Program.

*Prereq: Acceptance into the Presidential Honors Program*

#### HNR 150 Presidential Reading Group

1 cr

Seminar discussion of selected readings of various genres guided by the President and other campus leaders. May be repeated for credit. Graded Pass/Fail.

*Prereq: Acceptance into the Presidential Honors Program*

#### HNR 200 Honors Seminar

1 cr

Seminar designed to foster active engagement in the Alma College community: academics, arts, athletics, guest speakers, service, special events, etc. Students will attend, discuss, and maintain a reflective journal on a variety of designated campus events. Open to students accepted into the Presidential Honors Program.

*Prereq: Acceptance into the Presidential Honors Program*

#### HNR 250 Presidential Reading Group

1 cr

Seminar discussion of selected readings of various genres guided by the President and other campus leaders. May be repeated for credit. Graded Pass/Fail.

*Prereq: Acceptance into the Presidential Honors Program*

#### HNR 300 Honors Seminar

1 cr

Seminar designed to foster active engagement in the Alma College community: academics, arts, athletics, guest speakers, service, special events, etc. Students will attend, discuss, and maintain a reflective journal on a variety of designated campus events. Open to students accepted into the Presidential Honors Program.

*Prereq: Acceptance into the Presidential Honors Program*

#### HNR 400 Honors Seminar

1 cr

Seminar designed to foster active engagement in the Alma College community: academics, arts, athletics, guest speakers, service, special events, etc. Students will attend, discuss, and maintain a reflective journal on a variety of designated campus events. Open to students accepted into the Presidential Honors Program.

*Prereq: Acceptance into the Presidential Honors Program*

## Academic and Career Planning (ACP)

### ACP 100 Strategic Learning

1 cr

This course is designed to assist students in developing the skills necessary to be successful in college. It will help you develop a personal academic success plan, understand how to utilize the resources at Alma College, identify and leverage your individual learning style, as well as enhance both your time management and study skills. Graded Pass/Fail Only

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## American Studies (AMS)

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### Minor Requirements

Thirty credits which must include:

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

#### AMS 101 Introduction to American Studies

2 cr

Focuses on the multi-disciplinary perspectives needed to understand the complexity of "the American experience(s)."

*Prereq: First-year or Sophomore Standing*

#### AMS 102 Perspective American Experience

2 cr

Focuses on seminal sources for deepening one's perspectives on "America."

*Prereq: First-year or Sophomore Standing*

#### AMS 301 American Studies Seminar

2-4 cr **UL**

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

*Prereq: AMS 101 and 102*

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## Anthropology (ANT)

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

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

#### ANT 111 Introduction to Anthropology

SO

4 cr

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

#### ANT 180 Topics in Anthropology

SO

1-8 cr

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

#### ANT 212 Intro to Cultural Anthropology

SO

4 cr **UL**

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

Prereq: SOC-101 or ANT-111

### ANT 213 Principles of Archaeology

 SO 4 cr UL

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

Prereq: ANT-111 recommended

### ANT 214 Fund. of Biological Anthropology

 SO 4 cr UL

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

Prereq: ANT-111 or BIO-121 or BIO-123 or Permission

### ANT 215 Michigan Archaeological Fieldwork

SO SL 4 cr UL

Survey and excavation of a local archaeological site. Field methods, record keeping, preservation of finds, laboratory experience, and public education. Includes classroom instruction, field, and laboratory work, and a service-learning component. Course fee.

Prereq: ANT-111, 213, or 312 recommended

### ANT 215M Michigan Archaeological Fieldwork

 SO SL 4 cr UL

Survey and excavation of a local archaeological site. Field methods, record keeping, preservation of finds, laboratory experience, and public education. Includes classroom instruction, field, and laboratory work, and a service-learning component. Course fee.

Prereq: ANT-111, 213, or 312 recommended

### ANT 216 Ethnobotany

SO 4 cr UL

Ethnobotanical and paleoethnobotanical approach to relationships between plants and human culture. Philosophical, ethical and technological perspectives of traditional and Western attitudes toward human-plant interactions. Issues of land-use rights, biodiversity, global stewardship and intellectual property rights. Combined lecture and seminar format.

Prereq: ANT-111

### ANT 217 Medical Anthropology

SO 4 cr UL

An examination of the interplay between culture and medicine in a global context. Cross-cultural notions of healing, illness and medicine will be explored. Ethnography of medical practices, health disparities and policy implications will be examined.

Prereq: ANT-111 or Permission

### ANT 218 Introduction to GIS

 SO 4 cr UL

Introduction to theory and methods of Geographic Information Systems (GIS). Emphasizes (1) how spatial layout shapes and constrains social, economic, and political possibilities, (2) history and ethics of mapmaking, and (3) how to input and analyze spatial data. Students will access a laptop computer and industry-standard software, ESRI ArcGIS. Preparation for GIS Certificate, internships, job opportunities.

### ANT 280 Topics in Anthropology

SO 2-4 cr UL

Examines special subjects in Anthropology.

### ANT 311 Indigenous Cultures

SO 4 cr UL

A cross-cultural study of indigenous peoples around the globe. Major themes such as colonialism, sovereignty, language, belief systems and identity are examined through deep reading of

specific ethnographic case studies.

Prereq: ANT-111 or ANT-212

### ANT 312 North American Archaeology

SO 4 cr UL

Focus on major prehistoric and historic North American cultures as revealed through archaeology and representative archaeological sites. Special emphasis on Michigan and the Midwest.

Opportunities for hands-on post-excavation laboratory research.

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

### ANT 315 Michigan Archaeological Fieldwork

SO 4 cr UL

Research from peer-reviewed and/or primary sources, application of research to data from local sites resulting in written report, exhibition, or public presentation. Supervision of field crews in Spring Term excavation and survey program. Intended for students with experience in, and serious commitment to, archaeological research.

Prereq: ANT-215 or Permission;

### ANT 315M Michigan Archaeological Fieldwork

 SO 4 cr UL

Research from peer-reviewed and/or primary sources, application of research to data from local sites resulting in written report, exhibition, or public presentation. Supervision of field crews in Spring Term excavation and survey program. Intended for students with experience in, and serious commitment to, archaeological research.

Prereq: ANT-215 or Permission;

### ANT 380 Topics in Anthropology

SO 2-4 cr UL

Examines special subjects in Anthropology.

Prereq: Junior or Senior Standing

### ANT 380M Topics in Anthropology

SO 4 cr UL

### ANT 385 Anthropology Practicum

4 cr UL

Participation in community institutions, agencies, schools, and business with individual faculty supervision. Applications of concepts through experience. About 11-14 hours of field work per week for each four credits. Includes paper report.

Prereq: Permission.

### ANT 498 Research Seminar-Anthropology

 SO 2-4 cr UL

Designed as a culminating experience for Anthropology majors and minors. Emphasizes student synthesis and application of cumulative anthropological knowledge. Students facilitate classes and engage in an original research project culminating in a public presentation of their work.

Prereq: ANT-111 and 12 UL credits of ANT or Permission.

### ANT 499 Independent Study-Anthropology

HCAT 2-4 cr UL

Supervised reading or project in special areas of anthropology.

Prereq: Permission.

### ANT 500 Senior Thesis-Anthropology

SO 4 cr UL

Designed for Senior Anthropology majors with the consent of the Department. Program of empirical and theoretical research.

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## Art and Design (ART)

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The Bachelor of Arts (B.A.) in Art and Design is designed for students seeking a broad overview of various media within the Studio Arts, and is often combined with other majors such as Business, English or Psychology.

### Major Requirements

Thirty-six credits, which must include:

1. 20 Credits, Core Requirements: ART-101, 111, 112, 120, and 150.
2. 4 Credits, Upper Level Quill courses in Art History from the following: ART-212, 213, 215M, 319.
3. 4 Credits, Senior Exhibition: ART 501, ART-502, and a senior exhibition approved by the art faculty with a successful advisory board review.
4. 8 Credits, Studio Courses. Note: Students have the option of focusing in a single area of art. A concentration or focus is not a requirement for the Bachelor of Arts degree, but strongly recommended. The art faculty encourage students to pursue additional credits within an area of study to obtain a more competitive portfolio upon graduation.

**Painting & Drawing Studio Area:** ART-162; 261; 262; 361; 362; 461; 462; 500.

**Ceramics & Sculpture Studio Area:** ART-140; 240; 241; 250; 253; 340; 350; 450.

**Graphic Design Studio Area:** ART-131; 231; 331; 431.

**Photography Studio Area:** ART-126; 226; 326; 426

An emphasis in Animation, Graphic Novel and Comic Design are available through our partnership with Duncan of Jordanstone College of Art and Design (DJCAD) at the University of Dundee in Scotland. In addition to the above coursework required for the major, students wishing to continue in Animation should take ART-162, 228, 253, and NMS-232 to prepare for their semester or year-long experience in Scotland during their Junior year.

#### Art Minor Requirements

Twenty-four credits which must include:

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

#### Art History Minor Requirements

Twenty-four credits which must include:

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

#### Program Considerations for Art History Minor

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

#### Transfer Credits in Studio Art

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

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

#### ART 101 Drawing I

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

#### ART 109 Greek Myth & Classical Art

AH 4 cr  
The ancient Greeks told their famous stories of themselves and their history in both the intimate spaces of vase painting and in the

more public displays of sculpture. We will examine images of Greek Myth by asking: How was export vase ware to be read by their Greek and non-Greek audiences? How do we determine the referents of those images, when the myths had not yet been recorded in texts? How did viewers encounter, read and understand their highly decorated temples? The course will also engage later Hellenistic and Roman works.

#### ART 111 History of Art I

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

#### ART 112 History of Art II

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

#### ART 120 Two-Dimensional Design

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

#### ART 126 Photography I

AH 4 cr  
Introduction to basic 35mm photography including digital, film, and darkroom techniques. Students will begin with digital cameras and learn all aspects of the basic camera body, and lenses. In addition, students will photograph with standard 35mm film cameras, process and print Black and White film in the darkroom using traditional paper and chemistry. A digital camera with manual settings is required and a traditional 35mm SLR film camera is suggested. Course fee.

#### ART 131 Graphic Design I

AH 4 cr  
Students will focus on the principles, elements, and working procedures of the design and visual presentation of communication pieces. This is also, an introduction to the computer as a design tool using the industry standards in digital illustration and page layout software (Adobe Illustrator, InDesign). File transport (PDF) and font management software will also be introduced. Course fee.  
*Prereq: ART/NMS-120*

#### ART 140 Ceramics I

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

#### ART 150 3-Dimensional Design

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

#### ART 162 Figure Drawing I

AH 4 cr  
An introductory drawing course using the human body to discuss proportion and space. Much of the class will focus on developing drawing technique and observational skills for naturalistic rendering. Course fee.  
*Prereq: ART-101 or ART-120 or Permission*

#### ART 171 Printmaking I


AH 4 cr  
This course will explore the basic printmaking methods and their art historical significance. The students will gain basic knowledge of techniques and vocabulary that will further develop their artistic expression through the creation of the multiple print and/or presentation processes. We will cover Monotype, Collagraph, Relief, and Dry point Etching using a more contemporary, less

toxic process. Course fee.


**ART 180 Topics in Studio Art**

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


**ART 209 Greek Myth & Classical Art**

 AH 4 cr  
The ancient Greeks told their famous stories of themselves and their history in both the intimate spaces of vase painting and in the more public displays of sculpture. We will examine images of Greek Myth by asking: How was export vase ware to be read by their Greek and non-Greek audiences? How do we determine the referents of those images, when the myths had not yet been recorded in texts? How did viewers encounter, read and understand their highly decorated temples? The course will also engage later Hellenistic and Roman works.


**ART 212 Survey of Renaissance Art**

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

**ART 213 Survey of Modern Art**

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

**ART 215M Contemporary Art**

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

**ART 226 Photography II**

AH 4 cr UL  
Students will build on their basic photographic skills while exploring the aesthetics of digital photography as it relates to the digital SLR camera, color aesthetics, post-production techniques and color management for printing or viewing. Participants should have a solid understanding of aperture, shutter speed and depth of field before enrolling in this course. A digital camera with manual controls is required. Course fee.  
*Prereq: ART-126*

**ART 228 Lighting Studio**

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

**ART 231 Graphic Design II**

AH 4 cr UL  
Introduces students to the basics of photography using the digital camera and how to use photo manipulation software (Adobe Photoshop) for composition, color correction, and digital manipulation. Course fee.  
*Prereq: ART-131*

**ART 240 Ceramics II**

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

**ART 241 Wheel Throwing**

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

**ART 250 Sculpture I**

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

**ART 253 Figurative Clay Sculpture**

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

**ART 261 Painting I**

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

**ART 262 Figure Drawing II**

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

**ART 271 Printmaking II**

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

**ART 280M Topics in Art History**


AH 4 cr UL  
Selected topics in the history of art. Subject varies according to instructor's field. Course content and instructor announced in advance. May be repeated for credit if course content covers a different topic. (Past courses include art history in Rome, and world ceramics: London). Course fee. Spring Term only.  
*Prereq: Take ART-101 or ART-120;*

**ART 281 Topics in Studio Arts**

AH 2-4 cr UL  
Selected topics in studio art. Subject varies according to instructor's field. Course content and instructor announced in advance. May be repeated for credit if course content covers a

different topic. May include course fee.

**ART 281M Painting Community: A Mural Project**

 AH 4 cr **UL**  
We will produce a mural in downtown Alma. This course focuses on multiple facets of building and executing an outdoor, semi-permanent painting. We will be studying murals as a form of urban art designed to uplift and support local community. Students will be asked to collaborate within small groups, build a proposal for outside committee approval, and execute the accepted class proposal. Course fee.


**ART 290 Directed Studio**

AH 2-4 cr **UL**  
Exploration at the intermediate level through a studio project in a selected medium. Open to majors and non-majors. Utilizes a directed studio format. (Past courses included book arts, jewelry, watercolor, wheel-thrown ceramics, etc.). Course fee.  
*Prereq: Permission*

**ART 299 ART Independent Study**

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

**ART 319 Art Theory**

 AH 4 cr **UL**  
An exploration of the main theoretical discourses (philosophical, critical, historical) that impel both the creation and the reception of art, including the very definition of art, as deployed throughout the 20th century. Course fee.  
*Prereq: Junior or Senior Standing*

**ART 326 Photography III**

AH 4 cr **UL**  
An exploration of various camera formats including medium and large format cameras. Various printing methods will be explored based on aesthetic goals. Participants will work toward self-assigned goals with permission and direction from the instructor. Course fee.  
*Prereq: ART-126*

**ART 330 Graphic Design III**

AH 4 cr **UL**  
An advanced computer course focusing on the combined use of digital illustration and photo manipulation software in the creation of aesthetic and artistic graphic imagery for posters, marketing materials and other graphic based media. Also, an early introduction to the visual and verbal vocabularies of design and color theory as they relate to graphic design. Course fee.  
*Prereq: ART-131*

**ART 340 Ceramics III**

AH 4 cr **UL**  
This course is designed around developing an individual voice with fired clay and ceramic surface. Both form and surface will be explored in contributing to the content of the piece. Through research, surface testing, and experimentation, students will develop skills towards a disciplined studio practice. Course fee.  
*Prereq: ART-240*

**ART 350 Sculpture II**

AH 4 cr **UL**  
A continued material investigation in three-dimensions with a focused introduction to wood. Additionally, there will be a stronger emphasis on the students' individual investigation of material, process, and conceptual thought process. Course fee.  
*Prereq: ART-250*

**ART 361 Drawing and Painting I**

AH 4 cr **UL**  
This is an intermediate course, which discusses contemporary as well as traditional ways of creating a drawing and a painting. Time will be devoted to developing ideas of a unique body of work as well as material experimentation. Course fee.  
*Prereq: ART-262 or Permission*

**ART 362 Drawing and Painting II**

AH 4 cr **UL**  
This is an intermediate course, which discusses contemporary as well as traditional ways of creating a drawing and a painting. Time will be devoted to developing ideas of a unique body of work as well as material experimentation. Course fee.  
*Prereq: ART-361 or Permission*

**ART 380 Topics in Studio Art**

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

**ART 380M Topics in Art**

AH 4 cr **UL**  
Selected topics in the history of art. Subject varies according to instructor's field. Course content and instructor announced in advance. May be repeated for credit if course content covers a different topic. (Past courses include women in art, history of prints). Course fee.

**ART 385 Art Internship**

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


**ART 390 Advanced Directed Studio**

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

**ART 399 ART Independent Study**

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

**ART 400 Art History Thesis**

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

**ART 424 Photography III**

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

**ART 426 Photography IV**

AH 4 cr **UL**  
Exploration and development of images made with digital and traditional technology. Students will work towards a body of work suitable for exhibition and will be developing/printing, matting/framing/ and writing artist biographies as well as artist statements. Course fee.  
*Prereq: ART-126*



**ART 430 Graphic Design IV**  
AH 4 cr **UL**  
Focuses on making connections between idea and visualization using type, imagery, and color to solve communication problems. Learn to understand the design process, including problem identification, brainstorming, research, creative briefs, various forms of conceptualizing, and presentation preparation. Develop an understanding of design principles and strategies to media outlets through the use of advertising, branding, and various marketing tactics. Course fee.  
*Prereq: ART-131 and ART-231*

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

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

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

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

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

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

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

**ART 501 Professional Practice I**  
AH 2 cr **UL**  
This course is a requirement for seniors majoring in art. Art 501 is the first part of the art department's capstone experience. Students will take this course their senior year fall semester. The class will build application materials for success after graduation as well as create an exhibition for their senior thesis. Course Fee.  
*Prereq: Senior Standing, Declared Major in Art*

**ART 502 Professional Practice II**  
AH 2 cr **UL**  
This course is a requirement for seniors majoring in art. Art 502 is the second part of the art department's capstone experience. Students will take this course their senior year winter semester. In this course, we will continue building application materials for success after graduation as well as create an exhibition for their senior thesis. Course Fee.  
*Prereq: Senior Standing, Declared Major in Art*

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## Astronomy (AST)

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

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

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

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

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## Biochemistry (BCM)

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### Major Requirements

Sixty-four credits which must include:

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

### Program Considerations

- Potential majors are advised to schedule MTH-121 and 122 and PHY-112 and 113 or 121 and 122 in the freshman and sophomore years so they may take CHM-331 or 332 in the junior year.

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

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

**BCM 180 Topics in Biochemistry**

NS1 1-4 cr

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

*Prereq: Permission*

**BCM 180M Topics in Biochemistry**

NS1 1-4 cr

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

**BCM 201 Biotechnology Journal Club**

2 cr UL

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

**BCM 319 Toxicology**

NS1 4 cr UL

An introduction to Toxicology. Topics include general principles, toxicodynamics and kinetics, metabolism and biochemical mechanisms, system and organismal responses, testing guidelines, analytical methods, and case studies (clinical and environmental). Laboratory. Course fee.

*Prereq: BIO-121 and CHM-230*

**BCM 321 Biochemistry**

NS1 4 cr UL

Overview of the major topics of biochemistry including the chemistry, structure, function, biological activity and molecular mechanisms of the major biological macromolecules. Introduction to bioenergetics and central metabolic pathways. Laboratory. Course fee.

*Prereq: BIO-121, CHM-223, CHM-224 (CHM-224 may be taken concurrently), and Junior Standing*

**BCM 401 Biotechnology Journal Club**

2 cr UL

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

**BCM 422 Advanced Biochemistry**

NS1 4 cr UL

Further study of intermediary metabolism through the use of historical and current research articles. Introduction to biophysical methods. Emphasis on experimental design, data analysis and integration of biochemical information. Laboratory. Course fee. (Offered Winter, Odd numbered years)

*Prereq: BCM-321, CHM-230 (CHM-230 may be taken concurrently)*

**BCM 430 Molecular Genetics**

NS1 4 cr UL

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

Laboratory. Course fee. (Offered Winter, Even-numbered years)

*Prereq: BCM-321 or BCM-401*

**BCM 499 Biochemistry Independent Study**

HCAT 1-4 cr UL

Independent research in biochemistry resulting in a written report. Course fee.

**BCM 500 Senior Thesis**

NS1 4 cr UL

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

*Prereq: Permission*

## Biology (BIO)

**Major Requirements**

Thirty-six credits which must include:

1. Core (20 cr): BIO-121, 221, 222, 223, 290, and 490.
2. Electives (16 cr; Pre-approved spring term courses may be used to fulfill any of the four elective areas):
  - a. Evolution and Genetics: 4 credits in either BIO- 204 or 360
  - b. Ecology and Biodiversity: 4 credits from one of the following: BIO- 302, 306, 309, 319, 361, and 370.
  - c. Form and Function: 4 credits from one of the following: BIO- 205, 206, 207 or 226, 305, and 387.
  - d. Cell and Molecular Biology: 4 credits from one of the following: BIO- 125, 308, 325, 333, and 430.
3. Completion of the MFT examination for biology.

**Teaching Major**

Thirty-six credits which must include:

1. Core (24 cr): BIO-121, 222, 223, 204, 290, 302, and 490.
2. Twelve credits of upper level BIO electives.
3. Completion of MFAT examination.

**Program Considerations**

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

**Minor Requirements**

Twenty-four credits which must include:

1. BIO-121, 222, 223.
2. 12 additional credits of upper level BIO electives.

**Teaching Minor Requirements**

Twenty-four credits which must include: BIO-121, 222, 223, 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 Foundations of Biology**

NS1 4 cr  
Foundational concepts of biology are introduced through a combination of activities, case studies, presentations and discussions, and hands-on laboratory experiences. Students explore the essentials of metabolism, basic cell membrane and organelle structure and function, biosynthesis, DNA replication, cell division, reproduction, and Mendelian genetics within broader biological contexts such as human ecology and health, environmental issues, and evolution. The laboratory component provides students with practical experiences that develop laboratory skills and that employ the scientific method and basic data analyses. Laboratory. Course fee.

**BIO 125M Molecular Techniques**

NS1 4 cr  
The course is an introduction to basic molecular biology laboratory techniques and applications. Prepares students for upper level courses and summer research internships and independent studies in the molecular sciences. Course fee.

**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 180 Conservation Biology: Preserve Diversity**

NS1 2 cr  
Conservation Biology encompasses policies and practices related to wildlife management and restoration biology, and to preservation through zoos and botanical gardens. More broadly, conservation biologists are concerned with preserving biodiversity in a world with expanding human disturbance. Course content will include the general foundations of conservation biology, approaches to conservation, and the importance of, and threats to, biodiversity. Through lectures and discussions of research articles and videos, we will explore how conservation biology can be applied to our careers and personal lives.

**BIO 204 Genetics**

NS1 4 cr UL  
The mechanics of inheritance at the molecular and cellular levels and the relationship of this phenomenon to gene action, organismal development, population changes and evolution. Laboratory. Course fee.  
*Prereq: BIO-121 and Sophomore Standing*

**BIO 205 Human Embryology**

NS1 4 cr UL  
Development of the organism from its beginning to the establishment of the basic body plan and organ systems. Live embryos and developmental morphology of vertebrates. Laboratory. Course fee.  
*Prereq: BIO-121*

**BIO 206 Forest Vegetation**

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

**BIO 207 Comparative and Environmental Physiology**

NS1 4 cr UL  
The study of dynamic organ system functions that maintains animal homeostasis under varying activity levels and in the face of changing environmental conditions. Focus is placed on negative or positive feedback control systems that regulate physiological variables and on the mediating cellular mechanisms of sensors, effectors, integrators, and intervening pathways. Physiological adaptations as they allow animals to cope in their environments are stressed. Laboratory. Course fee.

**BIO 215M Human Biodiversity**

NS1 4 cr UL  
Human variation and diversity are examined from genetic and epigenetic perspectives. Topics will likely include discussions on human migration, genetic measures of diversity, race, eugenics, genocide, among others. Course fee.  
*Prereq: Sophomore Standing or permission*

**BIO 221 Cell Biology**

NS1 4 cr UL  
The course focuses on the molecular structure of cells and how those structures permit and constrain cell functions. BIO 221 answers questions regarding how cells function from protein, lipid, and organellar trafficking, chromatin organization, and cytoskeletal function, to cell division mechanics. Course includes clinical correlates involving many common disease conditions including cancer, cystic fibrosis, lysosomal storage diseases, Creutzfeldt-Jakob Disease, and muscular dystrophy. Laboratory includes in vitro cell culturing experience and basic molecular techniques. Laboratory. Course fee.  
*Prereq: BIO-121*

**BIO 222 Plant Biology**

NS1 4 cr UL  
An introductory course emphasizing plants as the model organism for learning about basic biological principles including plant development, anatomy, physiology, behavior, evolution, and ecology. Studio format course, in which lectures and labs are combined for a student-focused, active-learning experience. Students work throughout the semester as members of collaborative groups to answer and develop questions, solve problems, perform experiments, and conduct research that is intended to help them learn. Laboratory. Course fee. (Formerly offered as BIO-202).  
*Prereq: BIO-121*

**BIO 223 Animal Biology**

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


**BIO 290 Experimental Design & Analysis in BIO**

NS1 2 cr UL  
Biology as a quantitative, experimental, and theoretical science is a central focus of the course. Foundational skills essential for conducting research in biology and for critical evaluation of research are established. Students learn the underlying principles and practical skills necessary for the exploration of questions and for testing hypotheses with special emphasis on research design and analysis and interpretation of data using statistical techniques. Sound experimental and statistical principles are demonstrated through the use of data from several diverse fields of biology. The course provides an essential foundation for undergraduate research in biology. Course fee.  
*Prereq: BIO-121 and sophomore standing*

**BIO 299 Biology Independent Study**  
 HCAT 1-4 cr **UL**  
 An opportunity for exceptional freshmen and sophomores to work directly with faculty on a research project. Typically, students help gather data and participate in the analysis of data. Introduction to the research process. Course fee.  
*Prereq: Permission*

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

**BIO 305 Comparative Vertebrate Anatomy**  
 NS1 4 cr **UL**  
 Explores the use of homology and cladistics to recover phylogenies and to understand the evolution of anatomical features of vertebrates. The function, form, and biodiversity of chordates with emphasis on vertebrates are discussed. Laboratory. Course fee.  
*Prereq: BIO-223*

**BIO 306 Forest Ecology**  
 NS1 4 cr **UL**  
 Ecological interactions crucial to understanding forest ecosystems. This class will be taught by using the flipped classroom teaching method which will involve active learning techniques. Students will be responsible for a significant amount of preparation outside of class and active learning projects during class. Laboratory and field studies, with one Saturday field trip with a focus on acquiring field techniques and mastering quantitative skills. Laboratory. Course fee.  
*Prereq: BIO-222 or Permission*


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

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

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

**BIO 319 Toxicology**  
 NS1 4 cr **UL**  
 The study of toxic effects of chemicals on human and ecological populations. This includes the basic principles of toxicology and toxicity testing, fate and transport of materials in the environment and the body, key toxins and toxicants, and modes of toxic action among other topics. These subjects are supplemented with scientific literature on current topics in toxicology. Laboratory. Course fee.  
*Prereq: BIO-121 and CHM-115 (one course from CHM-223, BIO-223, or IPH-227 recommended)*

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


**BIO 325M Advanced Molecular Techniques**  
 NS1 4 cr **UL**  
 The course is an extension of BIO125. Upper level course for Junior and Seniors includes additional independent assignments, presentations, and mentoring. Course fee.  
*Prereq: Junior or Senior standing*

**BIO 330 Immunology**  
 NS1 4 cr **UL**  
 The basic elements of the immune system that govern the innate and adaptive immune responses will be covered. Emphasis will be spent on B and T lymphocyte functions and the mechanisms of immune defense against pathogens. Course fee.  
*Prereq: BIO-121 or IPH-131 or permission*

**BIO 333 Cancer Biology**  
 NS1 4 cr **UL**  
 Cancer biology is an interdisciplinary field spanning several disciplines that include genetics, cell biology, immunology, and microbiology. Basic principles of tumor biology are explored initially from a historical view of diagnosis and treatment paradigms and then through discussions of chemo- and immune-therapies, an introduction to oncogenes, tumor suppressor and DNA repair genes that are disrupted during carcinogenesis, and an in-depth look into several common types of malignancies.  
*Prereq: BIO-121 or IPH-131 or permission*


**BIO 344 Human Dissection**  
 NS1 2 cr **UL**  
 This course will provide students with the opportunity to learn careful dissection techniques and to gain experience in identifying anatomical structures. Emphasis will be placed on anatomical concepts, structure-function relationships, and clinical applications. Instructors will encourage students to develop skills and the confidence to work independently during their dissections. Human Dissection is an alternative course offering to IPH 344 (Human Anatomy) and is intended for students in any pre-health professional track and other students with science backgrounds who are interested in learning about the human body.  
*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 222 or 223 or Permission*

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

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

**BIO 387M Clinical Histopathology**  
 NS1 4 cr **UL**  
 Normal cytologic structure of major tissue types in various species will be studied. Abnormal changes will be identified and studied, and pathophysiologic causes of these abnormalities discussed. Cytologic changes will be related to gross anatomical appearance and abnormalities that would be evident on diagnostic imaging modalities. Students will gain understanding of the symptoms created in the patient by the diseased tissue and which

diseases/disorders must therefore be considered. Lab will develop skills utilized in histological preparation and examination of normal and diseased tissue. Course fee.

*Prereq: Take BIO-121*

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

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

*Prereq: Permission*

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

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

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

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

A retrospective of each student's experiences as a biology major that encourages students to make the connections among the various areas of biology, to reflect upon opportunities and personal pathways through the biology major, and to link their past experiences to future endeavors. Students complete reading and writing assignments and are required to complete the Mean Field Aptitude test. Course fee.

*Prereq: Senior Standing*

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

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

*Prereq: Permission*

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

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

*Prereq: Permission*

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## Biotechnology (BTC)

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### Minor Requirements

Twenty-four credits which must include:

1. Core (12 credits): BIO 121, BCM 201, BCM 401, BCM 430;
2. Electives (12 credits): Choose 12 credits from BIO 125, BCM 321, BCM 380, BCM 422, BIO 204, BIO 308, BIO 320, CHM 224, and either BIO 207 or IPH 227;

### Program Considerations:

- Note that some elective courses have additional prerequisites.
- Students with AP Biology test scores of 5 may elect to receive four credits of BIO-121, thus fulfilling this requirement.
- Students are invited to petition the Biotechnology Steering Committee in writing if they encounter new or distinctive course offerings that are relevant to the minor.

**BTC 125M Protein Expression Techniques** 4 cr  
NS1

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

will be followed by a full day in the laboratory. Course fee.

**BTC 280 Biostatistics** 4 cr UL  
NS1

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

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

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

*Prereq: Permission*

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

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

*Prereq: BIO-121 and CHM-223*

**BTC 325M Protein Expression Techniques** 4 cr UL  
NS1

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

**BTC 399 Research in Biotechnology** 1-4 cr UL  
HCAT

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

*Prereq: Permission*

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

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

*Prereq: BCM-321 and BIO-204*

**BTC 499 Research in Biotechnology** 1-4 cr UL  
HCAT

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

*Prereq: Permission*

**BTC 500 Senior Thesis** 4 cr UL

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

*Prereq: Permission*

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## Business Administration (BUS)

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### Major Requirements

#### General Business Administration Major

Thirty-six credits which must include:

Core Courses (36 cr):

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

\*See also Required Cognate Courses.

### Accounting Major

Fifty-two credits which must include:

Core Courses (36 cr):

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

Accounting Emphasis (16 cr)

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

\*See also Required Cognate Courses.

### Professional Accounting (CPA) Major

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

### Finance Major

Forty-four credits which must include:

Core Courses (36 cr):

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

Finance Emphasis (8 cr)

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

\*See also Required Cognate Courses

### Management Major

Forty-four credits which must include:

Core Courses (36 cr):

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

Management Emphasis (8 credits)

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

\*See also Required Cognate Courses

### Marketing Major

Forty-four credits which must include:

Core Courses (36 credits)

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

Marketing Emphasis (8 credits)

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

\*See also Required Cognate Courses

### International Business Administration Major (IBA)

Thirty-two credits which must include: Core Courses:

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

International Coursework:

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

\*See also Required Cognate Courses

### Secondary Teaching Major Requirements

Thirty-six credits which must include:

1. BUS-121, 221, 309, 323, 327, 333, 440

2. Four credits from 224A, 224B, 224C, 224D
3. 401 or 410

\*See also Required Cognate Courses.

### Business Administration Minor Requirements

Twenty-eight credits which must include:

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

### Cognate courses required for all Business Majors and Minors:

1. Economics: ECN-111 or 112;
2. Data/Business Analytics; four credits from ECN-217, 317; POL-111, 215, or other course pre-approved by the department.
3. Quantitative: four credits from MTH-113, 116, 118, 121, 341, PSY-220 or other course pre-approved by the department. MTH-116 is the preferred course.
4. Ethics: four credits from PHL-225, 227, 228, 229, 242 or other course pre-approved by the department.
5. One course in COM or NMS or any other communication course approved by the department (students may take any two or four credit course in either COM or NMS).

### BUS 121 Business Foundations

4 cr

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

### BUS 150 Business Professionals I

SL

1 cr

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

### BUS 151 Business Professionals II

SL

1 cr

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

*Prereq: Permission*

### BUS 215 Fundamentals of Law



4 cr UL

Overview of the law and everyday legal situations that are encountered in cross disciplinary professions. Topics covered may include contracts, employment, real estate and leases, criminal law, torts, financial issues and personal property. Course fee.

### BUS 221 Financial Accounting

4 cr UL

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

*Prereq: BUS-121 or HCA-131 (may be taken concurrently), sophomore standing, or permission*

### BUS 223 Business Leadership and Society



4 cr UL

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

*Prereq: BUS-121 or Permission*

**BUS 224A Managerial Accounting**4 cr **UL**

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

*Prereq: BUS 121 or HCA 131, BUS 221*

**BUS 224B Managerial Decision Models**4 cr **UL**

Study of accounting with emphasis on cost-volume-profit, incremental analysis, budgeting, capital budgeting and decision making. Emphasis on how cost and managerial accounting concepts apply to decision making and management analysis. Includes basic data analytics and additional spreadsheet design practice.

*Prereq: BUS 121 or HCA 131, BUS 221*

**BUS 224C Managerial Healthcare**4 cr **UL**

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

*Prereq: BUS 121 or HCA 131, BUS 221*

**BUS 224D Managerial Accounting - Topics**4 cr **UL**

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

*Prereq: BUS 121 or HCA 131, BUS 221*

**BUS 225 Legal Environment of Business**4 cr **UL**

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

**BUS 226 Cross-Cultural Studies**

4 cr

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

**BUS 301 Business Communications**4 cr **UL**

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

*Prereq: ENG 101 and BUS 121*

**BUS 309 Managerial Finance**4 cr **UL**

An introductory course in finance designed for general business students with an emphasis on core financial principles. Students will acquire a working knowledge of how capital markets function, learn to analyze financial statements, assess the time value of money and the valuation of debt and stock, and make capital budgeting decisions.

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

**BUS 315 Personal Finance**4 cr **UL**

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

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

**BUS 321 Intermediate Accounting I**4 cr **UL**

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

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

**BUS 322 Intermediate Accounting 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: four credits from BUS-222 or BUS-224(A-D or 224M); ECN 111, 112, 201 or 202; and four credits from MTH 113, 116, 118, 121, 341, PSY 220, or Permission*

**BUS 324 Human Resource 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.

*Prereq: Junior Standing*

**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.

*Prereq: Junior Standing*

**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.

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

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

**BUS 336 Direct Response Marketing**2 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-Commerce**2 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 Marketing**4 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 Management**2 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 Finance**4 cr **UL**

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

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

**BUS 341 Applications and Cases in Management**4 cr **UL**

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

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

**BUS 342 Applications and Cases in Marketing**4 cr **UL**

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

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

**BUS 350 Business Professionals III**SL 2 cr **UL**

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

*Prereq: Permission*

**BUS 366 Commercial Law**4 cr **UL**

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

*Prereq: Junior Standing or Permission*

**BUS 380DM Strategic Leadership**4 cr **UL**

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

*Prereq: Permission*

**BUS 380DMA World in Debt**4 cr **UL**

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

**BUS 380M Strategic Leadership**4 cr **UL**

OPEN TO ALL STUDENTS. Today's business leaders confront an increasing array of choices in an environment characterized by constant change. Leadership requires knowledge and technical competence, but as important is the development of the skills needed to align, motivate, and guide diverse teams to perform at the highest levels in rapidly changing environments. This course will utilize a number of methods to engage the students in the kind of decisions that today's leaders face. Key to the class will be the opportunity to meet with successful alumni from a range of fields, in order to gain their perspectives on the characteristics of successful leadership. The class will be held online and meet daily.

*Prereq: Permission*



**BUS 385 Business Administration Practicum**4 cr **UL**

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

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

**BUS 401 Advertising**4 cr **UL**

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

*Prereq: BUS-333 or Permission*

**BUS 410 Investments**4 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 Finance**4 cr **UL**

An advanced finance course designed to cover more complicated topics in corporate finance. In this course, students will increase understanding of cash flow estimation and risk analysis, capital structure and leverage, dividends and share repurchase, and working capital management.

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

**BUS 422 Advanced Accounting**4 cr **UL**

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

*Prereq: BUS-322 and Senior Standing*

**BUS 423 Small Business Management**4 cr **UL**

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

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

**BUS 425 Federal Individual Income Tax**4 cr **UL**

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

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

**BUS 426 Federal Business Taxation**4 cr **UL**

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

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

**BUS 427 Transnational Management**4 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 Management**4 cr **UL**

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

*Prereq: BUS-333 or Permission*

**BUS 428M Global Marketing Management**4 cr **UL**

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

*Prereq: BUS-333 or Permission*

**BUS 429 Multinational Finance**4 cr **UL**

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

*Prereq: BUS-309*

**BUS 435 Marketing Research**4 cr **UL**

Study of the formal research techniques applicable to marketing. Methodical considerations include sample selection, questionnaire design, data collection, processing and analysis of data, and the preparation of managerial reports.

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

**BUS 436 Selling/Sales Management**4 cr **UL**

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

*Prereq: BUS-333*

**BUS 440 Global Strategic Management**4 cr **UL**

Coverage of all aspects of strategy with a focus on industry and corporate analysis, especially in the global environment. Emphasis on individual written and group oral presentations of case analyses. Students apply the concepts learned to actual business situations. The capstone course for Business Administration and International Business Administration majors.

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

**BUS 442 Accounting Information Systems**4 cr **UL**

Study of accounting information systems, including systems analysis, design and implementation. Emphasis on design and documentation tools and internal controls. Focuses on the needs and responsibilities of accountants as end users of systems, system designers and auditors.

*Prereq: BUS-322 or by Permission*

**BUS 442M Accounting Information Systems**4 cr **UL**

Study of accounting information systems, including systems analysis, design and implementation. Emphasis on design and documentation tools and internal controls. Focuses on the needs

and responsibilities of accountants as end users of systems, system designers and auditors. Spring Term only.  
*Prereq: BUS-322 or by Permission*

**BUS 446 Cross-Cultural Studies** 4 cr **UL**

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

**BUS 449 Auditing** 4 cr **UL**

Study and evaluation of the nature, objectives, scope and theory of the audit process as applied to accounting and internal control systems. Emphasis and balance placed on standards, ethics, current developments and legal requirements as well as special topics including statistical sampling and audit of electronic data processing systems.

*Prereq: BUS-322 and Senior Standing*

**BUS 480 International Business Law** 2-4 cr **UL**

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

*Prereq: Junior or Senior Standing*

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

Requires instructor permission.

**BUS 500 Senior Thesis** 4 cr **UL**

Student must have a GPA of 3.5 or better calculated on all BUS courses taken.

*Prereq: Senior Standing and Permission*

- Completion of an independent research project normally culminating in a senior thesis is recommended. Students bound for graduate school should make careful course selections to support their particular area of emphasis; participation in research, completion of CHM-313, 314 and 411, MTH-210 and 211 should be considered.
- Experience with calculus based physics (PHY- 121 and 122) is preferred over PHY-112 and 113.
- The Chemistry department strongly recommends, in order to be a competitive medical school applicant, 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.
- In addition, students who plan to take the MCAT at the end of the junior year are encouraged to take CHM-115 in the fall of their first year so that BCM-321 can be completed in advance of taking the MCAT (CHM-115, 223, 224, 230 and BIO-121 are prerequisites to BCM-321).

**Departmental Honors**

Students may achieve honors in Chemistry by:

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

**Minor requirements**

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

**Teaching Major Requirements**

Completion of the requirements for the Chemistry major.

**Teaching Minor Requirements**

Twenty-four credits which must include:

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

**American Chemical Society Certified Degree**

American Chemical Society Certified Degree Completion of CHM-115, 223, 224, 230, 313, 314, 320, 331, 332, 450, BCM-321 and four credits chosen from CHM-399, 411, 499, or BCM-422. Completion of 400 hours of laboratory work beyond CHM-115 is required. If independent study is used to satisfy the ACS-certified degree requirements, a written research report is required. Students must consult with the Chemistry chair prior to their junior year for approval of their program.

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

**CHM 103M Basic Chemical Investigations**

NS2 4 cr

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

*Prereq: MTH-100 or Placement*

**CHM 115 Chemical Analysis**

NS2 4 cr

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

*Prereq: MTH-110 or Placement*

**CHM 199 Chemistry Independent Study**

HCAT 1-4 cr

Planned program of reading or laboratory experimentation. Course fee.

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## Chemistry (CHM)

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**Major Requirements**

Thirty-six credits which must include:

1. Core Courses (28 cr): CHM-115, 223, 224, 230, 320, 331, and 332
2. Select Area of Concentration:
  - Chemistry: eight credits from CHM-251, 300 or 400 level courses, BCM-321 or 422. At least four credits must be at or above the 300 level.
  - American Chemical Society Certified Degree: CHM-313 and 314; BCM-321; and four credits chosen from CHM-399, 411, 499, or BCM-422 (must include 150 lab hours).
  - Pre-Medicine: BCM-321 and four credits from 300 or 400 level courses in Chemistry (see Program Considerations below); The American Chemical Society Certified Degree is also available with the pre-medicine concentration.
3. Successful completion of CHM-450.

*Cognate Courses Required for All Chemistry Majors:*

1. MTH-121 and MTH-122
2. PHY-121 and PHY-122; or PHY-112 and PHY-113

**Program Considerations**

- Potential majors are advised to schedule MTH-121 and 122 and PHY-121 and 122 (or PHY-112 and 113) in the freshman and sophomore years so they may enroll in CHM-331 and 332 in the junior year.

Prereq: Permission

**CHM 223 Organic Chemistry I**  
NS2 4 cr UL  
Study of the chemistry of carbon-containing compounds, emphasizing the various functional groups and their transformations, reaction mechanisms and stereochemistry, and the development of synthetic schemes. Laboratory. Course fee.  
Prereq: CHM-115

**CHM 224 Organic Chemistry II**  
NS2 4 cr UL  
Study of the chemistry of carbon-containing compounds, emphasizing the various functional groups and their transformations, reaction mechanisms and stereochemistry, and the development of synthetic schemes. Laboratory. Course fee.  
Prereq: CHM-115, 223

**CHM 230 Inorganic Chemistry**  
NS2 4 cr UL  
Study of the chemistry of the metals and non-metals emphasizing periodic behavior, elementary thermodynamics, ionic and covalent structures, oxidation and reduction reactions, acid-base chemistry, equilibria, transition metal complexes and reaction kinetics. Laboratory. Course fee.  
Prereq: CHM-224 or Permission

**CHM 251 Chemistry of Ordinary Things**  
NS2 4 cr UL  
An exploration of the applications of principles of general and organic chemistry of everyday phenomena. Additional topics include an introduction to drug design and aspects of spectroscopy to probe molecular structure. Laboratory. Course fee.  
Prereq: CHM-223

**CHM 280 Topics in Chemistry**  
4 cr UL  
Chemical topics chosen by the instructor. May be taken more than once for credit. Course fee may apply.  
Prereq: CHM-230

**CHM 299 CHM Independent Study**  
HCAT 1-4 cr UL  
Planned program of reading or laboratory experimentation. Course fee. Requires instructor permission.

**CHM 310 Medicinal Chemistry**  
NS2 2 cr UL  
Study of the molecular aspects of drug function leading to an understanding of the basis for rational drug design. Discussion of physical-chemical properties and their effect on biological activity, structure-activity relationships, drug metabolism and receptor theory.  
Prereq: CHM-230

**CHM 311 Environmental Chemistry**  
NS2 2 cr UL  
Introduction to environmental chemistry, emphasizing the origins, transport, reactions, effects and fates of chemical species in the water, air, soil and living environments.  
Prereq: CHM-230

**CHM 312 Fragrance and Flavor Chemistry**  
NS2 2 cr UL  
A study of the physiological basis for smell and taste, history of fragrances and flavors, origins and analysis of natural materials and raw materials for and production of synthetic ingredients. The fragrance and flavor industry, marketing and product application will also be discussed. There is no separately assigned lab, however students will be engaged in laboratory exercises. Course fee.  
Prereq: CHM-230

**CHM 313 Inorganic Structures**  
NS2 2 cr UL  
A survey of inorganic species including symmetry, bonding models and spectroscopy. An overview of the reactions of organometallic compounds will be included.

Prereq: CHM-230

**CHM 314 Bioinorganic Chemistry**  
NS2 2 cr UL  
The study of the use of metals by biological species emphasizing inorganic models, reaction types and reaction mechanisms.  
Prereq: CHM-230

**CHM 320 Instrumental Analysis**  
NS2 4 cr UL  
Principles and laboratory methods of chemical analysis using instrumentation: chromatography, spectroscopy, Fourier transform infrared and nuclear magnetic resonance spectroscopy, atomic absorbance and ion selective electrodes. Laboratory. Course fee.  
Prereq: CHM-230

**CHM 331 Chemical Thermodynamics**  
NS2 4 cr UL  
The laws of thermodynamics are applied to chemical mixtures and reactions, and the principles of statistical mechanics are used to derive these laws from the behavior of single molecules. Laboratory. Course fee.  
Prereq: CHM-230, MTH-122 and PHY-113 or 122

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

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

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

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

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

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

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

**CHM 500 Senior Thesis**

NS2

2 cr **UL**

Preparation of a comprehensive thesis and a public presentation on an investigation of an original problem. Required for departmental honors.

*Prereq: Six credits in CHM-399 or 499 or taken concurrently*

## Chinese (CHN)

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

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

**CHN 111 Beginning Chinese I**

4 cr

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

**CHN 112 Beginning Chinese II**

☺ AH

4 cr

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

*Prereq: CHN-111 or Permission*

**CHN 221 Intermediate Chinese I**

☺ AH

4 cr

Second year Chinese; continuing study of the Chinese language; training of listening and speaking skills with additional emphasis on reading and writing within a cultural context.

*Prereq: CHN-112 or Permission*

**CHN 222 Intermediate Chinese II**

☺ AH

4 cr

Second year Chinese; continuing study of the Chinese language; training of listening and speaking skills with additional emphasis on reading and writing within a cultural context.

*Prereq: CHN-112 or Permission*

## Communication (COM)

**Major Requirements**

Thirty-six credits which must include:

1. Core: COM-111; one of the following: COM-101, 102 or 110.
2. Context: Twenty credits in COM, 16 of which must be upper-level.
3. Capstone: COM-350, 450, and an internship (385) or applied learning experience approved by the department.

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

**Departmental Honors**

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

**Minor Requirements**

Twenty-four credits which must include:

1. COM-111, 450, and one of the following: COM-101, 102 or 110.
2. Eight additional upper level 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 102 Group and Team Communication**

AH

4 cr

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

**COM 110 Media Systems and Influence**

AH

4 cr

This course serves as an introduction to the study of the major media industries and effects of contemporary mass communication. Emphasis will be on analyzing the way media technologies affect news, advertising, and entertainment functions of media and the way media professionals and organizations use media to influence perception, behavior, and social identity.

**COM 111 Fundamentals of Speech Communication**

AH

4 cr

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

**COM 123 Performing Advocacy**

AH SL

4 cr

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

**COM 192 Introduction to Public Relations**

AH

2 cr

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

**COM 201 Relational Communication**

AH

4 cr **UL**

Examination of messages, roles, 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 211 Political Communication**

AH

4 cr **UL**

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 **UL**

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

**COM 220 Intercultural Communication**

☺ AH

4 cr **UL**

Study of interdependent relationship between communication and culture. Examines conceptual and experiential problems of communication across cultural boundaries. Focuses on perceiving, interpreting, and evaluating different cultural values, world views

and patterns of communication. Course fee.

### COM 221 Intimacy and Technology

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

### COM 223 Humor, Culture and Communication

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

### COM 227 Argument and Public Advocacy

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

### COM 243 Health Communication

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

### COM 253 Environmental Communication

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

### COM 320 Gender and Communication

AH 4 cr UL  
Explores the rhetorical construction of gendered identities, focusing on cultural messages about femininity and masculinity in social, political, institutional and relational contexts. Through readings, discussions, films and presentations, the course examines the way gendered identities are created, contested and performed, emphasizing the relevance of this process to our daily lives.

*Prereq: Four credits COM and Sophomore Standing, or Permission*

### COM 327 Propaganda and Persuasion

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

### COM 350 Seminar in Communication Inquiry

AH 4 cr UL  
Examination of systematic methodological approaches to the formal analysis of communication processes, messages and problems. Focus on evaluation of research literature and creation of a research proposal. Requires Junior standing.

*Prereq: Twelve credits in COM, including COM-101 or Permission; Junior Standing*

### COM 353 Risk and Crisis Communication

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

*Prereq: COM-243 or 253 or Permission*

### COM 385 Communication Internship

2-4 cr UL  
Application of communication concepts and skills through participation in communities, institutions, agencies, schools and businesses. Supervision by faculty and sponsoring organizations. Includes interpretive journal and substantive analytic paper.

*Prereq: Twelve credits in COM and Junior Standing or Permission*

### COM 450 Communication Theory

AH 4 cr UL  
Synthesis, integration and elaboration of theoretical perspectives on communication issues, problems and practices developed through previous coursework, projects and internships. Coursework includes completion of individual senior project and compilation of portfolio.

*Prereq: COM Major or Minor; Senior Standing and COM-385 or Permission*

### COM 500 Senior Thesis

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

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## Computer Science (CSC)

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### Major Requirements

Thirty-six credits, which must include:

1. CSC-120, 121, 204, 230, 240 and 310
2. Fourteen additional credits as follows:
  - Eight credits from CSC-410, 420, 430 or 440.
  - Electives may be chosen from any CSC course numbered 114 or above; MTH-336; and COG-120.
3. 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.
4. Cognates: In addition to the thirty-six credits above, MTH-120, and 4 additional credits of MTH numbered 113 or above. Students should coordinate with their advisor to decide which MTH course best aligns with their interests.

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

### Program Considerations

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

### Minor Requirements

Twenty-four credits, which must include:

1. CSC-120 and 121
2. 16-credits of computer science courses, with least eight credits taken from upper-level CSC courses or MTH 336
3. MTH-120 must also be taken as a cognate, in addition to the twenty-four credits above.

**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-100 or Placement*

**CSC 116 Programming With Data**

NS3

4 cr

Introduction to programming techniques for the manipulation and analysis of digital data. Programming topics include: digital representations of data, types of data, programming decision and repetition, functions and libraries for storing and manipulation data in the language of instruction (e.g. the pandas library of Python). Data topics include: common formats (e.g. CSV, JSON, XML, database), missing data, cleaning data, exploratory data analysis. Visualizing and presenting data to support an argument. Cross-listed with DAT-116.

**CSC 117 Image and Reality**

4 cr

Explores the current reality of artificial intelligence and visions of what it is and will be. Examination of current artificial intelligence systems. Particular emphasis on robotics, with projects involving robot design, creation and programming. Laboratory.  
*Prereq: MTH-100 or Placement*

**CSC 118 Media Computation**

4 cr

Introduction to media programming and computation. Exploring computer programming for manipulating images, sounds, movies, e-text, and other digital media. Skills and knowledge will involve problem-solving, data representation, and programming principles including recursion, user-interaction, and object-oriented design. Introduction to computer science hardware and software fundamentals. CSC-118 and 120 may not both be taken for credit in the major. Laboratory.  
*Prereq: MTH-100 or Placement*

**CSC 120 Object-Oriented Programming I**

NS3

4 cr

Fundamentals of object-oriented programming in the language of instruction (e.g., Java). Topics include: basic computation, input and output, control structures, classes and object instantiation, methods and parameter passing, arrays and strings, sorting and searching. Laboratory.  
*Prereq: MTH-100 or placement*

**CSC 121 Object-Oriented Programming II Techniques**

NS3

4 cr

Focuses on object-oriented design, encapsulation and inheritance. Programming topics such as recursion and event-driven programming. Basic data structures such as a stacks, queues and linked lists.  
*Prereq: CSC-120*

**CSC 204 Social and Ethical Issues**

NS3

2 cr

Studies social and moral problems arising from the use of computing technologies, with a particular focus on the Internet. Topics such as free speech, privacy, communications interception, encryption, intellectual property, liability for software and hardware malfunction, and for information content.  
*Prereq: Any CSC course or Permission*

**CSC 230 Software Design**

NS3

4 cr UL

Software design: requirements, specification, modern design techniques, program testing methods. Applications of advanced

data structures.

*Prereq: CSC-121 and MTH-120*

**CSC 240 Algorithms and Complexity**

NS3

4 cr UL

Advanced data structures and algorithms, algorithmic analysis, and an introduction to distributed and parallel algorithms.  
*Prereq: MTH-120 and CSC-121*

**CSC 280 Topics in Computer Science**

NS3

2-4 cr UL

Topical study in computer science. While topics vary, the course usually introduces a particular computer programming language (e.g., C, C++, Prolog, etc.).  
*Prereq: CSC-121 and Permission*

**CSC 310 Computer Organization**

NS3

4 cr UL

Advanced introduction to assembly languages and structure and organization of digital computers, including addressing schemes, digital representation of data and computer arithmetic. Course fee.  
*Prereq: CSC-121*

**CSC 315 Machine Learning**

NS3

4 cr UL

Principles and techniques for machine-based decision and prediction from large datasets. Algorithms for and applications of classification, regression, and unsupervised learning. Introduction to neural networks and deep learning. Use of machine learning libraries in languages such as Python and R.  
*Prereq: DAT 116 or CSC 121, and MTH 242, or Permission*

**CSC 335 Computer Graphics**

NS3

4 cr UL

Introduction to techniques of computer graphics including three-dimensional representations, perspective, computer animation, computer art and applications of computer graphics to various other disciplines.  
*Prereq: CSC-230*

**CSC 345 Artificial Intelligence**

NS3

4 cr UL

Survey of major topics in artificial intelligence. Emphasis on fundamental concepts: search, knowledge representation, problem solving and logic. Additional topics such as expert systems, learning, natural language processing, neural networks, planning, theorem proving and vision. Programming in an AI language.  
*Prereq: CSC-121*

**CSC 380 Topics in Computer Science**

NS3

2-4 cr UL

*Prereq: CSC-335 or Permission*

**CSC 399 Computer Science Independent Study**

HCAT

1-4 cr UL

Requires instructor permission.

**CSC 410 Database Management**

NS3

4 cr UL

In-depth study of techniques for storing, selecting and retrieving data. Topics selected from file and database organization, safety and recovery, privacy, security and commercial systems.  
*Prereq: CSC-230*

**CSC 420 Operating Systems**

NS3

4 cr UL

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

**CSC 430 Theory of Computing**

NS3

4 cr UL

In-depth study of the main components of the theory of computation: finite automata and computability.  
*Prereq: CSC-120 and MTH-223*

**CSC 440 Languages and Translators**  
 NS3 4 cr UL  
 An in-depth study of the principles of programming languages and language-translation. Includes major programming paradigms in historical and modern contexts and explores language translation via interpreters and compilers, including lexical, syntactic, and semantic analysis.  
*Prereq: CSC-310*

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

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

## Dance (DAN)

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

### Major Requirements

Thirty-six credits, which must include:

1. Eight credits of Dance Studio Technique choosing from DAN-139, 147, 160, 210, 240, 244, 340, 344 (any of which may be repeated for credit but must include at least ONE ballet course and ONE modern course);
2. Dance Theory (14 credits): DAN-191, 220, 347, and 351;
3. DAN-201 Choreography;
4. Complete either the senior capstone (DAN-495) or the honors thesis (DAN-500);
5. Eight credits of selected THE or DAN electives.

### Minor Requirements

Twenty-four credits, which must include:

1. Six credits of Dance Technique chosen from DAN-139, 147, 160, 210, 240, 244, 340, and 344 (any of which may be repeated for credit but must include at least ONE ballet course and ONE modern course);
2. Eight credits of Dance Theory: DAN-191, 220, 347, and 351; four credits of Choreography I (DAN-201);
3. Six credits of selected THE or DAN electives.

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

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

**DAN 139 Somatic Movement**  
 AH 4 cr  
 Introduction to Somatic Methods; e.g. Alexander Technique, Ideokinesis, Bartenieff, and Feldenkrais.

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

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

**DAN 147 Dance Fundamentals**  
 AH 2 cr  
 This course introduces basic movement concepts, aesthetics, and qualities. It also covers the beginnings of modern dance, ballet, and jazz. The course will develop movement sequences based in all three techniques and differentiate vocabulary. Short writing assignments will complement studio requirements. Offered every fall term.

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

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

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

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

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

**DAN 191 Dance Professions**  
 AH 2 cr  
 Survey on dance professions, including dance related careers, and guest speakers.

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

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

**DAN 220 Dance Pedagogy**  
 AH 4 cr  
 This course examines practical, pedagogical, and philosophical approaches to teaching dance in different settings, including schools (K-12), recreation, and professional dance training. Through readings, discussions, lectures, individual and group assignments, students will develop and apply lesson plans based on practical and reflexive skills. The content of this course includes the NDEO (National Dance Education Organization) and MAEIA (Michigan Arts Education Instruction and Assessment) standards. Different genres of dance may be included depending on the specialties of participants.  
*Prereq: 4 credits from DAN Sophomore Standing*

**DAN 240 Modern Dance II Intermediate**  
 AH 1 cr  
 Continuation of Modern Dance I. Emphasis on movement patterns and development of body alignment. May be repeated for credit.  
*Prereq: DAN-147*

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

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

**DAN 245 Jazz Dance**  
 AH 1 cr  
 This course looks at the practice of jazz dance throughout U.S. history. We will consider key styles and techniques, emphasizing rhythm, improvisation, shape, and isolations. This class is for multi-level learners. May be repeated for credit.  
*Prereq: DAN-147 or Permission*

**DAN 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: DAN-148 or Permission*

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

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

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

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

**DAN 302 Dance Composition**  
 AH 2 cr UL  
 Dance composition is the foundation of group choreography, which requires an examination of different theories, literacies, and examples in order to achieve an original piece of art. We will look at many examples of choreographers' group compositions as reference points. This course will require one short group composition and one paper. Offered every odd winter term.

**DAN 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: DAN-240 or Permission*

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

**DAN 346M 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. Spring Term only.

*Prereq: Permission*

**DAN 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.  
*Prereq: DAN 351*

**DAN 351 Dance History**  
 🌍 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.

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

**DAN 380M Dance and Pop Culture**  
 🌍 🌍 AH 4 cr UL  
 What are the dances from stages, clubs, and screens that have drawn attention in the U.S. over the last century? Where do they come from? This class will explore and contextualize dance in popular culture and analyze who dances, how they dance, and how movement constructs identity and history. We will look at dances from around the world (e.g., Africa, Central, and South America) and their influences on U.S. culture. The course introduces methods for critical analysis and reveals the hidden heritage of dances we see in clubs, television, films, and musicals. Through reading selections, videos, and discussions, students will discover how popular dance reflects and affects perceptions of age, ethnicity, economic status, and disability. Overarching themes include the role of media in the development and dissemination of dance and issues of innovation and appropriation.

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

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

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

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

**DAN 495 Senior Capstone**  
 2 cr UL  
 This course is required for dance majors in their senior year who are not enrolled in DAN 500 (Senior Thesis). The capstone can be either a paper or a performance. The paper must evidence advanced research that explores a specific topic in dance studies chosen by students in conjunction with their capstone advisor. The performance must be one of original choreography that is accompanied by a detailed written component or portfolio.  
*Prereq: Advanced Junior standing or permission from instructor*

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



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

## Data Analytics (DAT)

### Minor Requirements

Twenty-six credits which must include:

1. DAT 115: Introduction to Data Analytics (4 cr)
2. DAT 315: Machine Learning (4 cr)
3. Introduction to programming: DAT 116 or CSC 120 (4 cr)
4. Upper level statistics: MTH 242 or MTH 342 (4 cr)
5. Data analytics project: DAT 385 or DAT 399 (2 cr)
6. Data intensive electives: 8-cr from the following courses, at least 4 cr completed at the upper level: CSC 345, CSC 410, ECN 217, ECN 317, HCA 405, IPH 330, MTH 116, MTH 118, MTH 336, MTH 341, PHY 221, POL 217, PSY 220.
7. Additional electives may be approved in consultation with the math and computer science faculty.

### DAT 115 Introduction to Data Analytics

NS3 4 cr

Introduction to graphs, calculations, and models for summarizing data, gaining insights from data, and making predictions.

Discusses variation in data and how to ensure conclusions are justified. Example data sources include business, economics, medical studies, and sports statistics. Uses both a spreadsheet program, such as Microsoft Excel, and a statistics-oriented computing platform, such as R.

### DAT 116 Programming With Data

NS3 4 cr

Introduction to programming techniques for the manipulation and analysis of digital data. Programming topics include: digital representations of data, types of data, programming decision and repetition, functions and libraries for storing and manipulation data in the language of instruction (e.g. the pandas library of Python). Data topics include: common formats (e.g. CSV, JSON, XML, database), missing data, cleaning data, exploratory data analysis. Visualizing and presenting data to support an argument. Cross-listed with CSC-116.

### DAT 315 Machine Learning

NS3 4 cr UL

Principles and techniques for machine-based decision and prediction from large datasets. Algorithms for and applications of classification, regression, and unsupervised learning. Introduction to neural networks and deep learning. Use of machine learning libraries in languages such as Python and R.

*Prereq: DAT 116 or CSC 121, and MTH 242, or Permission*

### DAT 385 Data Analytics Project

Practicum in the field of Data Analytics. 2 cr

### DAT 399 Data Analytics Ind Study

Independent study topic selected by instructor and student. 2 cr

## Economics (ECN)

### Major Requirements

Thirty-six credits which must include:

1. Eight credits from ECN-111, 112, 122, or other approved 100-level course
2. ECN-217, 311, 312, and 317
3. Twelve credits of ECN at or above the 300-level
4. Successful completion of ECN-500 or a minimum score of 150 on the Major Field Achievement Test in Economics is required for the Department's comprehensive evaluation. Students should schedule the MFAT for the Fall Term of their senior year. Students who fail the Fall MFAT will retake

it in the Winter Term. Students who fail a second time will be given an oral comprehensive evaluation.

5. All 36 credits that count toward the major must be taken for letter grade. Economics courses may be taken for S/F credit but only above and beyond the 36 credits taken for letter grade for the major.
6. Prior approval is required for all transfer credit for any 300-level or above ECN coursework.
  - The Department recommends that students supplement the major with courses from other areas, including (but not limited to) Business Administration, Computer Science, Mathematics, Philosophy, Political Science, and Psychology. Students interested in Economics graduate work are strongly encouraged to take at least a year of calculus or other advanced Mathematics classes. Computer Science classes are also useful as preparation for Economics graduate work.

### Minor Requirements

Twenty-four credits which must include:

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

### Departmental Honors

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

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

### ECN 111 Principles of Macroeconomics

SO 4 cr

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

### ECN 112 Principles of Microeconomics

SO 4 cr

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

### ECN 122 Introduction to Game Theory

SO 4 cr

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

### ECN 122M Introduction to Game Theory

SO 4 cr

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

### ECN 180 Readings in Economics

SO 1-4 cr

Selected introductory topics in Economics announced in advance. May be taken more than once for credit if topics are different.

### ECN 180M Applied Computational Methods

SO 4 cr

Computers can do more than simply solving problems superfast. Computer-based methods have inspired and enabled people to make amazing achievements in engineering, biology, environmental studies, economics and finance, etc. Together, we will create mathematical models to analyze a wide variety of real-world problems. We will learn how the computer solves these models. We will write computer codes on the software MATLAB to solve and apply the models. We will also evaluate and improve


existing models based on their usefulness and clarity. By the end, students of the course will master core computing techniques widely used in academic and business research. The course is designed for students with experience in pre-calculus. No previous experience with computer coding is required. Strong math skills are welcome but not required at first: with an interactive and collaborative learning environment, the instructors hope to help students discover their own dormant interest in applied mathematics and use such tools to expand their critical thinking skill set.

**ECN 199 Topics in Economics**  
 HCAT 4 cr  
 Topics in Economics

**ECN 217 Quantitative Methods**  
 SO 4 cr  
 An introduction to a variety of the quantitative methods used in the social sciences. Students will learn the basic probability and research design theory necessary for understanding and applying quantitative methods in social sciences. Students will replicate data analyses and conduct their own with real world data. Students will learn to use statistical software, like R. Prerequisite for ECN 317.  
*Prereq: One math class at MTH-110 level or higher, or Permission*

**ECN 311 Intermediate Macroeconomics I**  
 SO 4 cr UL  
 Models of national income determination. The monetary system and the relationship between money and financial markets. Monetary theory and policy. Explanations of inflation and unemployment. Business cycles and economic growth theory.  
*Prereq: ECN-100 level course or permission*


**ECN 312 Intermediate Microeconomics**  
 SO 4 cr UL  
 Price mechanism and elasticity concepts. Theories of consumer behavior and producer behavior. Pricing in product and resource markets. General equilibrium theory.  
*Prereq: ECN-100 level or permission*

**ECN 314 Behavioral Economics**  
 SO 4 cr UL  
 Study of economic decision-making from based on modified neo-classical assumptions. Students will explore selected themes from psychology, sociology, and neuroscience. We will also investigate the relevance of behavioral economics to the formation of good public policy. Students will engage with the material through a combination of lectures, discussion, experiments, and research projects.  
*Prereq: ECN-100 level or permission*


**ECN 317 Econometrics**  
 SO 4 cr UL  
 Survey of standard forecasting techniques in business and economics. Introduces the use of econometric models with emphasis on multiple regression, simulation modeling and time-series analysis. Special attention to applying forecasting techniques to real-world data.  
*Prereq: ECN-100 level and ECN-217, or permission*

**ECN 318 Mathematical Economics**  
 SO 4 cr UL  
 Formal application of mathematical tools to micro- and macroeconomic analysis; algebra, sets, matrix algebra, differential and integral calculus, ordinary and partial differential equations, and finite difference equations.  
*Prereq: ECN-111 and 112; MTH-113 or 121*

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

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

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

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

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

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

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

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

**ECN 380 Environmental Policy Analysis**  
 SO 4 cr UL  
 An immersion into the science of our changing global environment and policies based on neoclassical economic philosophy that attempt to address broad and specific problems. Students interested in science and those interested in economics will work collaboratively to address real-world problems and issues with the goal to help move our policy-thinking towards a more effective model of addressing global problems. Students will evaluate policy decisions as they have played out with certain environmental issues, and discuss new ways of approaching complex, and dynamic environmental and economic changes that the world faces in the 21st century.  
*Prereq: Any 100-level or introductory level Economics course*

<b>ECN 385 Economics Practicum</b> Requires Junior standing or permission.	4 cr <b>UL</b>
<b>ECN 499 Economics Independent Study</b> Under supervision, student formulates project topic, conducts research and prepares a properly documented paper presenting conclusions and support. Requires instructor permission.	4 cr <b>UL</b>
<b>ECN 500 Senior Thesis</b> Requires instructor permission.	4 cr <b>UL</b>

## 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 Tests in endorsement areas, and successfully fulfilled all requirements of the Teacher Education Program. The Education Department offers majors and minors leading to teacher certification. The Department also offers a *non-certification* Educational Studies Major and Minor and Special Education 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. Student should consult with the Education Department about requirements.

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

### DEPARTMENTAL HONORS

Students may achieve honors in Education by:

- Earning a 3.5 GPA in an Education major (elementary education, secondary education, or educational studies) and a 3.3 overall cumulative GPA.
- Performing at a superior level in the culminating departmental experience of student teaching (EDC 490 / 491) or an educational studies internship (EDC-470).
- Preparing a senior thesis of honors caliber and presenting it at an appropriate public forum.

### SECONDARY EDUCATION MAJOR REQUIREMENTS

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

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

- EDC-130 (2 cr) concurrent with EDC-103 (1 cr).
- EDC-230 (3 cr) concurrent with EDC-203 (1 cr); EDC-240 (4 cr).
- EDC-311 (1 cr); EDC-312 (1 cr); EDC-303 (1 cr); EDC-346 (4cr); 370 (2 cr); 373 (3 cr) (except for Special Education major). *Prerequisites include Admission to the Teacher Education Program.*
- EDC-430S (3 cr) with EDC-490S (5 cr) and 491S (5 cr). *Prerequisites include successful completion of all other courses of Secondary Education Major and Admission to Student Teaching.*
- Candidates are required to take a teaching methods course for each endorsement.
- A minimum of thirty student contact hours in a classroom setting, within the content area of each endorsement, are required.

### Michigan Secondary Standard Certification Requirements

This certificate allows teaching in grades 6-12 in subjects in

which the candidate has an endorsement. To be recommended for certification, the candidate must complete the following:

- The Secondary Education Major, *requirements listed above*, with a 2.5 GPA and no Education course may be taken Pass/Fail, except for 1 credit placement classes, or be graded below a 2.0 (C).
- A Teaching Major with a 2.75 GPA. Additional endorsement areas for certification must also be met with a 2.75 GPA.
- An overall cumulative GPA of 2.75.
- Students must also pass the appropriate MTTC subject area test. To be recommended for certification in an additional endorsement area, candidates must also pass the appropriate MTTC subject area test in that subject. For initial certification, MTTC subject-area passing scores will remain valid for five years.
- Students must provide proof of valid CPR and First Aid cards as required by the Michigan Department of Education.

### Secondary Teaching Endorsements

Alma College offers the following Teaching endorsements for students seeking secondary certification:

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

### Social Studies Additional Endorsement (Group Major - Secondary)

All Secondary Teaching students who wish to add a Social Studies Endorsement must also complete a Teaching Major in History.

Forty-eight credits which must include:

- ECN-111 (4 cr) and 112 (4 cr)
- GGR-101 (2 cr), 102 (2 cr), and 201 (4 cr)
- POL-101 (4 cr) and 121 (4 cr)
- HST-100 (4 cr), 101 (4 cr), 104 (4 cr), 105 (4 cr), and 206 (4 cr)
- EDC-445S (4 cr)
- For certification, take and pass the MTTC Social Studies test. No course graded below 2.0 (C) may count toward a Social Studies Group Major; a 2.75 GPA is required.

### Special Education - Learning Disabilities Major (Secondary or Elementary)

Thirty-six credits, which must include:

- EDC-151, 152, 250, 255, 205, 301, 374, 375, 376, 504, 505, 506;
- For certification, take and pass the MTTC Special Education - Learning Disabilities test.
- For Secondary Education majors, a candidate must complete the Secondary Education Program, a content endorsement area, and the Special Education Program to become endorsed in learning disabilities.
- No course graded below 2.0 (C) may count toward a Special Education Major; 2.75 GPA is required. Mathematics and English are recommended as the content endorsements for Special Education Majors.

### PK-6 MAJOR REQUIREMENTS

PK-6 Major allows you to teach in preschool through sixth grade classrooms. To be recommended for certification, the candidate must complete the PK-6 Major and pass the PK-3 or 3-6 certification test. Candidates are strongly encouraged to take certification tests for PK-3 and 3-6 grade bands to have multiple endorsements.

Ninety-seven credits; which must include:

- EDC 101, 101C, 102, 151, and 166
- EDC 201, 202, 209, and 266
- EDC 304, 308, 316, 364, 364C, 366, 366C, 367, 367C, 368, 368C, 374, and 466

- EDC 501, 502, and 503
- HST 104 and 206
- ISC 201 and 301
- MTH 204, 205, and 206

### Michigan PK-3 and 3-6 Standard Certification Requirements

These certificates permit teaching in grades PK-3 and 3-6. Subject area endorsements permit teaching in grades 6-8 in that subject area. To be recommended for certification by Alma College, the candidate must complete the following:

- Elementary Education Major, requirements listed above, with a 2.5 GPA and 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.
- A 2.5 GPA is required for each additional endorsement area and no course required for certification may be taken Pass/Fail or be graded below a 2.0 (C).
- Candidates must pass MTTC in Elementary Education.  
**Note:** Elementary candidates must pass MTTC in their majors or minors to be certified in these additional endorsement 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.

### PK-6 ADDITIONAL ENDORSEMENTS

Elementary Education majors select one additional endorsement from the following:

- Integrated Science (major or minor)
- Language Arts (major or minor)
- Mathematics (major or minor)
- Social Studies (major only)
- Spanish (major only)
- Special Education - Learning Disabilities (K-12 major only)

### Language Arts Major (PK-6)

Thirty-six credits, which must include:

- ENG-120; 190; 225; four credits of any 300-level literature course
- Four credits in Literature from: ENG-250; 251; 260; 261
- Eight credits in Writing from: ENG-201; 202; 210; 220; 270; 291; 293
- Four credits in Communication Arts from: COM-101; 111; NMS-201
- Four credits in Multicultural and Interpersonal perspectives from: COM-123, 201, 220; ENG-240; 241; 367; 368; 381
- For certification, take and pass the MTTC Language Arts test.

### Language Arts Minor (PK-6)

Twenty-four credits, which must include:

- Complete ENG-120; 225; and COM-220.
- Four credits in Literature from: ENG-250; 251; 260; or 261
- Four credits in Writing from: ENG-201; 210; or another writing class approved by the English Department.
- Four credits from Communication: COM-101; 111; 123; or 227
- For certification, take and pass the MTTC Language Arts test.

### Integrated Science Group Major (PK-6)

Forty credits, which must include:

- BIO-121 (4 cr); CHM-103 (4 cr); PHY-112 or 121 (4 cr); ENV-105 (4 cr) and 110 (4 cr); GEO-113 (4 cr); PSC-380 (4 cr).
- Two elective classes from: ENV-380 (4 cr); GEO-101 (4 cr); PHY 113 or 122 (4 cr); BIO-309 (4 cr); only one 399 (4 cr) Independent Study allowed from one of the following departments: BCM, BIO, CHM, CSC, ENV, GEO, IPH; or other four-credit class approved by the Education Department.
- For certification, take and pass the MTTC Integrated Science test

### Integrated Science Group Minor (PK-6)

Twenty-four credits which must include:

- BIO-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 (PK-6)

Forty-four credits, which must include:

- ECN-111 (4 cr) and 112 (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.

### Spanish Major (PK-6)

See SPN Department course listings.

### Mathematics Major (PK-6)

See MTH Department course listings.

### Mathematics Minor (PK-6)

See MTH Department course listings.

### Special Education - Learning Disabilities Major (K-12 Major Elementary)

Thirty-six credits, which must include:

- EDC-151, 152, 250, 255, 205, 301, 374, 375, 376, 504, 505, 506;
- For certification, take and pass the MTTC Special Education - Learning Disabilities test.
- For Secondary Education majors, a candidate must complete the Secondary Education Program, a content endorsement area, and the Special Education Program to become endorsed in learning disabilities.
- No course graded below 2.0 (C) may count toward a Special Education Major; 2.75 GPA is required. Mathematics and English are recommended as the content endorsements for Special Education Majors.

### 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 of central registry clearance. All students who have an Education course with a classroom placement must have a background check completed at the Department of Health and Human Services (DHHS) prior to beginning in their assigned classroom. This is free of charge, and DHHS records must be current. See the Education Department for more details. School Districts may require additional screenings.

### Student Teacher Fingerprinting Procedure

The Education Department requires fingerprinting of student teachers. All student teachers must have the Criminal Background Check Livescan fingerprinting procedure completed by August 1 or 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 remain valid throughout your student teaching period. See the Education Department for more details.

### Admission to the Teacher Education Program (TEP)

The Education Department reviews all applicants and judges their suitability for entrance to the program during the student's sophomore year; students who decide to seek teacher certification after the sophomore year can be admitted late but may require extra time to complete the program. For full approval students must have the following:

- A completed application (on Tk20) for admission to the TEP submitted by the deadline.
- A cumulative GPA of at least 3.0.
- Demonstrate proficiency in writing and mathematics as determined by Alma College.
- Provide scores in reading, math, and writing on a nationally normed assessment.
- Evidence that the applicant has dispositions conducive to success in the teaching profession (as indicated by disposition assessment forms, Student Life reports, the recommendation of the Education Department, and a Felony

Conviction Statement confirming that the student has not been convicted of any act contributing to the delinquency of a minor or involving moral turpitude).

6. Good standing - student life.
7. All majors(s) and minor(s) must be declared through the Registrar's Office at the time of TEP application.

**Be aware that these requirements are subject to change in accordance with state or national accreditation mandates.**

#### Admission to Student Teaching

The Education Department reviews a student for admission to Student Teaching. For full approval, students must have the following:

1. Admission to the Teacher Education Program
2. A formal application for student teaching submitted by November 15 of the academic year prior to student teaching.
3. A 2.75 overall cumulative GPA.
4. For secondary: a GPA in the Teaching Major(s) of 2.75; if applicable, a C or above in all classes in the Social Studies and Special Education endorsements.
5. For elementary: a GPA in the Teaching Major(s) of 2.5 with C or above in all courses (2.75 required for K-12 Special Education - Learning Disabilities major)
6. A 2.5 GPA in Education courses and a grade of C or above in all courses.
7. In compliance with State of Michigan specifications, satisfactory demonstration of:
  - high academic achievement
  - successful group work with children in classroom placements
  - knowledge of research-based teaching
8. Evidence that the applicant has dispositions conducive to success in the teaching profession (as indicated by disposition assessment forms, the recommendation of the Education Department, and a Felony Conviction Statement confirming that the student has not been convicted of any act contributing to the delinquency of a minor or involving moral turpitude).

#### Additional Notes

1. Admission to the Teacher Education Program is a prerequisite for all classes at the 300 level and above for certification candidates.
2. Note on scheduling: it is expected that students attempt *no more than* 45 hours in placement class/es in any semester.
3. Once approved for the student teaching internship, the requirements must be retained in order to begin the student teaching term.
4. Student teachers may not participate in significant non-teaching activities such as arts or sports without securing prior written approval from the Education Department.

#### 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 the following major requirements:

1. EDC-101, 101C, 102, 151, and 308
2. Complete one of the following concentrations (12 credits):
  - **Special Needs:** EDC-152, 250, 255, 374, or 376.
  - **Pedagogy:** EDC-202, 304, 316, 364, 364C, 366, 366C, 367, 367C, 368, 368C, or 374.
  - **Literacy:** EDC-166, 266, 366, 366C, 346 or 466.
  - **Science Education in Informal Settings:** ISC-201, ISC-301, EDC-364, 364C, ENV-105, ENV-110, GEO-101, GEO-113 or other courses approved by EDC.
3. EDC-470 Internship (5 cr)
4. Other EDC courses (to reach 36-cr total in the major)

#### Educational Studies Minor

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

Twenty-four credits, which must include:

1. EDC-101, 101C, 102, 151 and 308
2. Additional EDC courses to reach 24-credits in minor

#### Special Education Minor

The Special Education minor is designed for those who will work with people with special needs. The Special Education minor does not lead to K-12 teacher certification.

The minor is recommended for teacher candidates who are not seeking special education teaching endorsement, but seek to be more prepared to work with students with special needs. Also designed for students not seeking teaching licensure but plan to work with students with special needs in related professions.

Twenty-four credits, which must include:

1. Complete EDC 151, 152, 250, 255, 374, 376 and 316.
2. Choose one course from the following: EDC-102; PSY-203, 314, or 331.

#### EDC 100 Introduction to Diverse Learners

2 cr

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

#### EDC 101 Introduction to Education

3 cr

Provides a foundation to PK-12 education focused on access and equity; introduces learners and learning theory, school and society, approaches to teaching, and core teaching practices. Supports the development of reflective practice with attention to diverse perspectives and responsibilities of educators. Taken concurrently with EDC-101C.

#### EDC 101C Intro to Education Clinical Experience

1 cr

Exploration of the teaching profession through structured observation and participation in classroom settings at grade levels and subject areas appropriate for career interests. Includes 30 hours of clinical experience.

*Prereq: HS graduation or instructor permission, Taken concurrently with EDC101*

#### EDC 102 Child Development in Education

4 cr

Psychological theories and research of human development applied to classroom learning; includes examination of the multiple interrelated areas of child development and learning, learning processes, and motivation to learn; also examines the complex and multiple influences on development and learning.

#### EDC 103 Foundations of Secondary Education

1 cr

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

*Prereq: EDC-130 concurrently*

#### EDC 105 Introduction to Special Education-Field

1 cr

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

*Prereq: EDC-150 concurrently*

#### EDC 120 Teaching in Context

2 cr

Introduction to perspectives on teaching. Historical, philosophical, sociological and comparative frameworks and models of teaching, including learning environments and teaching approaches. Examination of multiple purposes and goals of schooling; ethical

and professional responsibilities of teachers to multiple stakeholders. Required for elementary certification. Fall/Winter

**EDC 130 Foundations of Secondary Education** 2 cr  
A beginning course that is meant to help the pre-service teacher understand the realities of teaching and the education profession in general. A foundation to assist the student in making a better, more informed career choice about becoming a secondary teacher while also providing cases that secondary teachers must effectively face every day. Required for secondary certification. Fall/Winter.  
*Prereq: EDC-103 concurrently*

**EDC 150 Introduction to Special Education** 2 cr  
Introduction to characteristics and categories of exceptional children, birth through adulthood. Learn the rules and regulations concerning provision of special education and related services. Discussion of historical and legal issues. Learn to develop, implement, and evaluate the progress of an IEP. Required for Special Education K-12 major. Winter only.  
*Prereq: EDC-105 concurrently*

**EDC 151 Introduction to Special Education I** 2 cr  
An introduction to the historical, theoretical, and legal perspectives that guide special education services in school settings. An overview of the continuum of services for students with special needs which are designed to increase access to learning and improve educational outcomes.

**EDC 152 Introduction to Special Education II** 2 cr  
Common disabilities in young children with special needs and extending to transition related services post-secondary. Introduction to the IEP process and implementation of individualized instruction to meet the learning needs of an exceptional child.

**EDC 160 Children's Literature** 4 cr  
SL  
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 166 Foundations of Literacy** 4 cr  
Introduction to interrelated nature of the literacy processes, developmental and culturally diverse nature of literacy, culturally responsive practices, and specific literacy constructs and how they develop.

**EDC 180 Issues and Ideas in Education** 2-4 cr  
Survey of topics to broaden understanding of teaching and learning. Open to prospective teachers and others interested in education in the United States or in other societies. Course fee.

**EDC 183 Intro to Early Childhood Education** 4 cr  
SL  
Introduction to the early childhood profession, the nature of the profession, including its philosophical, historical and social foundations and current contextual influences (e.g., demographic and policy influences). Familiarization with various types and models of early childhood programs. Includes discussion of characteristics of developmentally appropriate practice. Learn and apply guidelines for the organization and administration of early childhood programs. Required for Early Childhood Endorsement. Winter 2021 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 201 Strategic Partnerships** 4 cr UL  
Explores the role of school-community partnerships, professional and ethical approaches for working with children and families, and an overview of the Michigan State Board of Education Code of Ethics. Focuses on developing positive relationships with families and increasing equitable access to learning opportunities.

**EDC 202 Learning Environments** 4 cr UL  
Links child development with behavior management theories to create productive learning environments and support students' development of social skills.  
*Prereq: Sophomore standing*

**EDC 203 Child Development and Education - Field** 1 cr UL  
A 40-hour placement in classrooms concurrent with EDC-230. Provides an introduction to the professional roles and responsibilities of teaching all children. Students will be placed in a "home" classroom and work closely with that teacher to observe, assist, and work closely with students applying psychology principles and learning theories. Fall/Winter  
*Prereq: Sophomore Standing*

**EDC 205 Special Education Clinical I** 1 cr UL  
Work with students 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 a student's learning. Thirty hours of clinical experience.  
*Prereq: EDC-151 and 152*

**EDC 209 The Arts, Health, and Movement in PK-6** 1 cr UL  
Research-based instructional strategies to support the whole child's learning and development through visual and performing arts, movement, physical activities, and development of critical knowledge, skills, and behaviors that contribute to life-long health.

**EDC 230 Child Development and Education** 3 cr UL  
An overview of psychological theories and research applied to classroom learning. The course includes study of concepts in human development - cognitive, affective, physical, emotional, moral, and social; study of learning, motivation, and assessment; developmentally appropriate practice; an overview of processes of human development in childhood and adolescence with a focus on socialization and education; and study of the influences of family, community, and culture on education. Required for elementary and secondary certification. Fall/Winter  
*Prereq: Sophomore Standing; EDC-203 concurrently*

**EDC 240 Learning Env and Reflective Teaching** 4 cr UL  
Examination of characteristics of productive classroom learning environments. Analysis of cases of teaching and learning; evaluation of instructional strategies and activities, technologies, and resources that enhance learning for all learners; planning for classroom management. Includes peer teaching. Required for elementary and secondary certification. Fall/Winter  
*Prereq: Sophomore Standing*

**EDC 250 Introduction to Learning Disabilities** 4 cr UL  
Characteristics of individuals with learning disabilities. Interventions and services including diagnosis, assessment, and specific remedial techniques. Correlating factors leading to identification. Implementation of evidence-based practices through lesson planning and hands-on experience. Ten hours of clinical experience.

Prereq: EDC-151 or 152

**EDC 255 Transition Mgmt in Special Education** 4 cr UL  
Preparation of exceptional students for transition to adulthood. Life skills and Social-Emotional Learning. Barriers and challenges which interfere with high school completion and transitioning to the post-secondary setting will be discussed. Ten hours of clinical experience.  
Prereq: EDC 151 or EDC 152 or Sophomore Standing

**EDC 262 Mathematical Thinking and Learning** 4 cr UL  
Investigate particular teaching and learning strategies that may help or hinder different students' learning of mathematics. Focus on interpreting children's mathematical work and examine central questions in mathematics teaching. Develop familiarity with available resources and begin the development of skills and attitudes to learn from teaching and other opportunities. May include a service learning component. Required for elementary certification. Winter only.  
Prereq: Sophomore Standing

**EDC 266 Emergent Literacy** 4 cr UL  
Preparation for supporting emergent and beginning literacy development and curriculum design for diverse learners through appropriate learning environments, instructional techniques, assessments, resources and texts.  
Prereq: EDC-166

**EDC 281 Child Dev and Learning: Birth - Age 8** 4 cr UL  
Examination of physical, cognitive, social, emotional and other types of development in infancy and early childhood. Addresses the development of children with special needs and linguistically and culturally diverse backgrounds. Students complete 30 hours of field placement in an early childhood setting. Required for Early Childhood Endorsement. Fall 2020 and Fall 2022 only. Course fee.  
Prereq: EDC-183; Sophomore Standing

**EDC 282 School, Family & Community Partnerships** 2 cr UL  
Emphasizes the critical role of family-school partnerships in ensuring children's well-being and academic success. Introduction to historical roles of the family and community in early childhood education. Discussion of barriers to family involvement as well as effects of successful family participation. Addresses various types of family involvement and best practice guidelines associated with each type. Explores models for involving communities as partners in children's care and education. Required for Early Childhood Endorsement. May include a service learning component. Winter 2022 only.  
Prereq: Sophomore Standing

**EDC 283 The Care and Edc of Infants and Toddlers** 1 cr UL  
A framework for understanding how infants and toddlers grow and learn. Developmentally appropriate curricula and materials will be examined. Required for Early Childhood Endorsement. Fall 2021 only.  
Prereq: EDC-183, Sophomore Standing

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

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

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

**EDC 303A Secondary Ed Methods: Add'l Endorsement** 1 cr UL  
Topics in instructional planning, teaching, and assessment are explored in-depth for specific subject areas. Required for secondary certification in Teaching Minors or additional Teaching Majors.  
Prereq: TEP approval; completion of or concurrent enrollment in EDC-311

**EDC 304 Instructional & Assistive Technology** 2 cr UL  
Understanding and implementing technology standards for educators and students to support communication, productivity, teaching and learning. Includes assistive technologies to enhance the learning of all students.  
Prereq: Sophomore standing

**EDC 306 Educational Assessment** 2 cr UL  
Developing, evaluating, and using ongoing, balanced, systematic formative and summative assessments of knowledge and dispositions. Includes ethical assessment practices and assessment literacy supports for learners and their families.  
Prereq: Sophomore standing

**EDC 308 Diversity in Education** 2 cr UL  
Introduction to diversity and how it shapes teaching and learning. Preparation to work effectively with culturally and linguistically diverse populations in educational contexts. Includes instructional practices for teaching diverse learners. Attention to policy issues, language acquisition, standards, differentiation, accommodations, strategies, assessment, proficiency levels, resources, parent communication, and collaboration.  
Prereq: Sophomore standing, Education major or minor

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

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

**EDC 316 Educational Assessment** 2 cr UL  
Developing, evaluating, and using ongoing, balanced, systematic formative and summative assessments of knowledge and dispositions. Includes ethical assessment practices and assessment literacy supports for learners and their families.  
Prereq: Sophomore standing

**EDC 346 Teaching Reading in Middle & Senior High** 4 cr UL

Survey of strategies for teaching, diagnosing and improving word recognition, comprehension and study skills. Survey of student language needs and program planning for reading instruction at the middle and senior high school levels. May include a service learning component. Required for secondary certification. Fall only.

*Prereq: TEP Approval*

**EDC 350 Instructional Design in Special Edc** 4 cr UL

Examination of the methods of identification, assessment, and instructional planning for individuals with learning disabilities. Curriculum design and modification/adaptation of instructional materials for struggling children in the special education and general education setting are covered. A variety of classroom practices and strategies which emphasize and promote individual motivation, classroom management, transition planning, the use of assistive technology, and meeting the needs of diverse children are analyzed. Required for Special Education-Learning Disabilities K-12 major. Fall, odd years.

*Prereq: EDC-105, 150, 205, 250, 255; TEP Approval*

**EDC 355 Understanding Stu w/Learning Disability** 4 cr UL

Exploration of brain development and characteristics of children with learning disabilities from early childhood through adolescence. A focus on understanding ways of helping children with learning disabilities succeed through the use of instructional planning, technology, and inclusive education. Analysis of useful and creative strategies for teaching struggling individuals and understanding the importance and practicality of building support systems with parents, general education teachers, and other community resources. Required for Special Education-Learning Disabilities K-12 major. Winter only.

*Prereq: EDC-105, 150, 205, 250, 255; TEP Approval*

**EDC 360 Teaching Elementary Language Arts** 3 cr UL

Examination of reading and language arts methods. Survey of developmental reading including phonemic awareness, phonics, word recognition, fluency, vocabulary development, and comprehension. Use of assessment to inform instruction, classroom organization and management of the reading program, and methods of teaching language arts, including their interrelationships with reading. Required for elementary certification. Winter only.

*Prereq: TEP Approval; EDC-302, 312, and 362 concurrently*

**EDC 361 Teaching Elementary Science** 3 cr UL

Examination of methods and materials in elementary science education. May include service learning project and action research project. Required for elementary certification. Fall only.

*Prereq: TEP Approval; EDC-301, 311, and 363 concurrently*

**EDC 362 Teaching Elementary Mathematics** 3 cr UL

This course builds on EDC-262 and focuses on four areas: Teaching mathematics, working with students as individuals, organizing a class, and professionalism and reflective learning. Required for elementary certification. Winter only.

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

**EDC 363 Teaching Elementary Social Studies** 3 cr UL

Examination of methods and materials in elementary social studies education. Required for elementary certification. Fall only.

*Prereq: TEP Approval; EDC-301, 311, and 361 concurrently*

**EDC 364 PK-6 Science Methods** 3 cr UL

Supports preservice PK-6 teachers learning to enact equitable and phenomena-based science instruction that is culturally relevant; responsive to student thinking; and engages students in disciplinary core ideas, science and engineering practices, and crosscutting concepts.

*Prereq: ISC-301*

**EDC 364C PK-6 Science Teach Clinical Experience** 1 cr UL

Includes at least 30 hours of clinical experience, observation and direct work with students including planning, teaching, and assessment in PK-6 science.

*Prereq: EDC-364 must be taken concurrently*

**EDC 366 PK-6 Literacy Methods** 3 cr UL

Examination of developmentally appropriate and research-based assessment and instruction for diverse literacy learners PK-6, including learning environment, curriculum, texts and resources, and development of specific literacy constructs.

*Prereq: Concurrent with EDC366C, Junior standing, EDC 166*

**EDC 366C Literacy Methods Clinical Experience** 1 cr UL

Classroom apprenticeship includes 30 hours with mentor teacher in classroom setting at certification level; observation and direct work with teacher and students including co-planning, teaching and assessing in literacy processes.

*Prereq: EDC-366 must be taken concurrently*

**EDC 367 PK-6 Social Studies Methods** 3 cr UL

Examination of developmentally appropriate methods for teaching PK-6 social studies emphasizing an inquiry approach integrating history, geography, political science, economics and civic engagement; emphasis on planning, teaching, assessment, classroom environment, and resources.

*Prereq: Junior standing, taken concurrently with EDC367C*

**EDC 367C PK-6 Social Studies Methods Clinical Exp** 1 cr UL

At least 30 hours of clinical experience including observation and direct work with students including planning, teaching, and assessment in PK-6 social studies.

*Prereq: EDC-367 must be taken concurrently*

**EDC 368 PK-6 Mathematics Methods** 3 cr UL

Pedagogical knowledge for teaching mathematics to diverse learners. Includes building relationships with children, caregivers, and communities to support mathematics learning, instructional planning, productive dispositions, and use of assessments.

*Prereq: TEP approval, EDS, MTH 204, MTH 205, MTH 206, taken concurrently with EDC368C*

**EDC 368C PK-6 Mathematics Teaching Clinical Expe** 1 cr UL

Includes at least 30 hours of clinical experience, observation and direct work with students including planning, teaching, and assessment in PK-6 mathematics.

*Prereq: EDC-368 must be taken concurrently*

**EDC 370 Instructional and Assistive Technology** 2 cr UL

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

*Prereq: TEP Approval or EDS Major*

**EDC 373 Special Education for Classroom Teachers** 3 cr UL

Introduction to the teaching of exceptional students. Review of historical and legal issues in special education. Characteristics of



exceptional learners, birth through adolescence. Examination of materials and methodology appropriate for instructing exceptional learners in inclusive classrooms. Includes eight-hour practicum. Required for elementary and secondary certification (except Special Education major). Winter only.  
*Prereq: TEP Approval*

**EDC 374 Inclusion and Co-Teaching** 2 cr UL

Techniques to promote the full participation of a student with special needs in the general education classroom. Planning, collaboration, and co-teaching strategies that promote equity in access to learning.

*Prereq: TEP approval or EDS*

**EDC 375 Special Education Field II** 1 cr UL

Evaluate IEP goals and objectives. Conduct assessment and plan/deliver instruction. Implemented appropriate teaching strategies. Modify instruction based on assessment data. Thirty hours of clinical experience.

*Prereq: EDC-151, 152, 250, 205, 255*

**EDC 376 Teaching Students W/ Learn. Disabilities** 4 cr UL

Identification, assessment, and instructional planning for individuals with learning disabilities. Principles of instructional design, teaching methods and current practices of instructing students with learning disabilities.

*Prereq: EDC-151, EDC 152, EDC 255, EDC 250, EDC 205*

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

Preparation for planning and facilitating developmentally appropriate learning experiences for young children in the content areas of language, literacy, mathematics, science, social studies, the arts, health and safety. Techniques for adapting instruction to culturally diverse learners and those with developmental delays. Preparation in appropriate management and guidance techniques, and designing appropriate physical environments and schedules for young children. Students practice integrating systematic observation of young children's behavior with instructional design and assessment and program evaluation techniques. Students learn techniques for working cooperatively with families in the care and education of their children and with community services and referral procedures for children. Includes a 30-hour practicum in an early childhood site. Required for Early Childhood Endorsement. Classroom placement included. Fall 2021 and Fall 2023 only.

*Prereq: TEP Approval*

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

Requires instructor permission.

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

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

*Prereq: Junior Standing; Permission*

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

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

*Prereq: TEP Approval or EDS Major; Senior Standing*

**EDC 405 Curriculum Mthds in Special Ed - Field** 1 cr UL

Demonstration of the understanding of the IEP process by evaluating how goals and objectives are formulated to frame children's learning. Goals within an IEP are identified and an instructional unit implemented incorporating appropriate teaching strategies. Individual growth as a result of the interventions is measured and the success of the instructional methods is analyzed and evaluated. Appropriate individual performance assessments are created. The ability to modify instruction based on assessment data is demonstrated. Includes 30 hours of

Elementary/Middle/High placement. Pass/Fail only. Required for Special Education-Learning Disabilities K-12 major. Fall, odd years.

*Prereq: EDC-105, 150, 205, 255, 350, 355; TEP Approval; EDC-450 concurrently*

**EDC 430E Student Teaching Seminar - Elementary** 3 cr UL

Reflection on student teaching and professional issues. Classroom inquiry and analysis; self-reflection and professional development plans; representation in portfolio, web, and interviews; legal and ethical issues. Required for elementary certification. Note: Students must be approved for student teaching and have completed all core education and teaching major/minor courses prior to beginning student teaching. See department for exceptions.

*Prereq: TEP Approval; ST Approval; Take EDC-490E and EDC-491E concurrently*

**EDC 430S Student Teaching Seminar - Secondary** 3 cr UL

Reflection on student teaching and professional issues. Classroom inquiry and analysis; self-reflection and professional development plans; representation in portfolio, web and interviews; legal and ethical issues. Required for secondary certification. Note: Students must be approved for student teaching and have completed all core education and teaching major/minor courses prior to beginning student teaching. See department for exceptions.

*Prereq: TEP Approval; ST Approval; Take EDC-490S and EDC-491S concurrently*

**EDC 445F Methods in World Languages E/S** 2 cr UL

Students spend 30 hours in a language classroom placement specific to the student's major and level (elementary or secondary) and will have specialized teaching methods support in World Languages with an emphasis on instructional planning, teaching, and assessment. Required for elementary (K-5) and secondary (6-12) World Language certification.

*Prereq: TEP Approval*

**EDC 445S Secondary Methods in Social Studies** 4 cr UL

Survey of special teaching methods in student's major field of social studies. Required for secondary social studies certification.

*Prereq: TEP Approval*

**EDC 450 Curriculum Methods in Special Education** 3 cr UL

Preparation and planning for the development of curriculum and individualized teaching methodology appropriate for individuals with disabilities in the least restrictive environment. Basic principles of instructional design are discussed. Appropriate child performance assessments are created with students demonstrating the ability to modify instruction based on assessment data. Current practices and problems of instructing students with learning disabilities are addressed. Required for Special Education-Learning Disabilities K-12 major. Fall, odd years.

*Prereq: EDC-105, 150, 205, 255, 350, 355; TEP Approval; EDC-405 concurrently*

**EDC 453 Assess and Remediation in Special Ed** 4 cr UL

This course provides pre-service teachers with the knowledge and skills necessary to complete a comprehensive educational evaluation, interpret the results, and develop an instructional plan to address individual youth needs and deficits. Formal and informal assessment procedures are examined and include the evaluation of reading, language, mathematics, social/emotional development, vocational and transitional needs. Techniques for communicating test results are discussed. FERPA rules are addressed. Students will work full-time in the field during the final 6-weeks of this course to study the content in the field. Fall only.

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

**EDC 455 Special Ed Student Teaching Seminar** 3 cr **UL**

Work collaboratively to discuss strategic planning for students with learning difficulties. Design and prepare to implement models of collaboration that enhance the participation of special education students within the general education environment. Discuss current topics in special education. Fall only.

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

**EDC 460 Teaching the Struggling Reader** 4 cr **UL**

Survey of theory and methods associated with reading instruction for struggling readers. Emphasis placed on assessment of reading strengths and needs as well as specific strategies for reading improvement. Includes supervised instruction. Required for elementary certification. Fall only.

*Prereq: TEP Approval; Senior Standing*

**EDC 466 Learner-Centered Literacy Supports** 4 cr **UL**

Theory and methods for targeted literacy interventions including motivation, engagement, and support for culturally and linguistically diverse learners and struggling literacy learners, with appropriate assessments, instruction, and remediation.

*Prereq: EDC-366*

**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.

*Prereq: Requires instructor permission and junior standing EDC-103 and 130; and at least 3 credits of upper-level EDC credits; TEP Approval; Junior Standing.*

**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.

*Prereq: Permission*

**EDC 490E Directed Teaching - Elementary** 5 cr **UL**

Teaching under the direction of a cooperating teacher in the public schools. Applications must be filed by November 15 of the academic year prior to directed teaching. Required for elementary certification. Fall/Winter.

*Prereq: TEP and ST Approval*

**EDC 490S Directed Teaching - Secondary** 5 cr **UL**

Teaching under the direction of a cooperating teacher in the public schools. Applications must be filed by November 15 of the academic year prior to directed teaching. Required for secondary certification. Fall/Winter.

*Prereq: TEP and ST Approval*

**EDC 491E Directed Teaching - Elementary** 5 cr **UL**

Teaching under the direction of a cooperating teacher in the public schools. Applications must be filed by November 15 of the academic year prior to directed teaching. Required for elementary certification. Fall/Winter.

*Prereq: TEP and ST Approval*

**EDC 491S Directed Teaching - Secondary** 5 cr **UL**

Teaching under the direction of a cooperating teacher in the public schools. Applications must be filed by November 15 of the academic year prior to directed teaching. Required for secondary certification. Fall/Winter.

*Prereq: TEP and ST Approval*

**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. Junior or senior year. Must apply for student teaching by November 15 of junior year and be approved prior to beginning ECE student teaching. Pass/Fail only. Fall/Winter/Spring/Summer.

*Prereq: EDC-183, 281, 282, 283, 383, SOA-220; TEP and ST Approval*

**EDC 495 Special Education Student 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. Fall only.

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

**EDC 499 Education Independent Study** 4 cr **UL**

HCAT  
Individual investigation of an educational problem or development of a creative, usable project.

*Prereq: Senior Standing, EDC or EDS major, and Permission*

**EDC 500 Senior Thesis** 2-4 cr **UL**

Required for departmental honors.

*Prereq: Permission*

**EDC 501 Teaching Internship 1: General Education** 5 cr **UL**

With the supervision and support of mentor teachers and clinical instructors, teacher candidates plan and enact authentic teaching experiences, assess student work, use data to plan subsequent lessons, and perform all duties appropriate for a teacher intern in a classroom setting appropriate to a certification level. Leads to full class responsibility.

*Prereq: ST approval, all required certification courses*

**EDC 502 Teaching Internship 2: General Education** 5 cr **UL**

Continuation of Teaching Internship 1. With the supervision and support of mentor teachers and clinical instructors, teacher candidates plan and enact authentic teaching experiences, assess student work, use data to plan subsequent lessons, and perform all duties appropriate for a teacher intern. Includes a successful period of full class responsibility.

*Prereq: EDC-501*

**EDC 503 Teaching Internship Seminar** 4 cr **UL**

Application and reflection of core teaching practices, education theories, and professional expectations to support professional growth.

**EDC 504 Special Education Internship Seminar** 4 cr **UL**

Assessment and strategic planning for students with learning difficulties. Design and prepare to implement models of collaboration that will enhance the participation of special education students within the general education environment. Current topics in special education.

*Prereq: EDC-151, 152, 250, 255, 205, 301, 374, 375, 376*

**EDC 505 Special Education Internship I**5 cr **UL**

Develop and demonstrate procedures for implementing an Individualized Education Program. Ensure learning for special education students in a pull-out setting and within the general education environment. Six weeks in the clinical setting with a mentor special education teacher. Concurrent to EDC 504.

*Prereq: EDC-151, 152, 250, 255, 205, 301, 374, 375, 376*

**EDC 506 Special Education Internship II**5 cr **UL**

Deliver one-to-one, small-group, and large-group lessons using evidence-based practices which foster academic, social-emotional, and behavioral success. Six weeks in the clinical setting with a mentor special education teacher. Concurrent to EDC 504

*Prereq: EDC-151, 152, 250, 255, 205, 301, 374, 375, 376*

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## Engineering Science (EGR)

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**Major Requirements**

Sixty-five (65) credits, which must include a shared interdisciplinary core and concentration (such as Engineering, Environmental Physics, or Biomedical Physics) as listed below:

Core (45-48 credits):

1. EGR-130 and 330.
2. PHY-121 and 122.
3. Either PHY-212 or EGR-250.
4. MTH-121, 122, 210, and 211.
5. CSC-120 or another approved course involving programming.
6. EGR-385 (1 to 4 credits): At least 200 hours of service learning, research, or internship in engineering or related area.
7. EGR-430 Engineering Science Capstone Project.

Concentration (20 credits, must be approved by the department):

1. Eight credits of PHY courses numbered 300 and above (some require PHY-221).
2. Twelve credits of additional upper-level engineering courses (often transferred), or of other upper-level natural science courses (not in PHY, EGR, or MTH).

**Program Considerations**

Other considerations: MTH-310 is highly recommended. Students in the dual-degree engineering program may need to complete ECN-111 or 112; check the detailed requirements for individual programs. **Students completing the Engineering Science major may not minor or double major in Physics.**

**The Engineering Science major is not ABET accredited.**

Students who intend to continue their careers as professional engineers, who plan to take the Fundamentals of Engineering Examination, or who plan to continue their education with an MSc or MSE may require additional work and/or professional experience to qualify.

**EGR 130 Digital Fabrication**

NS2

4 cr

Students will learn to design 3D structures using computer-aided software (e.g. Autocad) and fabricate them using diverse manufacturing processes like additive manufacturing (3D printing), laser cutting, and CNC machining. This is a hands-on class with lab, open to students who would like to design and fabricate their own game pieces, art components, experimental equipment, to reproduce archeological artifacts or biological structures, or other possibilities. Laboratory.

**EGR 250 Electric Circuits**

NS2

4 cr **UL**

Study of theory and applications of analog electronics. Includes DC and AC circuit theory, basic network analysis, filter responses, semiconductor devices, power supplies, amplifiers, and introduction to microcontrollers. Laboratory.

*Prereq: PHY-122*

**EGR 330 Engineering Workshop**

NS2

4 cr **UL**

Students will develop an understanding of the relationship between engineering, science, and culture. They will work on cross-disciplinary projects, creating interactive physical objects by combining mechanical, electronic, and computing systems. In the process, they will use the models and knowledge acquired from their major to understand our relationship with technology and society. Laboratory.

*Prereq: EGR-130 and either PHY-212 or EGR-250*

**EGR 385 Internship/Service Learning**

NS2

1-4 cr **UL**

Service learning, research, or internship in engineering or related area. A capstone project cannot count towards this course.

*Prereq: EGR-130 and either PHY-212 or EGR-250*

**EGR 430 Engineering Capstone**

NS2

4 cr **UL**

Students will plan and develop a capstone project that applies their specialized skills in engineering and science to a complex problem. The project will demonstrate expertise in engineering practices and fundamentals.

*Prereq: EGR-330*

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## English (ENG)

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**Major Requirements**

Thirty-six credits, which must include:

1. ENG-120, 220, 320, and 420.
2. One course of the following: ENG-190, 290, 291, 292, 293, 294, or 296.
3. ENG-250 or 251; and 260 or 261.
4. Eight additional credits of upper-level literature selected from the following: ENG-340, 351, 353, 354, 355, 356, 360, 361, 364, 365, 366, 367, 368, 380, 381, 382, and 383.
5. 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.
6. 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.
7. Note: ENG-100, 101 and 110 do not count in the English major. No independent study counts toward the major unless it is approved as a substitute for a major requirement.

**Minor Requirements**

Twenty-four credits, which must include:

1. ENG-120.
2. ENG-250 or 251; and 260 or 261.
3. Select one course from: ENG-190, 201, 220, 225, 270, 290, 291, 292, 293, 294, 296, or 320.
4. Two additional 300 level literature courses chosen from: ENG-340, 351, 353, 354, 355, 356, 360, 361, 364, 365, 366, 367, 368, 380, 381, 382, and 383
5. Note: ENG-100, 101, and 110 do not count in the English minor.

**English Secondary Teaching Major**

Same requirements as the English major.

**English Secondary Teaching Minor**

Same requirements as the English minor.

**Language Arts Teaching Major and Minor (Elementary or PK-6 only)**

See the Education section of the catalog for list of requirements.

**Writing Minor Requirements**

Twenty-four credits from any of the following:

1. ENG-190, 201, 202, 203, 204, 210, 220, 270, 290, 291, 292, 293, 294, 295, 296, 370, 390, 391, 393, and 490.
2. One 4 credit writing-intensive internship experience, ENG 385, can be included in the 24-credits with prior departmental approval.
3. Minors are encouraged to explore one of the following optional writing tracks:

- Business and Professional Writing: ENG-202, 203, 204, 270, 295, or 385.
- Creative Writing: ENG-290, 291, 292, 293, 294, 390, 391, or 393.
- Journalism and Media: ENG-201, 202, 203, 204, 270, 370, or 385.
- Teaching Writing: ENG-201, 202, 203, 210, 290, or 291.

1. Writing minors on defined tracts may petition the department to include approved courses in COM, NMS, or BUS for one of their required writing courses. A current list of approved substitutes is maintained by the department.

#### Program Considerations

- Prospective majors should plan to take ENG-120 in the first year, ENG-220 in the sophomore year, ENG-320 in the junior year, and English 420 in the senior year. **Note:** One foreign language course at or above the 112 level is required for the English major.
- ENG-100, 101 and 110 do not count toward the English major or minor.
- Students considering graduate school are urged to complete more than the required number of 300-level literature classes as well as 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-220, 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 108 Introduction to College Reading

2 cr

Provides a brief introduction to different types of texts that students can expect to encounter in college coursework. Readings include academic, popular, and creative writings. Students respond to readings in writing and through class discussion while developing college-level reading strategies.

#### 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 is open to all students with a solid foundation in reading and writing.

#### ENG 180 Studies in Literature and Language

AH

2-4 cr

Studies in Literature and Language

#### ENG 180FMAAlways a River: Fishing in Literature

AH

4 cr

"Always a River" will involve intensive reading and discussion about fishing in addition to writing nature essays. As a class we will also travel five different days to Grayling to fish in the Ausable under the tutelage of professional guides from Old Ausable Fly Shop. Lastly, we will spend at least one day cleaning up the river as a class. The focus of the course is thus three-fold: to explore and read about fishing in literature, especially Michigan literature, to receive hands-on instruction in the art of fly fishing and river ecology, and to require students to write several nature essays. Course fee.

#### ENG 180GMGeology and Mythology of Greece

AH

4 cr

Greece and the Greek Isles nurtured a civilization whose impact on literature, politics, and philosophy continues to the day. They are also home to some of the most distinctive and important geology in the world. This course will explore the physical forces, which shaped Greek landscapes, then look at the way these landscapes in turn helped shape the history and culture of the people who lived on them. It will visit sites that illustrate the geological mechanisms, which formed the region's distinctive beauty, and discuss historic events like the catastrophic 1686 B.C.E. volcanic eruption on Santorini, which affected settlements across the Mediterranean. The course will also explore how Greek literature, from ancient works like the Odyssey to modern classics like Zorba the Greek, uses this environment to trace the human condition. Sites of study will most likely include Athens, Rhodes, Santorini, and Crete. Course fee.

#### ENG 180M Studies in Lit and Language

AH

4 cr

Selected topics in English.

#### 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: 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. Spring Term only.

#### ENG 183M Medieval & Renaissance Drama in London

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. Spring Term only.

#### ENG 190 Creative Writing


AH

4 cr


Introduction to the creative process through an exploration of multiple genres. This course focuses on fostering creative experimentation, observation, reflection, and an understanding of the conventions and creative possibilities of different genres, including poetry, fiction, and creative non-fiction. No prior creative

writing experience required.


### ENG 201 Advanced Rhetoric

 AH 4 cr UL  
Exploration of how ancient rhetorical principles (such as invention, arrangement, and style) can help us to understand and to craft effective arguments. Emphasis on the development of rhetorical awareness and research-based writing.

### 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.


### ENG 203 Professional and Technical Writing

 AH 4 cr UL  
Introduction to the rhetorical and production practices central to various professional writing contexts. These include corporate, educational, and technical settings. This course is open to students from any major interested in a practical understanding of writing in professional and technical environments.  
*Prereq: ENG 101, 201, 202, or 220*


### ENG 204 Design and Visual Rhetoric

AH 4 cr UL  
Exploration of rhetoric of design in composing written texts for various professional and creative contexts. This course focuses on the role visual elements play in reading and interpretation and is designed for students interested in graphic design or New Media Studies who would like to deepen their writing abilities, as well as for writers who are interested in developing practical skills in writing in ways that make intentional, rhetorically informed use of visual and design elements as tools of persuasion.  
*Prereq: ENG 101, 201, 202, or 220*


### ENG 210 Teaching Writing

 AH 4 cr UL  
Overview of the major theories and critical scholarship in the teaching of composition - as well as practical experience in designing assignments, rhetorical analysis, revision processes, and giving and receiving feedback on college-level writing.  
*Prereq: ENG 101, 201, 202, or 220*

### ENG 220 Foundations of Literary Argument

 AH 4 cr UL  
Development of the reading, writing, and research skills foundational to advanced study of literature (in English or in other languages). This course focuses on cultivating the creative and critical modes of thinking and writing used in analyzing literary, cultural, historical, and critical source material. Required for English majors and minors, this course is also designed to benefit students in related fields that depend on textual analysis in argumentation, including World Languages, History, New Media Studies, Women's and Gender Studies, and American Studies.


### 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  
Introduction to the basics of writing for various mass media forms - print, broadcasting, and online media. Students 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, 201, 202, or 220*

### ENG 283M Shakespeare on Stage

  AH 4 cr UL  
A study of Shakespeare's plays offering a representative survey of the major histories, comedies, and tragedies. Attention will be focused on reading the plays carefully and viewing and analyzing both stage and film productions of them.  
*Prereq: Two courses in literature*

### ENG 290 Poetry Workshop I

AH 4 cr UL  
Exploration of poetic form and language through writing and workshoping student work, as well as through critiquing the work of published poets. This course focuses on cultivating an inventive, playful relationship to language as well as foundational habits necessary for the creation of art.

### ENG 291 Fiction Workshop I

AH 4 cr UL  
Exploration of the craft of writing short fiction through writing and workshoping student work, as well as through critiquing the work of published authors. This course focuses on providing a foundational understanding of narrative forms and styles, as well as introducing students to the habits of art necessary for sustained creative writing.


### ENG 292 Playwriting

AH 4 cr UL  
Exploration of the craft of writing short plays through writing and workshoping student work, as well as through critiquing the work of published authors. This class is designed for writers with experience with theatre, or for theatre students with an interest in writing for the stage.


**ENG 293 Creative Nonfiction**  
AH 4 cr **UL**  
Exploration of the craft of writing creative nonfiction, including personal essay, memoir, and the meditative essay. Through writing and workshopping of student and professional work, this class introduces students to the observational, reflective, and aesthetic skills necessary to practicing the habit of art.


**ENG 294 Screenwriting I**  
AH 4 cr **UL**  
Exploration of the craft of writing screenplays for film. Through writing and workshopping student and professional work, students will explore techniques for developing characters and scenes, as well as crafting stories that will translate well to the screen.

**ENG 295 Grant Writing**  
AH SL 4 cr **UL**  
Introduction to grant writing as a genre of professional writing. This course explores grant writing from both a theoretical and a practical perspective, including the philosophy of philanthropy, the process of identifying needs, developing grant proposals, and identifying funding sources.


**ENG 296 Cross Genre Workshop**  
 AH 4 cr **UL**  
Exploration of the craft of writing creative works that cross traditional genre boundaries, including prose poems, new media essays, and other forms of radical hybridity. Through writing and workshopping of student and professional work, this class introduces students to the observational, reflective, and aesthetic skills necessary to practicing the habit of art.

**ENG 299 English Independent Study**  
H CAT 2-4 cr **UL**  
Requires instructor permission.



**ENG 320 Critical Theory**  
 AH 4 cr **UL**  
Surveys modern literary and critical discourse with emphasis on understanding and applying different theoretical approaches to literature.  
*Prereq: ENG-220 and one upper level literature course*

**ENG 340 Women's Literature**  
 AH 4 cr **UL**  
Studies in the literature of women from its beginnings in Julian of Norwich through Bradstreet and Woolf to the present. Includes historically and internationally diverse authors in a variety of genres.  
*Prereq: Two courses in literature*


**ENG 351 Chaucer**  
AH 4 cr **UL**  
Study of Chaucer's major works, including the Canterbury Tales and Troilus and Criseyde, and/or selected works of Chaucer's contemporaries.  
*Prereq: Two courses in literature*


**ENG 353 The English Renaissance**  
 AH 4 cr **UL**  
Selected study of English Renaissance texts ranging from More's Utopia to Milton's Paradise Lost. Includes works by authors such as Marlowe, Spenser, Donne, Herbert, Jonson and Marvell.  
*Prereq: Two courses in literature*

**ENG 354 Shakespeare**  
 AH 4 cr **UL**  
Study of Shakespeare's plays offering a representative survey of the major histories, comedies and tragedies.  
*Prereq: Two courses in literature*


**ENG 355 British Romantics and Victorians**  
  AH 4 cr **UL**  
Study of the major 19th-century British writers from Blake to Hopkins. Includes such authors as Wordsworth, Coleridge, Keats and the Brownings, and such essayists as Wollstonecraft, Hazlitt, Carlyle and Pater.  
*Prereq: Two courses in literature*

**ENG 356 Modern British and Irish Literature**  
 AH 4 cr **UL**  
Study of major British and Irish authors since 1900, including Yeats, Joyce, Eliot, Woolf and Beckett.  
*Prereq: Two courses in literature*


**ENG 360 Transatlantic 18th Century Literature**  
 AH 4 cr **UL**  
Study of the literature of "the long Eighteenth Century" from a transatlantic perspective. This course examines the emergence of the novel, as well as the impact of the slave trade and of the Enlightenment on the literature of Britain, the Americas and the Caribbean. Authors include Equiano, Wheatley, Behn, Swift, Defoe, Burney, Godwin, Brown and Foster.  
*Prereq: Two courses in literature*


**ENG 361 Modern American Writers to 1865**  
 AH 4 cr **UL**  
Examines in depth selected writers from the Revolution to the Civil War, with a special focus on the struggle to define an "American" literature. Includes such authors as Brown, Irving, Poe, Douglass, Jacobs, Dickinson, Melville, Hawthorne, Whitman and Stowe.  
*Prereq: Two courses in literature*

**ENG 364 Studies in Drama**  
AH 4 cr **UL**  
Studies of issues and developments in English language drama from the Restoration to the present. Individual sections might be organized by themes, by period (i.e., Restoration or 20th-century drama), or by focusing on multiple works by playwrights such as Dryden, Behn, Farquhar, Shaw, O'Neill, Williams, Albee, Churchill, or Fugard.  
*Prereq: Two courses in literature*

**ENG 365 Studies in the Novel**  
 AH 4 cr **UL**  
Studies of issues and developments in English language novel. Individual sections might be organized by themes, by periods, or by focusing on multiple works by authors as diverse as Defoe and DeLillo, Richardson and Rushdie, or Melville and Morrison.  
*Prereq: Two courses in literature*

**ENG 366 Modern American Literature**  
AH 4 cr **UL**  
Studies of American literature from post-WWII to the present.  
*Prereq: Two courses in literature*

**ENG 367 African American Literature**  
 AH 4 cr **UL**  
Study of African American Literature as a distinct tradition beginning with the experience of enslavement and influenced by African and African American oral cultural heritage.  
*Prereq: Two courses in literature*

**ENG 368 American Indian Literature**  
 AH 4 cr **UL**  
Study of the rich and varied literary tradition's roots in oral culture and its modern and contemporary expressions.  
*Prereq: Two courses in literature*

**ENG 370 Studies in Journalism**  
AH 4 cr **UL**  
Advanced study of topics in journalism and writing for the media that might include a focus on particular genres like magazine article writing, literary journalism, environmental journalism, digital journalism, or investigative reporting.  
*Prereq: ENG 270 or Permission*

**ENG 380 Studies in Literature and Language**  
AH 1-4 cr **UL**  
The study of various topics such as Holocaust literature, the dramas of AIDS, contemporary Scottish literature and travel literature. Students may register for more than one course under this number.  
*Prereq: Two courses in literature*

**ENG 381 Diversity Studies in Literature**  
AH 4 cr UL  
Studies of literature beyond the American and British canon: Asian American literature, Black women writers, Eastern European and non-Western world literature, and postcolonial writers. Students may register for more than one course under this number.  
*Prereq: Two courses in literature*

**ENG 382 Off Campus Studies: American Experience-Literary and Cultural Voices**  
AH 4 cr UL  
Special emphasis on travel to develop historical and cultural awareness as it adds to the richness of the American literary experience such as writers of the Southwest in Taos, New Mexico, New England writers in Martha's Vineyard and Key West writers in Florida. Genres, periods and authors vary.  
*Prereq: Two courses in literature*

**ENG 383 Off-Campus: British Lit and Culture**  
AH 4 cr UL  
Special emphasis on travel to develop historical and cultural awareness as it adds to the richness of the British literary experience such as Shakespeare and Company in London and Medieval Literature in England. Genres, periods and authors vary.  
*Prereq: Two courses in literature*

**ENG 383M Shakespeare on Stage**  
AH 4 cr UL  
A study of Shakespeare's plays offering a representative survey of the major histories, comedies, and tragedies. Attention will be focused on reading the plays carefully and viewing and analyzing both stage and film productions of them.  
*Prereq: Two courses in literature*

**ENG 385 English Practicum**  
2-8 cr UL  
Application of concepts in language and writing through participation in journalistic, public relations and other work settings. Supervision by faculty and sponsoring organization. Includes interpretive journal and summarizing paper.  
*Prereq: Permission*

**ENG 390 Poetry Workshop II**  
AH 4 cr UL  
Advanced workshop in the art and craft of writing poems. In-depth critiquing of student and professional writing.  
*Prereq: ENG-290*

**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 392 Playwriting Workshop II**  
AH 4 cr UL  
Advanced workshop in the art and craft of playwriting. In-depth critiquing of student and professional writing.  
*Prereq: ENG-292*

**ENG 393 Creative Nonfiction II**  
AH 4 cr UL  
Advanced workshop in writing creative nonfiction and practicing the habit of art. In-depth critiquing of student and professional writing.  
*Prereq: ENG-293*

**ENG 394 Screenwriting II**  
AH 4 cr UL  
Advanced workshop on the craft of writing film screenplays. In-depth critiquing of student and professional writing.  
*Prereq: ENG-294*

**ENG 399 English Independent Study**  
HCAT 2-4 cr UL  
Requires twenty-four completed English credits with "B" average and permission.

**ENG 420 Senior Seminar**  
AH 4 cr UL  
A sustained investigation in the study of language and literature that draws upon the expertise developed in previous English courses. Topics will vary each term. Students will complete a seminar project and submit a portfolio of their writing in the major.  
*Prereq: ENG-320, three upper level literature courses and senior standing*

**ENG 490 Independent Writing Project**  
AH 2-4 cr UL  
Independent work on a sustained, advanced writing project that is a culminating experience of the writing minor. An emphasis on writing for publication or performance (screenplay or play) is encouraged.  
*Prereq: ENG 370, 390, 391, 392, 393, or 394*

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

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

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## Environmental Studies (ENV)

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### Major Requirements

Sixty credits which must include forty credits of Core Courses and sixteen credits of electives (mostly upper-level) that allow focus in a particular area of study.

1. Core (40 credits): ENV-105; ENV-110 or GEO-101; ENV-205, 291, and 480; eight credits from CHM-115, BIO-121, 222, or 223; eight credits from POL-141, PHL-225 or REL-225, COM-253, ECN-340; eight credits from ENV-319, 360, 370.
  2. Complete one of the following tracks (16 credits):
    - a. **Environmental Science:** Sixteen upper-level credits from the following departments: BIO, BCM, CHM, ENV, IPH, PHY, PSY, and/or MTH/CSC, approved by the ENV department chair.
    - b. **Environmental Health:** Sixteen credits selected from BIO-307 or IPH-226; IPH-270, 331, 328, 430; ENV-265, 380, or other special topics courses approved by the ENV department chair.
    - c. **Environmental Policy:** Four credits from POL-101, PHL-228, HST-271; twelve credits from POL-217, 225/226 (only four credits can count toward major), 231, 233, 242, 305, 341, 401; COM-227, 327, or other special topics courses approved by the ENV department chair.
- *Because ENV is an interdepartmental major, all majors are required to take 56 upper-level credits to graduate in accordance with the academic catalog guidelines.*
  - The Program Comprehensive Evaluation is in the form of oral presentation to the Environmental Studies faculty as part of the ENV-480 seminar.
  - Note that ENV-480 is linked with the School for Public and Environmental Affairs (SPEA) at Indiana University and counts for Master's level credit for students accepted into the SPEA program.

### Other Considerations:

- Students are expected to complete an internship or research experience appropriate to their academic and career goals and approved by the department chair.
- Recommended courses include: PHY-112 or 121, and MTH-121.
- Potential majors are highly recommended to consult with the ENV program chair as soon as possible to develop an appropriate curricular plan. A firm grasp of statistics is critical for all of the major tracks and a minimum of MTH 116 (which counts towards the Distributive Requirements in the Natural Sciences - Mathematics/Computation) is expected. Further mathematical and analytical requirements will be discussed between the potential major and program chair(s) and will be

tailored to the student's specific academic and career goals.

### Minor Requirements

Twenty-six credits which must include the following courses:

1. ENV-105;
2. ENV-110 or GEO-101;
3. ENV-205 and 480;
4. BIO-121, 122, or 123;
5. CHM-115;
6. Select 4-cr from POL-141, PHL-225, ECN-340 or COM-253.

Environmental Studies students are recommended to conduct research or take a Spring Term experience abroad that utilizes our relationships with various institutions. MTH-116 (Statistics) and/or MTH-121 (Calculus) are strongly advised to fulfill NS-3 distributive requirements. MTH-121 is required for most graduate work.

### ENV 105 Intro to Environmental Studies

NS1 4 cr  
Examination of humans and their relationship to the natural environment. Explores current status of environmental problems, controversies and solutions. Laboratory. Course fee.

### ENV 110 Environmental Geology

NS2 4 cr  
Investigation into the causes of geologic hazards such as earthquakes, mass movement, volcanoes and desertification. Includes investigation into geologic process involved in the formation of energy and material resources, their origin, uniqueness and the impact of their use on the environment. Topics center on the interrelationships among all physical Earth processes. Laboratory.

### ENV 205 Environmental Health

4 cr UL  
Exploration of the relationship between the environment and human health. Topics include exposure to pollution, environmental disasters, injuries, and occupational health. The following concepts will be explored: environmental justice, toxicology, public health, and risk assessment.  
*Prereq: Sophomore standing*

### ENV 291 Scientific Writing and Methods

2 cr UL  
Examination of the different types of scientific writing, literature, along with practice of effective science communication within multiple formats. Brief coverage of how science writing and communication is different from everyday writing and communication. Skill development in effectively representing and understanding basic statistical analyses, graphs, diagrams and illustrations and their role in effective communication.  
*Prereq: Sophomore standing*

### ENV 360 Watershed Hydrology

4 cr UL  
Investigation of the methods and means describing how surface water and groundwater move in the environment. Topics include the relationship between surface and groundwater, migration of contaminants in fluvial and subsurface systems, and the theoretical and practical application of mathematical expression of water movement. Real-world, local problems serve as a centerpiece for project development.  
*Prereq: ENV-205 and ENV-291, or permission. CHM-115 recommended.*

### ENV 370 Risk Assessment

4 cr UL  
Systematic approach to the prediction of risks to human health and the environment. Theoretical framework of basic risk assessments is paired with application of real-world examples of known and unknown chemical and biological agents. Students learn to prepare ecological risk assessments.  
*Prereq: BIO-291 or ENV-291 or sophomore standing*

### ENV 380 Environmental Policy Analysis

4 cr UL  
An immersion into the science of our changing global environment and policies based on neoclassical economic philosophy that

attempt to address broad and specific problems. Students interested in science and those interested in economics will work collaboratively to address real-world problems and issues with the goal to help move our policy-thinking towards a more effective model of addressing global problems. Students will evaluate policy decisions as they have played out with certain environmental issues, and discuss new ways of approaching complex, and dynamic environmental and economic changes that the world faces in the 21st century.

*Prereq: 100-level or introductory level Environmental course*

### ENV 380 Environmental Problems and Issues

4 cr UL  
Examination of selected environmental issues and problems. Content varies. Topics may include pollution, energy, natural resources, land use planning and recycling. Course fee.  
*Prereq: ENV-105 or 110 or Permission*

### ENV 380M Topics in Env Studies

4 cr UL  
Selected topics in Environmental Studies problems. Content varies. Topics may include pollution, energy, natural resources, land use planning and recycling. Course fee.

### ENV 385 Environmental Studies Practicum

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

### ENV 480 Topics Seminar in Environmental Studies

2 cr UL  
Capstone course in environmental studies. Interdisciplinary approach incorporating scientific knowledge with policy and humanistic issues that are applied to real-life environmental problems.  
*Prereq: Sixteen credits of ENV or Senior Standing or Permission*

### ENV 499 Environmental Studies Independent Study

HCAT 1-4 cr UL  
Independent study in the field of environmental studies.  
*Prereq: ENV-105, 110 and one additional course from the ENV curriculum*

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## Exercise and Health Studies (EHS)

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### Coaching Minor Requirements

Twenty-four credits which must include:

1. 12-cr within Exercise Science; EHS-121, 140, 231, 241 and 385.
2. 12-cr chosen from PSY-212 or 331, PHL-242, NMS-130 or 310, COM-102 or 212.

**Graduation Limitation: Students may only apply up to six credits of (EHS) Exercise and Health Science courses numbered 100-165 toward degree.**

### EHS 110 Beginning Tennis

1 cr  
Activity-based course. Pass/Fail only. Course fee.

### EHS 112 Beginning Golf

1 cr  
Activity-based course. Pass/Fail only. Course fee.

### EHS 121 Introduction to Coaching

2 cr  
This course introduces students to the various responsibilities of a coach and the skills needed to successfully work with athletes in team settings. Throughout the course, students will explore various coaching models and leadership styles. Intentionally develop and apply tools to meaningfully engage with athletes from diverse backgrounds and cultural traditions. Students will also learn effective communication, problem-solving, and decision-making



skills.

<b>EHS 130 Beginning and Adv Beginning Swimming</b>	1 cr
Activity-based course. Pass/Fail only. Course fee.	
<b>EHS 131 Adv Begin/Intermediate Swimming</b>	4 cr
Activity-based course. Pass/Fail only. Course fee.	
<b>EHS 140 Recruitment and PR in Athletics</b>	2 cr
This course is focused on the role of recruitment in building a sports program and ways to build support for a sports program in communities and organizations. Students will learn the rules that govern recruitment at different levels of play, explore the ethical and social responsibilities coaches have related to recruitment, and develop recruitment strategies that facilitate a healthy team culture. Students will also learn strategies for building relationships with fans and communities.	
<b>EHS 150 Fitness for Life</b>	1 cr
Introduction to lifetime activities for physical fitness and cardiovascular health; includes fitness testing and personalized exercise prescription. Pass/Fail only.	
<b>EHS 154 Conditioning</b>	1 cr
Activity-based course. Pass/Fail only. Course fee. Graded Pass/Fail Only.	
<b>EHS 156 Strength Training</b>	1 cr
Activity-based course. Pass/Fail only. Course fee.	
<b>EHS 157 Aerobic Exercise</b>	1 cr
Activity-based course. Pass/Fail only. Course fee.	
<b>EHS 160 Individual Activity</b>	1 cr
Activity-based course. Pass/Fail only. Course fee.	
<b>EHS 165 Group Activity</b>	1 cr
Designed for a group of students to contract for a specific goal-centered learning experience. Goals, activities and means of evaluation must be detailed with the instructor. Pass/Fail only.	
<b>EHS 180 Topics in EHS</b>	2-8 cr
Activity-based course. Pass/Fail only. Course fee.	
<b>EHS 199 EHS Independent Study</b> HCAT	1-4 cr
Activity-based course. Pass/Fail only. Course fee.	
<b>EHS 200 Lifeguarding</b>	2 cr
Fundamentals of lifeguarding. Satisfactory completion of this course qualifies student for American Red Cross lifeguarding certification. Course fee.	
<b>EHS 201 Water Safety</b>	2 cr
Requires Advanced Life Saving Certificate.	
<b>EHS 202 SCUBA Diving</b>	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 231 Team Leadership** 2 cr

This course is designed to deepen students' understanding of the theories of coaching and athlete development. Students will develop their own coaching philosophy and leadership style that facilitates meaningful engagement with athletes from diverse backgrounds and cultural traditions. Students will also practice effective communication, problem-solving, and decision-making skills.

**EHS 241 Strength and Conditioning for Coaches** 2 cr

This course presents strength and conditioning theory and practice. Designed primarily for students interested in coaching athletes, the course explores different training models and their utilization and the injury prevention effects of appropriate training.

**EHS 280 Topics in EHS** 2 cr **UL**

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

**EHS 299 EHS Independent Study** 1-8 cr **UL**

HCAT  
Requires instructor permission.

**EHS 350D Principles of Coaching for Teachers** 2 cr **UL**

Designed as a variable content course with the subject to be determined on a demand basis. Topics may include basketball, football, soccer, track, volleyball or baseball/softball.

**EHS 380 Topics in EHS** 1-4 cr **UL**

Designed as a variable topic and credit course which may include adaptive and corrective physical education, injury rehabilitation, environmental physiology and sports medicine.

**EHS 399 EHS Independent Study** 1-4 cr **UL**

HCAT

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## Foreign Service (FOR)

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Interdepartmental major. This major requires fifty-six credits of approved courses through the Program of Emphasis documentation, typically drawn from the areas of economics, history and political science.

**FOR 385 Foreign Service Practicum** 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.

*Prereq: Permission*

**FOR 499 Foreign Service Independent Study** 1-8 cr **UL**

HCAT

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

Individual research culminating in the preparation of a major paper. Work should be initiated during the Fall Term of the senior year.

# French (FRN)

French courses, as designated by the three-letter prefix FRN, are taught in French. World Languages and Cultures courses, as designated by the three-letter prefix WLC, are taught in English. Courses taught internationally may have a different emphasis from those offered on campus.

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

**Advanced Credit in a second language may be earned by:**

1. Scoring at the 4 level or higher on the Advanced Placement (AP) exam.
2. Successfully completing the International Baccalaureate Program (IB) or the National Foreign Language Examination.

## FRN 111 Beginning French I 4 cr

Introduction to French. Primary objective is to help students acquire necessary basic skills: speaking, listening, reading and writing. Secondary objective is to provide insight on French culture and society.

## FRN 112 Beginning French II 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 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. Course fee. Spring Term only.

*Prereq: Permission*

## FRN 170 Paris in May 4 cr

Provides two academic components: language study and French culture. Students attend a regular language class through Alma College at the Alliance Francais (any level) and study cultural history of Paris through selected readings, directed visits and shows. Course fee. Spring Term only.

*Prereq: Permission*

## FRN 207 French Conversation I 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 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 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

## FRN 292 Targeted French Language Studies 2-4 cr

## FRN 293 Studies in History and Civilization 2-4 cr

## FRN 294 Studies in French and Francophone Lit 2-4 cr

## FRN 295 Studies in Business French 2-4 cr

## FRN 307 French Conversation II 2 cr UL

## FRN 321 French Composition and Conversation 4 cr UL

## FRN 330 Current Issues 4 cr UL

## FRN 350 Study in French Literature 4 cr UL

## FRN 354 From Labelle Epoque to the 1990s 4 cr UL

## FRN 355 History of French Literature I 4 cr UL

## FRN 356 History of French Literature II 4 cr UL

## FRN 360 Francophone Literature 4 cr UL

**FRN 369 Quebec**  
🌐 AH 4 cr UL  
An introduction to the province of Quebec, designed for students with one year of college French or more. Readings cover the history of the province, its political struggles, and its artistic expression. Includes a visit to Montreal, and extended stay at Laval University, Course fee. Spring Term only.  
*Prereq: Permission*

**FRN 370 Paris in May**  
🌐 4 cr UL  
Provides two academic components: language study and French culture. Students attend a regular language class through Alma College at the Alliance Francais (any level) and study cultural history of Paris through selected readings, directed visits and shows. Course fee. Spring Term only.  
*Prereq: Permission*

**FRN 371 History of French Civilization I**  
🌐 AH 4 cr UL  
Introduction to French civilization and culture to 1715. Political, social and religious institutions; art, architecture, music and literature.  
*Prereq: FRN-321 and permission*

**FRN 372 History of French Civilization II**  
🌐 AH 4 cr UL  
Introduction to French civilization and culture from 1715 to present. Political, social and religious institutions; art, architecture, music and literature.  
*Prereq: FRN-321 and Permission*

**FRN 377 Studies in French Film**  
🌐 AH 4 cr UL  
Studies in French film, emphasizing the critical analysis of technical and artistic applications, socio-historical contexts and directors' personal styles.  
*Prereq: FRN-321 or permission*

**FRN 380 Topics in French Language, Lit and Civ**  
🌐 AH 4 cr UL  
Various topics such as Afro-French literature and culture, the French novel, the short story, French literary criticism and theory, study of individual authors, social structures in modern France, the press in France, the French educational system, modern French art and others.  
*Prereq: FRN-222 or FRN-280 or Permission*

**FRN 391 French Language Studies**  
🌐 AH 2-4 cr UL  
Further study of grammar and development of reading, writing, speaking and listening skills.

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

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

**FRN 394 Studies in French and Francophone Lit**  
🌐 AH 2-4 cr UL  
Studies in literature on a variety of topics or genres.

**FRN 395 Studies in Business French**  
🌐 AH 2-4 cr UL  
Study of business French for commercial communication with the French-speaking world.

**FRN 495 Senior Thesis Part I**  
🌐 AH 1 cr UL  
Prior to enrollment in FRN 500. Designed to set the preliminary work toward the senior thesis in motion. Students will be required to work on a bibliography, outline, and prospectus of the forthcoming thesis.  
*Prereq: Permission*

**FRN 499 French Language Independent Study**  
🌐 HCAT 4 cr UL

*Prereq: Senior Standing; Permission*

**FRN 500 Senior Thesis**  
🌐 AH 4 cr UL

*Prereq: Permission*

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## Geography (GGR)

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**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*

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## Geology (GEO)

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

**GEO 101 Physical Geology** NS2 4 cr

Overview of physical Earth processes including rock and mineral formation, weathering and erosion, volcanism, seismicity and glaciation. Topics focus on central theme of plate tectonics. Also included are tectonic mechanisms responsible for structural change and landforms. Laboratory. Course fee.  
*Prereq: MTH-100 or Placement*

**GEO 112 Introduction to Michigan Basin Geology** NS2 4 cr

Field-oriented course focusing on unique geology of the Michigan Basin. Emphasis on tectonic and climatic changes in Michigan's geologic past and the rock records and fossil assemblage representing these changes. Topics include formation of the Michigan Basin's unique structure. Field trips include Wallace limestone quarry, evaporite deposits in a Grand Rapids gypsum mine, sandstone ledges at Grand Ledge, Silver Lake sand dunes and regional Pleistocene glacial features. Laboratory. Course fee.  
*Prereq: MTH-100 or Placement*

**GEO 113 Dynamic Earth** NS2 4 cr

Study of the earth's dynamic systems as explained by plate tectonics theory. Examination of rock and fossil records. Laboratory. Course fee.

## Gerontology (GER)

Gerontology is an interdisciplinary minor drawing on our faculty's broad range of research and professional experience with aging. The minor helps students prepare for the numerous careers which are affected by the increase in the older population.

### Minor Requirements

Twenty-four credits which must include:

1. Core Courses: IPH 212 or BIO 101, GER 385, GER 480, PHL 229, PSY 260, PSY 280 (Advanced Psychology of Aging), SOC 234
2. 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.

Prereq: *Permission*

**GER 480 Senior Seminar** 2 cr **UL**

Multidisciplinary capstone seminar for gerontology minors.

Prereq: *Permission*

## German (GRM)

German courses, as designated by the three-letter prefix GRM, are taught in German. World Languages and Cultures courses, as designated by the three-letter prefix WLC, are taught in English.

Courses taught internationally may have a different emphasis from those offered on campus.

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

**Advanced Credit** in a second language may be earned by:

1. Scoring at the 4 level of higher on the Advanced Placement (AP) Exam.
2. Successfully completing the International Baccalaureate (IB) Program exams, at the High Level with a minimum score of 5.

**GRM 111 Beginning German I** 4 cr

Introduction to German. Primary objective: to enable students to begin early and meaningful communication in German by acquiring necessary basic skills. Emphasizes skills in speaking, listening, reading and writing. Secondary objective provides insight through participation in German culture and society. (Alma, Germany)

**GRM 112 Beginning German II** 4 cr

Introduction to German. Primary objective: to enable students to begin early and meaningful communication in German by acquiring necessary basic skills. Emphasizes skills in speaking, listening, reading and writing. Secondary objective provides insight through participation in German culture and society. (Alma, Germany)

Prereq: *GRM-111 or Placement*

**GRM 200 German Masterpieces** 4 cr **UL**

Reading and discussion of selected works of German literature in English translation, including Böll, Brecht, Goethe, Grass, Hesse, Kafka, Peter Schneider, Maron and Plenzdorf. Does not count toward major or minor. (Alma)

**GRM 221 Language and Culture** 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** 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** 4 cr **UL**

Systematic study of grammar and further development of speaking and writing skills through reading, discussion, intensive classroom drill through culture. (Germany)

Prereq: *GRM-112 or Permission*

**GRM 232 Composition and Conversation II** 4 cr **UL**

Systematic study of grammar and further development of speaking and writing skills through reading, discussion, intensive classroom drill through culture. (Germany)

Prereq: *GRM-112 or Permission*

**GRM 251 Aspects of German Culture I** 4 cr **UL**

Intermediate level investigation of various historic aspects of contemporary German civilization and culture through speaking, writing, reading exercises, discussion and excursions. (Germany)

Prereq: *GRM-112 or Permission*

**GRM 252 Aspects of German Culture II** 4 cr **UL**

Intermediate level investigation of various historic aspects of contemporary German civilization and culture through speaking, writing, reading exercises, discussion and excursions. (Germany)

Prereq: *GRM-112 or Permission*

**GRM 299 Readings in the Arts and Sciences** 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** 4 cr **UL**

Refinement and extension of language skills through consideration of contemporary issues and experiences from internet, newspapers, magazines and audio-visual materials. Expanded oral conversation, extensive and intensive written composition. Review of selected grammatical problems. (Alma and Germany)

Prereq: *GRM-222 or permission*

**GRM 312 Advanced Conversation and Composition II** 4 cr **UL**

Refinement and extension of language skills through consideration of contemporary issues and experiences from internet, newspapers, magazines and audio-visual materials. Expanded oral conversation, extensive and intensive written composition. Review of selected grammatical problems. (Alma and Germany)

Prereq: *GRM-222 or Permission*

**GRM 313 Intensive Language Practice** 4 cr **UL**

Review of selected grammatical problems; refinement of speaking, reading and writing skills through extensive classroom practice and cultural excursions. (Germany)

Prereq: *GRM-222 or Permission*

**GRM 315 Selected 20th Century Authors** 4 cr **UL**

Representative authors of the 20th century such as Thomas Mann, Hermann Hesse, Heinrich Böll, Bertolt Brecht, Günter Grass,

Ingeborg Bachmann, Christa Wolf and Monika Maron. Problems of literary and human response to transition and flux of modern society are explored. (Alma)

Prereq: GRM-222 or Permission

**GRM 316 The German Novelle**

 AH 4 cr UL

Investigation of the Novelle; its style, historical development and variants in German literature with examples drawn primarily from the 19th and 20th centuries. Readings from Kleist, Brentano, Tieck, Storm, Stifter, Droste-Hülshoff, Kafka and Mann. (Alma)

Prereq: GRM-222 or Permission

**GRM 321 In Search of German Identities**

 AH 4 cr UL

In-depth investigation of modern German culture and civilization from Bismarck to emergence of National Socialism. (Alma)

Prereq: GRM-222 or Permission

**GRM 322 Foundations of Contemporary Germany**

 AH 4 cr UL

Continuation of German culture and civilization with emphasis on the present; in-depth consideration of current social-political problems and possible solutions; the place of a unified Germany in a new European political-economic order. (Alma)

Prereq: GRM-222 or Permission

**GRM 341 Introduction to German Literature**

 AH 4 cr UL

Introduction to German literature through the study of form and genre. Stress on formal structuring of literature and the communicative process. Examples drawn from a wide range of periods, styles and milieux. Basic literary theory. (Alma)

Prereq: GRM-311 or Permission

**GRM 350 Postwar German Short Stories**

 AH 4 cr UL

The course, conducted in German, investigates the adoption of the genre "Kurzgeschichte" from American literature in postwar German literature and explores how West- and East-German writers, by means of this genre, come to terms with their pasts from 1950s through 1970s. (Alma)

Prereq: GRM-311 or Permission

**GRM 399 GRM Independent**

 HCAT 2-4 cr UL

Independent study on selected topics in German.

**GRM 401 Advanced Composition and Stylistics I**

 AH 4 cr UL

Concentration on areas of composition and style, both oral and written, which pose difficulty for advanced students; emphasis also given to advanced oral practice. (Germany)

Prereq: GRM-312 or Permission

**GRM 402 Advanced Composition and Stylistics II**

 AH 4 cr UL

Continued oral and written investigation into advanced grammar with attention to individual problems defined in previous study. Reading of contemporary culture and literary sources. Advanced oral practice. (Germany)

Prereq: GRM-401

**GRM 403 Advanced Composition and Stylistics III**

 AH 4 cr UL

Extensive investigation into points of concern for advanced German students, stressing intensive and extensive reading, conversation and writing to allow mastery of stylistic difficulties and idiomatic expressions. Questions and abilities investigated beyond the normal range of German study. (Germany)

Prereq: GRM-402


**GRM 411 The Age of Goethe**

 AH 4 cr UL

Study of literature and society surrounding the lifetime of Goethe, generally including the most significant authors and works from 1750-1825.

Prereq: GRM-341 or Permission

**GRM 412 Social Engagement in 19th & 20th Century**

 AH 4 cr UL

Investigation of the significant ideas affecting the individual and position in society, the alteration of expectations, social forces and basic cultural changes as seen in works of authors such as Lenz, Büchner, Hebbel, Heine, Hauptmann, Kafka, Brecht, Grass, Böll, Hochhuth, Weiss and Maron. (Alma)


Prereq: GRM-341 or Permission

**GRM 420 Advanced German for Teachers**

 AH 2 cr UL

Intensive review combined with cultural exposure and a stay abroad. Intended for persons who already possess a good command of German, but especially for high school instructors (Germany); requires GRM major or minor; prior teaching experience.

**GRM 499 German Independent Study**

 HCAT 4 cr UL

Prereq: Senior Standing; Permission

**GRM 500 Senior Thesis**

 AH 4 cr UL

Prereq: Permission

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## Healthcare Administration (HCA)

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**Major Requirements**

Fifty-six credits which must include:

1. Core Courses (40 credits): HCA-131 (may take BUS-121) BUS-221, 224; HCA-319, 328, 329, 385, 441; IPH-430, PHL-229.
2. Required Electives (16 credits) select from the following: ANT-217; HCA-280, 334, 344, 380, 405, 433, 450, 499, 500; IPH-210, 331, 340; PSY-260; SOC-234,336; COM-243.
3. Required Prerequisites (16 credits): BIO-121; ECN-111 and 112; and one course from: MTH- 116, MTH-118, MTH-121, or PSY-220. Note: prerequisite courses required for the HCA major may not be taken Pass/Fail.
4. Program Considerations: A minimum grade of CD or above must be earned in HCA-319, 328, 329, and 441 prior to enrolling in the HCA Practicum (HCA-385).

**HCA 131 Intro to Health Service Management**

4 cr

This course is geared toward first and second year students who desire a fundamental understanding of health service management. It will explore a variety of health care settings including hospitals, nursing homes and clinics. Case studies will augment student learning in leadership, motivation, organizational behavior, management thinking, performance and quality improvement, information technology, ethics and cultural competency. This is a required course for the Healthcare Administration major.

**HCA 319 Healthcare Finance**

4 cr UL

Implements financial management, managerial management, and economic principles to analyze real-world health care issues. Emphasizes and encourages problem-solving and creative thinking through the use of texts, cases, and models of health care industry. Provides a comprehensive overview of financial structure, market forces, controls and techniques used in health care financial management and the perspectives of the various interest groups involved (providers, insurers, policy makers, patients, and the general public). Provides students with an overview of the principal financial mechanisms in place across the U.S. health care industry and specific insights into critical issues the industry currently faces.

Prereq: BUS-121 or HCA-131; BUS-221; four credits from BUS-222 or BUS-224(A-D); or permission

**HCA 328 Health Law**4 cr **UL**

This course provides a legal framework for students interested in healthcare administration and managing the legal issues they will face in a healthcare organization. Students will learn the basic legal principles including: contract law, tort liability and malpractice, employment law, fraud and abuse, health planning and advocacy, HIPAA/Privacy, public health laws, and other related topics.

*Prereq: ECN-111 and 112, MTH-116 or BTC-280 or PSY-220, and four credits from BUS-222 or BUS-224(A-D); or Permission*

**HCA 329 Health Administration**4 cr **UL**

Explore relevant findings from the behavioral sciences and other disciplines to help students apply appropriate management skills in their organization. Study the basics of leadership, communication, motivation, change theories, organizational culture, problem solving, conflict and negotiations, decision-making, productivity measurement, the TQM process, resources allocation, and mission and values development.

*Prereq: BUS-121 or HCA-131; BUS-221; four credits from BUS-222 or BUS-224(A-D); or permission*

**HCA 334 Healthcare Marketing**4 cr **UL**

This general survey class will acquaint students to the marketing discipline from the perspective of Healthcare Administration. Topics include target markets, marketing segmentation, marketing research and the marketing mix. NOTE: Students cannot earn credit for both BUS-333 and 334.

*Prereq: four credits from BUS-222 or BUS-224(A-D); ECN-111 and 112; MTH-116 or BTC-280 or PSY-220; or Permission*

**HCA 344 Healthcare Human Resource Management**4 cr **UL**

Explore human resources management in healthcare organizations including: recruitment and selection of employees, benefits and compensation management, privileging and credentialing of health professions, performance evaluation, staffing plans, labor relations and labor laws relevant to healthcare organizations. Discussion of other topics such as appraisal, discipline, safety, benefits and collective bargaining as related to healthcare human resources.

*Prereq: HCA-329 or Permission*

**HCA 385 Healthcare Administration Practicum**4 cr **UL**

Only four credits will count in the major. Requires permission. Student must also successfully complete the appropriate internship workshops that are sponsored by the Center for Student Opportunity (CSO) and the HCA department. Internships are typically completed in the summer. Also, students must successfully pass a background check to enroll in HCA 385. A minimum grade of CD is required for HCA 319, 328, 329, and 441 prior to enrolling in this course. Pass/Fail only.

*Prereq: BUS-121 or HCA-131; BUS-221; four credits from BUS-222 or BUS-224(A-D); HCA319, 329, 441, IPH-430 and PHL-229*

**HCA 405 Healthcare Informatics**4 cr **UL**

The course will give students a broad exposure to the field of Health Informatics. Topics include, but are not limited to, networking, information systems, information technology, coding, data bases, HL7, security and HIPAA.

*Prereq: HCA-329 or Permission*

**HCA 433 Exploring Health Disparities**4 cr **UL**

Introduction to global health care systems and models and their influences on health disparities and delivery of healthcare. Students will think critically about and discuss health and healthcare within a global environment. Examine vulnerable populations and how social determinants influence the health outcomes of various nations.

*Prereq: BUS-121 or HCA-131 and Permission*

**HCA 441 Strategic Planning in Healthcare**4 cr **UL**

Introduces students to strategic planning as it applies to health care organizations. Students will develop practical skills in strategic management, such as internal and external environmental assessment, competitor analysis, and methods for evaluating strategic alternatives that can be used in different types of health care settings. Explores the leadership roles of governing boards, health care managers, and clinicians.

*Prereq: HCA-319 and 329*

**HCA 450 Long-Term Care Management**4 cr **UL**

Basic overview of long-term care management in the United States. Covers the state of the field, those it serves, and the various organizations who serve them. Examines issues affecting all long-term care providers, individually or collectively (e.g., financing, regulations, integration, ethical issues). Discusses how various segments of long-term care fit together to form an overall system while looking at trends that are likely to shape the field in the future.

*Prereq: HCA-329 or Permission*

**HCA 499 HCA Independent Study**

HCAT

1-4 cr **UL**

Requires instructor permission.

**HCA 500 HCA Senior Thesis**4 cr **UL**

Student must have a GPA of 3.5 or better calculated on all BUS courses taken.

*Prereq: Senior Standing and Permission*

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## Health Studies (HSS)

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**HSS 180 Topics in HSS**

2-4 cr

Exploration of special topics in health studies. Topics will vary and be selected by the instructor. May be taken more than once.

**HSS 385 Health Studies Practicum**1-8 cr **UL**

Observation of communication and career opportunities in a health care setting. One example of a practicum is a hospital rotation. Written work is required. Course fee. Pass/fail only.

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## History (HST)

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The study of history provides a historical perspective which contributes to an understanding of the economic (E), social (S), political (P), intellectual (I) and technological (T) factors which affect human behavior as well as the historical interpretation (H) which explains that behavior. Students may identify these central course themes by noting the explanatory caption, e.g. (ESPI). All lower level courses focus on the principal economic, social, political and intellectual problems in particular historical eras. Similarly, courses which emphasize a multinational or global perspective are noted by the caption (GP).

**Major Requirements**

Thirty-six credits which must include:

1. One 300-level United States history course from: HST-323, 325, 326, 327, 328, 341 or another course pre-approved by the department.
2. One 300-level European history course from: HST-330, 331, 332, 333, 336 or another course pre-approved by the department.
3. One 300-level non-Western history course from: HST-352, 353, 360, 361 or another course pre-approved by the department.
4. One 400-level seminar (not an independent study).

- All 36 credits that count toward the major must be taken for a letter grade. History courses may be taken for S/F credit but only above and beyond the 36 credits taken for letter grade for the major.
- Successful completion in student's senior year of the comprehensive examination administered by the department.
- Honors candidates must have a minimum 3.3 overall GPA and 3.5 in the History Department, complete a one-credit advanced bibliography course, submit an honors thesis, and where possible present the thesis in an external forum.

### History Minor

Twenty-four credits which must include:

- One four-credit American history course at any level.
- One four-credit European history course at any level.
- One four-credit non-Western history course at any level.
- At least two upper-level four-credit courses. Upper-level courses may be at the 300 or 400-level; a 400-level seminar is recommended as one of these, but not required. 200-level courses are particularly recommended when selecting the remaining courses for the minor.
- All 24 credits that count toward the minor must be taken for a letter grade. History courses may be taken for S/F credit, but only above and beyond the 24 credits taken for a letter grade for the minor.
- Successful completion of the comprehensive evaluation administered by the Department.

### Teaching Major Requirements

Students seeking a History Teaching Major are strongly urged to have an academic advisor who is a tenured or tenure-track faculty member of the History Department.

Thirty-six credits which must include:

- One 300-level United States history course chosen from: HST-323, 325, 326, 327, 328, 341 or another American history course pre-approved by the department.
- One 300-level European history course chosen from: HST-300, 330, 331, 332, 333, 336 or another European history course pre-approved by the department.
- One 300-level non-Western history course chosen from: HST-352, 353, 360, 361 or another history course pre-approved by the department.
- One 400-level seminar (not an independent study).
- HST-100, 101, 104, 105, and 206.
- The following cognate courses, unless a student is taking one or more of the following as part of another major or minor: ECN-111, GGR-101, GGR-102, and POL-101.
- All 36 credits that count toward the teaching major must be taken for a letter grade. History courses may be taken for S/F credit but only above and beyond the 36 credits taken for letter grade for the major.
- Successful completion in the student's senior year of the comprehensive examination administered by the department.
- Honors candidates must have a minimum 3.3 overall GPA and 3.5 in the History Department, complete a one-credit advanced bibliography course, submit an honors thesis, and where possible present the thesis in an external forum.

### Additional Notes

100 and 200 level courses are recommended for first-year students and sophomores. HST-300 and above are recommended for sophomores, juniors and seniors; freshmen admitted only with permission of the instructor.

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

### HST 100 World History Survey I

SO 4 cr  
Introductory overview of ancient world history from Paleolithic times until the sixteenth century, emphasizing how early civilizations developed and their relationships with each other. Goals include familiarizing students with the major (shared and unique) characteristics of early societies, highlighting the continuity and change as societies developed around the globe. (ESPIT/GP)

### HST 101 World History Survey II

SO 4 cr  
Introductory overview of modern world history since the 16th century, emphasizing developments within Europe and interaction with the rest of the world. Focuses on topics such as the origins of European expansion in the first "global age," rise of absolutism, Scientific Revolution and Enlightenment, age of revolution and industrialization, modern imperialism, origins and impact of the World Wars, and the Cold War and its aftermath. (ESPIT/GP)

### HST 104 The Making of America to 1877

SO 4 cr  
Examines American history from colonial times to Reconstruction; concentration on political, constitutional, social, economic and intellectual problems. (ESPITH/GP)

### HST 105 The American Century: 1877-Present

SO 4 cr  
Political, economic, social and intellectual issues from Reconstruction to the present. Focuses on 1877-1990. (ESPITH/GP)

### HST 107 American Foreign Relations

SO 4 cr  
Introductory survey of the rise of American power on the international stage from the 1890s to the present. Examines the expansion of its economic, political, and cultural influences in the world through trade and wars, and the spread of American values.

### HST 121 American Legal History I

SO 4 cr  
Introductory survey, 1620-1877. Indigenous and colonial law, crime and punishment, religion and the law, creation of the law of slavery, imperial conflicts and the Revolution, the Constitution, the Marshall and Taney courts, abolition and women's rights, and legal aspects of the Civil War and Reconstruction. (ESPI)

### HST 122 American Legal History II

SO 4 cr  
Introductory survey, 1877-Present. Labor and industrialization in the law, legal education and philosophies, civil rights, the New Deal and the courts, law and the economy, the growth of government and the expansion of presidential power, terrorism and the law. (ESPI)

### HST 122M American Legal History II

SO 4 cr  
Introductory survey, 1877-Present. Labor and industrialization in the law, legal education and philosophies, civil rights, the New Deal and the courts, law and the economy, the growth of government and the expansion of presidential power, terrorism and the law. (ESPI)

### HST 130 Women in European History

SO 4 cr  
Survey of Western European history, focusing on women's (and men's) roles in the family and society from Classical Greece and Rome through the French Revolution, highlighting particular women whose contributions have been celebrated through the ages as well as discussing what kinds of lives most women led. (ESPI/GP)

### HST 140 American Women's History

SO 4 cr  
Introductory survey and examination of problems and issues in American women's history and American feminism, colonial era to the present. Emphasizes gender, race and class as categories of historical analysis. (ESPITH)

### HST 150 What Do Historians Do?

SO 2 cr  
This course is open to all students, regardless of major. Students learn about how the study of history leads to a wide range of career paths, drawing especially upon the experiences of Alma College alumni. Students learn about the development of history as a profession and how various historical figures found their vocations. They reflect on the skills fostered by the study of history

and consider how to market those skills effectively in a job search. Students also search for job advertisements and produce key job search materials (e.g., cover letter, resume).

**HST 180 Topics and Problems in History**  
SO 2-4 cr  
Topical course in history. This course is variable credit and may have offerings from 2-4 credits.

**HST 180C China: History and Culture**  
🌐 SO 4 cr  
This course allows students to personally experience China and Chinese people by exploring their history, culture, and society. Students will meet Chinese people, exchange ideas with their Chinese counterparts, visit businesses, and rural communities. We will learn not only China's rich ancient history and culture, but also its current dynamic economic developments and social changes. China is a land of diversity that few people in the world will realize until they see it. Spring Term only. (ESPI/GP)  
*Prereq: Permission*

**HST 180CMChina: History and Culture**  
🌐🌐 SO 4 cr  
This course allows students to personally experience China and Chinese people by exploring their history, culture, and society. Students will visit different cities, universities, rural communities, and interact with Chinese students and people in real life. We will learn not only China's rich ancient history and culture but also its current economic and social developments and changes. China is a land of diversity that few people in the world truly realize until they see it. China is about the size of the United States but its population is six times that of America's. Undoubtedly China faces tremendous challenges in going through drastic economic, political and social changes. All students including first year students are welcome to join this class. Course fee.  
*Prereq: Permission*

**HST 199 Independent Study in History**  
HCAT 1-4 cr  
This course is variable credit and may have offerings from 1-4 credits.  
*Prereq: Permission*

**HST 200 Ancient Near East**  
🌐 SO 4 cr  
Ancient history from its beginnings in Mesopotamia until the 4th century B.C. Includes the kingdoms and empires of the Fertile Crescent (Sumerian, Babylon, Assyria, Israel and foundations of Judaism, Phoenicia, etc.), Egypt, Persia and other Near Eastern societies. (ESPITH/GP)

**HST 201 Ancient Greece**  
🌐 SO 4 cr  
An overview of ancient Greece from Minoa 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. (ESPI/GP)

**HST 204 Renaissance Worlds**  
🌐🌐 SO 4 cr  
Between about 1300 and 1700, Europe and its wider world witnessed a transformation through revolutions that changed art, economics, politics, religion, science, and more. Beginning with the Italian Renaissance and finishing on the eve of the Enlightenment,

this course offers an introduction to what historians now call the early modern period. Readings cover both Europe and its new overseas empires.

**HST 206 Approaches to Michigan History**  
🌐 SO 4 cr  
An introduction to historical methodologies, focusing on the history of Michigan from the pre-contact period to the present. Native American societies, European contact and first settlements, imperial wars and the American Revolution, territorial period and statehood, economic development and reform movements, Civil War, industrialization and urbanization, immigration and race relations, the two World Wars and the Great Depression, the civil rights movement, suburbanization and the decline of the auto industry, contemporary Michigan. Course fee. (ESPITH)

**HST 209 Selected Problems in Historical Research**  
🌐 SO 2-6 cr  
Introduction to archival research. Classification and cataloging; search and retrieval methods in local, state and federal government archives; periodical literature and research in the social sciences. Problems may be selected. Examples are literature of American history, European studies, Asian studies, Latin American studies and Mediterranean studies. (ESPIT) This course is variable credit and may have offerings from 2-6 credits.  
*Prereq: Permission*

**HST 221 English History**  
🌐 SO 4 cr  
Survey of English history from the Norman conquest to modern times. The principal emphasis is on political and constitutional issues and problems, but attention is also given to social, economic, legal and cultural developments. (ESPI/GP)

**HST 222 Ireland's Freedom Struggle**  
🌐 SO 4 cr  
Exploration of Irish history, with particular emphasis on the long struggle for freedom from English and later British rule, from the Middle Ages through the Protestant plantation in the north, the Penal Laws, Potato Famine, and Home Rule campaign, to the Easter Rising, War of Independence, and Northern Irish "Troubles." The course includes the complex interaction between the native Irish, English, Scots, and Welsh settlers, and the English/British state, as well as between Irish Catholics and Protestants, and the impact of this history on Irish culture and society, economic development and mass emigration, and on the changing connections between modern Irish nationalism and religion. (ESPI/GP)

**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 230 Europe and the Islamic World**  
🌐🌐 SO 4 cr  
Since 9/11, the relationship between the Islamic world and the West has become a topic of renewed interest and controversy. From one vantage point, Muslims and Christians have been at odds for centuries, engaged in what some have called a clash of civilizations. But some historians have questioned that interpretation. While Christians and Muslims have experienced much violence and tension, they have also managed to coexist for long periods of time and to engage in fruitful exchanges. This course examines how Christians and Muslims interacted with one another in the pre-Modern Mediterranean World (i.e., pre-1800). (ESPIH/GP)  
*Prereq: Sophomore Standing and one history course or Permission*

**HST 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 course also explores major social, economic and cultural developments. (ESPIT/GP)

**HST 249 Russian Studies**

SO 4 cr  
 Analysis of Russian economic, social, political and intellectual development from the era of Peter the Great, with particular emphasis on the 19th and 20th centuries; origins of the Russian intelligentsia; Slavophiles and Westernizers; abolition of serfdom; Bolsheviks and the Russian Revolution; and others. (ESPI/GP)

**HST 252 Modern East Asia**

SO 4 cr  
 Introductory survey of the modern history and culture of Korea, Japan, and China. Examines the inter-relations of the three countries and their different experiences since the arrival of Western industrial powers in the 19th century. Major topics include imperialism and cultural interactions, science and modern political thoughts, reforms and revolutions, social transformations, and the miracles of economic growth. This new course offers new approaches to the study of regional history by making connections of shared experiences.

**HST 253 Asian Studies: Modern China and Japan**

SO 4 cr  
 Introductory study of the modern history of China and Japan. Examines the dynamic developments of political, social, economic and cultural changes, including relations with the West, from 1800 to the present. (ESPI/GP)

**HST 254 Colonial Americas**

SO 4 cr  
 Examines the development of European colonies in the Americas from 1492 to independence, including the comparative interaction of Native American, African and European cultures in the Spanish, Portuguese, French and English colonies. Analysis of the political, economic, social and intellectual changes from the early colonies to independence. (ESPI/GP)

**HST 255 Latin America Since 1825**

SO 4 cr  
 Analyzes selected countries. Caudillos and dictators, reform and revolution, neocolonialism and imperialism, economic growth and development. (ESPI/GP)

**HST 256 1492 and the Spanish Empire**

SO 4 cr  
 The year 1492 has a mixed legacy. For many, it was a triumph. But it also had a tragic side: the eventual deaths of millions of African slaves and Native Americans. This course explores the aftermath of 1492: the history of Spanish America until the start of the wars of independence in 1810. Political and religious institutions created in the "New World" are examined, and the resulting social and cultural tensions. (ESPI/GP)

**HST 260 Introduction to African History**

SO 4 cr  
 Introductory survey of African history, emphasizing the sub-Saharan region. Chief focus is on the pre-colonial peoples and cultures of the region; attention also given to the nature and impact of the trans-Atlantic trade, European colonization, and the struggle for national independence in the 20th century. (ESPIT/GP)

**HST 271 Science & Public Health: A Global Study**

SO 4 cr  
 Germ theory and bacteriology revolutionized the knowledge of disease. This course studies modern public health in a global perspective, covering details about Europe, the United States, and

China. (ESPIT/GP)

**HST 272M Plagues and Peoples**

SO 4 cr  
 Scientific and historical approaches to explore the connections between major epidemics and world history, combining a general overview of the subject with more focused case studies. Study the social, economic, political, cultural, religious, and technological contexts in which epidemics arose, how those contexts shaped responses to them, and the impact of these epidemics on society at large. Spring Term only. (ESPIT/GP)  
*Prereq: Permission*

**HST 277 Am Studies: Civil War and Reconstruction**

SO 4 cr  
 Examines sectional crisis, disunion and reunion from 1845-77. Topics include significance of Civil War era for industrialization; agriculture and urbanization; emancipation of slaves and race relations; development of the Presidency; constitutional issues; and modern warfare. (ESPI)

**HST 280 Topics and Problems in History**

SO 2-4 cr  
 Topical course in history. This course is variable credit and may have offerings from 2-4 credits.

**HST 299 History Independent Study**

HCAT 1-4 cr  
 300-, 400- and 500-level courses are recommended for sophomores, juniors and seniors. Freshmen admitted only with permission of the instructor. This course is variable credit and may have offerings from 1-4 credits.

**HST 323 Creating the Republic, 1763-1815**

SO 4 cr UL  
 Analysis of selected economic, social, political and intellectual issues, including the coming of the American Revolution; "state-building" during the war for Independence; the "Critical Period," ratifying the Constitution; origins and early development of political parties, ideologies of republicanism and nationalism; diplomatic problems and territorial expansion; minorities in the early republic; and the War of 1812. (ESPI/GP)  
*Prereq: Sophomore Standing, and one history course or Permission*

**HST 325 Reform and Search for Order**

SO 4 cr UL  
 Urban revolution; middle class reforms; response of industry, labor, and public institutions to the progressive era; World War I; the Jazz Age; the stock market crash of 1929; and the Hoover administration. (ESPITH/GP)  
*Prereq: Sophomore Standing, and one history course or Permission*

**HST 326 The Roosevelt Revolution, 1932-45**

SO 4 cr UL  
 Analysis of the Great Depression, the New Deal, American isolation in 1930s, and American involvement in World War II. Historical perspectives of the New Society which emerged from the Great Depression and World War II. (ESPITH/GP)  
*Prereq: Sophomore Standing, and one history course or Permission*


**HST 327 Constitutional History**

SO 4 cr UL  
 Beginning with the debates over the ratification of the Constitution in 1788-89, this remarkable document has been contested, amended, and reinterpreted through many dramatic developments in American history. As a blueprint for a national government, it has shaped government, politics, and society; in turn, it has been influenced by changes in American politics, society, culture, technology, and the economy. The interplay between, on the one hand, the Constitution and constitutional law, and on the other, major historical events and trends, is the focus of this course. (ESPIH)  
*Prereq: Sophomore Standing, and one history course or Permission*

**HST 328 Cold War America**
 SO 4 cr **UL**

The Cold War dominated America and its rivalry with the Soviet Union in the world during the second half of the twentieth century. This course examines the origins, strategies, policies, and conflicts of the Cold War that shaped American domestic development and its global involvement. (ESPITH/GP)

*Prereq: Sophomore standing, and one HST course or Permission*

**HST 331 The Renaissance and Reformation**
 SO 4 cr **UL**


Analysis of European society in the crucial era of transition from the medieval to the modern world, Renaissance in Italy and northern Europe, humanism, Protestantism, the Counter-Reformation and religious wars. (ESPI/GP)

*Prereq: Sophomore Standing, and one history course or Permission*

**HST 332 Inquisitions**
 SO 4 cr **UL**


Few institutions in history are as infamous as the Inquisition. It represents some of the most notorious instances of intolerance and violence produced by religious belief. Our knowledge of this institution, however, too often relies upon myth. This course, thus, explores how religious authority functioned during a time very different from our own. Readings examine inquisition documents, as well as scholarship on Spain's inquisition and other inquisitions in Europe and the Americas. (ESPIH/GP)

*Prereq: Sophomore Standing, and one history course or Permission*

**HST 333 European Enlightenment**
 SO 4 cr **UL**


Perhaps the key intellectual movement to signal the dawn of the modern world, the European Enlightenment is known as an "age of reason" that spanned the seventeenth and eighteenth centuries and dismantled religion as the dominant force in European societies. But by no means did the Enlightenment spell the end of belief or superstition. Through sources from the period, we examine the ideas of several famous individuals, each of whom contributed and reacted to the European Enlightenment. While this course centers on development taking place in Europe, we also will devote some attention to the interaction between Europe and the wider world. (ESPIH/GP)

*Prereq: Sophomore Standing, and one history course or Permission*

**HST 335 London Pre-Seminar**
 SO 4 cr **UL**

HST 335 is the preparatory course taken in Alma in the winter before the spring term London Research Seminar. Introduction to advanced historical research, focusing on World War II. Interpret the relevant aspects of World War II, as well as the rudiments of British culture and history. Includes major research project. (ESPITH/GP)

*Prereq: HST 238 or another approved history course and Permission*

**HST 336 Rethinking World War II**
 SO 4 cr **UL**


Discussion and analysis of major debates on various facets of World War II, looking at multiple theaters and including consideration of the war on land, at sea, and in the air. Themes in the chosen case studies include planning, technology, strategy and tactics, intelligence, diplomacy, occupation policies, including the Holocaust, and resistance during World War II. The course includes a major research paper, drawing in part on extensive published primary sources and documentary collections in the College library. (ESPITH/GP)

*Prereq: Sophomore Standing, and one history course or Permission*

**HST 341 Presidential Elections**
 SO 4 cr **UL**

Studies the history of presidential elections focusing on the changing role of the media, campaign fundraising, electoral strategies, the role of the media in shaping campaigns, and the impact on public policy; offered especially in national election

years, where the election can serve as a laboratory to test theories.

**HST 352 China and the West**
 SO 4 cr **UL**


This course examines major interactions of China and the West via exchange of trade and ideas, paying particular attention to cultural perceptions and (mis)understandings. Topics of studies include the ancient Silk Road, Marco Polo and Jesuits as cultural intermediaries, encounter with imperialism, modern thoughts and Chinese transformations, and China's rise as an economic power. (This course satisfies the requirement of Asian history.)

*Prereq: One history course or permission.*

**HST 353 China's 20th Century Revolution**
 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. (ESPIH/GP)

*Prereq: Sophomore Standing, and one history course or Permission*

**HST 361 Race in South Africa and USA**
 SO 4 cr **UL**

A comparative study of South African and United States (especially Southern) history, this course examines similarities and differences in the way concepts of "race" shaped these countries' past and present, including how "race" intersected with class and ethnicity, but also gender. Topics covered include white settlement, the frontier, and subjection of indigenous peoples; racial slavery; "race mixing" and the "color line;" intra-white conflict and creation of white supremacist states; industrialization, racism, and labor relations; and Jim Crow, segregation, and apartheid. (ESPIH/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. This course is variable credit and may have offerings from 2-4 credits.

*Prereq: Sophomore Standing, and one history course or Permission*

**HST 380CMChina: History and Culture**
 SO 4 cr **UL**

This course allows students to personally experience China and Chinese people by exploring their history, culture, and society. Students will visit different cities, universities, rural communities, and interact with Chinese students and people in real life. We will learn not only China's rich ancient history and culture but also its current economic and social developments and changes. China is a land of diversity that few people in the world truly realize until they see it. China is about the size of the United States but its population is six times that of America's. Undoubtedly China faces tremendous challenges in going through drastic economic, political and social changes. All students including first year students are welcome to join this class. Course fee.

Prereq: Permission

### HST 385 Internship in History

4-12 cr UL

Study/work program requiring archival and/or field work in conjunction with archives, research libraries, or private or public agencies. Only eight credits may count toward the degree. This course is variable credit and may have offerings from 4-12 credits.

Prereq: Permission

### HST 399 History Independent Study

HCAT

1-4 cr UL

This course is variable credit and may have offerings from 1-4 credits.

Prereq: 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. (ESPITH/GP)

Prereq: Permission

### HST 425 Riot and Rebellion in America

SO

4 cr UL

This seminar will examine instances of civil disorder in American history, from the Pueblo Revolt of 1680, to Revolutionary-era mobs, slave revolts, and contemporary protests. Students will consider whether to classify each instance as a riot or a rebellion (and why that matters), and whether violence is a central characteristic of American history or an aberration.

Prereq: Permission

### HST 433 World War II Seminar

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. (ESPITH/GP)

Prereq: 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. (ESPITH/GP)

Prereq: Permission

### 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. This course is variable credit and may have offerings from 2-4 credits.

Prereq: Permission

### HST 499 History Independent Study

HCAT

1-4 cr UL

Advanced bibliography and selected problems. This course is variable credit and may have offerings from 1-4 credits.

Prereq: Permission

### HST 500 Senior Thesis

SO

1-4 cr UL

This course is variable credit and may have offerings from 1-4 credits.

Prereq: Permission

## Humanities (HUM)

### HUM 110 Fine Arts Education

AH

4 cr

A study of the knowledge, understanding and application of the content, functions, and achievements of dance, music, theatre, and the visual arts to promote one's ability to create, perform and respond in and through the arts. While the course will be of special interest to Elementary Education majors, it is designed to be accessible to all interested students. Fall only.

### HUM 180 Topics in Humanities

AH

2-10 cr

Courses in the humanities, often incorporating an interdisciplinary focus from two or more programs, which do not fit within current departmental boundaries. Course content varies and can be repeated for credit unless otherwise indicated.

### HUM 380M Dance and Pop Culture

AH

4 cr UL

What are the dances from stages, clubs, and screens that have drawn attention in the U.S. over the last century? Where do they come from? This class will explore and contextualize dance in popular culture and analyze who dances, how they dance, and how movement constructs identity and history. We will look at dances from around the world (e.g., Africa, Central, and South America) and their influences on U.S. culture. The course introduces methods for critical analysis and reveals the hidden heritage of dances we see in clubs, television, films, and musicals. Through reading selections, videos, and discussions, students will discover how popular dance reflects and affects perceptions of age, ethnicity, economic status, and disability. Overarching themes include the role of media in the development and dissemination of dance and issues of innovation and appropriation.

### HUM 385 Humanities Practicum

4 cr UL

Requires instructor permission.

### HUM 399 Humanities Independent Study

HCAT

1-4 cr UL

Requires instructor permission.

## Integrative Physiology and Health Science (IPH)

### Major Requirements

Forty credits which must include:

1. Core (20 credits): IPH 131, 231, 232, 301 and 327
2. Select one concentration:
  - Clinical Exercise Physiology: IPH 228, 229, 328, 402, 418, 419, 420; and 2 elective credits which must be 300-level or higher (not including IPH-480 or 500).
  - Pre-Therapy: IPH 310 or 311; IPH-345, 346, and 444; IPH-401 or 403; and 6 credits from the following: IPH-228, 229, 323, 324, 328, 335. *Cognate for this concentration is PHY-112 / 121.*

- Pre-Medicine: IPH 310 or 311; 401 or 402 or 403 or 404; IPH-444; IPH-264 or 331 or 430; and 6 additional credits from the previous options or the following: 265, 270, 328, 341, 418, 419, 420.
  - Public Health: IPH 264, 330, 331, 430; and 4 credits from the following: IPH: 265, 270, 310 or 311, 328.
3. Completion of the HAPS Comprehensive Examination (national, standardized examination) administered by the Department; completion of the Senior Seminar (IPH 480) or Senior Thesis (IPH 500).

**Note:** For some concentrations, First Aid and CPR certification are required by external internship/practicum programs.

#### IPH Minor Requirements

Twenty-four credits that must include: IPH 131, 231, 232, 301 or 327; and eight additional credits of electives, all of which must be upper-level credits.

#### IPH 131 Foundations in Physiology

NS1 4 cr  
This course will introduce students to core concepts underlying human function. At the end of the course students will be able to explain how these fundamental processes are essential to the viability of the human organism. Emphasis will be on general concepts, serving as preparation for the study of human physiology. The class will utilize traditional lecture together with in-class "laboratory" exercises and collaborative exercises solving clinically relevant problem sets.

#### 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 211 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. Course fee.

#### 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 and 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, BIO-207, or BIO-307 should not take this course. Laboratory.

#### IPH 224 Principles of Sports Medicine

 NS1 4 cr  
An exploration of the key tenets of sports medicine including sub-disciplines of expertise and a study of injury and pathology at the mechanistic, population, and epidemiological levels. Course fee.

#### IPH 227 Human Physiology

NS1 4 cr UL  
Study of organ system function emphasizing homeostatic control in the face of constant disruption. Laboratory. Course fee.  
*Prereq: BIO-121*

#### IPH 228 Physical Fitness Assessment

2 cr  
Development of hands-on assessment of health- and skill-related fitness components. Laboratory.  
*Prereq: IPH-220*

#### IPH 229 Exercise Rx in Healthy Populations

2 cr  
Development of exercise prescriptions based on client health and fitness goals. Laboratory.  
*Prereq: IPH-228*

#### IPH 231 Anatomy & Physiology I

NS1 4 cr  
An introduction into the musculoskeletal, nervous and cardiovascular organ systems. Students will learn about the structure, function and integration of the different systems while applying core concepts of physiology. This course is part one of a two semester sequence. Laboratory. Course fee.  
*Prereq: IPH-131 or BIO-121*


#### IPH 232 Anatomy & Physiology II

NS1 4 cr  
An introduction into the respiratory, immune, gastrointestinal, endocrine and reproductive organ systems. Students will learn about the structure, function and integration of the different systems while applying core concepts of physiology. This course is part two of a two-semester sequence. Laboratory. Course fee.  
*Prereq: IPH-231*


#### IPH 264 Environmental Health

4 cr UL  
Exploration of the relationship between the environment and human health. Topics include exposure to pollution, environmental disasters, injuries, and occupational health. The following concepts will be explored: environmental justice, toxicology, public health, and risk assessment.  
*Prereq: Sophomore standing*

#### IPH 265 Global Health Perspectives

 4 cr UL  
This course provides an overview of the major human health issues among the global community. Topics include: health education, healthcare, infectious disease, nutrition, violence, pollution and other health hazards. Review of case studies and data organization related to health disparities among different countries will be studied.  
*Prereq: Sophomore standing*

#### IPH 270 Community Health

 SL 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.

#### 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. Fall only.  
*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 secondary level.  
*Prereq: EDC-103 and EDC-130, or Permission.*

<b>IPH 280</b>	<b>IPH Seminar</b>	2 cr
Topics in physiology selected by the instructor. Students expected to give a presentation. Course fee.		
<b>IPH 301</b>	<b>Nutrition</b>	4 cr <b>UL</b>
NS1	Introduction to human nutrition including identification, function and food sources of required nutrients. Application of principles of normal nutrition to special issues (e.g., physical performance, obesity, pathology.) Course fee.	
<i>Prereq: IPH-231 or BIO-207</i>		
<b>IPH 303</b>	<b>Stress Management</b>	2 cr <b>UL</b>
Investigation of stressors in the work, social and self-environments. The physiology of stress and deep relaxation techniques studied as an introduction to life style redesign.		
<i>Prereq: Sophomore Standing</i>		
<b>IPH 310</b>	<b>Introduction to IPH Research</b>	2 cr <b>UL</b>
	Introduction to the research process. Typically students make a formal research proposal. Students are encouraged to pursue an individual study of a particular subject in Integrative Physiology.	
<i>Prereq: Junior Standing or Permission</i>		
<b>IPH 311</b>	<b>Introduction to Public Health Research</b>	2 cr <b>UL</b>
	This course is designed to provide students an overview of the research process. Especially designed for research areas in public health, such as behavioral science/health education, biostatistics/epidemiology, and environmental health.	
<b>IPH 321</b>	<b>Community Adult Fitness I</b>	1 cr <b>UL</b>
NS1	Hands-on exercise leadership of community members. Includes skill assessment, exercise prescription, and oversight of training and progress in individual and group fitness settings.	
<i>Prereq: IPH-228</i>		
<b>IPH 322</b>	<b>Community Adult Fitness II</b>	1 cr <b>UL</b>
	Hands-on exercise leadership of community members. Includes skill assessment, exercise prescription, and oversight of training and progress in individual and group fitness settings.	
<i>Prereq: Take IPH-321</i>		
<b>IPH 323</b>	<b>Therapeutic Modalities</b>	2 cr <b>UL</b>
Physiological principles and application of various therapeutic modalities utilized in the treatment of musculoskeletal injuries.		
<i>Prereq: IPH-227 or Permission</i>		
<b>IPH 324</b>	<b>Therapeutic Exercise</b>	2 cr <b>UL</b>
Methods and principles utilized in the rehabilitation of injuries of the physically active.		
<i>Prereq: IPH-323 or Permission</i>		
<b>IPH 327</b>	<b>Physiology of Exercise</b>	4 cr <b>UL</b>
NS1	Exploration of the physiological process in relation to exercise in everyday life, and to sports and recreational activities. Laboratory. Course fee.	
<i>Prereq: IPH-227 or BIO-207</i>		
<b>IPH 328</b>	<b>Pathophysiology</b>	4 cr <b>UL</b>
NS1	Introduction to the pathophysiologic study of disease in humans.	
<i>Prereq: IPH-227 or BIO-207 or Permission</i>		
<b>IPH 330</b>	<b>Health Data Analysis</b>	4 cr
	This course serves as an introduction to statistical computing and research data management.	
<b>IPH 331</b>	<b>Health Promotion</b>	4 cr <b>UL</b>
	NS1	Provides critical information for planning, implementing, and evaluating health promotion programs in the workplace, schools, community or health care setting.
<i>Prereq: Junior Standing</i>		
<b>IPH 334</b>	<b>Theory and Practice of Individual Sports</b>	4 cr <b>UL</b>
Analysis of the skills of badminton, tennis and golf, and methods of instruction unique to each sport. Assumes basic proficiency in each sport. Course fee.		
<i>Prereq: Permission</i>		
<b>IPH 335</b>	<b>Orthopedic Assessment I</b>	4 cr <b>UL</b>
An introductory exploration of didactic and clinical application into the examination and diagnostic assessment of upper and lower body orthopedic injuries. Laboratory.		
<i>Prereq: Permission</i>		
<b>IPH 336</b>	<b>Orthopedic Assessment II</b>	4 cr <b>UL</b>
An advanced exploration of didactic and clinical application into the examination and diagnostic assessment of upper and lower body orthopedic injuries. Laboratory.		
<i>Prereq: Permission</i>		
<b>IPH 340</b>	<b>Pharmacology</b>	4 cr <b>UL</b>
NS1	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.	
<i>Prereq: IPH-227 or BIO-207</i>		
<b>IPH 341</b>	<b>Basic Pharmacology</b>	4 cr <b>UL</b>
NS1	This course will introduce students to the basic principles underlying drug action. Concepts include basic receptor theory, pharmacokinetics, and the pharmacodynamics of major classes of drugs in use today. Students will apply the principles through analysis of laboratory and clinical testing data as well as case studies. The emphasis will be on general mechanisms of drug action.	
<i>Prereq: IPH-232 or BIO-207</i>		
<b>IPH 342</b>	<b>Sport and Exercise Psychology</b>	4 cr <b>UL</b>
This course is devoted to assisting students in learning and using theoretical and practical information related to the psychology of sport and physical activity. Effective mental training skills for successful sport and life performance are also discussed.		
<i>Prereq: Junior Standing or Permission</i>		
<b>IPH 344</b>	<b>Human Anatomy</b>	4 cr <b>UL</b>
NS1	In-depth study of human anatomy with laboratory experience. Course fee.	
<i>Prereq: IPH-227 or BIO-207 may be taken concurrently</i>		
<b>IPH 345</b>	<b>Biomechanics I</b>	2 cr <b>UL</b>
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.		
<i>Prereq: PHY-112 or PHY-121</i>		
<b>IPH 346</b>	<b>Biomechanics II</b>	2 cr <b>UL</b>
Continuation of IPH 345. Emphasis on experimental procedures in biomechanics and kinesiology. Laboratory.		
<i>Prereq: IPH-345 or Permission</i>		

**IPH 380 Topics in Integrative Phys & Health Sci** 1-4 cr **UL**

Designed as a variable topic and credit course.


**IPH 385 Integrative Phys & Health Sci Practicum** 1-4 cr **UL**

Designed for off- or on-campus placement combining academic orientation with practical preprofessional experience. Maximum of eight credits.

*Prereq: Permission*

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

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

 **NS1**  
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-227 or BIO-207; CHM-115*

**IPH 402 Cardiorespiratory Physio** 4 cr **UL**

An exploration of the cardiovascular and respiratory systems, and their interactions with one another. Laboratory. Course fee.

*Prereq: IPH-227 or BIO-207 and Junior status*

**IPH 403 Neurophys & Motor Control** 4 cr **UL**

Study of the nervous system's contributions to homeostasis and motor control.

*Prereq: IPH-227 or BIO-207 and Junior status*

**IPH 404 Endocrine Physiology** 4 cr **UL**

Examines the critical role of the endocrine system in human viability.

*Prereq: IPH-227 or BIO-207 and Junior standing*

**IPH 417M Fitness Assessment and Exercise Rx** 4 cr **UL**

**NS1**  
Hands-on assessment skills for health-related fitness components. Development and implementation of individualized exercise prescriptions based on fitness and goal assessments for healthy and diseased individuals. Laboratory. Course fee.

*Prereq: Take IPH-327 previously or concurrently*

**IPH 418 EKG Interpretation** 2 cr **UL**

Assessment and interpretation of the normal and abnormal electrocardiogram. Includes analysis of EKG changes associated with disease states and pharmacological treatments. Laboratory.


*Prereq: IPH-227 or BIO-207*

**IPH 419 Stress Testing** 2 cr **UL**

Application and interpretation of functional capacity and diagnostic stress testing. Includes analysis of normal and abnormal EKG and hemodynamic responses to graded exercise testing. Laboratory.

*Prereq: IPH-418*

**IPH 420 Exercise Prescription** 2 cr **UL**

 Develop and implement exercise prescription principles for healthy individuals as well as individuals with various diseased states. Design a comprehensive exercise program, including health and fitness screening, goal assessment, and development of an individualized exercise prescription. Laboratory.

*Prereq: IPH-327 and IPH-419*

**IPH 428 Exercise Testing and Prescription** 4 cr **UL**

**NS1**  
In-depth study of theoretical bases and applied knowledge required for graded exercise testing and individualized exercise prescription for normal and high risk populations, with emphasis on cardiac patients. Electrocardiograph techniques and interpretation, pharmacological considerations, test data interpretations and emergency procedures are included. Laboratory. Course fee.

*Prereq: IPH-327*

**IPH 430 Epidemiology** 4 cr **UL**

**NS1**  
Presents concepts, principles and methods generally used in the surveillance and investigation of health-related events.

*Prereq: BIO-121 and Junior Standing, or Permission*

**IPH 444 Advanced Anatomy** 4 cr **UL**

**NS1**  
An in-depth exploration of human anatomy with an emphasis on cadaver dissection. Application of core concepts from human anatomy and physiology. Hands-on dissection conducted by students in the human cadaver laboratory. A strong focus will be placed on the ethical implications of death and dying helping to cultivate empathy, compassion, and respect for others as future healthcare professionals and citizens of the world. Course fee.


*Prereq: IPH-232 or BIO-207*

**IPH 499 IPH Independent Study** 2-4 cr **UL**

**HCAT**  
Research in Integrated Physiology and Health Science under the supervision of the Department culminating in a thesis or research project.

*Prereq: IPH Major; Permission*

**IPH 500 Senior Thesis** 4 cr **UL**

 Requires instructor permission.

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## Integrated Science (ISC)

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**ISC 201 Integrated Science I** 4 cr

Introduction to concepts in biology, chemistry, physics, Earth, and space sciences. Topics include relationships in ecosystems; structure, function, and information processing; inheritance; forces and interactions; waves; weather and climate; processes that shape Earth; and patterns and cycles in space. Laboratory.

**ISC 301 Integrated Science II** 4 cr **UL**

This course is a continuation of Integrated Science I. Topics include matter and energy in ecosystems; interdependent relationships in organisms and ecosystems; growth, development, and reproduction; natural selection; forces and interactions; electromagnetic radiation; energy; chemical reactions; Earth history; weather and climate; human impacts; stars; solar system. Laboratory.

*Prereq: ISC-201*

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## Latin (LAT)

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Latin courses, as designated by the three-letter prefix LAT, are offered through the Modern Languages Department. The courses listed are offered periodically upon sufficient demand.

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

**LAT 111 Elementary Latin I** 4 cr

Phonetics, morphology, syntax and semantics preparatory to the translation of simple texts such as Caesar and Pinius.

**LAT 112 Elementary Latin II**

AH

4 cr

Continuing study of phonetics, morphology, syntax and semantics preparatory to the translation of simple texts such as Caesar and Pinus.

Prereq: LAT-111 or Permission

## Library Research (LIB)

**LIB 110 Introduction to Library Research**

2 cr

Introduces a wide range of research and information literacy skills, including how to effectively choose a research topic, how to best use print and digital sources, and ethical information use. Most appropriate for first- and second-year students.

**LIB 310 Research and Technology**

2 cr UL

Introduction to advanced library research using catalogs, databases, and internet sources. Students are encouraged to use mobile devices (e.g., laptops, tablets, smartphones) and to evaluate the usability of these devices. Most appropriate for juniors and seniors.

**LIB 385 Library Practicum**

1-4 cr UL

Study-work program in the College Library or another library.

## Mathematics (MTH)

**Major Requirements**

Thirty-six credits which must include:

1. MTH-121, 122, 210, 223, 310, and 421 or 431.
2. Twelve other upper-level Mathematics credits.
3. Cognates: CSC-120 and one course other than a Mathematics course, approved by the Department, with a Mathematics prerequisite numbered 113 or higher.
4. The senior comprehensive examination includes three parts: successful completion of the Major Field Test in Mathematics, submission of an approved writing sample and an approved oral presentation.
5. At least one statistics course is recommended.
6. Students interested in graduate school in mathematics should complete both MTH-421 and 431 and an honors project. Students interested in business and industrial careers should consider additional courses in Applied Mathematics, Computer Science and fields which apply mathematics in significant ways.

**Minor Requirements**

Twenty-four credits which must include:

1. MTH-121, 122, 210
2. At least two other upper-level Mathematics courses.

Note: MTH-100 and 202 do not count toward the Minor.

**Secondary Teaching Major Requirements**

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

**Secondary Teaching Minor Requirements**

At least twenty-six credits which must include: MTH-120, 121, 122, 223, 411; 117 or 310; and 116 or 341.

**Mathematics Teaching Major Requirements (PK-6)**

Thirty-six credits which must include:

1. MTH-110, 117, 121, 122, 202 or 204, 203, 210, 223, 341
2. Four other upper-level credits in Mathematics
3. Cognate: CSC-118 or 120
4. The senior comprehensive, which includes 1) submission of an approved writing sample, and 2) an approved oral presentation.

**PK-6 Teaching Minor Requirements**

Twenty-four credits which must include:

1. MTH-110; 113 or 121; MTH-116 or 341; MTH-120 or 223; MTH-202 or 204
2. Four additional credits at MTH-110 or above

**Mathematical Sciences Major Requirements**

Fifty-two credits which must include:

1. MTH-121, 122, 210, 223, 310, 336, 341, and 421 or 431
2. Computer Science 120 and 121
3. Twelve additional credits in upper-level Mathematics or Computer Science courses, at least four credits of which must be Computer Science. Courses which combine applications and theory are encouraged (e.g. MTH-211, 342, 391, 399 or 499; and CSC-240, 310, 420, 430, 440, or 499).
4. The senior comprehensive examination includes three parts: successful completion of the Major Field Test in Mathematics, submission of an approved writing sample and an approved oral presentation.

**Restrictions**

The following combinations of double majors are not permitted: Mathematical Sciences and Mathematics; and Mathematical Sciences and Computer Science.

**Four credits from MTH 110 or higher, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Natural Sciences - Mathematics/Computation.**

**MTH 100 Applied Algebra**

4 cr

Develops mathematical skills with an emphasis on increasing the students' ability to interpret and reason with quantitative information. Focuses on mathematical critical thinking and problem solving. Topics include variables and functions, linear, quadratic, exponential and other models, each presented in the context of applications from social and natural sciences, business, and everyday life.

**MTH 108 Introduction to College Math**

2 cr

Strengthen your mathematical skills in preparation for coursework requiring quantitative reasoning. Topics include algebraic and exponential expressions, polynomial and rational equations, and graphs in the coordinate system. Emphasis will be placed on the development of critical thinking and problem solving skills through applications.

**MTH 110 Liberal Arts Mathematics**

NS3

4 cr

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

Prereq: MTH-100 or Placement

**MTH 112 Pre-Calculus**

NS3

4 cr

Foundational concepts for the study of calculus. Investigates polynomial, rational, exponential, logarithmic and trigonometric functions. Explores the ideas of functions and graphs, with emphasis on concepts and skills central to calculus. May not be taken for credit by students who have successfully completed MTH-121, 122 or 210.

Prereq: MTH-100 or Placement

**MTH 113 Applied Calculus**

NS3

4 cr

Introduction to differential and integral calculus. Focuses on applications; theory held to a minimum. Examples from business and the natural and social sciences. Background in trigonometry not needed.

Prereq: MTH-112 or Pre-Calculus in High School

**MTH 116 Elementary Statistics**

NS3

4 cr

Introduction to modern elementary statistics and applications. Focuses on statistical reasoning and data analysis. Includes statistical design of experiments, estimation, hypothesis testing, regression, correlation and other selected topics.

Prereq: MTH-100 or Placement

**MTH 117 Intro to Matrices and Linear Methods**  
 NS3 2 cr  
 Introduction to solving systems of linear equations, linear programming, elementary matrix theory, and the modeling of situations which are linear. Applications from business and natural and social sciences. Note: The content of this course is necessary background for MTH-310. Requires placement in MTH-112 or 4 years of high school math.  
*Prereq: MTH-112 or Pre-Calculus in High School*

**MTH 118 Biostatistics**  
 NS3 4 cr  
 Introduction to statistical methods used in biomedical science and public health research. Focuses on experimental design, descriptive methods, hypothesis tests, analysis of variance, regression, and other selected topics.  
*Prereq: MTH-100 or Placement*

**MTH 120 Discrete Mathematics**  
 NS3 4 cr  
 Introduction to formal logic, sets, functions and relations, counting methods, graphs and trees, and recursive structures and inductive reasoning.  
*Prereq: MTH-112 or Pre-Calculus in High School*

**MTH 121 Calculus I**  
 NS3 4 cr  
 Introduction to the calculus of one variable. Includes limits and continuity, the derivative and applications, the integral and applications, infinite series and sequences. (Part I of II)  
*Prereq: MTH-112 or Pre-Calculus in High School*

**MTH 122 Calculus II**  
 NS3 4 cr  
 Introduction to the calculus of one variable. Includes limits and continuity, the derivative and applications, the integral and applications, infinite series and sequences. (Part II of II)  
*Prereq: MTH-121*

**MTH 180 Topics in Mathematics**  
 NS3 2-4 cr  
 Selected topics of current or historic importance. Prerequisites vary with topics selected.

**MTH 192 Mathematical Modeling**  
 NS3 4 cr  
 Development of various mathematical models used in business, social sciences and biological sciences; uses and limitations of models in practical situations. Some models use calculus and/or the computer. Computer programming not a prerequisite.  
*Prereq: MTH-113 or MTH-121*

**MTH 202 Mathematics for the Elementary Teacher**  
 NS3 4 cr  
 Overview and examination of the mathematical topics in the K-8 curriculum. Includes arithmetic of integers, decimals and fractions; numeration systems; set theory; problem solving; elementary logic, elementary concepts in probability and statistics; elementary concepts in geometry; and an introduction to computing.  
*Prereq: MTH-100 or placement, Sophomore Standing, and Education Major*

**MTH 203 Math - Middle and HS Teachers**  
 NS3 2 cr  
 This course will provide an overview and examination of the mathematical topics and pedagogical approaches in the middle and high school curriculum. Topics include problem solving, number theory, algebraic thinking, geometry, probability and statistics, and mathematics software applications for teaching (e.g., Geometer's Sketchpad and TinkerPlots).  
*Prereq: MTH-121*

**MTH 204 Number Systems for PK-6 Teachers**  
 NS3 4 cr  
 Introduction to number systems and operations, including early algebraic thinking, problem solving, set theory, and elementary logic. Analysis and construction of effective mathematical tasks in teaching number systems and operations at the PK-6 level.

**MTH 205 Rational Numbers for PK-6 Teachers**  
 NS3 4 cr  
 Unpacking mathematical content and identifying competence for rational numbers, with a focus on representations, learning trajectories, performing and supporting mathematical explanations, and interpreting and extending mathematical thinking.


**MTH 206 Geometry for PK-6 Teachers**  
 NS3 4 cr  
 An exploration of 2-D and 3-D geometry topics and spatial relations while exploring the high leverage teaching practice of assessment, noticing student thinking, and using representations.

**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**  
 Introduction to proof techniques. Theoretical analysis of discrete structures such as sets, graphs, functions, and relations.  
*Prereq: MTH-120 or MTH-122*

**MTH 241 Financial Mathematics**  
 NS3 4 cr **UL**  
 Introduction of fundamental concepts of interest theory. Applications of those concepts in calculating present and accumulated values for various streams of cash flows. Topics include reserving valuations, pricing, asset/liability management, investment income, and capital budgeting. Financial instruments such as derivatives will also be introduced.  
*Prereq: MTH-122*

**MTH 242 Applied Statistical Methods**  
 NS3 4 cr **UL**  
 Applied study of inferential and descriptive statistics. Topics include data visualization, confidence intervals and hypothesis tests, linear regression, ANOVA, ANCOVA, categorical data analysis, resampling methods, and time series. Emphasizes written and oral communication of results. Uses statistical software, such as R.  
*Prereq: A MTH course numbered 112 or above, or DAT-115 or 116, or ECN-217, or PSY-220*

**MTH 280 Topics in Mathematics**  
 NS3 2-4 cr **UL**  
 Selected topics of current or historic importance. Prerequisites vary with topics selected.  
*Prereq: MTH-122 or Permission.*

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



**MTH 310 Linear Algebra**  
NS3 4 cr UL  
Study of finite-dimensional real vector spaces; kernel, dimension, basis, linear transformations and their matrices, and eigenvalues.  
*Prereq: MTH-210; MTH-117 Strongly Recommended*

**MTH 323 Complex Analysis**  
NS3 4 cr UL  
Introduction to the theory of functions of a single complex variable. Analytic functions, complex series, Cauchy's theorem and conformal mapping.  
*Prereq: MTH-210*

**MTH 336 Numerical Analysis**  
NS3 4 cr UL  
Analysis and implementation of numerical algorithms for approximating functions, derivatives and integrals, and for solving nonlinear equations, ordinary differential equations and systems of linear equations. Discussion of standard software packages and techniques for writing efficient and reliable mathematical software in Pascal and/or FORTRAN.  
*Prereq: MTH-122 and CSC-120*

**MTH 341 Probability and Statistics I**  
NS3 4 cr UL  
In-depth examination of probability and introduction to mathematical statistics. Topics include axiomatic probability, discrete and continuous random variables, transformations of random variables, moment generating functions, limit theorems, and point estimation.  
*Prereq: MTH-122*

**MTH 342 Probability and Statistics II**  
NS3 4 cr UL  
Continuation of MTH-341, focusing on mathematical statistics. Selected topics may include maximum likelihood estimation, likelihood ratio tests, linear models, and Bayesian methods.  
*Prereq: MTH-341*

**MTH 345 Stochastic Processes**  
NS3 4 cr UL  
Introduction to the theory and applications of stochastic processes, including Markov chains, Poisson processes, queuing theory, and Brownian motion. Example applications include models of random walks, DNA sequences, call centers, and the Black-Scholes option pricing formula.  
*Prereq: MTH-210*

**MTH 351 Elementary Number Theory**  
NS3 4 cr UL  
Study of integers, including divisibility, the theory of prime numbers, congruences and solutions of equations in integers.  
*Prereq: MTH-223*

**MTH 380 Topics in Mathematics**  
NS3 4 cr UL  
Selected topics of current or historic importance. Prerequisites vary with topics selected.

**MTH 390 Combinatorics**  
NS3 4 cr UL  
Introduction to combinatorial theory. Topics include enumeration, recurrence, generating functions, graph theory and optimization.  
*Prereq: MTH-120 or 122*

**MTH 390M Combinatorics**  
NS3 4 cr UL  
Introduction to combinatorial theory. Topics include enumeration, recurrence, generating functions, graph theory and optimization.  
*Prereq: MTH-120 or 122*

**MTH 391M Introduction to Graph Theory**  
NS3 4 cr UL  
Introductory survey of the major concepts and applications of graphs, digraphs and networks. Application areas include transportation, traffic flow, games and puzzles. Spring Term only.  
*Prereq: MTH-122 or Permission*

**MTH 411 College Geometry**  
NS3 4 cr UL  
Axiomatic systems, models, finite geometries, Hilbert's axioms, independence of the parallel postulate, and introduction to non-Euclidean geometries with emphasis on hyperbolic geometry.  
*Prereq: MTH-223*

**MTH 413 Topology**  
NS3 4 cr UL  
Introduction to point-set topology. Includes topological properties of Euclidean spaces, abstract spaces and metric spaces. Explores connectedness, compactness, continuity and homeomorphisms.  
*Prereq: MTH-223*

**MTH 421 Abstract Algebra**  
NS3 4 cr UL  
Introduction to the theory of algebraic structures including elementary theory of groups, rings and fields.  
*Prereq: MTH-223 and 310*

**MTH 431 Advanced Calculus**  
NS3 4 cr UL  
In-depth examination of the calculus of one variable, including topology of the real line, sequences and series of functions.  
*Prereq: MTH-210 and 223*

**MTH 491 Mathematical Methods of Physics**  
NS3 4 cr UL  
Survey of advanced mathematical topics for application in the physical sciences. Topics selected from Fourier series, transform calculus, partial differential equations, boundary value problems, complex variables and vector calculus. Highly recommended for students planning graduate study in the physical sciences or applied mathematics.  
*Prereq: MTH-211; MTH-310 recommended*

**MTH 499 Mathematics Independent Study**  
HCAT 1-4 cr UL  
Requires instructor permission.

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

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## Medieval and Renaissance Studies (MED)

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### Minor Requirements

Twenty-four credits which must include:

1. Core (12 cr): HST-203; ENG-250; ART-211 or 112
  2. Electives (12 cr): Determined in consultation with the program director. Examples include but are not limited to: ART-210: Ancient Art, ENG-354: Shakespeare, FRN-371: History of French Civilization I, HST-331: Renaissance & Reformation, MUS-443: Music History I, and SPN-360: Spanish Literature to 1700. Students may substitute one of these electives with an approved independent study.
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## Music (MUS)

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Alma College is an accredited member of the National Association of Schools of Music, offers two degree options: Bachelor of Music in Music Education and Bachelor of Arts with a major in Music.

### Bachelor of Arts in Music

Forty credits which must include:

1. MUS-111, 112, 121, 122, 211, 212, 214, 345, 443, 444, 500
2. Two credits of Ensembles
3. Two credits of Applied Lessons at the 290 level and above

- Two credits of elective coursework subject to Departmental approval.
- 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 which must include:

- MUS-111, 112, 116, 121, 122, 211, 212, 214, 215, 237, 337, 344, 345, 431, 443, 444.
- Seven credits of Ensembles, one of which must be MUS-155, 157, or 159.
- Fourteen credits of Applied Lessons at the 290 level and above on one instrument or voice, subject to Department approval.
- Two credits of elective coursework subject to Departmental approval.
- 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. These courses are necessary to complete a secondary education major.

### Minor Requirements

Twenty-four credits, which must include:

- MUS-111, 112, 121 and 122
- MUS-120 or 443 or 444
- Two credits from MUS 140, 211, 214, 215, 237; may also complete courses not previously taken within the MUS-120, 443, or 444 sequence.
- Six credits of Applied Lessons at the 190 level or above on one instrument or voice.

### Applied Lessons

**Applies to:** MUS-191-198, 291-298, 391-398, and 491-498. Private lesson offerings are open to both majors and non-majors who complete an audition and receive permission to register. The 300-level (391-398) and 400-level (491-498) represent upper level performance skill and experience and require music faculty approval. **100-level lessons do not count toward the degree.**

There is a private lesson instruction fee of \$165 per term for all levels (191-198, 291-298, 391-398, and 491-498). (Offered every term)

### Ensembles

**Applies to:** MUS 150-159 and 351. Ensembles are open to all students who audition and receive permission from the instructor prior to registration. All ensembles are offered every year. **No more than eight credits of participation in all ensembles combined may be applied toward degree requirements.**

**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 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 114 Piano Proficiency I

AH 2 cr

Fundamental skills, technique and repertoire development. Scales, simple accompaniment patterns, harmonization and improvisation. Music majors only.

### 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. (Offered every year)

*Prereq: MUS-115 or Audition; Music Major*

### MUS 116T Piano Proficiency III

AH HCAT 2 cr

Level III piano proficiency. Technique includes both black and white major and minor scales, arpeggios, chromatic scales, seventh chords, accompany a piece from the major instrument or voice; intermediate repertoire levels. (Offered every year)

*Prereq: MUS-115 or Audition; Music Major*

### 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.

### MUS 121 Aural Skills I

AH 2 cr

Develops aural skills through a range of melodic, harmonic and rhythmic exercises. Introduces solfege syllables. May be taken concurrently with MUS-111 or in a subsequent term. (Offered every year)

*Prereq: Take MUS-111*

### MUS 122 Aural Skills II


AH 2 cr

Continuation of Aural Skills I. May be taken concurrently with 112 or in a subsequent term. (Offered every year).

*Prereq: MUS-121*

<b>MUS 131 Piano Pedagogy</b>			course during the winter term. Students will develop requisite and advanced skills using flags, rifles, sabres and body movement. The ensemble will perform for select athletic events and at select winter guard competitions. Course fee.
AH	1 cr		<i>Prereq: Permission</i>
Principles of musicianship on the piano. Designed for B.M. students. Emphasis on pedagogical methods and materials used in teaching piano to beginning and intermediate students. (Offered/Considered upon request).			
<i>Prereq: 8 credits from MUS-196 or MUS-396</i>			
<b>MUS 132 Vocal Pedagogy</b>			<b>MUS 154 Scottish Arts</b>
AH	2 cr		AH
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 Winter Term, even numbered years.			1 cr
<b>MUS 134 Woodwind Pedagogy</b>			<b>MUS 155 Percussion Ensemble</b>
AH	1 cr		AH
Principles of tone production, fingering and embouchure for flute, oboe, clarinet and bassoon (or saxophone). Specialization on the instrument of the student's choice. (Offered Fall, Odd numbered years)			1 cr
<b>MUS 135 Brass Pedagogy</b>			<b>MUS 156 Jazz Ensemble</b>
AH	1 cr		AH
Principles of tone production, fingering and embouchure for trumpet, French horn, trombone and tuba. Specialization on the instrument of the student's choice. (Offered Fall, Even-numbered years)			1 cr
<b>MUS 136 String Pedagogy</b>			<b>MUS 157 Alma Acapella</b>
AH	1 cr		AH
Principles of musicianship on the violin, viola, cello and double bass. Designed for music education students. Emphasis on elementary string teaching methods and large group ensemble techniques necessary for school orchestral directing. (Offered Winter, Even-numbered years)			1 cr
<b>MUS 137 Percussion Pedagogy</b>			<b>MUS 158 Handbell Choir</b>
AH	1 cr		AH
Principles of playing percussion instruments with emphasis on snare drum, mallet keyboard instruments and timpani. (Offered Winter, Odd numbered years)			1 cr
<b>MUS 138 Choral Pedagogy</b>			<b>MUS 159 Chamber Music</b>
AH	2 cr		AH
Principles of voice production, sight reading and singing. Emphasis on the selection of choral literature particularly with regard to developing voice. Offered Fall Term, odd numbered years.			1 cr
<i>Prereq: 2 terms of MUS-151 and/or 157 and/or 158</i>			<b>MUS 159A Chamber Music Strings</b>
<b>MUS 140 Non-Western Music</b>			AH
☺ AH	4 cr		1 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.			<b>MUS 159E Chamber Music Flute</b>
<b>MUS 150 Accompanying</b>			AH
AH	1 cr		1 cr
<b>MUS 151 College Chorale</b>			<b>MUS 159F Chamber Music Strings</b>
AH	1 cr		AH
<b>MUS 152 Chamber Orchestra</b>			1 cr
AH	1 cr		<b>MUS 159G Chamber Music Clarinet</b>
<b>MUS 153 Kiltie Band</b>			AH
AH	1 cr		1 cr
<b>MUS 153G Winter Guard Ensemble</b>			<b>MUS 159I Chamber Music Saxophone</b>
AH	1 cr		AH
Winter Guard Ensemble will provide students with experience or interest in the color guard arts a learning and performance oriented			1 cr
			<b>MUS 159J Chamber Music High Brass</b>
			AH
			1 cr
			<b>MUS 159K Chamber Music Horn</b>
			AH
			1 cr
			<b>MUS 159L Chamber Music Trombone</b>
			AH
			1 cr
			<b>MUS 159M Musical THR Vocal Ensemble</b>
			AH
			1 cr
			<b>MUS 159N Chamber Music Low Brass</b>
			AH
			1 cr
			<b>MUS 159V Chamber Music Vocal</b>
			AH
			1 cr
			<b>MUS 180 Topics in Music</b>
			AH
			1-4 cr
			Selected topics in music. May be taken more than once if topics differ. Only two registrations count toward Music Major.

<b>MUS 191A Violin</b> AH Private lessons. Course fee. <i>Prereq: MUS-191A previously or permission</i>	1 cr	<b>MUS 193L Trombone</b> AH Private lessons. Course fee. <i>Prereq: MUS-193L previously or permission</i>	1 cr
<b>MUS 191B Viola</b> AH Private lessons. Course fee. <i>Prereq: MUS-191B previously or permission</i>	1 cr	<b>MUS 193M Euphonium</b> AH Private lessons. Course fee. <i>Prereq: MUS-193M previously or permission</i>	1 cr
<b>MUS 191C Violoncello</b> AH Private lessons. Course fee. <i>Prereq: MUS-191C previously or permission</i>	1 cr	<b>MUS 193N Tuba</b> AH Private lessons. Course fee. <i>Prereq: MUS-193N previously or permission</i>	1 cr
<b>MUS 191D Double Bass</b> AH Private lessons. Course fee. <i>Prereq: MUS-191D previously or permission</i>	1 cr	<b>MUS 194 Percussion</b> AH Private lessons. Course fee. <i>Prereq: MUS-194 previously or permission</i>	1 cr
<b>MUS 191E Jazz Guitar</b> AH Private lessons. Course fee. <i>Prereq: MUS-191E previously or Permission</i>	1 cr	<b>MUS 195 Voice</b> AH Private lessons. Course fee. <i>Prereq: MUS-195 previously or permission</i>	1 cr
<b>MUS 191K Electric Bass Guitar</b> AH Private lessons. Course fee. <i>Prereq: MUS-191K previously or Permission</i>	1 cr	<b>MUS 196 Piano</b> AH Private lessons. Course fee. <i>Prereq: MUS-196 previously or Permission</i>	1 cr
<b>MUS 191Y Classical Guitar</b> AH Private lessons. Course fee. <i>Prereq: MUS-191Y previously or Permission</i>	1 cr	<b>MUS 197A Organ</b> AH Private lessons. Course fee. <i>Prereq: MUS-197A previously or permission</i>	1 cr
<b>MUS 192E Flute</b> AH Private lessons. Course fee. <i>Prereq: MUS-192E previously or permission</i>	1 cr	<b>MUS 197B Harpsichord</b> AH Private lessons. Course fee. <i>Prereq: MUS-197B previously or permission</i>	1 cr
<b>MUS 192F Oboe</b> AH Private lessons. Course fee. <i>Prereq: MUS-192F previously or permission</i>	1 cr	<b>MUS 198 Composition</b> AH Applied composition provides individual lessons in both the craft and creative process of composing for acoustic instruments. Completed projects that develop original musical ideas for various instrumental and vocal ensembles will be required. Course fee. <i>Prereq: MUS-111 and permission</i>	1 cr
<b>MUS 192G Clarinet</b> AH Private lessons. Course fee. <i>Prereq: MUS-192G previously or permission</i>	1 cr	<b>MUS 211 Comprehensive Musicianship III</b> 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 <b>UL</b>
<b>MUS 192H Bassoon</b> AH Private lessons. Course fee. <i>Prereq: MUS-192H previously or permission</i>	1 cr	<b>MUS 212 Comprehensive Musicianship IV</b> 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 <b>UL</b>
<b>MUS 192I Saxophone</b> AH Private lessons. Course fee. <i>Prereq: MUS-192I previously or permission</i>	1 cr	<b>MUS 214 Intro to Music Technology</b> AH Designed primarily for the music major, the course examines MIDI (Musical Instrument Digital Interface) techniques and applications for recording, scoring and musical production. Covers MIDI configurations, sequencing, multi-track recording, mixing and composing/arranging techniques. Students will also be trained in use of Finale, an industry standard application for music notation. (Offered every year) <i>Prereq: Music Major or Permission</i>	2 cr <b>UL</b>
<b>MUS 192P Bagpipes</b> AH Private lessons. Course fee. <i>Prereq: MUS-192P previously or permission</i>	1 cr		
<b>MUS 193J Trumpet</b> AH Private lessons. Course fee. <i>Prereq: MUS-193J previously or permission</i>	1 cr		
<b>MUS 193K Horn</b> AH Private lessons. Course fee. <i>Prereq: MUS-193K previously or permission</i>	1 cr		

<b>MUS 215 Audio Recording Workshop</b>			<b>MUS 292E Flute</b>		
AH		2 cr UL	AH		2 cr
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. Cross-Listed with NMS-215. (Offered every year)			Private lessons. Course fee. <i>Prereq: MUS-192E previously or permission</i>		
<b>MUS 225 Orchestration and Arranging</b>			<b>MUS 292F Oboe</b>		
AH		2 cr	AH		2 cr
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>			Private lessons. Course fee. <i>Prereq: MUS-192F previously or permission</i>		
<b>MUS 237 Conducting and Score Reading</b>			<b>MUS 292G Clarinet</b>		
AH		2 cr UL	AH		2 cr
Art of conducting, rehearsal techniques and procedures, score reading, problems of interpretation, organization and activities of choral and instrumental groups. (Offered Fall, Even-numbered years) <i>Prereq: MUS-112</i>			Private lessons. Course fee. <i>Prereq: MUS-192G previously or permission</i>		
<b>MUS 250 Musical Theatre Techniques</b>			<b>MUS 292H Bassoon</b>		
AH		4 cr UL	AH		2 cr
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.			Private lessons. Course fee. <i>Prereq: MUS-192H previously or permission</i>		
<b>MUS 284 Music in Film</b>			<b>MUS 292I Saxophone</b>		
 AH		4 cr UL	AH		2 cr
This course examines the wide range of musical styles and aesthetic approaches used in narrative film. By analyzing examples from silent movies, Hollywood classics, foreign films, and recent releases, the class explores the functional and dramatic roles of music. No formal music theory experience is required. <i>Prereq: ENG-101</i>			Private lessons. Course fee. <i>Prereq: MUS-192I previously or permission</i>		
<b>MUS 291A Violin</b>			<b>MUS 292P Bagpipes</b>		
AH		2 cr	AH		2 cr
Private lessons. Course fee. <i>Prereq: MUS-191A previously or permission</i>			Private lessons. Course fee. <i>Prereq: MUS-192P previously or permission</i>		
<b>MUS 291B Viola</b>			<b>MUS 293J Trumpet</b>		
AH		2 cr	AH		2 cr
Private lessons. Course fee. <i>Prereq: MUS-191B previously or permission</i>			Private lessons. Course fee. <i>Prereq: MUS-193J previously or permission</i>		
<b>MUS 291C Violoncello</b>			<b>MUS 293K Horn</b>		
AH		2 cr	AH		2 cr
Private lessons. Course fee. <i>Prereq: MUS-191C previously or permission</i>			Private lessons. Course fee. <i>Prereq: MUS-193K previously or permission</i>		
<b>MUS 291D Double Bass</b>			<b>MUS 293L Trombone</b>		
AH		2 cr	AH		2 cr
Private lessons. Course fee. <i>Prereq: MUS-191D previously or permission</i>			Private lessons. Course fee. <i>Prereq: MUS-193L previously or permission</i>		
<b>MUS 291E Jazz Guitar</b>			<b>MUS 293M Euphonium</b>		
AH		2 cr	AH		2 cr
Private lessons. Course fee. <i>Prereq: MUS-191E previously or Permission</i>			Private lessons. Course fee. <i>Prereq: MUS-193M previously or permission</i>		
<b>MUS 291K Electric Bass Guitar</b>			<b>MUS 293N Tuba</b>		
AH		2 cr	AH		2 cr
Private lessons. Course fee. <i>Prereq: MUS-191K previously or Permission</i>			Private lessons. Course fee. <i>Prereq: MUS-193N previously or permission</i>		
<b>MUS 291Y Classical Guitar</b>			<b>MUS 294 Percussion</b>		
AH		2 cr	AH		2 cr
Private lessons. Course fee. <i>Prereq: MUS-191Y previously or Permission</i>			Private lessons. Course fee. <i>Prereq: MUS-194 previously or permission</i>		
			<b>MUS 295 Voice</b>		
			AH		2 cr
			Private lessons. Course fee. <i>Prereq: MUS-195 previously or permission</i>		
			<b>MUS 296 Piano</b>		
			AH		2 cr
			Private lessons. Course fee. <i>Prereq: MUS-196 previously or Permission</i>		
			<b>MUS 297A Organ</b>		
			AH		2 cr
			Private lessons. Course fee. <i>Prereq: MUS-197A previously or permission</i>		

**MUS 297B Harpsichord**  
AH 2 cr  
Private lessons. Course fee.  
*Prereq: MUS-197B previously or permission*

**MUS 298 Composition**  
AH 2 cr  
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.  
*Prereq: MUS-111 and permission*

**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 Winter Term, Odd numbered years.

**MUS 340M Gilmore Festival**  
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. Spring Term only.

**MUS 344 Elementary School Music**  
AH 4 cr UL  
MUS 344 Elementary School Music Examination of methods and materials in music. Required of Music Majors who wish to be certified to teach music at elementary and secondary levels. Open also to Education students with music background. (Offered Fall, Odd numbered years)  
*Prereq: Music Education Major; Permission*

**MUS 345 Career Skills for Musicians**  
AH 2 cr UL  
In today's ever-changing environment, new and creative approaches are necessary to shape a career in music. This course, a one-semester introduction to the basic principles of music entrepreneurship, is designed to help students acquire a range of practical skills necessary to succeed after graduation. Topics covered include: effectively marketing yourself, physical and mental health for musicians, copyright laws, website development, tips for interviews and auditions, and many other areas pertinent to developing a satisfying career in music. Offered Winter Term, even numbered years.

**MUS 350 Opera Workshop**  
AH 1 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 four 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.

**MUS 391A Violin**  
AH 2 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 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 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 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 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 Electric Bass Guitar**  
AH 2 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 Classical Guitar**  
AH 2 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 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 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 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 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-392H previously or permission*

**MUS 392I Saxophone**  
AH 2 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-392I previously or permission*

**MUS 392P Bagpipes**  
AH 2 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-392P previously or permission*

**MUS 393J Trumpet**  
AH 2 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-393J previously or permission*

**MUS 393K Horn**  
AH 2 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-393K previously or permission*

**MUS 393L Trombone**  
AH 2 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-393L previously or permission*

**MUS 393M Euphonium**  
AH 2 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-393M previously or permission*

**MUS 393N Tuba**  
AH 2 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-393N previously or permission*

**MUS 394 Percussion**  
AH 2 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-394 previously or permission*

**MUS 395 Voice**  
AH 2 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-395 previously or permission*


**MUS 396 Piano**  
AH 2 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-396 previously or Permission*


**MUS 397A Organ**  
AH 2 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-397A previously or permission*

**MUS 397B Harpsichord**  
AH 2 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-397B previously or permission*

**MUS 398 Advanced Composition**  
AH 2-4 cr UL  
Individual lessons are provided in both the craft and creative process of composing for acoustic instruments. This advanced course focuses on completing large-scale projects that develop original musical ideas for various instrumental and vocal ensembles. Course fee.  
*Prereq: MUS-111 and permission*

**MUS 431 General Methods of Music Education**  
AH 4 cr UL  
Principles of group process teaching and classroom management. Accompaniment skills in piano and recorder, rehearsal techniques, teaching basic instrumental and vocal skills in grades 5-12 and a pedagogical overview of the human voice and standard band and orchestral instruments including tone production, practical ranges and related functions in an ensemble. (Offered Fall, Even-numbered years)  
*Prereq: Permission*

**MUS 443 Music History I**  
 AH 4 cr UL  
Music from Antiquity through the Baroque, Classical, and Early Romantic periods.  
*Prereq: MUS-112*

**MUS 444 Music History II**  
 AH 4 cr UL  
Music of the 19th, 20th, and 21st centuries.  
*Prereq: MUS-112*

**MUS 491A Violin**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-391A previously or permission*

**MUS 491B Viola**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-391B previously or permission*

**MUS 491C Violoncello**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-391C previously or permission*

**MUS 491D Double Bass**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-391D previously or permission*

**MUS 491E Jazz Guitar**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-391E previously or Permission*

**MUS 491K Electric Bass Guitar**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-391K previously or Permission*

**MUS 491Y Classical Guitar**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-391Y previously or Permission*

**MUS 492E Flute**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-392E previously or permission*

**MUS 492F Oboe**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-392F previously or permission*

**MUS 492G Clarinet**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-392G previously or permission*

**MUS 492H Bassoon**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-392H previously or permission*

**MUS 492I Saxophone**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-392I previously or permission*

**MUS 492P Bagpipes**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-392P previously or permission*

**MUS 493J Trumpet**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-393J previously or permission*

**MUS 493K Horn**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-393K previously or permission*

**MUS 493L Trombone**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-393L previously or permission*

**MUS 493M Euphonium**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-393M previously or permission*

**MUS 493N Tuba**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-393N previously or permission*

**MUS 494 Percussion**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-394 previously or permission*

**MUS 495 Voice**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-395 previously or permission*

**MUS 496 Piano**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-396 previously or Permission*

**MUS 497A Organ**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-397A previously or permission*

**MUS 497B Harpsichord**  
AH 4 cr UL  
Private lessons. Intended for upper-level performance skill. Final registration subject to departmental approval. Course fee.  
*Prereq: MUS-397B previously or permission*

**MUS 498 Advanced Composition**  
AH 4 cr UL  
Individual lessons are provided in both the craft and creative process of composing for acoustic instruments. This advanced course focuses on completing large-scale projects that develop original musical ideas for various instrumental and vocal ensembles. Course fee.  
*Prereq: MUS-111 and Permission*

**MUS 499 Music Independent Study**  
HCA 1-4 cr UL  
Requires instructor permission.

**MUS 500 Senior Recital Or Thesis**  
AH 2 cr UL  
Satisfies the Department's comprehensive evaluation requirement. Requires instructor permission.  
*Prereq: Permission*

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## New Media Studies (NMS)

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### Major Requirements

Thirty-six credits which must include:

1. Core: NMS-101 and eight additional credits from CSC-118 or 120, NMS-120, 130, 140, and 160
2. Context: At least twelve credits from upper level NMS courses
3. Capstone: Complete an internship (NMS-385), taken for a total of 4 credits; Senior Seminar (NMS-449) and Senior Studio (NMS-450)

### Departmental Honors

Completion of all NMS major requirements, 3.5 GPA in the major, an AB or above in Senior Capstone sequence (NMS-449 and NMS-450), and presentation of an NMS project at Honors Day.

### Minor Requirements

Twenty-four credits which must include:

1. Core: NMS-101 and an additional eight credits from CSC-118 or 120, NMS-120, 130, 140, and 160
2. Context: At least eight credits of any upper level NMS courses
3. Capstone: Senior Studio (NMS-450)

### NMS 101 Introduction to Digital Media

4 cr

Introduction to technical, social, and cultural aspects of new media. Topics include media convergence, interactivity, social networking, and participatory culture. Includes lab work exploring basic principles of effective communication employing a variety of digital media for designing and delivering graphics, audio and video.

### NMS 114 Introduction to Web Development

4 cr

This course provides an introductory examination of the theory and practice of communication in a digital format, including text, hypertext, visual, audio and video. Stresses application of digital media principles to authoring for the Web. Surveys the technologies underlying the World Wide Web, including Web page construction and JavaScript programming. Laboratory.

### NMS 120 Two-Dimensional Design

4 cr

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

### NMS 125 Introduction to Film Theory

4 cr

In this course, we will study a wide variety of films; we will also study characteristics of the film/video medium and see how they are illustrated by the films studied in the course. Emphasis will be on the expressiveness of film techniques, fictional films, alternatives to the live-action fictional film, and how viewers understand films.

### NMS 130 Interactive Media

4 cr

In our society, interactivity has become a key component of media. We try to make our messages compelling and memorable, whether designing ad campaigns, websites, or Facebook profiles. Interactivity is widely debated, even within a single medium, and so the various approaches to it will make up the core inquiry for this course: what makes a piece of media interactive? How does meaning get communicated in interactive media? How can we design media using interactivity to deepen communication? Students will focus on social media, transmediation, and games, and will compose digital projects and deliver presentations, both individually and collaboratively.

### NMS 140 Camera Media

4 cr

This course addresses the importance of the camera in the twenty-first century and prepares students for advanced production and critical work with its media. Through readings, discussions,



and hands-on activities, students develop fluencies in three areas: camera histories, camera techniques, and camera rhetorics (the camera's persuasive power). Course fee.

### **NMS 160 Sound Design**

4 cr

This course presents an overview of digital audio and video applications and the workflows designed to produce and manipulate digital sound and moving images. This includes music and sound for video, animation, and using audio and video on the Web. Additional topics will include the basics of sound design, syncing of audio and motion video and the rudiments of audio and video production systems. Students will also be introduced to important media standards such as NTSC, HDV, MIDI, QuickTime, MPEG and various SD and HD formats. (Formerly MUS 201)

### **NMS 180 Topics in New Media Studies**

1-4 cr

Selected topics in new media innovations, issues and effects. May be taken more than once for credit. Course fee.

### **NMS 180M Topics in New Media Studies**

1-4 cr

Selected topics in new media innovations, issues and effects. May be taken more than once for credit. Course fee.

### **NMS 210 Motion Graphics and Animation**

4 cr

Introduction to 2D and 3D visual effects, animation and compositing. Critical study and theory of motion and animation principles; concepts of key framing, applying behaviors, tweening animations, symbols, generators and particle emission, chroma keying and rotoscoping.

### **NMS 215 Audio Recording Studio**

2 cr **UL**

Overview of the impact of computers and technology in the music professions. Topics include design of recording studio and lab environments, MIDI technology, fundamentals of audio technology, multimedia applications and using sound/music on the Web. Cross-listed with MUS-215. (Offered every year)

### **NMS 220 Intro to Media Programming & Computation NS3**

4 cr **UL**

Write programs to manipulate images, sounds and movies, developing knowledge and skills in problem solving, data representation, data manipulation, and programming principles including recursion and object-oriented design. Introduction to basic ideas in hardware, software and computing.

### **NMS 221 Intimacy and Technology**

4 cr **UL**

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

### **NMS 225 Applied Film Theory**

4 cr **UL**

Applied Film Theory will offer students a study in the theory of film and applied filmmaking. Course topics will include the inspirations, source materials, historical context, production process, and existing critical analyses of important films from the last century. This course combines analysis of film with hands-on digital media projects and is designed to complement other courses in the New Media Studies major.

*Prereq: NMS-125 or Permission*

### **NMS 230 Game Design I**

4 cr **UL**

Video game development is a burgeoning creative field that requires collaboration of experts with a variety of skill sets. Students in this course will take on the intense task of designing a video game from concept through storyboarding to prototyping and playtesting a paper model. Students will develop a game design

document outlining the game's mechanics and story and will create art assets for game. Each student will demonstrate proof of concept for their game in a presentation using the assets they developed. No coding experience is necessary for this course, and no coding will be required in the course.

### **NMS 230M Game Design I**

4 cr **UL**

Video game development is a burgeoning creative field that requires collaboration of experts with a variety of skill sets. Students in this course will take on the intense task of designing a video game from concept through storyboarding to prototyping and playtesting a paper model. Students will develop a game design document outlining the game's mechanics and story and will create art assets for game. Each student will demonstrate proof of concept for their game in a presentation using the assets they developed. No coding experience is necessary for this course, and no coding will be required in the course.

### **NMS 232 Digital Imaging**

4 cr **UL**

Exploration of aesthetic and technical relationships between still images, multiple prints and montage as they are presented in the form of the digital straight print, narratives, and/or series. Course fee.

*Prereq: NMS-120 or ART-121; ART 126 recommended*

### **NMS 233 Tabletop Role-Playing Games**

HCAT

4 cr **UL**

The past several decades have seen an explosion of innovative board games, card games, miniature games, and pen-and-paper games, many of which involve role-playing (which is when players act out personas other than their own). Using theory, exposure to numerous games, and actual play, students will explore the design, mechanics, and social elements of non-digital, tabletop role-playing games. Course fee.

### **NMS 233M Tabletop Role-Playing Games**

Ⓢ

4 cr **UL**

The past several decades have seen an explosion of innovative board games, card games, miniature games, and pen-and-paper games, many of which involve role-playing (which is when players act out personas other than their own). Using theory, exposure to numerous games, and actual play, students will explore the design, mechanics, and social elements of non-digital, tabletop role-playing games. Course fee.

### **NMS 240 Digital Film Production**

4 cr **UL**

Students are introduced to fundamentals of filmmaking and produce their own films. Elements covered include pre-production (financing, screenwriting and scheduling); production (cinematography, sound recording and directing); and post-production (editing, basic effects, marketing and distribution). Must be an NMS major or receive instructor permission to register for this course. Course fee.

*Prereq: NMS Major or Permission*

### **NMS 244 Video Editing**

4 cr **UL**

An intermediate course in film editing. Students analyze and practice techniques in narrative, documentary, commercial and experimental editing. All footage will be provided.

### **NMS 260 Visual Communication**

4 cr **UL**

Focus on understanding images in culture from a psychological, photojournalistic and communication perspective. Work from a range of disciplines, including anthropology, communication, media and cultural studies, sociology, psychology and design.

### **NMS 280 Topics in New Media Studies**

2-4 cr **UL**

Selected topics in new media innovations, issues and effects. May be taken more than once for credit. Students may need to buy materials for their projects at a cost up to \$100.

**NMS 299 NMS Independent Study**  
HCAT 1-4 cr **UL**  
Requires instructor permission.

**NMS 300 Media Theory and Culture** 4 cr **UL**  
Survey key benchmarks and texts in the history of media and new media technologies, while also introducing critical readings of 20th and 21st century media culture, both from the theoretical field of media studies and the creative works of artists, filmmakers and writers.

**NMS 310 Social Media** 4 cr **UL**  
Our networked, digital age has seen the rise of a new kind of social and political engagement based in websites, crowd sourcing campaigns, social media platforms, and community-based video games. This course will pick apart several of the most popular social media platforms giving voice to business and identity politics in the US. We will look at best practices for managing social media for business. We will also look at trends in digital cultures including security, privacy, cyber bullying, and harassment, talk about ways individuals and corporate entities express themselves, and examine social movements with a focus on audience and visual rhetoric.  
*Prereq: Sophomore standing*

**NMS 330 Game Design II** 4 cr **UL**  
Video game development is a burgeoning creative field that requires collaboration of experts with a variety of skill sets. Students in this course will build on their experiences in Game Design I to undertake a more thorough and developed game design. Students will develop a game design document and partial game walk-through outlining the game's mechanics and story and will create art assets for the game using Adobe Illustrator. The end-game of the course is for each student to demonstrate proof of concept for their game in a studio-style pitch/presentation using the assets they developed. No coding experience is required for the course, no coding will be required in the course.  
*Prereq: NMS-230*

**NMS 330M Game Design II** 4 cr **UL**  
Video game development is a burgeoning creative field that requires collaboration of experts with a variety of skill sets. Students in this course will build on their experiences in Game Design I to undertake a more thorough and developed game design. Students will develop a game design document and partial game walk-through outlining the game's mechanics and story and will create art assets for the game using Adobe Illustrator. The end-game of the course is for each student to demonstrate proof of concept for their game in a studio-style pitch/presentation using the assets they developed. No coding experience is required for the course, no coding will be required in the course.  
*Prereq: NMS-230*

**NMS 347 Postworlds** 4 cr **UL**  
An advanced course in visual effects and speculative design. VFX techniques are used to create possible and impossible worlds that critique modern culture. Students shoot original footage and make use of stock libraries.  
*Prereq: NMS-101, NMS-140, or permission*

**NMS 380 Topics in New Media Studies** 2-4 cr **UL**  
Selected topics in new media innovations, issues, and effects.  
*Prereq: NMS-101 or Permission*

**NMS 381 Advanced Documentary** 2 cr **UL**  
Combines theory, history and practice, exploring documentary video production through an overview of the history and major styles, field exercises, screening, discussion and critique. Participating in collaborative work with classmates, students are exposed to a range of storytelling, production, aesthetic, and artistic issues. Hands-on demonstrations, field exercises,

screenings, readings, lectures and discussion prepare students to produce short documentary videos.

**NMS 382 Advanced Mixing and Mastering** 2 cr **UL**  
In-depth, project-oriented class that explores the creative and technical issues involved in multitrack sound editing, mixing and mastering. Topics include mono, stereo and multichannel audio formats, understanding mixing consoles, signal flow and busses, sound analysis and metering plug-ins, controlling levels and gain, advanced EQ, compression and "brick wall" limiting, automation and time-based effects. Tools include popular DAW applications Logic Pro, Pro Tools and Reason.  
*Prereq: NMS-204*

**NMS 385 New Media Studies Internship** 1-8 cr **UL**

**NMS 399 NMS Independent Study** 1-4 cr **UL**  
HCAT  
Requires instructor permission.

**NMS 449 Senior Seminar** 4 cr **UL**  
The first part of a two-course, senior-year capstone sequence aligned with the NMS mission to marry theory and practice. This course emphasizes conceptual and critical skills through discussion, research, writing, oral presentation, and project planning. Students engage the theoretical context of their specializations in NMS and build deeper communication fluencies in them. A thesis lays the groundwork for an applied project in the subsequent NMS 450 studio.  
*Prereq: Senior standing, completion of NMS 101*

**NMS 450 Senior Studio** 4 cr **UL**  
This capstone studio serves as a bridge between work at Alma and a professional post-graduate career. Students will independently plan and execute a capstone project that applies their specialized skills in new media to a challenging problem. The goal is to develop projects with lasting impacts while deepening the students' own methods of design. Course also addresses how these skills might fit into post-graduate life through resume and portfolio workshops, as well as seminar discussions about new media's role in the world. At the end of the term, capstones are assessed by a panel of faculty and industry judges at a public exhibition, which the class organizes and hosts.  
*Prereq: Senior Standing*

**NMS 480 Topics in New Media Studies** 2-4 cr **UL**  
Selected topics in new media innovations, issues, and effects.  
*Prereq: NMS-101 or Permission*

**NMS 499 NMS Independent Study** 1-4 cr **UL**  
HCAT  
Requires instructor permission.

**NMS 500 Studies Senior Thesis** 2-4 cr **UL**  
Development and completion of original scholarly/creative work. May be applied, interpretive, critical, empirical or theoretical. Required for departmental honors. Requires senior standing and permission.  
*Prereq: Senior Standing and Permission*

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## Nursing (NUR)

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### Bachelor of Science in Nursing

1. Professional Sequence (36 cr): NUR-210, 211, 310, 311, 360; IPH-310 or 311, IPH-430; MTH-116; PSY-120, 331; HCA-131.
2. Nursing Content/Practice (26 cr): NUR-350, 351, 353, 355, 452, 454, 500

- Natural Science Core (32 cr): BIO-121 or IPH-131, BIO-308; CHM-115; IPH-301, 231\*, 232\*, 328\*, 340\* (*Student must earn a grade of C or higher in courses noted with an \*.*)
- Integrative Core (25 cr): SOC-101; PHL-229; POL-141; 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.**

### Additional Program Requirements and Considerations for Nursing

- All nursing students must maintain a cumulative minimum GPA of 2.5 and a minimum GPA of 3.0 in nursing (NUR) courses.
- All nursing students must earn a minimum grade of C in the following IPH courses: 227, 328, 340, and 344.
- All nursing students must earn a minimum grade of BC in every nursing (NUR) course to progress in the program.
- Any nursing student earning a C or below in a nursing course (NUR) must repeat the course to remain in the program and progress. The student may continue to take courses in the same tier while waiting to repeat the course.
- A student may repeat only one nursing course (NUR), and may repeat a nursing course only one time. If a student fails to achieve a grade of BC or above in a second NUR course, or a grade of BC or above in a repeated nursing course, the student will not be allowed to remain in the Alma College nursing program.

#### NUR 101 Integrative Seminar 1

1 cr

Provides the theoretical base to further prepare nurses to become competent to care for the health of people. Integrates knowledge, skills and attitudes learned from the concurrent semester courses with that of the nursing process to provide a foundation for the clinical decision-making process. Additionally an introduction to servant leadership with service to the community is introduced in this course.

#### NUR 102 Integrative Seminar 2

1 cr

Provides the theoretical base to further prepare nurses to become competent to care for the health of people. This course further develops the concepts discussed and learned in NUR 101. This course continues to integrate the knowledge, skills, and attitudes learned from the concurrent semester courses with that of the nursing process to provide a foundation for the clinical decision-making process. Servant leadership is further developed in this course. This course is taught in the hospital SIM lab  
*Prereq: NUR-101*

#### NUR 201 Integrative Seminar 3

1 cr

Provides the theoretical base to further prepare nurses to become competent to care for the health of people. This course further develops the concepts discussed and learned in NUR 101 and 102. This course continues to integrate the knowledge, skills, and attitudes learned from the concurrent semester courses with that of the nursing process to provide a foundation for the clinical decision-making process. The concept of servant leadership with is further developed in this course.  
*Prereq: NUR-102*

#### NUR 202 Integrative Seminar 4

1 cr

Provides the theoretical base to further prepare nurses to become competent to care for the health of people. This course further develops the concepts discussed and learned in NUR-101, NUR-102 and NUR-201. This course continues to integrate the knowledge, skills and attitudes learned from the concurrent semester courses with that of the nursing process to provide a foundation for the clinical decision-making process. Servant leadership is further developed in this course.  
*Prereq: NUR-201*

#### NUR 210 Clinical Skills, Medical Math and EMR

2 cr

Provides the theoretical base for nursing therapeutics (clinical skills, medical math and EMR) to provide safe-effective patient centered care. Patient centered caring practices are expanded to include issues of privacy, confidentiality, and responses to diversity. Quality and safety standards/competencies for nursing therapeutics are introduced and practiced within a laboratory setting. Students must also enroll in NUR-211. Course fee.  
*Prereq: IPH-227, 344, 328, and 340*

#### NUR 211 Physical Assessment

2 cr

Provides the theoretical base for a comprehensive health history and physical assessment utilizing the nursing process for a well adult patient. Incorporates spiritual, socio-cultural, psychological and physical dimensions of the patient for the health history and physical assessment. Patient centered caring practices are expanded to include issues of privacy, confidentiality, and responses to diversity. Quality and safety standards/competencies for the physical assessment are introduced and practiced within a laboratory setting. Student must also enroll in NUR 210. Course fee.  
*Prereq: IPH-227, 344, 328, and 340*

#### NUR 280 Population Health

2 cr

Course Description: This course will explore occurrences and distribution of health events across populations: local, national, and global. The student will examine health outcomes related to morbidity, mortality, quality of life and disparities through the reciprocal determinant factors of health, individual behavior, social and physical environment, culture, and genomics. Epidemiological principles will be identified and used to examine a current health issue. Lastly, students will consider the impact of health policies, and programs, related to current health issues.

#### NUR 301 Integrative Seminar 5

1 cr UL

Provides the theoretical base to further prepare nurses to become competent to care for the health of people. This course further develops the concepts discussed and learned in NUR 101, 102, 201 and 202. The servant leadership goal is allocated in this course.  
*Prereq: NUR-211*

#### NUR 302 Integrative Seminar 6

1 cr UL

Provides the theoretical base to further prepare nurses to become competent to care for the health of people. Additionally an introduction to servant leadership with service to the community is introduced in this course.  
*Prereq: NUR-301*

#### NUR 310 Fundamentals Nursing Practice

4 cr UL

Provides the theoretical base for scientific inquiry/nursing process (assessment, diagnosis, planning, interventions and evaluation) to provide patient-centered care. Quality and safety standards/competencies of nursing practice are employed for the fundamental care of a patient within the framework of health care delivery systems. Nursing Fundamental Practicum Students practice learned assessment, fundamental and nursing skills in community and hospital settings under the supervision of clinical instructors. Leadership and system thinking concepts are expanded and practiced in the clinical setting. Laboratory/practicum. Course fee.  
*Prereq: NUR-211*

#### NUR 311 Nursing Theory and Professional Practice

2 cr UL

Provides a theoretical base for the concepts of the meta-paradigm of nursing theory (patient/person, nurse, health, and environment), the core values of Alma College, the BSN essentials and the QSEN initiatives to guide the development of a professional nursing practice. Development of a philosophy of a professional nursing role is approached from a perspective of the Alma College tradition, social justice, reflective thinking and a values-centered

professional education.

Prereq: NUR-211

**NUR 350 Medical Surgical Nursing I W.Practicum** 4 cr UL

Provides the theoretical base to prepare professional nurses to administer safe-effective, evidenced based practice care for the medical-surgical adult patient. The interrelationship of the patient, health, nursing and the environment are explored and practiced within a medical-surgical setting. Quality and safety standards/competencies of nursing practice are employed for the adult medical-surgical population within the framework of health care delivery systems. Laboratory/practicum. Course fee.

**NUR 351 Mental Health Nursing With Practicum** 4 cr UL

Provides the theoretical base to prepare professional nurses to become competent to care for the mental health needs of the patient. The interrelationship of the patient, health, nursing and the environment are explored and practiced within the mental health setting. Quality and safety standards/competencies of nursing practice for the adult mental health population are explored and practiced within the framework of health care delivery systems. Laboratory/practicum. Course fee.

**NUR 353 Pediatric Nursing** 3 cr UL

Provides the theoretical base to prepare professional nurses to become competent to care for children and their families. The interrelationship of the patient, health, nursing and the environment are explored and practiced within the critical care setting. Quality and safety competencies of nursing practice for the pediatric population are explored and practiced within the framework of health care delivery systems. Laboratory/practicum. Course fee.

Prereq: NUR-211

**NUR 355 Maternal Health Nursing** 3 cr UL

Provides the theoretical base to prepare nursing students to become competent to care for childbearing women. The interrelationship of the patient, health, nursing and environment are explored within the maternal health setting. Quality and safety competencies of nursing practice for the maternal health population are explored within the framework of health care delivery systems. Laboratory/practicum. Course fee.

Prereq: NUR-211

**NUR 355M Maternal Health Nursing** 3 cr UL

Provides the theoretical base to prepare nursing students to become competent to care for childbearing women. The interrelationship of the patient, health, nursing and environment are explored within the maternal health setting. Quality and safety competencies of nursing practice for the maternal health population are explored within the framework of health care delivery systems. Laboratory/practicum. Course fee.

Prereq: NUR-211

**NUR 360M Community/Global Nursing Experience** 4 cr UL

Provides the theoretical base to prepare professional nurses to become competent to care for the needs of patients from a designated community. The interrelationship of the patient, health, nursing and the environment are explored and practiced within a designated community setting. This course explores the health outcomes of a group of individuals, including the distribution of such outcomes within the group. The outcomes of mortality, quality of life and disparities will be examined through the reciprocal determinant factors of health care, individual behavior, social environment, physical environment, and genomics. The student will examine how policies and programs impact outcomes and determinants within current urban and global health care settings. Laboratory/practicum.

**NUR 380 Nursing Seminar** 1-4 cr UL

Topics in Nursing decided by instructor

**NUR 401 Integrative Seminar 4** 1 cr UL

Provides the theoretical base to further prepare nurses to become competent to care for the health of people. This course further develops the concepts discussed and learned in NUR 302.

Prereq: NUR-201

**NUR 402 Capstone Seminar** 2 cr UL

Provides a theoretical base for implementing learned nursing interventions through theory into professional practice. Theories derived from multiple disciplinary perspectives (arts and sciences) and research methods are employed to assist populations at risk. Social justice, women's issues, abuse and violence, substance abuse, social and health policies, disparities, access problems, and integrity of basic units of society are explored with the Alma Core Values embedded in the process of the project.

**NUR 452 Medical Surgical Nursing II W Practicum** 4 cr UL

Provides the theoretical base to prepare professional nurses to become competent to care for critical care needs of the adult and geriatric population. The interrelationship of the patient, health, nursing and the environment are explored and practiced within the critical care setting. Quality and safety standards/competencies of nursing practice for the adult critical care population are explored and practiced within the framework of health care delivery systems. Laboratory/practicum. Course fee.

**NUR 454 Community Health Nursing W Practicum** 4 cr UL

Provides the theoretical base to prepare professional nurses to become competent to care for patients in the community. The interrelationship of the patient, health, nursing and the environment are explored within the community setting. Quality and safety standards/competencies of nursing practice are explored for care of the patient in the community within the framework of health care delivery systems. Laboratory/practicum. Course fee.

**NUR 480 Nursing Seminar** 1-4 cr UL

Topics in Nursing decided by instructor

**NUR 500 Clinical Immersion Practicum** 4 cr UL

Provides for the transition of the student nurse to a professional baccalaureate nurse within an interdisciplinary, population-based model of care. The practicum is an immersion experience in which the student has the opportunity to practice the role of an entry-level baccalaureate nurse under the guidance of faculty and the direct supervision of an experienced clinician. Seminars are held to examine issues facing entry-level practitioners, such as ethical challenges, role transition, team building, conflict management, delegation, population-based care and community outreach, along with cost and quality outcomes in health care. Course fee.

**NUR 500M Clinical Immersion Practicum** 4 cr UL

Provides for the transition of the student nurse to a professional baccalaureate nurse within an interdisciplinary, population-based model of care. The practicum is an immersion experience in which the student has the opportunity to practice the role of an entry-level baccalaureate nurse under the guidance of faculty and the direct supervision of an experienced clinician. Seminars are held to examine issues facing entry-level practitioners, such as ethical challenges, role transition, team building, conflict management, delegation, population-based care and community outreach, along with cost and quality outcomes in health care. Course fee.

Laboratory.  
Prereq: Permission

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## Philosophy (PHL)

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### Major Requirements

Thirty-six credits which must include:


1. Core (20 credits): PHL-102, 103, 111 or 112, 126 and 500
2. PHL Electives (16 credits), which must include:
  - At least 4 credits from the following: PHL-202, 215, 216, 217, 224, 240/340, 303, 305, or 347.
  - At least 8 upper-level credits including PHL-232, 234, 236, and all 300-level philosophy courses.
3. Successful completion of the 4-credit thesis (PHL-500) and oral examination administered by the department.

### Minor Requirements

Twenty-four credits which must include: PHL-102, 103, 111 or 112, and 126 and an additional 4-credits of PHL elective credits 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 Western Philosophy II

 AH 4 cr  
Survey of major ideas which have helped shape the Western tradition and the thinking of contemporary persons. The timeframe includes the Renaissance to 20th century.

#### PHL 126 Introduction to Values

AH 4 cr  
Exploration of moral values, nature of moral judgments, and bases for moral decisions. Practice in decision making. Study of such controversial contemporary issues as capital punishment, abortion, privacy, death with dignity, racism and sexism. Focus on person as individual and member of society.

#### PHL 131 Introduction to Political Theory

AH 4 cr  
Introduction to normative political theory, both historical and contemporary. Includes analysis of central concepts of politics such as power, freedom, justice, democracy and equality. Explore key modern ideologies, such as liberalism, conservatism, socialism, fascism and political Islam. (Cross-listed as POL-131)


#### PHL 180 Topics in Philosophy

AH 2-6 cr  
Selected topics in philosophy. Subject, credits and applicability to distributive requirements and to Major or Minor to be announced in advance.


#### PHL 202 Feminist Philosophy

AH 4 cr  
Examination of recent feminist studies in philosophy and religion. Focus on method, style, approach and arguments of the feminist critique.


#### PHL 215 Philosophy of Religion

 AH 4 cr  
Examination of classical and contemporary issues in the philosophy of religion such as arguments for and against the existence of God, religious language, the relation between faith and reason, the evidential value of religious claims, and the relationship between morality and religion. (Cross-listed as REL-215.)

#### PHL 216 Themes in Existentialist Literature

 AH 4 cr  
Examination, evaluation and discussion of selected subjects - the individual, freedom, responsibility, anxiety, hope, death, meaning of life - as treated in various essays, short stories and dramas. Focus on analysis and interpretation of texts. (Cross-listed as REL-216.)

#### PHL 217 Asian Philosophy and Religion

 AH 4 cr  
Exploration of the history, thought and contemporary roles of the major religious and philosophical traditions of Asia, including Hinduism, Buddhism, Confucianism and Taoism. (Cross-listed as REL-217.)

#### PHL 224 Aesthetics

AH 4 cr  
Exploration of values pertaining to the arts. Study of principal aesthetic views, major issues in the philosophy of art, application to various art works and nature of aesthetic judgments, creative activity and aesthetic qualities of experience.

#### PHL 225 Environmental Ethics

AH 4 cr  
Examination of conceptual and moral issues about nature and humans' relationship to it. Focus is on both theoretical frameworks about humans' responsibility for the environment and on contemporary environmental controversies, such as global warming, population issues, pollution, global justice and sustainability.

#### PHL 227 Ethics and Business

AH 4 cr  
Exploration of the nature of moral values, moral judgments and ethical decisions. Analysis of selected issues in modern business. Test cases used for practice in decision making. Especially pertinent for those planning business careers but designed for all interested students.


#### PHL 228 Ethics and Law

AH 4 cr  
Exploration of conceptual and ethical issues in the making and administration of law. Introduction to ethical theory. Study of such topics as criminals' rights, justification of punishment, death penalty, nature of legal responsibility, extent of justifiable government interference with freedom and relation between law and morality. Especially pertinent for Pre-Law students, but designed for all interested students.


#### PHL 229 Ethics and Medicine

AH 4 cr  
Exploration of nature of moral values, moral judgments and ethical decisions. Analysis of selected issues in medicine and other health fields. Test cases used for practice in decision-making. Especially pertinent for those planning careers in health professions, but designed for all interested students.


#### PHL 230 Religion and Science

 AH 4 cr  
Examination of the relationship between religion and science through both historical and contemporary issues. (Cross-listed as REL-230.)

#### PHL 232 Ancient Political Thought

 AH 4 cr  
Exploration of key ideas in ancient and medieval political thought. The works of Socrates, Plato, Aristotle, the Stoics, Epicurus, Augustine and Aquinas are considered. Key questions addressed include: Is democracy superior to rule by the enlightened few? Are humans by nature political creatures? What is the proper relation between the individual and the state? Is the state a natural entity? (Cross-listed as POL-232.)

#### PHL 234 Modern Political Thought

 AH 4 cr  
Analysis of selected original works of Machiavelli, Hobbes, Locke, Rousseau, the American founders, Bentham, Mill, Marx and Nietzsche. Emphasis on relevance to contemporary political

thought and issues. (Cross-listed as POL-234.)

**PHL 235 Ethics and Education**

AH 4 cr UL  
Examination of ethical issues and education. Emphasis on the ethics of education, such as the very idea of compulsory education; and ethics in education, such as the tension between moral education and indoctrination, and issues pertaining to multiculturalism, gender and disability. Of special interest to students planning to become elementary or secondary teachers, but accessible to all interested students.

**PHL 236 Contemporary Political Thought**

AH 4 cr UL  
This course explores contemporary debates in political theory regarding justice, democracy, freedom, equality, and rights. Do contemporary democracies distribute resources and opportunities fairly? Do they treat all citizens equally? Are they sufficiently democratic? Is capitalism a just economic system? Does it support or undermine democracy, freedom, and equality?  
*Prereq: POL-131*

**PHL 240 Philosophy of Love and Sex**

AH 4 cr UL  
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 UL  
Examination of conceptual and moral issues that arise in sport. Conceptual issues include the relationship between play, games and sport, and the nature of competition. Moral issues include the role of sport in education, sportspersonship, performance-enhancing drugs, violence in sport, hunting and gender equity in sport.

**PHL 280 Topics in Philosophy**

AH 2-4 cr UL  
Selected topics in philosophy in such areas as historical studies, epistemology, metaphysics and values. May be taken more than once if different topic.

**PHL 280M Topics in Philosophy**

AH 2-4 cr UL  
Selected topics in philosophy in such areas as historical studies, epistemology, metaphysics and values. May be taken more than once if different topic.

**PHL 299 Philosophy Independent Study**

HCA 4 cr UL  
Planned program of individual study of a particular subject in philosophy, developed with the supervising professor.  
*Prereq: Permission*

**PHL 303 Symbolic Logic**

AH NS3 4 cr UL  
In-depth examination of symbolic logic, extending the propositional logic developed in PHL 103 to include predicate logic and logic of identity. Study of translation into notation, test validity by such methods as deduction, truth tables and truth trees. Examination of logical concepts: logical truth, consistency, equivalence, interpretations and the properties of relations.

**PHL 305 Philosophy of Science**

AH 4 cr UL  
Analysis of the nature of science. What justifies the view that science is the most objective source of human knowledge? What makes a scientific theory true? Examination of rival accounts of science and their relation to actual practice of scientists. Especially pertinent to science majors, but designed for all interested students. Extensive background not required.

**PHL 326 Virtue Ethics**

AH 4 cr UL  
In-depth examination of "virtue ethics." Is virtue based on reason alone, or does it also involve feeling and sentiment? What kind of character traits should I try to cultivate? What kind of person should I try to become? Consideration of such virtues and vices as honesty, friendship, loyalty, selfishness, gossip and greed, ending on the ultimate ethical question: What makes my life worthwhile or meaningful?  
*Prereq: One philosophy course or Permission*

**PHL 340 Philosophy of Love and Sex**

AH 4 cr UL  
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 347 Philosophy of Mind**

AH 4 cr UL  
Exploration of rival views on relation between mind and body, beginning with dualism, the view which is most hospitable to belief in life after death. Emphasis on various materialist theories which explain human actions without any reference to non-physical entities. Exploration of implications of theories of mind for issues such as immortality and human freedom.  
*Prereq: Any philosophy course or COG-120 or Permission*

**PHL 380 Seminar**

AH 2-4 cr UL  
Selected topics in philosophy which arise in various fields. Generally interdisciplinary, team-taught. Reading, discussion, papers and critiques. Subjects and credits to be announced.  
*Prereq: Permission*

**PHL 399 Philosophy Independent Study**

HCA 1-4 cr UL  
Planned program of individual study of a particular subject in philosophy, developed with the supervising professor. Major can include more than one enrollment in independent study.  
*Prereq: Permission*

**PHL 499 Philosophy Independent Study**

HCA 4 cr UL  
Planned program of individual study of a particular subject in philosophy, developed with the supervising professor.  
*Prereq: Permission*

**PHL 500 Senior Thesis**

AH 1-4 cr UL  
Individual research culminating in preparation of a major paper and departmental oral examination.  
*Prereq: Permission*

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## Physical Science (PSC)

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**PSC 101 General Physical Science**

NS2 4 cr UL  
An introduction to the basic concepts in physical science in the areas of physics, chemistry, earth science and astronomy. Meets standards for elementary certification. Laboratory.

**PSC 180 Basic Physical Science**

4 cr UL  
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.

## Physics (PHY)

### Major or Teaching Major Requirements

Thirty-six credits which must include:

1. PHY-121, 122, 212, 221, 312, 321, 323, 421; and either 333, 380, 399, 480, 499, 500 or AST-225;

2. Required Cognates (16 cr): MTH-121, 122, 210, 211.

CSC-120 and MTH-310 are highly recommended for the major.

### Minor or Teaching Minor Requirements

Twenty-four credits which must include:

1. PHY-121, 122, 212, and 221;
2. Eight credits from Physics and Astronomy courses numbered 200 or above;
3. Required Cognates (8 cr): MTH-121 and MTH-122

Note: Most upper level PHY courses also require MTH-210.

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

### PHY 112 Physics of the Human Body I

NS2 4 cr

First half of an introductory course on general physics with examples drawn from applications to the human body. Uses algebra and trigonometry, but not calculus. Physical principles are used to explain body functions such as muscles and human motion, with topics including mechanics, rotation, and conservation laws. Laboratory. Course fee.

Prereq: MTH-112, 113, or 121 or Permission

### PHY 113 Physics of the Human Body II

NS2 4 cr

Second half of the introductory class started in PHY112. Uses algebra and trigonometry, but not calculus. General physical principles are introduced and used to explain body functions including: hearing and acoustics, vision and optics, and electric forces and signaling. Laboratory. Course fee.

Prereq: PHY-112

### PHY 121 Introduction to Physics I

NS2 4 cr

Calculus-based treatment of one and two-dimensional mechanics, vectors, force, work, energy, momentum, torque, and static equilibrium. Offered every Fall. Laboratory. Course fee.

Prereq: MTH-113 or MTH-121 previously or concurrently

### PHY 122 Introduction to Physics II

NS2 4 cr

Continuation of PHY 121. Topics include oscillations and waves, sound, electricity and magnetism, optics, and basic thermodynamics. Offered every Winter. Laboratory. Course fee.

Prereq: PHY-121

### PHY 140 Machine Shop

NS2 2 cr

Introduction to machine shop tools and techniques. Offered every winter. Course fee.

### PHY 212 Mechanical Systems

NS2 4 cr UL

Rotational kinematics, dynamics, and advanced static equilibrium; fluids and introduction to thermal physics. Offered Winter, Even-numbered years)

Prereq: PHY-121 and MTH-121

### PHY 221 Modern 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-121

### 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.

Prereq: PHY-221

### PHY 299 Physics Independent Study

HCAT 1-8 cr UL

Planned program of study. Topic selected by instructor and student.

Prereq: 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. (Offered Fall, Even-numbered years)

Prereq: PHY-122 and MTH-211

### 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. (Offered Fall, Odd numbered years)

Prereq: PHY-122, MTH-210

### 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-Boltzman statistics; thermal equilibrium; and fluctuations and irreversibility. (Offered Winter, Odd numbered years)

Prereq: PHY-122, PHY-221 and MTH-210

### 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 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.

Prereq: May require Permission

### PHY 399 Physics Independent Study

HCAT 1-4 cr UL

Planned program of study. Topic selected by instructor and student.

Prereq: 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. (Offered Winter, Even-numbered years)

Prereq: PHY-221, MTH-210; MTH-310 is recommended

### PHY 480 Topics in Physics

NS2 4 cr UL

Study of topic of current or historical importance chosen by instructor. Prerequisites vary with selections.

Prereq: May require Permission

**PHY 499 Physics Independent Study**  
HCAT 1-4 cr UL  
Planned program of study. Topic selected by instructor and student.  
*Prereq: 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. Course fee.  
*Prereq: Permission*

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## Political Science (POL)

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### Major Requirements

Thirty-six credits which must include:

1. POL-401
2. At least twenty additional upper level credits. (*No more than eight credits from POL 226/227 and 328/329 may count toward the major.*)
3. Successful completion of the departmental comprehensive examination. The exam will require that students demonstrate competency in three of the following four subfields of political science: American politics and public policy (APP), Comparative politics (CMP), International Relations (INR) and Political Theory (THE). Students can determine the subfield to which a course belongs by noting the explanatory caption that appears in parentheses at the end of the course description.
4. For topics courses designated POL-180, 280, and 380, consult with the instructor or political science chair to determine which subfield the course falls under.
5. Departmental honors requires the completion of a senior thesis, successful defense before the department, and public presentation of the thesis

### Minor Requirements

Twenty-four credits which must include:

At least sixteen upper level credits in POL (*No more than eight credits from POL 226/227 and 328/329 may count toward the major.*)

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

Course Subfield Designation Summary:

American Politics/Public Policy (APP):

POL-101, 141, 233, 241, 243, 245, 305, 341 and 345

Comparative Politics (CMP):

POL-111, 214, 217 and 317

International Relations (INR):

POL-121, 127, 221, 225, 226, 227, 325, 326, 327, 328 and 329

Political Theory (THE):

POL-131, 231, 232, 234 and 235

**POL 101 The American Political System**  
SO 4 cr  
Study of institutions and processes of politics and government. Contemporary political problems. Primary focus on federal government with some attention to state and local politics. (APP)

**POL 111 Forming More Perfect Unions**  
SO 4 cr  
To "Form a more perfect Union," political leaders build institutions by creating constitutions. These institutions are attempts to solve immediate problems but also give rise to new problems, and no one set of institutions is appropriate for all contexts or moments in time. In this course students will participate in simulations of the Constitutional Convention of 1787, the Mexican Revolution, and the building of post-apartheid South Africa. By examining three "constitutional moments" in depth, students will better understand the dynamics, aspirations, and limitations of constitutions, preparing them to explore the political system of any country, past or present.

**POL 121 World Conflicts and Problems**  
SO 4 cr  
Examines a selection of world conflicts in terms of their causes and prospects for war, control or settlement. Explores world-wide problems, needs and efforts among states to deal cooperatively. (INR)

**POL 127M Presidential Library Research**  
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. Spring Term only. (INR)

**POL 131 Modern Ideals and Ideologies**  
SO 4 cr  
This course examines the most influential ideologies of the modern era including liberalism, conservatism, socialism, communism, fascism, and liberation ideologies. (Cross-listed as PHL-131) (THE)

**POL 141 Intro to Public Mgt and Policy Analysis**  
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. (APP)

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










**POL 214 Latin American Politics**  
SO 4 cr UL  
Latin America has been a focus of political scientists for decades, as these 19 diverse countries share many features and yet also represent a wide array of political experiences and trajectories, including: communist revolutions; bloody civil wars; military dictatorships known for massive human rights violations; presidential autogolpes; and, yes, even stable democracy. In this course, students will explore the dynamics that shape Latin America through simulations of the Mexican Revolution and post-dictatorship Argentina and research projects highlighting particular aspects of politics in the region. (CMP)

**POL 217 Democracy's Slow Death**  
SO 4 cr UL  
By any number of measures, democracy is slowly retreating around the world as authoritarianism increasingly succeeds in limiting the power and impact of voters. While historically these efforts were dramatic and abrupt, whether violent insurrections, sudden autogolpes, or military coup d'etats, in recent years has become much more likely for democracies to be slowly hollowed out from within by democratically-elected leaders. This course explores the decline of democracy around the world. Students will develop a dataset of political institutions to test a range of theories attempting to explain this decline. Some background in statistics is recommended but not required. (CMP)

**POL 221 Analysis of International Politics**  
SO 4 cr UL  
Study roles of the state, international and non-state actors in international politics; theories of conflict, conflict control and resolution; and prospects for world community. (INR)

**POL 225 International Law and Organizations**  
SO 4 cr UL  
Analyzes historical evolution of international law, its purposes, principles and relationship to the international arena. Study of international organizations and their impact on international legal order. (INR)



- POL 226 Model United Nations "A"**  
 SO 2 cr **UL**  
 Preparation to represent an assigned country at a Model UN competition through examination of current international issues and UN organizational structures and processes. Course fee. (INR)
- POL 227 Model United Nations "B"**  
 SO 2 cr **UL**  
 Preparation to represent an assigned country at a Model UN competition through examination of current international issues and UN organizational structures and processes. (INR)
- POL 231 American Political Thought**  
 SO 4 cr **UL**  
 Explores American political thought from the founding to the present. Key themes considered include majority rule and minority rights, participatory versus elite theories of democracy, the tensions between democracy, freedom and equality, and civil disobedience. (THE)
- POL 232 Ancient Political Thought**  
 SO 4 cr **UL**  
 Exploration of key ideas in ancient and medieval political thought. The works of Socrates, Plato, Aristotle, the Stoics, Epicurus, Augustine and Aquinas are considered. Key questions addressed include: Is democracy superior to rule by the enlightened few? Are humans by nature political creatures? What is the proper relation between the individual and the state? Is the state a natural entity? (Cross-listed as PHL-232.) (THE)
- POL 233 Current Controversies U.S. Politics**  
 SO 4 cr **UL**  
 Examine the ethical and empirical dimensions of some current political controversies in the U.S., such as the death penalty, gay marriage, torture, terrorism, affirmative action and euthanasia. Introduction to relevant concepts in ethical theory, law, political philosophy and empirical inquiry in order to provide the framework to think knowledgeably and critically about these issues. (APP)
- POL 234 Modern Political Thought**  
 SO 4 cr **UL**  
 Analysis of selected original works of Machiavelli, Hobbes, Locke, Rousseau, the American founders, Bentham, Mill, Marx and Nietzsche. Emphasis on relevance to contemporary political thought and issues. (Cross-listed s PHL-234.) (THE)
- POL 236 Contemporary Political Thought**  
 SO 4 cr **UL**  
 This course explores contemporary debates in political theory regarding justice, democracy, freedom, equality, and rights. Do contemporary democracies distribute resources and opportunities fairly? Do they treat all citizens equally? Are they sufficiently democratic? Is capitalism a just economic system? Does it support or undermine democracy, freedom and equality? (THE)  
*Prereq: POL-131*
- POL 241 U.S. Presidential Elections**  
 SO 4 cr **UL**  
 Studies the links of elections and the media, campaign fundraising, electoral strategies, the role of the media in shaping campaigns, and the impact on public policy; offered especially in national election years, where the election can serve as a laboratory to test theories. (APP)
- POL 242 Comparative Environmental Health Policy**  
 SO 4 cr **UL**  
 Comparative analysis of the environmental-health policy process. Emphasis on applied research related to current government or non-governmental organization projects or concerns.
- POL 243 Public Opinion and Voting**  
 SO 4 cr **UL**  
 The course explores how Americans form their political beliefs and values, and how those beliefs and values influence their voting behavior. The impact of ideology, economic class, ethnicity, religion, and education are considered. (APP)
- POL 245 The Political Experience**  
 SO 4 cr **UL**  
 Explores nature of elective and administrative politics in state and local governments. Integrates cognitive and experiential learning. Includes field trips and interviews with state/local leaders in government, interest groups and media. (APP)
- POL 280 Topics in Political Science**  
 SO 2-4 cr **UL**  
 Variable topics in political analysis.
- POL 305 Constitutional Law**  
 SO 4 cr **UL**  
 Case law study of the Supreme Court's interpretations of U.S. Constitution in the areas of the governmental structures and processes and civil rights and liberties. Different approaches to interpreting the Constitution are also considered. (APP)
- POL 310 Political Science Statistics**  
 SO NS3 4 cr **UL**  
 Statistics is the dominant methodological approach in social science, including political science. In this course, students will learn the mathematical underpinnings and software for multivariate regression analysis, the dominant methodology in the field (among others). Political Science Statistics will use some of the most prominent databases in the field as the foundation for instruction and teach students basic and advanced Microsoft Excel techniques as well.  
*Prereq: One POL course or transfer equivalent*
- POL 317 Politics of Fear and Hate**  
 SO 4 cr **UL**  
 Populist parties, particularly on the political right, have been increasingly successful in recent elections, particularly in Europe and the Americas. Scholars increasingly seek to explain the appeal of these anti-elite, often xenophobic, parties in recent years in so many different countries. In this course, students will build a dataset and, using linear regression analysis in Microsoft Excel, test a range of hypotheses to better understand this increasingly common political phenomenon. (CMP)  
*Prereq: POL 310; any one POL and one statistics course (MTH 118, 242; DAT 115; PSY 220); or permission*
- POL 325 U.S. Foreign Policy**  
 SO 4 cr **UL**  
 Study of goals of American foreign policy and U.S. role in changing world; structure, processes and politics of foreign policy-making; and U.S. foreign policy since end of WWII. Analysis of selected current U.S. foreign policy concerns. (INR)
- POL 326 U.S. National Security Policy**  
 SO 4 cr **UL**  
 Analyzes emergence and evolution of post- WWII national security state. Assesses impact of changing international environment on conceptions of "national security." (INR)
- POL 327M Presidential Library Research**  
 SO 4 cr **UL**  
 Research visit to a presidential library. Lower level focuses on primary source investigations on topics of student interest. Upper level is preparation for a substantial research paper potentially leading to a senior thesis and/or published article. Spring Term only. (INR)
- POL 328 Advanced Model UN "A"**  
 SO 2 cr **UL**  
 Examine in detail the functioning of the central bodies of the UN community, including the General Assembly, Security Council, ECOSOC and specialized agencies. Also address the role of nongovernmental organizations, regional and subregional organizations and individual states. Only four credits may count toward the major. (INR)  
*Prereq: POL-226 and 227*
- POL 329 Advanced Model UN "B"**  
 SO 2 cr **UL**  
 Examine in detail the functioning of the central bodies of the UN community, including the General Assembly, Security Council,

ECOSOC and specialized agencies. Also address the role of nongovernmental organizations, regional and subregional organizations and individual states. Only four credits may count toward the major. Course fee. (INR)

Prereq: POL-226 and 227

**POL 341 Public Policy Analysis**  
SO 4 cr UL  
Study of policy process, particularly policy evaluation. Focuses on such policies as educational, environmental, economic and social welfare. Emphasis on learning evaluation methodologies through application to current public policy issues. (APP)

**POL 345 Public Administration History and Theory**  
SO 4 cr UL  
Study of the development of modern public bureaucracies and the relationship of bureaucracy and other governmental institutions, particularly through analysis of original works on public administration from Woodrow Wilson and Max Weber to more recent commentaries. (APP)

**POL 380 Topics and Problems in Political Science**  
SO 4 cr UL  
Courses on special political subjects in both the foreign/international and American realms.

**POL 381 Washington Semester**  
SO 4 cr UL  
Credit awarded for student participation in seminars and coursework. (American University)

**POL 382 Washington Semester**  
SO 4 cr UL  
Credit awarded for student participation in seminars and coursework. (American University)

**POL 385 Political Science Practicum**  
1-4 cr UL  
Placements in government, political institutions and related agencies may be made available by the Department or may be arranged by students in consultation with the Department.

**POL 401 Senior Seminar**  
SO 4 cr UL  
Comprehensive capstone study of politics within the context of a distinct theme in political science.

**POL 499 POL Independent Study: Readings**  
HCAT 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.

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## Psychology (PSY)

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### Major Requirements

Thirty-six credits which must include:

1. PSY-120 or 121; 201 or 203 or 204; 212 or 276 or 336; 220; 225; 305 or 308 or 310; 314; 331; 421.
2. Two elective credits in PSY.
3. To earn Departmental Honors in Psychology, students are required to have a 3.5 or higher GPA in their psychology classes, an empirical thesis, and a successful thesis defense.
4. Students working toward post-graduate study should work with a psychology department member to do independent research, practical experiences, internships, and an empirical thesis.

### Minor Requirements

Twenty-four credits from Psychology courses.

**Four credits from PSY, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Natural Sciences - Life Sciences. Neuroscience Major Requirements (NSC)**

Fifty-six credits which must include:

1. Core Content: PSY-120 or PSY-121, 201, 220, and 356; BIO-121; CHM-115; PSY-203 or ENV-319 or IPH-340; BIO-207 or IPH-225; two credits of research (PSY-399, 499, or 500, or any upper-level independent research); four additional credits from Psychology.
2. At least 18 credits (twelve consisting of upper-level courses) from the following: BIO-204, 301, 320, 360, 361, BCM-321, CHM-223, 224, CSC-120, ECN-314, IPH-338, MTH-121, PHL-229, PHY-112 or 121, or other courses approved by the program director.
3. Potential majors are strongly recommended to consult with the program director to develop a more specialized program of courses. Additional courses may be required for certain graduate schools and different courses are recommended dependent on interests in specific subfields of neuroscience (i.e. computational, behavioral, cognitive, developmental, social, and molecular).
4. Neuroscience is considered an interdisciplinary major, which requires 56 upper-level credits to graduate in accordance with the guidelines in the academic catalog.

**PSY 120 Foundations of Psychology**  
NS1 4 cr  
Learn why people think, feel, and act as they do. Explore the mind, brain, and body connection. Only one of PSY-120 or PSY-121 is permitted to count toward a Psychology major and total credits earned to graduate.

**PSY 121 Introduction to Psychology**  
NS1 4 cr  
Survey of major areas of psychology: learning, perception and cognition, human development, individual differences, social psychology and abnormal psychology. Laboratory. Course fee. Only one of PSY-120 or PSY-121 is permitted to count toward a Psychology major and total credits earned to graduate.

**PSY 121M Introduction to Psychology**  
NS1 4 cr  
Survey of major areas of psychology: learning, perception and cognition, human development, individual differences, social psychology and abnormal psychology. Laboratory. Course fee.

**PSY 201 Physiological Psychology**  
NS1 4 cr UL  
Study of physiological processes and structures underlying behavior and development. Laboratory techniques for investigation of electrical and chemical brain activity. Laboratory. Course fee.  
Prereq: PSY-120 or 121

**PSY 203 Psychopharmacology**  
NS1 4 cr UL  
Examination of the behavioral and biological effects of psychoactive substances with an emphasis on how drugs affect the brain. This course will explore legal and illegal substances as well as pharmaceuticals used in the treatment of mental disorders.  
Prereq: PSY-120 or 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-120 or 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-120, 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-120 or 121; PSY-220*

**PSY 234 Psychological Problems of Childhood**
 NS1 SL 2 cr **UL**

The nature, consequences, causes, treatment, and prevention of problems psychologically affecting children and adolescents (such as child abuse, delinquency, depression, drug abuse, hyperactivity, and poverty). Service learning component.

*Prereq: PSY-120 or 121*

**PSY 244 Positive Psychology**
 NS1 2 cr **UL**

Positive Psychology is the scientific study of happiness, strengths, and optimal functioning. The field also involves applications to counseling, education, business, and other areas.

*Prereq: PSY-120 or 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-120 or 121*

**PSY 260 Psychology of Aging**
 NS1 SL 2 cr **UL**

Examination of current psychological theory and research concerning physical changes, cognition, personality and psychopathology in the later years of life. Service learning component included in course.

*Prereq: PSY-120 or 121*

**PSY 275 Psychological Testing and Measurement**
 NS1 2 cr **UL**

Consideration of principles involved in construction, use and evaluation of tests of ability and personality. Application to such issues as personnel selection, sex differences and therapeutic practice. Emphasis on actual clinical data, ethical and value issues in test construction and use.

*Prereq: PSY-120 or 121*

**PSY 276 Industrial Organization**

NS1 4 cr

Students will examine human behavior in the workplace from a scientist-practitioner view and learn how applied psychology research can improve hiring, management, and development decisions in business.

**PSY 279M Origins of Psychology**
 NS1 4 cr **UL**


The course will examine the historical, cultural, and societal events that have resulted in the development of modern psychology. Among the topics examined will be: the technological innovations that led to the founding of the first psychology lab in Leipzig in 1879; the zeitgeist of 1900 Vienna that led to the development of the psychoanalytic tradition; the rise of the Nazis and the holocaust leading to many developments in social psychology. Spring Term only. Course fee.

*Prereq: PSY-120 or 121 and permission*

**PSY 280 Topics in Psychology**
 NS1 2-4 cr **UL**

Exploration of areas of mutual interest to instructor and students. Topics include depression, stress and coping, clinical interviewing and counseling, psychological problems of childhood, and neurological disorders. May be taken more than once for credit. May have other prerequisites in addition to PSY-121.

*Prereq: PSY-120 or 121*

**PSY 305 Learning**
 NS1 4 cr **UL**

In-depth study of methods of learning among human and non-human species.

*Prereq: PSY 120 or PSY 121*

**PSY 305M Learning**
 NS1 4 cr **UL**

In-depth study of methods of learning among human and non-human species.

*Prereq: PSY 120 or PSY 121*

**PSY 308 Science of Emotion**
 NS1 4 cr **UL**

This course integrates perspectives from a variety of sub-topics within psychology. It will examine the function, expression, and regulation of emotion. The evolutionary origins and the biological processes involved in emotion will be examined. We will discuss the interrelationship of emotion, cognition, and culture. Topics will include discrete emotions such as anger, love, and happiness.

*Prereq: PSY-120 or PSY-121*

**PSY 310 Cognition**
 NS1 4 cr **UL**

Consideration of the psychology of thinking: input, processing, storage and retrieval of information. Also explores categorization, concept formation, mental structure, language, reasoning, and problem solving.

*Prereq: Three courses in PSY or Permission*

**PSY 312 Personality II**
 NS1 4 cr **UL**

In-depth examination of personality theory and of major controversial issues in the contemporary literature.

*Prereq: PSY-120 or 121; PSY-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-120 or 121*

**PSY 315 Clinical Interviewing**
 NS1 2 cr **UL**

Students develop skills in a mainstream approach to clinical interviewing, including applications to counseling with kids, resistant adults, couples and families, trauma survivors, and people from diverse backgrounds.

*Prereq: PSY-120 or 121*

**PSY 331 Developmental Psychology**
 NS1 4 cr **UL**

Consideration of current theoretical perspectives and research on attachment, language acquisition, cognitive and moral development. Attention to role of ideological and philosophical commitments in study of development.

*Prereq: PSY-120 or 121*

**PSY 336 Social Psychology**
 NS1 4 cr **UL**

Consideration of current theory and research on person perception, social influence, attitude formation, intergroup relations, altruism and aggression. Emphasis on ethical and social issues in conduct and application of social psychological research.

*Prereq: PSY-120 or 121; SOC-101*

**PSY 356 Neuroscience Seminar**
 NS1 4 cr **UL**

In-depth examination of neuronal mechanisms involved in complex animal and human behaviors and of the methodology used in molecular, cognitive, clinical, behavioral, and developmental neuroscience. Course fee.

*Prereq: PSY-201 or PSY-203, or permission*

**PSY 385 Psychology Practicum**
 SL 2-4 cr **UL**

Participation in community institutions, agencies, schools and businesses combined with individual faculty supervision to allow students to apply concepts and locate literature relevant to their own experiences.

Prereq: PSY-120 or 121

**PSY 390 Clinical Field Experience**

NS1 SL 4 cr UL  
Participation in programs in hospitals, agencies, schools, businesses or the judicial system. Faculty and on-site professionals provide intensive supervision. Students improve abilities to apply concepts, principles and techniques and reflect on significant conceptual, ethical and personal aspects of the experience in written papers and oral discussions.

Prereq: PSY-120 or 121; 212; 240 or 280; and 314; or Permission

**PSY 399 Psychology Independent Study**

NS1 HCAT 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 404 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 120 or 121, 220, and 225 or permission

**PSY 421 Senior Seminar**

NS1 2 cr UL  
Students will build knowledge and skills needed to pursue their next steps following degree completion including applying to graduate school and seeking employment. Students will work with the instructor to plan successful entry into the workforce. Professional and career development will serve as the foundation for this course.

Prereq: PSY-120 or PSY-121; PSY-220; PSY-225; and at least junior standing

**PSY 499 Psychology Independent Study**

NS1 HCAT 2-4 cr UL  
Planned program of reading in preparation for senior thesis.

**PSY 500 Senior Thesis**

NS1 2-4 cr UL  
Development and conduct of original, independent, empirical investigation. Required for departmental honors.

Prereq: PSY-499, Senior Standing and Permission

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## Public Affairs Institute (PAF)

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Alma's Public Affairs Institute offers interdisciplinary experiences for students who, regardless of particular majors, have common academic and vocational interests in public affairs. The program includes workshops, visiting speakers, scholars-in-residence, professional consulting and advising.

**Requirements**

To earn certification in the Public Affairs Program, students must earn a minimum of eighteen credits drawn from the following classes: PAF-150, 160, 350, 360, 385, 450 and 499; and POL-141 or comparable classes, independent studies or seminars in other disciplines pre-approved by the Director of Public Affairs as alternatives of PAF-385, 450, or 499.

Participants are encouraged to satisfy general education requirements by completing coursework in HST-105 or 121; PHL-126, 225, 227, 228, 229, 235 or REL-210; ECN-111 and 112, POL-101, or SOC-101; and ENV-105 or PSY-121. Elective coursework will be recommended by the program advisor to enhance skills and broaden perspectives.

Candidates who complete Alma's degree requirements and all Institute components will graduate with a bachelor's degree in the major subject and will have the following noted on their permanent record: *Completed the Public Affairs Program.*

Candidates who satisfy the requirements prescribed above and who achieve a 3.0 overall GPA together with a 3.25 GPA in the Institute Program will have the designation *Public Affairs Fellow* inscribed on their permanent record. Admission to the Institute

requires formal application and acceptance.

**PAF 150 Public Affairs Colloquium**

SL 1-2 cr  
Introduction to selected, critical public affairs issues through multidisciplinary and case-study approaches. Presentations by visiting speakers, other resource people and students.

**PAF 160 Community Issues & Public Leadership I**

SL 1-4 cr  
Investigation and implementation of projects related to economic and social development issues in local, regional and global community. Graded Pass/Fail.

**PAF 350 Public Affairs Seminar I**

2-4 cr UL  
Provides exposure to leadership of those working currently, or historically, to secure minimum standards for protecting human rights and limiting or ending conflict. Course will study institutions created to address the need for international law and protection of rights and dignity. Students will be immersed in the reasons for and implementation of international standards and institutions to protect human rights, especially related to rules of war. A core component of this course is students develop a plan to address challenges and further build on solutions observed during the course.

**PAF 360 COM Issues and Pub Leadership II**

SL 1-4 cr UL  
Advanced investigation and continuing implementation of projects related to economic and social development issues in local, regional and global community. Graded Pass/Fail.

Prereq: PAF-150, 160 or Permission

**PAF 380 Topics and Problems in Public Affairs**

2-4 cr UL  
Courses on special topics both substantive and procedural in public affairs and leadership in both the international and domestic realms. Objectives will vary with each offering, but in general will be at the upper level, requiring previous study of the political process, civic life and leadership. May have a course fee.

Prereq: Permission

**PAF 385 Public Affairs Practicum**

4-12 cr UL  
Internship with public or private agencies arranged in consultation with the Public Affairs Institute advisor. Minimum of four credits required for all Public Affairs program participants although no more than eight may count toward the degree.

Prereq: PAF-450 and Permission

**PAF 450 Public Affairs Seminar II**

4 cr UL  
Provides exposure to leadership of those working currently, or historically, to secure minimum standards for protecting human rights and limiting or ending conflict. Course will study institutions created to address the need for international law and protection of rights and dignity. Students will be immersed in the reasons for and implementation of international standards and institutions to protect human rights, especially related to rules of war. A core component of this course is students develop a plan to address challenges and further build on solutions observed during the course.

Prereq: PAF 350

**PAF 499 Public Affairs Independent Study**

HCAT 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.

## Public Health (PBH)

### Minor Requirements

Twenty-four credits which must include:

1. Core (16 credits): IPH 330, 331, 430, and ENV 205
2. Quantitative Reasoning requirement (4 credits): MTH 118
3. Four additional credits chosen from the following: IPH 265, 270; 301; ENV 265; HCA 433; HST 271; PSY 203; SOC 234; COM 243; PHL 229; POL 141.
4. Program Considerations: A research methods course or independent research (e.g. IPH 311/399/499 or PSY 225) is strongly encouraged. Enrollment in additional elective courses is also highly encouraged.

### PBH 385 Public Health Practicum

1-8 cr UL

Requires instructor permission.

### PBH 399 Public Health Independent Study

HCAT

1-4 cr UL

Requires instructor permission.

## Religious Studies (REL)

### Minor Requirements

Twenty-four credits in Religion (including REL-100) to complete the minor.

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

### REL 100 What Is Religion?

 AH

4 cr

An introduction to the histories, major figures, sacred texts and belief systems of selected "world religions" such as Hinduism, Confucianism, Daoism, Judaism, Buddhism, Christianity, Islam, and/or newer religious movements such as Mormonism or Baha'i Faith.

### REL 101 Introduction to the Hebrew Bible

 AH

4 cr

A literary and historical introduction to the books of the Tanakh or Hebrew Bible (what Christians call the Old Testament), including the Torah, prophets, wisdom literature, and other writings.

### REL 102 Introduction to the New Testament

 AH

4 cr

An introduction to the writings of the New Testament (including gospels, epistles, and apocalypse) as well as its first-century historical context and early canonical formation.

### REL 103 Vocation in Christian Traditions

 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 and 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 the 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

2-4 cr

Special topics in religious studies. May be repeated for distinct topics.

### REL 181 Topics in Biblical Studies

AH

2-4 cr

Special topics in biblical studies. May be repeated for distinct topics.

### REL 202 Religion, Gender, and Sexuality

 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 207 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.

### REL 210 Biblical Ethics and Community Service

AH

4 cr

Examines the Biblical ethic underlying the religious understanding, worship and community service of Jewish and Christian religious communities. Opportunities to participate in community service agencies and programs.

### REL 215 Philosophy of Religion

 AH

4 cr

Examination of classical and contemporary issues in the philosophy of religion such as arguments for and against the existence of God, religious language, the relation between faith and reason, the evidential value of religious claims, and the relationship between morality and religion. (Cross-listed as PHL-215.)

### REL 216 Existentialism

AH

4 cr

Examination, evaluation and discussion of selected subjects - the individual, freedom, responsibility, anxiety, hope, death, meaning of life - as treated in various essays, short stories and dramas. Focus on analysis and interpretation of texts. (Cross-listed as PHL-216.)

### REL 217 Asian Philosophy and Religion

 AH

4 cr

Exploration of the histories and roles of the most influential religious traditions and philosophical systems in Asia: Hinduism, Buddhism, Confucianism, and Daoism. (Cross-listed as PHL-217.)

### REL 219 Judaism and Islam

 AH

4 cr

An examination of Jewish and Islamic thought and practice from the formative periods to the present, including contemporary debates. Includes reading, discussion, and written analysis of various primary and secondary texts.

### REL 220 Bible and Society

AH

4 cr UL

Explores how the social context (ethnic, economic, class, etc.) of faith communities shapes the study, understanding, and use of scripture in worship and impacts the values and daily lives. Emphasis on lectionary readings shared by Protestants and Roman Catholics, and the Hebrew scriptures. (Cross listed as SOC-221.)

**REL 225 Religion, Business, and the Environment**  
AH 4 cr  
Business and ecological ethics in religious perspective.

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

**REL 231 Homiletics**  
AH 4 cr  
An examination of public religious speech from hermeneutical interpretation to delivery and evaluation. This course includes practical application of homiletic studies through public speaking exercises, interfaith examination of texts, and exposure to intercultural preaching.

**REL 240M Jesus in Gospel and Film**  
AH 4 cr  
An introduction to the context, life, and teaching of Jesus of Nazareth through the media of film, primary texts (canonical and non-canonical gospels), and secondary texts in biblical criticism. Spring Term only.

**REL 250 Christian Ethics**  
AH 4 cr  
An exploration of current Christian debates on ethical issues such as human reproduction, homosexuality, pacifism and just war, racism, nationalism, genetic engineering, and/or economic and environmental justice. Prior knowledge of Christian traditions is helpful but not required.

**REL 280 Topics in Religion**  
AH 2-4 cr  
Special topics in Religious Studies.

**REL 280M Topics in Religion**  
AH 2-4 cr  
Special topics in Religious Studies.

**REL 281 Topics in Biblical Studies**  
AH 2-4 cr UL  
Special topics in biblical studies.

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

**REL 302 Religion, Gender, and Sexuality**  
AH 4 cr UL  
This course addresses questions about women in various religious traditions and examines the ways feminist theory interacts with the study and practice of religion.  
*Prereq: One Religious Studies course or Permission*

**REL 305 Introduction to Christian Thought**  
AH 4 cr UL  
An introduction to Christian thought and practice from the first century to the present. Course includes reading, discussion, and written analysis of a variety of primary and secondary texts; individual and group work; off-campus site visits; and/or academic service learning.  
*Prereq: One Religious Studies course or Permission*

**REL 306 Reformation**  
AH 4 cr UL  
An examination of the theological debates surrounding the Protestant and Catholic Reformations of 16th century Europe. Includes reading, discussion, and written analysis of various primary and secondary texts.  
*Prereq: One Religious Studies course or Permission*

**REL 307 Religion in America**  
AH 4 cr UL  
Examination of history of religious thought and traditions in America. Analysis and interpretation of selected documents. Non-traditional forms of religion also included.  
*Prereq: One Religious Studies course or Permission*

**REL 315 Philosophy of Religion**  
AH 4 cr UL  
Examination of classical and contemporary issues in the philosophy of religion such as arguments for and against the existence of God, religious language, the relation between faith and reason, the evidential value of religious claims, and the relationship between morality and religion. (Cross-listed as PHL-215.)  
*Prereq: One Religious Studies course or Permission*

**REL 316 Existentialism**  
AH 4 cr UL  
Examination, evaluation and discussion of selected subjects - the individual, freedom, responsibility, anxiety, hope, death, meaning of life - as treated in various essays, short stories and dramas. Focus on analysis and interpretation of texts.  
*Prereq: One Religious Studies course or Permission*

**REL 317 Asian Philosophy and Religion**  
AH 4 cr UL  
Exploration of the histories and roles of the most influential religious traditions and philosophical systems in Asia: Hinduism, Buddhism, Confucianism, and Daoism.  
*Prereq: One Religious Studies course or Permission*

**REL 319 Judaism and Islam**  
AH 4 cr UL  
An examination of Jewish and Islamic thought and practice from the formative periods to the present, including contemporary debates. Includes reading, discussion, and written analysis of various primary and secondary texts.  
*Prereq: One Religious Studies course or Permission*

**REL 330 Religion and Science**  
AH 4 cr UL  
Examination of the relationship between religion and science through both historical and contemporary issues.  
*Prereq: One Religious Studies course or Permission*

**REL 340M Jesus in Gospel and Film**  
AH 4 cr UL  
An introduction to the context, life, and teaching of Jesus of Nazareth through the media of film, primary texts (canonical and non-canonical gospels), and secondary texts in biblical criticism. Spring Term only.  
*Prereq: One Religious Studies course or Permission*

**REL 350 Christian Ethics**  
AH 4 cr UL  
An exploration of current Christian debates on ethical issues such as human reproduction, homosexuality, pacifism and just war, racism, nationalism, genetic engineering, and/or economic and environmental justice. Prior knowledge of Christian traditions is helpful but not required.  
*Prereq: One Religious Studies course or Permission*

**REL 380 Topics in Religion**  
AH 2-4 cr UL  
Selected topics in religious studies. May be taken more than once. Only two registrations count toward a Major in Religious Studies.  
*Prereq: One Religious Studies course or Permission*

**REL 381 Topics in Biblical Studies**  
AH 2-4 cr UL  
Topics may include Torah, Paul's Letters, Prophetic and Wisdom Literature, Synoptic Gospels, and/or Biblical Ethics and Social Problems. May be repeated for credit for distinct topics.  
*Prereq: One Religious Studies course or Permission*

**REL 385 Religious Studies Practicum**  
1-4 cr UL

**REL 399 Religious Studies Independent Study**  
HCAT 2-6 cr UL  
Individual study of particular subject in religion. Intensive acquaintance with selected part of the literature through planned program of reading.

**REL 400 Theory and Method in Religious Studies** 4 cr **UL**  
AH

Upper level seminar addresses current issues in the field of religious studies (such as postmodernism, postcolonialism, disability studies, and/or queer theory), approaching these issues with a variety of disciplinary methods (such as historical, theological, phenomenological, ethical, and/or anthropological). Required for, but not limited to, majors and minors in religious studies.

*Prereq: REL-100 or Junior Standing*

**REL 500 Senior Thesis** 4 cr **UL**  
AH

Individual research culminating in preparation of major paper and departmental oral examination. Requires instructor permission to register.

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## Sociology (SOC)

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

### Sociology Major Requirements

Thirty-six credits which must include:

1. Core: SOC-101, 301, and 302.
2. Two concentrations, with eight credits in each area (a total of 16-credits):
  - Self and Society: SOC-224, 234, 236, or 243
  - Social Structure and Inequality: SOC-141, 225, 226, 229, or 341
  - Social Institutions: SOC-220 and 353
3. Eight credits of SOC electives. No more than four credits of approved SOC-180 may count towards the major.
4. Required Cognate Course: ANT-111
5. The senior comprehensive evaluation for the major is the successful completion of the Major Field Test in Sociology.
6. Department Honors: Successful completion of SOC-500 and a minimum of 3.5 GPA in Sociology.

### Sociology Minor Requirements

Twenty-four credits of Sociology; which must include SOC-101.

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

**SOC 101 Principles of Sociology** 4 cr  
SO

Identify sociology as a tool to widen perspective and understanding, employ basic sociological concepts in the observance of social behavior, and identify the basic social institutions and their functions. Prerequisite for all other SOC courses.

**SOC 141 Social Problems** 4 cr  
SO

Examination, evaluation and discussion of contemporary social problems providing theoretical orientations and analytical skills to understand their complexities and ramifications. For example: poverty, health issues, crime and ways of dealing with crime.

**SOC 180 Topics in Sociology** 1-4 cr  
SO

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

**SOC 220 Sociology of Family** 4 cr **UL**  
SO

Examines how family life is structured by broader social, political, and economic changes. Analysis organized historically around clan, lineage, nuclear and post-nuclear family structures. Contemporary family problems also studied. Fall Term.

*Prereq: SOC-101*

**SOC 224 Women, Work, and Calling** 4 cr **UL**  
SO

Examines the concepts of work, vocation, and calling as they apply to the lives of women, from a sociological perspective. Students are encouraged to apply insights from this course to their own vocational journeys.

*Prereq: SOC-101*

**SOC 225 Conflict and Class** 4 cr **UL**  
SO

Examination of class and its consequences. Topics may include ideology, the middle class, social movements, and social order (e.g., war and peace). Class intersects with gender and race issues. Cross-cultural settings will be examined.

*Prereq: SOC-101*

**SOC 226 The Color of Justice** 4 cr **UL**  
SO

Uses socio-historical and cultural awareness to investigate connections between the history of Jim Crow, courtroom relationships, spaces of incarceration, race, family, and community.

*Prereq: SOC-101*

**SOC 229 Population Dynamics** 4 cr **UL**  
SO

Population dynamics mirror plate tectonics - they move slowly, but are very powerful. They influence societies and individuals and are international in scope. One needs to understand them to better view social problems.

*Prereq: SOC-101*

**SOC 234 Aging and Health Institutions** 4 cr **UL**  
SO

Examines key concepts, main theories, and important substantive issues related to aging and health institutions from a sociological perspective. Among the central issues explored are gender and racial inequality in aging, as well as social institutions connected to aging and public policy.

*Prereq: SOC-101*

**SOC 236 Social Psychology** 4 cr **UL**  
SO

Exploration of the intersection of sociology and psychology via such topics as social influence, social cognition, self, and attitudes as they impact areas such as intergroup relations, pro-social behavior, and aggression. Cross-cultural comparisons are made.

*Prereq: SOC-101 and PSY-121 or Permission.*

**SOC 243 Social Deviance** 4 cr **UL**  
SO

Examination, evaluation and discussion of major theories and approaches to deviance, forms of deviance, their institutional relationships, as well as implications for individuals and applications of concepts to "real world" events.

*Prereq: SOC-101*

**SOC 280 Topics in Sociology** 2-4 cr **UL**  
SO

Examines special subjects in Sociology.

*Prereq: SOC-101*

**SOC 301 Methods of Social Research** 4 cr **UL**  
SO

Fundamentals of basic principles, logic, and procedures of social research. Examines survey, unobtrusive, and qualitative methodologies as well as research ethics and policy.

*Prereq: 12 credits from SOC*

**SOC 302 Social Theory** 4 cr **UL**  
SO

This course involves the posing and answering of questions about the nature of self and of social life. It investigates the fundamental issues of how social order is maintained and conversely, how social conflict and change occur. The first half of the course focuses on the work of classical social theorists such as Karl Marx, Max Weber, Emile Durkheim, W.E.B. DuBois, and Charlotte Perkins Gilman. In the second half, we examine the work of

contemporary theorists and schools of thought such as Erving Goffman, Symbolic Interactionism, Critical Race Theory, Intersectionality, Feminism, and Post-Modernism.

*Prereq: SOC-101 or permission*

**SOC 341 Race and Ethnic Relations**

SO 4 cr **UL**

Examines racism in American society; dominant-subordinate group relations with particular emphasis on African Americans, Native Americans, Latinos, Asian Americans and White Ethnics; political, economic, social and cultural consequences.

*Prereq: SOC-101 or SOC-141*

**SOC 353 Sociology of Gender**

SO 4 cr **UL**

Explores the social construction of gender and the myriad ways gender influences individuals, interpersonal relationships, popular culture, sexuality, race, social class, the life course, and social institutions such as work and family.

*Prereq: SOC-101*

**SOC 380 Topics in Sociology**

SO 2-4 cr **UL**

Examines special subjects in Sociology.

*Prereq: SOC-101*

**SOC 385 Sociology Practicum**

1-8 cr **UL**

Participation in community institutions, agencies, schools, and business with individual faculty supervision. Applications of concepts through experience. About 11-14 hours of field work per week for each four credits. Includes paper report.

*Prereq: Permission.*

**SOC 386 Practicum**

4 cr **UL**

**SOC 399 SOC Independent Study**

HCAT 1-4 cr **UL**

**SOC 499 Sociology Independent Study**

HCAT 2-4 cr **UL**

Supervised reading or project in special area of sociology.

*Prereq: Permission.*

**SOC 500 Sociology-Senior Thesis**

SO 2-4 cr **UL**

Designed for senior Sociology majors with the consent of the Department. Program of empirical and theoretical research.

*Prereq: Permission.*

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## Spanish (SPN)

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Spanish courses, as designated by the three-letter prefix SPN, are taught in Spanish. World Languages and Cultures courses, as designated by the three-letter prefix WLC, are taught in English. Courses taught internationally may have a different emphasis from those offered on campus.

**Major Requirements**

Thirty-six credits at the 200 level or above which must include:

1. Sixteen credits (16 cr) of upper-level Spanish classes.
2. Successful completion of WLC 101
3. Successful completion of English cognate: 4 credits from ENG 201, ENG 202, ENG 220, or ENG 320.
4. Students should be aware that a maximum of 6 credits (including WLC 101) may be taken wherein the primary language of instruction is English; courses must be pre-approved by the WLC department.
5. A minimum of one semester of approved international study in a Spanish-speaking country.
6. Language Proficiency must be demonstrated by taking an approved external proficiency exam. Majors are expected to perform at the American Council on the Teaching of Foreign Languages (ACTFL) Advanced-Low proficiency level as (averaged across the four skills listening, speaking, reading, writing).
7. Students will write and defend, in open forum, an acceptable paper of moderate length reflecting on their study of Spanish, study abroad experience and how the role of language and culture combines with the mission of a liberal arts education.

**Minor Requirements**

Twenty-six credits, which must include:

1. Two credits of WLC-101
2. At least eight SPN credits at the 300 level.
3. A semester or Spring Term of study in a Spanish-speaking country is highly recommended.
4. Language Proficiency must be demonstrated by taking an approved external proficiency exam. Spanish minors are expected to perform at the American Council on the Teaching of Foreign Languages (ACTFL) Intermediate-High proficiency level (averaged across the four skills of listening, speaking, reading, and writing).

**Spanish Teaching Major Requirements**

Thirty-six credits (thirty-four of which must be beyond SPN 203) and which must include:

1. Successful completion of SPN-321.
2. At least four credits from each of the following groups:
  - Spain Culture and Civilization - SPN-350, 355, 261/361
  - Latin American Culture and Civilization - SPN-334, 352, 364, 374, 263/363
  - Literature - SPN-331, 340, 343, 344, 360, 362, 370, 372, 373
3. Successful completion of ENG-225 and EDC-445F.
4. A minimum of one semester of approved international study in a Spanish-speaking country.
5. Students will write and defend, in open forum, an acceptable paper of moderate length reflecting on their study of Spanish, study abroad experience and how the role of language and culture combines with the mission of a liberal arts education. 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 ACTFL - OPI at the Advanced-Low level. The Teacher Education Program is proactive about informing students of opportunities for taking these tests.

**Four credits from SPN 105 or higher, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Humanities.**

**Department Honors may be achieved in the World Languages and Cultures Department by:**

1. Having a 3.5 GPA in all classes applied to the major.
2. Performing beyond minimum requirements on the Language Exam portion of the Departmental Comprehensive Evaluation.



3. Presenting a senior thesis of honors caliber.

**Advanced Credit in a second language may be earned by:**

1. Scoring at the 4 level or higher on the Advanced Placement (AP) exam.
2. Successful completion of International Baccalaureate (IB) exams taken at the Higher Level (HL) with earned scores of (5) or above or earning a minimum score of (5) for the National Foreign Language Examination.

**SPN 100 Foundations of Spanish**

2 cr

Language acquisition course with an intensive focus on foundational structures in all four skills (listening, speaking, reading, writing) at the ACTFL Novice-Low proficiency level. Designed for students with no previous Spanish language experience. NOTE: Students who have completed 3 or more years of high school Spanish study are not eligible to enroll at this level. Course fee.

**SPN 101 Beginning Spanish Language**

2 cr

Beginning level language acquisition course which includes an introduction to present and past tenses and high frequency vocabulary in all four skills (listening, speaking, reading, writing) at the ACTFL Novice-Mid proficiency level. Course is designed for students with limited previous Spanish language experience. NOTE: Students who have completed 3 or more years of high school Spanish study are not eligible to enroll at this level. Prereq: SPN 100

**SPN 105 Spanish Language and Culture**

2 cr

Novice level course designed to practice communication, emphasizing conversational skills at the ACTFL Novice-Mid to high proficiency levels. NOTE: Open to students who have had two to three years of high school credit, or a college SPN course at the 100 level.

**SPN 109 Spanish Reading Club**

1 cr

Guided reading at the 100, 200, or 300 levels. 100 level texts are generally written for language learners at the intermediate-low level and 200 level texts at the intermediate-high level. 300 level texts are written for native speakers, be they literary works, popular novels, or peer-reviewed articles. May be repeated for credit. Pass / fail graded course. Prereq: Permission only

**SPN 111 Beginning Spanish I**

4 cr

Intensive course for beginners in Spanish. Primary objective: to help students begin early and meaningful communication in Spanish by acquiring necessary basic skills. Emphasizes all four language skills: reading, writing, and especially listening and speaking. Secondary objective: to provide insight into Hispanic culture and society through readings, discussions and activities. NOTE: Students who have earned credit for three or more years of high school Spanish may not enroll in SPN-111 or 112. (Offered by Alma Programs Abroad only)

**SPN 112 Beginning Spanish II**

⊕ AH HCAT

4 cr

Intensive course for beginners in Spanish. Primary objective: to help students begin early and meaningful communication in Spanish by acquiring necessary basic skills. Emphasizes all four language skills: reading, writing, and especially listening and speaking. Secondary objective: to provide insight into Hispanic culture and society through readings, discussions and activities. NOTE: Students who have earned credit for three or more years of high school Spanish may not enroll in SPN 111 or 112. (Offered by Alma Programs Abroad only) Prereq: SPN 111 or Permission

**SPN 150 Cultural Topics**

⊕ AH

2 cr

Topics-based approach to developing intercultural awareness and increasing Spanish proficiency in all four skills (listening, speaking, reading, writing) at the ACTFL Novice-high/Intermediate-Low proficiency levels. Topics vary; may

be repeated for credit. NOTE: Open to students who have taken up to three years of high school Spanish. Course fee.

**SPN 185 Service Learning in Spanish**

⊕ AH

1-4 cr

May be repeated for credit with a maximum of four credits applied toward the major or minor. Requires permission and placement.

**SPN 201 Intermediate SPN Language I**

AH

2 cr

Language acquisition course aimed at understanding how the present tenses, object pronouns, and other high frequency structures work in context. Designed to support the development of all four skills (listening, speaking, reading, writing) at the ACTFL Intermediate Low/Mid proficiency levels. Course fee.

**SPN 202 Intermediate SPN Language II**

AH

2 cr

Language acquisition course aimed at understanding how simple and compound past tenses, and other high frequency structures work in context. Designed to support the development of all four skills (listening, speaking, reading, writing) at the ACTFL Intermediate-Mid proficiency level. Course fee.

**SPN 203 Spanish Language III**

AH

2 cr

Language acquisition course aimed at understanding how subjunctive moods, and other high frequency structures work in context. Designed to support the development of all four skills (listening, speaking, reading, writing) at the ACTFL Intermediate-Mid/High proficiency levels. Course fee.

**SPN 207 Spanish for Health Care I**

⊕ AH

2 cr

Part I of a 2-credit, 2-course sequence that introduces basic vocabulary and cultural information specific to health care contexts in all four skills (listening, speaking, reading, writing). This sequence will not be sufficient for translation or interpretation certification, nor for practicing medicine in Spanish, but it provides basic communication skills that students could build on if they so choose. SPN 207 is not appropriate for students with no previous Spanish experience, nor for students who have the equivalent of SPN 202 or higher. Course fee.

**SPN 208 Spanish for Health Care II**

⊕ AH

2 cr

Part II of a 2-credit, 2-course sequence that introduces basic vocabulary and cultural information specific to health care contexts in all four skills (listening, speaking, reading, writing). This sequence will not be sufficient for translation or interpretation certification, nor for practicing medicine in Spanish, but it provides basic communication skills that students could build on if they so choose. SPN 208 is not appropriate for students with no previous Spanish experience, nor for students who have the equivalent of SPN 203 or higher. Course fee.

**SPN 209 Spanish Reading Club**

AH

1 cr

Guided reading at the 100, 200, or 300 levels. 100 level texts are generally written for language learners at the intermediate-low level and 200 level texts at the intermediate-high level. 300 level texts are written for native speakers, be they literary works, popular novels, or peer-reviewed articles. May be repeated for credit. Pass / fail graded course. Prereq: Permission only

**SPN 221 Intermediate Spanish Language I**

⊕ AH

4 cr

Continuing study of the Spanish language with additional emphasis on reading and writing skills. Study of Hispanic culture and close reading of selected Hispanic texts from various genres. Extensive grammar review, composition, and oral-aural practice. (Alma Programs Abroad) Prereq: SPN 112 or Placement

**SPN 222 Intermediate Spanish Lang II**

☺ AH 4 cr  
 Continuing study of the Spanish language with additional emphasis on reading and writing skills. Study of Hispanic culture and close reading of selected Hispanic texts from various genres. Extensive grammar review, composition, and oral-aural practice. (Alma Programs Abroad)  
*Prereq: SPN 221*

**SPN 223 Intermediate Spanish Language III**

☺ AH 4 cr  
 Intermediate level study of Spanish. Designed for students who have completed second year college Spanish but whose language skills need strengthening before they enter upper level courses while studying abroad. Requires placement into this course. (Alma Programs Abroad)

**SPN 224 Intermediate Spanish Language IV**

☺ AH 4 cr  
 Intermediate level study of Spanish. Designed for students who have completed second year college Spanish but whose language skills need strengthening before they enter upper level courses while studying abroad. Requires placement. (Alma Programs Abroad)

**SPN 250 Cultural Topics**

☺ AH 2 cr  
 Topics-based analysis of culture focused on the development of intercultural competencies and language proficiency in all four skills (listening, speaking, reading, writing) at the ACTFL Intermediate - Low/Mid proficiency levels. Topics vary; may be repeated for credit. Course fee.

**SPN 260 Cultural Topics**

☺ AH 2 cr  
 Topics-based analysis of culture focused on the development of intercultural competencies and language proficiency in all four skills (listening, speaking, reading, writing) at the ACTFL Intermediate-Mid proficiency level. Topics vary; may be repeated for credit. Course fee.

**SPN 261 Language and Culture in Spain**

☺ AH 4 cr  
 Spanish language instruction, investigation and comparative studies of social and ethnic issues. Students live with a host family. Destination may vary. Course fee. (Spring Term course)  
*Prereq: Permission*

**SPN 263 The Other America**

☺ AH 4 cr  
 Travel and study in "The Other America." Spanish language instruction, investigation and comparative studies of social and ethnic issues. Students live with a host family. Destination may vary. Course fee. (Spring term course)  
*Prereq: Permission*

**SPN 281 Conversation**

☺ AH 2 cr  
 Fluency in oral expression developed through extensive class discussion. May include oral reports, summaries of reading and viewing materials, phonetics and pronunciation exercises, colloquial expressions and creative dramatic performance. May be repeated for a total of four credits. (Alma, Alma Programs Abroad)

**SPN 299 Independent Reading**

☺ HCAT 1-4 cr UL  
 Supervised study and research of an area not covered in available courses.  
*Prereq: Permission*

**SPN 309 Spanish Reading Club**

AH 1 cr UL  
 Guided reading at the 100, 200, or 300 levels. 100 level texts are generally written for language learners at the intermediate-low level and 200 level texts at the intermediate-high level. 300 level texts are written for native speakers, be they literary works, popular novels, or peer-reviewed articles. May be repeated for credit. Pass / fail graded course.

**SPN 311 Spanish Grammar I**

☺ AH 4 cr UL  
 Intermediate level study of Spanish. Designed for students who have completed third year college Spanish but whose language skills need strengthening as they pursue upper level courses while studying abroad. Requires placement. (Alma, Alma Programs Abroad)  
*Prereq: WLC 101 or permission*

**SPN 312 Spanish Grammar II**

☺ AH 4 cr UL  
 Intermediate level study of Spanish. Designed for students who have completed third year college Spanish but whose language skills need strengthening as they pursue upper level courses while studying abroad. Requires placement. (Alma, Alma Programs Abroad)  
*Prereq: WLC 101 or permission*

**SPN 313 Spanish Grammar III**

☺ AH 4 cr UL  
 Advanced level study of Spanish. Designed for students who have completed third year college Spanish and who are pursuing upper level courses while studying abroad. Requires placement. (Alma Programs Abroad)  
*Prereq: WLC 101 or permission*

**SPN 314 Spanish Grammar IV**

☺ AH 4 cr UL  
 Advanced level study of Spanish. Designed for students who have completed third year college Spanish and who are pursuing upper level courses while studying abroad. Requires placement. (Alma Programs Abroad)  
*Prereq: WLC 101 or permission*

**SPN 315 Advanced Spanish Language**

☺ AH 4 cr UL  
 Advanced level study of Spanish. Designed for students who have completed third year college Spanish and who are pursuing upper level courses while studying abroad. Requires placement. (Alma Programs Abroad)  
*Prereq: WLC 101 or permission*

**SPN 316 Advanced Spanish Language**

☺ AH 4 cr UL  
 Advanced level study of Spanish. Designed for students who have completed third year college Spanish and who are pursuing upper level courses while studying abroad. Requires placement. (Alma Programs Abroad)  
*Prereq: WLC 101 or permission*

**SPN 321 Advanced Composition in Spanish**

☺ AH 4 cr UL  
 Advanced composition in a variety of genres aimed at developing skills appropriate to professional as well as academic contexts. (Alma)

**SPN 322 Written Expression**

☺ AH 4 cr UL  
 Development of written skills and creative expression in a variety of genres. Taught in programs abroad. Prerequisite is placement during study abroad.  
*Prereq: WLC 101 or permission*

**SPN 325 Investigation of Grammar**

☺ AH 2-4 cr UL  
 Intensive review of Spanish grammatical theory and structures.  
*Prereq: WLC 101 or permission*

**SPN 329 Translation/Interpretation**

☺ AH 4 cr UL  
 This is a service-learning course in which students will study and practice theories and techniques of translation and interpretation. Students will apply their developing skills to Spanish translations of English-language materials submitted by a variety of community organizations.  
*Prereq: WLC 101 or permission*

**SPN 330 Myths, Tales and Legends**

🌐 AH 4 cr UL

Reading and discussion of Hispanic folktales and traditional stories. Focus on cultural context and narrative tradition, combined with principles of orality and storytelling.

Prereq: WLC 101 or permission

**SPN 331 Introduction to Hispanic Literature**

🌐 AH 4 cr UL

Combines practical and theoretical approaches to reading and understanding literature from Spain and the Americas. Study of the attributes of various genres as well as selected works representative of the same. Provides the basic analytical foundation necessary for advanced study and interpretation of Hispanic literature required for the major. (Alma)

Prereq: WLC 101 or permission

**SPN 334 Mexican Culture and Civilization**

🌐 AH 4 cr UL

Introduction to the society and culture of Mexico from a historical perspective: political, religious and social institutions.

Prereq: WLC 101 or permission

**SPN 335 Spanish for Business and Commerce**

🌐 AH 4 cr UL

Acquisition of specific commercial concepts and vocabulary in Spanish and the study of worldwide and local economic factors. (Alma, Alma Programs Abroad)

Prereq: WLC 101 or permission

**SPN 340 Survey of Hispanic-American Literature**

🌐 AH 4 cr UL

Reading and discussion of selections from major works of Hispanic-American Literature and their relationships to contemporary and subsequent society and culture.

Prereq: WLC 101 or permission

**SPN 343 Survey of Spanish Literature**

🌐 AH 4 cr UL

Reading and discussions of selections from the major works of Spanish literature and their relationship to contemporary and subsequent society and culture. (Segovia)

Prereq: WLC 101 or permission

**SPN 344 Survey of Regional Hispanic Literature**

🌐 AH 4 cr UL

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

Prereq: WLC 101 or permission

**SPN 350 History of Spanish Civilization**

🌐 AH 4 cr UL

Introduction to the history of Spanish civilization and culture. Political, religious and social institutions; art, architecture, literature and music. Readings, lectures, compositions and discussions in Spanish. (Alma, Alma Programs in Spain)

Prereq: WLC 101 or permission

**SPN 352 Hispanic-American Culture & Civilization**

🌐 AH 4 cr UL

Introduction to society and culture of contemporary Hispanic-America through examination of political, social, religious and artistic forces. Emphasis on social-political problems and their effect on the United States. Readings, lectures, compositions and discussions in Spanish. (Alma, Alma Programs in Hispanic-America)

Prereq: WLC 101 or permission

**SPN 355 History of Art and Architecture**

🌐 AH 4 cr UL

Period and manner studies of the great Spanish and Hispanic-American painters. Vision of aesthetic ideas through painting. Architectural concepts and styles. Site visits in Madrid and the surrounding area. (Alma Programs Abroad)

Prereq: WLC 101 or permission

**SPN 360 Spanish Literature to 1700**

🌐 AH 4 cr UL

Reading and discussion of the major works of the Medieval, Renaissance and Baroque periods in Spain: the Cantar del Mio Cid, La Celestina, Lazarillo de Tormes; poetry of Garcilaso, San Juan de la Cruz, Gongora and Quevedo; drama of Lope de Vega, Tirso de Molina and Calderon. (Alma)

Prereq: SPN 331 and WLC-101; or Permission

**SPN 362 Hispanic-American Literature to 1888**

🌐 AH 4 cr UL

Reading and discussion of principal works in Hispanic-American literature from pre-Columbian to Modern: chronicles of the Conquest, poetry of the Colonial period, poetry and prose of Romanticism, Realism and Naturalism. (Alma)

Prereq: SPN 331, WLC-101; or Permission

**SPN 364 Indigenous Cultures**

🌐 AH 4 cr UL

Period, cultural, economic, and ethnic studies of the people of a specific country in Hispanic America. (Alma Programs Abroad)

Prereq: WLC 101 or permission

**SPN 370 Spanish Literature Since 1700**

🌐 AH 4 cr UL

Reading and discussion of representative works from the Romantic period to the present in Spain: Becquer, Galdos, Unamuno, Ortega y Gasset, Garcia Lorca and others. (Alma, Alma Programs in Spain)

Prereq: SPN 331 and WLC 101 or Permission

**SPN 372 Hispanic-American Literature Since 1888**

🌐 AH 4 cr UL

Reading and discussion of representative works in Hispanic-American literature from Modernism to the present: Dario, Marti, Borges, Neruda, Paz, Cortazar, Vargas Llosa, Fuentes, Garcia Marquez and others. (Alma, Alma Programs in Hispanic America)

Prereq: SPN 331 and WLC 101 or Permission

**SPN 373 Hispanic-American Theater**

🌐 AH 4 cr UL

This course introduces students to select texts and movements of twentieth and twenty-first century Hispanic-American drama and performance. We will analyze and engage with dramatic texts, performances, and key theoretical perspectives to approach questions of theater practices and intersections with society and politics, representations of race/ethnicity, class, gender/sex/sexuality. Although the course includes all four skill areas (reading, writing, speaking, and listening), the course emphasizes oral production through class presentations, dramatic readings, performance, etc.

Prereq: WLC 101; or permission

**SPN 374 Regional History of Hispanic America**

🌐 AH 4 cr UL

A comprehensive study of the history of specific regions of Hispanic America including pre-Columbian through contemporary issues. (Quito)

Prereq: WLC 101 or permission

**SPN 375 Spanish Civil War in Film and Text**

🌐 AH 4 cr UL

This course explores the historical background and socio-political context of the Second Republic and the Civil War in Spain. Students will engage with a variety of literary and non-literary texts, music, and film to explore how the war was reflected and is remembered through different media.


**SPN 377 Studies in Hispanic Film**

🌐 AH 4 cr UL

This course, taught in Spanish, examines contemporary Hispanic cultural issues through a critical analysis of Hispanic film. Goals include learning to watch film critically to understand how cinematographic elements contribute to a deeper analytic understanding of the film. Additionally, students will critically examine the ways films engage with history and culture, analyzing them as sources of knowledge. Possible course fee.

Prereq: WLC 101 or permission

**SPN 380 Topics in Spanish**

 AH 2-4 cr **UL**  
Requires instructor permission. Prerequisites vary by topic.  
Prereq: WLC 101 or permission


**SPN 381 Public Speaking in Spanish**

AH 4 cr **UL**  
This course, taught in Spanish, focuses on developing effective oral communication skills in a variety of contexts, with emphasis on diagnosing rhetorical situations, inventing and delivering informative and persuasive presentations, and facilitating public discussion. Students will become more effective communicators through researching, outlining, writing, presenting, discussing, critiquing, and revising their own work, as well as that of their peers and of other public speakers. The structure of the course allows students to pair other majors/interests with Spanish.  
Prereq: WLC 101 (may be taken concurrently), SPN 321, or Permission


**SPN 495 Thesis Preparation**

 AH 1 cr **UL**  
Requires instructor permission.  
Prereq: WLC 101 or permission

**SPN 499 Spanish Independent Study**

 HCAT 1-4 cr **UL**  
Supervised reading and research in an area not covered by available courses. Requires senior standing and instructor permission. (Alma)  
Prereq: WLC 101 or permission

**SPN 500 Senior Thesis**

 AH 4 cr **UL**  
Definition of a question, thesis paper and oral defense in Spanish. Requires senior standing and permission. (Alma)  
Prereq: WLC 101 or permission

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## Theatre (THE)

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Theatre courses, as designated by the three-letter prefix THE, are offered through the Theatre and Dance Department.

**Theatre Major Requirements**

Thirty-six credits that include:  
1. THE 125, 170, 171, 202, 232, 264;  
2. THE 497 and 498;  
3. Eight credits of Theatre electives; excluding THE 150 Theatre Company.  
4. Required cognate course: DAN-139 Somatic Movement.

**Theatre Minor Requirements**


Twenty-four credits which must include:  
1. THE-125, 170, 171, 232, and 264.  
2. Four credits of Theatre electives excluding THE-150, Theatre Company.  
3. Recommended Cognate DAN-139 Somatic Movement.

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

**THE 101 Introduction to Theatre**

AH 4 cr  
An exploration of theatre as an art form and how dramatic literature becomes theatre.

**THE 120 Introduction to Dramatic Literature**

 AH 4 cr  
Preparation for advanced study of literature and language, including vocabulary, critical approaches, and writing strategies employed in literary analysis. This course is required for a major or minor in English, but open to all students with a solid foundation in reading and writing.

**THE 123 Performing Advocacy**

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

**THE 125 Acting**

AH 4 cr  
Introduction to acting through participation in exercises which emphasize moment-to-moment acting from the actor's impulse in contact with a partner. Culminates with class performances.

**THE 150 Theatre Company**

AH 1 cr  
Participation in acting and technical work on departmental productions with actual rehearsal and performance. May be repeated more than once for credit.


**THE 152 Theatre Administration**

AH 1 cr  
Participation in business areas required to create, manage and address audience needs for all departmental productions: publicity, programs, box office and house management. May be repeated more than once for credit.

**THE 170 Stagecraft**

AH 4 cr  
Introduction to the terminology, technology and techniques of technical production in the performing arts. Laboratory sessions in the theatre, workshops and backstage assignments on department productions ensure practice of the topics discussed in class. Laboratory.

**THE 171 Design for the Theatre**

 AH 4 cr  
Introduction to the design of the physical environment in the theatre. Consideration of scenery, costume, lighting and sound for live performance; their unifying aesthetic principles and distinctions. Culminates in class presentation of student designs for particular plays.

**THE 202 Script Analysis**

AH 4 cr  
This course develops bedrock skills in "discovering meaning" by examining various analytical models.  
Prereq: THE-125 or THE-170 or Permission

**THE 225 Acting II**

AH 4 cr **UL**  
Continuation of THE 125 expanding to explore period styles and dialect work.  
Prereq: THE-125

**THE 226 Voice and Diction**

AH 4 cr **UL**  
Introduces the theory and practice in the basic techniques of developing a clear and expressive speaking voice.

**THE 227 Stage Combat**

AH 4 cr **UL**  
Study of the art of physical combat in a theatrical setting using the Society of American Fight Director's guidelines. The focus will be on performing a hand to hand combat scene and a rapier fight scene. Laboratory.

**THE 232 Directing**

AH 4 cr **UL**  
Study of basic procedures for the director: script analysis, communication and working with actors, and technical use of the stage. Students direct one or two short scenes emphasizing script analysis and the director's collaboration with actors.  
Prereq: THE-125

**THE 261 Great Ages of Theatre I**
 AH 4 cr **UL**

Survey of the physical structure, production methods and styles of theatre and the cultures that produced them from their beginnings to the Elizabethan Period. Considers primitive rituals and Eastern Theatre as well as Western Theatre. Includes reading representative plays and their place in the theatrical development of the period.

**THE 262 Great Ages of Theatre II**
 AH 4 cr **UL**

Survey of the physical structure, production methods and styles of theatre and the cultures that produced them from Elizabethan England to the Modern Period. Considers Renaissance Spain and France, Restoration England, and Baroque and Romantic Europe through the Modern Theatre. Includes the reading of representative plays and their place in the theatrical development of the period.

**THE 263 Modern Drama**

AH 4 cr

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

**THE 264 Theatre History**
 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 present. Considers primitive rituals, Eastern, and Western Theatre. Includes reading representative plays and their place in the theatrical development of the period.

**THE 270 Drafting and Drawing**

AH 2 cr

As an introduction to drafting and drawing for the theatre, students will develop technical skills needed to explore modes of ideation and creative problem solving. There will be a focus on the fundamentals of theatrical drafting, both by hand and computer, as well as development of drawing and painting skills needed for further exploration in theatre design.

**THE 271 Scene Design**
 AH 2 cr **UL**

As an introduction into scenic design for the theatre, students will focus on developing a basic understanding of the art of scenic design, the process a designer uses in the creation and development of their work, and the tools needed to communicate one's design to others. This will include exploration of scenery as a tool for expression in live performance, as well as exploration of visualization of the intellectual concept of a production and research for scenic design development.

**THE 272 Lighting Design**
 AH 2 cr **UL**

As an introduction into light design for the theatre, students will focus on developing a basic understanding of the art of light design, the process a designer uses in the creation and development of their work, and the tools needed to communicate one's design to others. This will include exploration of light as a tool for expression in live performance, as well as exploration of visualization of the intellectual concept of a production and research for scenic design development.

*Prereq: ART 101 or Permission*

**THE 273 Costume Design**
 AH 4 cr **UL**

Exploration of costumes as an expressive tool in live performance. Intensive work in color theory, line, mass, texture; survey of historical fashion; advanced presentation techniques. Culminates in assembly of a portfolio of student renderings for plays chosen by the student from approved list.

**THE 274 Sound Design**

AH 2 cr

Exploration of sound as an expressive tool in live performance. Gives students an understanding of the science, technology and historic usage of sound in theatre. Emphasis in script analysis and

design and production process.

**THE 275 Stage Management**
 AH 4 cr **UL**

Study of the basic procedures for the stage manager: organization skills, communication skills, supervisory skills, scheduling, budgeting, and theatre technology as they pertain to the stage manager.

**THE 276 Scene Painting**
 AH 4 cr **UL**

Learn basic scene painting techniques such as marble, stone work and wood grains and apply them to scene painting projects. Course culminates in a major project including multiple techniques.

**THE 277 Props Design and Construction**

AH 4 cr

Learning basic props design and construction including casting, molding, sculpting and woodworking.

**THE 278 Costume Construction**

AH 4 cr

Students will learn the basic skills required for sewing and building costumes for theater and dance through a series of projects geared towards the practical application of various techniques. This includes instruction in hand sewing, machine sewing, cutting, patterning, and design concerns.

**THE 280 Topics in Theatre**

AH 4 cr

Special topics and projects in theatre selected by instructor. Background prerequisites vary with selections.

**THE 280M Topics in Theatre**

AH 4 cr

Special topics and projects in theatre selected by instructor. Background prerequisites vary with selections.

**THE 292 Playwriting Workshop**
 AH 4 cr **UL**

Students write several brief etudes in addition to writing and revising a more substantial script. The course uses staged readings and feedback from actors and audience members to help students learn the craft of writing for performance. Emphasizes revision and collaboration in the production process. May be repeated once for credit.

*Prereq: Permission*

**THE 325 Theatre Studio: Acting**
 AH 2-4 cr **UL**

Advanced participation as an actor cast in a public performance of a theatre production under the direction of a faculty supervisor. The student must be cast in a major role, submit a written character analysis and journal of rehearsals and performances of that role. May be repeated for credit.

*Prereq: THE-125 and Permission*

**THE 332 Intermediate Directing**
 AH 4 cr **UL**

Continuation of THE 232. Principles and techniques of stage directing culminating in the analysis, casting and direction of a one-act play for public presentation.

*Prereq: THE-232*

**THE 371 Theatre Studio: Scenery**
 AH 2-4 cr **UL**

Advanced tutorial in scenic design. Students responsible for all research materials, production drawings, models, plots and schedules for a theatre or dance production working in close consultation with a faculty member. Culminates in the realization of a scenic project. May be repeated for credit.

*Prereq: THE-271 and Permission*

**THE 372 Theatre Studio: Lighting**
 AH 2-4 cr **UL**

Advanced tutorial in lighting design. Students responsible for all research materials, production drawings, plots, and schedules for a theatre or dance production working in close consultation with a

faculty member. Culminates in the realization of the lighting atmosphere for a public performance and a written analysis of the project. May be repeated for credit.

*Prereq: THE-271 and Permission*

**THE 375 Theatre Studio: Management**

AH 2-4 cr **UL**

Advanced participation as a stage manager of a theatre production under the tutelage of a faculty supervisor. Students organize and run auditions, rehearsals, technical rehearsals and performances of a major production for public performance. May be repeated for credit.

*Prereq: THE-273 and Permission*

**THE 380 Topics in Theatre and Dance**

AH 4 cr **UL**

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

**THE 385 Theatre Practicum**

4 cr **UL**

Study-work participation in community institutions, schools or professional organizations combined with faculty supervision. Practical experience in teaching, directing or performance of theatre. Culminates in written report. Also offered as THE 386.

*Prereq: Permission*

**THE 399 Theatre and Dance Independent Study**

HCAT 1-4 cr **UL**

Supervised reading, research or projects.

**THE 432 Theatre Studio: Directing**

AH 2-4 cr **UL**

Advanced tutorial in the principles and techniques of stage directing culminating in the analysis, casting and directing of a full-length play.

*Prereq: THE-232 and Permission*

**THE 497 Capstone I**

AH 2 cr **UL**

Focuses on the scholarly research required to prepare for the performance/practical element of the capstone experience. THE 497 usually culminates in an advanced research paper that explores and explains a specific topic in theatre studies chosen by the student in conjunction with his or her capstone advisor. The project may include designing an element of mainstage production. In such cases, the designer will provide his or her research portfolio at the end of Capstone I in lieu of the research paper.

*Prereq: 30 credits in THE and second semester Junior standing*

**THE 498 Capstone II**

AH 2 cr **UL**

Students apply the practical skills developed while pursuing the theatre major. THE 498 usually culminates in the presentation of scenes related to the topic studied in THE 497. Depending on the student's area of interest, scenes will be directed, designed, and/or acted in by the capstone student. In some cases, special projects such as directing or designing a main stage production may provide the content of THE 497 and 498 and fulfill the capstone requirement. At the end of 498, the student will be required to complete a paper or project reflecting on their Capstone and Alma Experience.

*Prereq: THE-497 and Senior standing*

**THE 500 Senior Thesis**

AH 4 cr **UL**

Students with honors in Theatre and Dance must complete a Senior Thesis, approved and directed by the Department. In some cases, THE 500 may replace THE 497 and 498 to fulfill the capstone requirement.

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## Women's and Gender Studies

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### Minor Requirements

Twenty-four credits which must include:

1. WGS-101 and 102
2. At least four credits from: WGS-280, 385 or 399.
3. At least twelve credits (eight of which must be at the 200 level or higher) from the following: COM-123 or 301; ENG-340; IPH-223, 301 or 303; HST-140, 228 or 253; PHL-202; POL-141, 231, or 381/382; REL-202; SOC-220, 234, 353, or additional approved course.

**WGS 101 Introduction to Women's Studies**

4 cr

Studies of a rich and varied selection of classic and contemporary works from the humanities and social sciences centered on women's images, realities and choices. Interdisciplinary survey of women's contributions, concerns, perspectives and theories. Diversity of class, ethnicity, race and sexual orientation addressed from feminist perspectives which counterbalance traditional biases.

**WGS 102 Introduction to Feminist Thought**

4 cr

Studies of historical and contemporary works examining feminist theoretical approaches to explaining experiences, representations and relative positions of women in society. Overview of American feminist thought which includes the varieties of liberal, cultural, Freudian, socialist, existential and radical feminism. Also considers the theoretical contributions of women of color, postmodernists and poststructuralists.

**WGS 280 Topics in Women's and Gender Studies**

2-4 cr **UL**

Specific topics concerning gender issues, choices, realities and self-expression chosen by the instructor. This course is variable credit and may have offerings from 2-4 credits. May be repeated for credit with no more than four credits counted toward the minor.

*Prereq: WGS 101 or 102 or Permission*

**WGS 385 WGS Practicum**

2-4 cr **UL**

Internship designed to provide on-site personal and service-oriented learning and experiences in a wide variety of areas related to women's studies, issues and concerns. Practicums must be taken through a relevant department, with permission of the women's studies coordinator and the department chair. This course is variable credit and may have offerings from 2-4 credits.

*Prereq: WGS-101 and Permission*

**WGS 399 WGS Independent Study**

HCAT 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. This course is variable credit and may have offerings from 2-4 credits.

*Prereq: WGS-101; one of ENG-340, HST-140, REL-202, PHL-202, SOC-353, WGS-102 or WGS-280; and Permission*

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## World Languages and Cultures (WLC)

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The World Languages and Cultures (WLC) Department offers several kinds of majors. Students can pursue traditional language majors in French (FRN), German (GRM), or Spanish (SPN), each of which requires a semester study abroad.

WLC also offers two additional majors that do not require study abroad: WLC Single Language and Culture and WLC Dual Languages and Cultures.

**WLC Single Language and Culture Major Requirements:**

36 credits which must include:

1. Declaration of a concentration in one Target Language (FRN, GRM, or SPN);
2. Successful completion of WLC 101;
3. Students should be aware that a maximum of 10 credits (including WLC 101) may be taken wherein the primary language of instruction is English; courses must be pre-approved by WLC department.

- Of the minimum 26 credits in the target language, no more than 4 credits from the 100 level may count towards the major, and a minimum of 12 credits must be upper-level coursework.
- Study in a country where the target language is spoken is highly recommended.
- Language Proficiency must be demonstrated by taking an approved external proficiency exam. Majors are expected to perform at the American Council on the Teaching of Foreign Languages (ACTFL) Intermediate-High proficiency level (as averaged across the four skills listening, speaking, reading, writing).
- Students will write and defend in open forum an acceptable paper of moderate length in the target language reflecting on their language and culture study, study abroad experience (if applicable), and how the role of language and culture combines with the mission of a liberal arts education. Details and linguistic expectations will be determined in consultation with WLC faculty.

**WLC Dual Languages and Cultures Major Requirements:**

Thirty-six credits which must include:

- Declaration of a concentration in two (or more) target languages (CHN, FRN, GRM, or SPN).
- Complete at least 4 credits of 300 level coursework in both languages;
- Successful completion of WLC 101;
- Students should be aware that a maximum of 10 credits (including WLC 101) may be taken wherein the primary language of instruction is English; courses must be pre-approved by WLC department.
- Of the minimum 26 credits in the target languages, no more than 4 credits from the 100 level may count towards the major.
- Study in a country where each target language is spoken is highly recommended.
- Language Proficiency must be demonstrated by taking an approved external proficiency exam. Majors are expected to perform at the American Council on the Teaching of Foreign Languages (ACTFL) Intermediate-Mid level (averaged across the four skills listening, speaking, reading, writing) in both languages.
- Students will write and defend in open forum an acceptable paper of moderate length reflecting on their languages and cultural study, study abroad experience (if applicable), and how the role of language and culture combines with the mission of a liberal arts education. Details and linguistic expectations will be determined in consultation with WLC faculty.

**Studying abroad is not a requirement in the WLC Single or Dual Language and Culture Majors. However, study in a country where the target language is spoken is highly recommended.**

**Department Honors** may be achieved in the World Languages and Cultures Department by:

- Having a 3.5 GPA in all classes applied to the major,
- Performing beyond minimum requirements on the Language Exam portion of the Departmental Comprehensive Evaluation, and
- Presenting a senior thesis of honors caliber.

**Advanced Credit** in a second language may be earned by:

- Scoring at the 4 level or higher on the Advanced Placement (AP) exam.
- Successfully completing the International Baccalaureate Program (IB) HL exam with a score of 5.

**WLC 101 Introduction to Cultural Analysis**

☺ AH 2 cr

An introductory course that focuses on tools for cultural analysis of a variety of genres (literature, film, art, performance, etc.) from multi-disciplinary perspectives. Taught in English. This course is a pre- or co-requisite for 300 level content courses in target languages.

**WLC 180 Topics in World Languages and Cultures**

☺ AH 2-4 cr

Various topics in World Languages and Cultures. Taught in English. May be repeated for credit if topic varies. Prerequisites vary by topic.

**WLC 185 Service Learning**

1 cr

May be repeated for credit with a maximum of four credits applied toward the major or minor. Requires permission and placement.

**WLC 280 Topics in World Languages and Cultures**

☺ AH 2-4 cr

Various topics in World Languages and Cultures. Taught in English. May be repeated for credit if topic varies. Prerequisites vary by topic.

**WLC 299 Independent Study**

☺ HCAT 1-4 cr

Supervised study and research of an area not covered in available courses. Requires instructor permission.

*Prereq: Permission*

**WLC 380 Topics in World Languages and Cultures**

☺ AH 2-4 cr UL

Various topics in World Languages and Cultures. Taught in English. May be repeated for credit if topic varies. Prerequisites vary by topic.

**WLC 399 Independent Study**

☺ HCAT 1-4 cr UL

Supervised study and research of an area not covered in available courses. Requires instructor permission.

*Prereq: Permission*

# Board of Trustees 2021-22

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## Officers

- Eric P. Blackhurst '83, Chair.** Associate General Counsel, Corporate Transactions and Latin America, The Dow Chemical Company; Midland, Michigan. (2011)
- Darryl G. Schimeck '82, Vice Chair.** Chief Executive Officer, Versa Integrity Group, Inc.; Houston, Texas. (2014)
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## Board Members

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- Cardell D. Johnson '02,** Director of Quality Improvement and Enterprise Risk Management, U.S. Agency for International Development; Washington, D.C. (2012)

**Ann Randall Kendrick '78,** Owner, Pollock-Randall Funeral Home; Port Huron, Michigan. (2016)

**David P. Larsen '84,** Partner, Bodman PLC; Detroit, Michigan. (2005)

**Karen M. Magnuson '78,** Project Director, New York and Michigan, Solutions Journalism Network; New York, New York. (2018)

**Edward K. Osowski '87,** Director Transformational Change, Strategic Enterprise Capabilities, Nike; Beaverton, Oregon. (2019)

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**John M. Wilson '90,** President, Wilson Law Office, P.C.; Midland, Michigan. (2020)

**Russell C. Youngdahl Jr. '75,** Founding/Managing Member, NorthStar Capital Partners, LLC; Jackson, Michigan. (1995–2004; 2016)

## Trustees Emeriti

- Bruce T. Alton,** Retired Senior Counsel, AGB Search, Inc.; Lancaster, Pennsylvania. (2004–2013)
- Larry R. Andrus '72,** Chief Executive Officer, Andrus Advisors, LLC; Grand Rapids, Michigan. (2004-2013; 2015–2018)
- Merrill H. Armstrong '57,** Chairman of the Board Emeritus, Armstrong International, Inc.; Harbor Springs, Michigan. (2011–2014)
- Warren F. Boos,** Retired Senior Vice President, UBS Financial Services; Orchard Lake, Michigan. (1968–2000)
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- Gary W. Fenchuk '68,** President, East West Partners of Virginia; Midlothian, Virginia. (1990–2014)
- John C. Foster '67,** Retired Chief Judge, Sixteenth Judicial Circuit Court; Presbyterian Minister; Boulder, Colorado. (2001–2013)



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**Nancy E. Gallagher '80**, Attorney, Gallagher, Everitt & Associates, PLLC; Alma, Michigan. (2000–2018)

**Glenn D. Granger '83**, President, Chief Executive Officer, Granger Construction Company; Lansing, Michigan. (2006–2019)

**Richard P. Heuschele '59**, Physician, Radiology — Retired; Saginaw, Michigan. (2000–2015)

**David R. Hubbard '60**, Retired Vice President of Finance, Edison Sault Electric; Cheboygan, Michigan. (2011–2014)

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**Donald A. Lindow**, Senior Managing Director, Azimuth Capital Management, LLC; Bloomfield Hills, Michigan. (1987–2013)

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**Thomas J. McDowell**, Retired Executive Vice President, First Chicago NBD; Pompano Beach, Florida. (2006–2015)

**James T. McIntyre '69**, President, C. S. McIntyre & Associates; Monroe, Michigan. (1983–2017)

**Stephen F. Meyer '80**, Managing Director, River Marsh Capital, LLC; Retired President and Chief Executive Officer, Welch Allyn, Inc.; Okatie, South Carolina. (2006–2016; 2017–2020)

**Roger L. Myers**, President and Chief Executive Officer, Presbyterian Villages of Michigan; Southfield, Michigan. (1994–2018)

**Antje Newhagen '67**, Los Altos, California. (2004–2013)

**Marcia J. Nunn '73**, Retired Counsel, Automotive Components Holdings, LLC; Naples, Florida. (2004–2019)

**Calvin P. Owen**, Retired President, Owen-Ames-Kimball Company; Sarasota, Florida. (1981–1995)

**Glenda D. Price**, Retired President, Marygrove College; Detroit, Michigan. (2000–2009)

**David T. Provost '76**, Vice Chairman, TCF Financial; Troy, Michigan. (1994–2013)

**Ron R. Sexton '68**, Retired Treasurer, Dow Corning Corporation; Midland, Michigan. (2004–2016)

**D. Michael Sherman '74**, Chairman and Chief Executive Officer, DMS Insurance Holdings, LLC; Brecksville, Ohio. (2008–2019)

**Matthew E. Steinmetz '84**, Partner, Kirkland & Ellis LLP; Chicago, Illinois. (2012–2019)

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## Officers of the College 2021-22

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The year of appointment is given after each name. The appointments indicated are for the academic year of 2021-22.

### President

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

### Provost and Senior Vice President for Academic Affairs

Kathleen Poorman Dougherty, B.A., St. Olaf College; M.A., Ph.D., University of Oklahoma. *Also Professor of Philosophy.* (2018)

### Chief Operating Officer and Senior Vice President for Administration

Alan D. Gatlin, B.S., Murray State University. (2017)

### Chief Financial Officer and Vice President for Finance

James A. Carman, B.A., Olivet College. (2021)

### Vice President for Advancement

### Vice President for Enrollment and Special Assistant to the President

Amanda Zielinski Slenski, B.A., Alma College; M.S., Miami University. (2018)

### Vice President for Student Affairs and Chief Diversity Officer

Damon M. Brown, B.S., B.B.A., The Ohio University; M.A., Central Michigan University. (2020)

## Faculty 2021-22

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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 2021-22.

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

**Kathleen Poorman Dougherty**, Provost and Senior Vice President for Academic Affairs; Professor of Philosophy. B.A., St. Olaf College; M.A., Ph.D., University of Oklahoma. (2018)

**Takeshi Abo**, Visiting Assistant Professor of Music. B.M., Kyoto City University of Arts; M.M., D.M.A., Michigan State University. (2006)

**Victor Argueta-Diaz**, Assistant Professor of Physics; Pre-Engineering Coordinator. B.S., National Autonomous University of Mexico; M.S., Ph.D., The Ohio State University. (2009)

**Kathryn Armstrong**, Lecturer in Business Administration. B.B.A., Northwood University; M.S., Central Michigan University; M.S., Walsh College; Ph.D., Argosy University. (2020)

**Cera Babb**, Instructor of Music. B.M., University of Delaware; M.M., University of Oregon. (2021)

**Melodee Babcock**, Instructor of Nursing. B.S.N., University of Michigan; M.S.N., Wayne State University. (2019)

**Karen L. Ball**, Charles A. Dana Professor of Integrative Physiology and Health Science. B.A., Alma College; Ph.D., University of Illinois at Chicago. (1995)

**Murray C. Borrello**, Instructor of Geology and Environmental Studies. B.A., Albion College; M.S., University of Massachusetts. (1987)

**Liping Bu**, Reid-Knox Professor of American History. B.A., M.A., Beijing University; M.S., Ph.D., Carnegie Mellon University. (1999)

**Eric Calhoun**, Associate Professor of Biology. B.S., Truman State University; Ph.D., Mayo Graduate School. (2008)

**Devin Camenares**, Assistant Professor of Biochemistry. B.S., Cook College-Rutgers University; Ph.D., Stony Brook University. (2018)

**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)

**Khanssaa El Alami Caning**, Lecturer in World Languages and Cultures – French. B.A., M.A., Sidi Mohamed Ben Abdellah University; Ph.D., University Michel de Montaigne Bordeaux III. (2019)

**Britt Cartrite**, Charles A. Dana Professor of Political Science. B.A., M.A., University of Denver; M.A., Ph.D., University of Colorado at Boulder. (2005)

**Ruth Chaplen**, Associate Professor of Nursing. B.S.N., Nazareth College; M.S.N., D.N.P., Wayne State University. (2018)

**Chih-Ping Chen**, Associate Professor of English. B.A., National Chengchi University; M.A., National Taiwan University; Ph.D., University of Massachusetts. (2000)

**Matthew A. Cicci**, Assistant Professor of English. B.A., Indiana University-Purdue University Indianapolis; M.A., Central Michigan University; Ph.D., Wayne State University. (2015)

**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**, Associate Professor of Communication and New Media Studies. B.A., St. Anselm College; M.A., Loyola University of Chicago; Ph.D., Clemson University. (2012)

**Rosely Conz**, Assistant Professor of Dance. B.F.A., M.P.A., State University of Campinas; M.F.A., University of Colorado. (2017)

**Kelly Cuccolo**, Assistant Professor of Psychology. B.S., University of the Sciences; M.A., Ph.D., University of North Dakota. (2021)

**Robert Cunningham**, Associate Professor of Economics. B.A., The Pennsylvania State University; M.A., Ph.D., Binghamton University. (1999)

**Zhewei Dai**, Professor of Mathematics and Computer Science. B.S., Wuhan University; M.S., Ph.D., Michigan State University. (2005)

**Scott D. Dexter**, Professor of Computer Science. B.S., Dennison University; M.S., Ph.D., University of Michigan. (2019)

**Jillian D. Dickson**, Assistant Professor of Art and Design. B.F.A., Bradley University; M.F.A., Clemson University. (2015)

**Janie Diels**, Associate Professor of Communication. *Also Associate Provost*. 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**, Professor of Chemistry. B.S., St. Norbert College; Ph.D., University of Wisconsin-Madison. (2007)

**Nancy Dopke**, Associate Professor of Chemistry. B.S., Millikin University; Ph.D., University of Wisconsin-Madison. (2007)

**Prathim “Maya” Dora-Laskey**, Associate Professor of English. B.A., M.A., Stella Maris College; M.Phil., University of Madras; Ph.D., University of South Carolina; D.Phil., University of Oxford. (2012)

- Deborah A. Dougherty**, Gunda Kaiser Professor of Spanish. B.A., Aquinas College; M.A., Ph.D., Michigan State University. (1996)
- Brian J. Doyle**, Associate Professor of Biology and Biotechnology. B.S., Ph.D., University of Illinois. (2010)
- Andrew Duncan**, Coordinator of Highland Arts/Instructor of Music. B.A., Alma College; M.S., Wayne State University. (2006)
- 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)
- Morgan Fonley**, Associate Professor of Mathematics and Computer Science. B.A., B.S., M.S., Ph.D., University of Iowa. (2015)
- Patrick J. Furlong**, Professor of History. B.A., M.A., University of Cape Town; Ph.D., University of California, Santa Barbara. (1993)
- William Gorton**, Associate Professor of Political Science. B.A., College of William and Mary; Ph.D., University of Minnesota. (2005)
- Murray Gross**, Charles A. Dana Professor of Music. B.A., M.M., Oberlin Conservatory of Music; D.M.A., Michigan State University. (2004)
- Brian Hancock**, Assistant Professor of Education. B.S., Alma College; M.S., Central Michigan University; Ph.D., Michigan State University. (2018)
- Brianna Harfmann**, Assistant Professor of Integrative Physiology and Health Science. B.S., Alma College; Ph.D., University of Kentucky. (2017)
- Amanda D. Harwood**, Associate Professor of Biology and Environmental Studies. B.A., Monmouth College; M.S., Ph.D., Southern Illinois University. (2015)
- Derick Hulme**, Arthur L. Russell Professor of Political Science. B.A., St. Lawrence University; M.A.L.D., Ph.D., Tufts University. (1992)
- Terry Dana Jachimiak II**, Associate Professor of Theatre. B.F.A., Longwood University; M.F.A., Wayne State University. (2017)
- Steward Jensen**, Associate Professor of Physics. B.S., Harvey Mudd College; Ph.D., University of Chicago. (2009)
- Lisa Kaylor**, Assistant Professor of Mathematics. B.S., Westminster College; Ph.D., Wesleyan University. (2019)
- 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)
- Hyun Kim**, Associate Professor of Integrative Physiology and Health Science. B.S., Indiana University; M.S., State University of New York-Buffalo State College; Ph.D., University of Illinois at Urbana-Champaign. (2016)
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