## 2013-14 Academic Catalog

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## Academic Calendar

## Fall 2013

| August | 24 | Saturday | Freshman Orientation Begins, Welcoming |
| :--- | :--- | :--- | :--- |
| Convocation |  |  |  |


| December | 13 | Friday | Residence Halls Close, 5 P.M. |
| :--- | :--- | :--- | :--- |
| December | 17 | Tuesday | Final Grades Due, 9 A.M. |

## Winter 2014

| January | 5 | Sunday | Residence Halls Open, Noon |
| :--- | :--- | :--- | :--- |
| January | 6 | Monday | Classes Begin, 8 A.M. |
| January | 10 | Friday | Last Day to Add a 1st 7-week Class |
| January | 17 | Friday | Last Day to Add a 14-week Class |
| January | 20 | Monday | Martin Luther King Jr. Celebration Day |
| February | $3-7$ | Monday-Friday | Classes Cancelled 12:30-6:00 P.M. |
| February | 19 | Wednesday | Last Day to Drop a 1st 7-week Class Term Registration |
| February | 20 | Thursday | Middle of Term |
| February | 22 | Saturday | Begin 2nd 7-week Classes |
| February | 24 | Monday | Winter Term Recess Begins |
| March | 2 | Sunday | Mid-Term Grades Due, 9 A.M. |
| March | 3 | Monday | Friday |


| March | 28 | Friday | Last Day to Drop a 2nd 7-week Class |
| :--- | :--- | :--- | :--- |
| April | 3 | Thursday | Honors Day |
| April | $14-18$ | Monday-Friday | Winter Term Exams |
| April | 18 | Friday | Good Friday: No Classes after 12:30 P.M. |
| April | 19 | Saturday | Commencement, 2 P.M. |
|  |  |  | Residence Halls Close, 5 P.M. |
| April | 22 | Tuesday | Final Grades Due, 9 A.M. |

## Spring 2014

| April | 26 | Saturday | Residence Halls Open, Noon |
| :--- | :--- | :--- | :--- |
| April | 27 | Sunday | Classes Begin, 1 P.M. |
| May | 16 | Friday | Last Day to Drop a Class |
| May | 22 | Thursday | Spring Term Ends; Residence Halls Close, 5 |
|  |  |  | P.M. |
| May | 27 | Tuesday | Final Grades Due, 9 A.M. |

## Summer 2014

June 2-August 22
Summer Session

## Accreditation and Compliance Statements

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

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

Michigan Department of Education
John A. Hannah Office Building
608 West Allegan, Box 30008
Lansing, MI 48909
Phone: (517) 373-3324
www.mde.state.mi.us

Committee on Professional Training
American Chemical Society
1155 Sixteenth Street, NW
Washington, DC 20036
Phone: (202) 872-5558
FAX: (202) 872-6066

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

Commission on Accreditation of Athletic Training Education
2201 Double Creek Drive, Suite 5006
Round Rock, TX 78664
Phone: (512) 733-9700
FAX: (512) 733-9701
e-mail: caate@sbcglobal.net

## Notice

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

## Emergency Procedures

Alma College has adopted an Emergency Response Plan, revised in April 2013, that provides contingency procedures for Alma College administrators, staff, faculty and students in the event of a campus emergency. The College also has implemented an Emergency Notification System that allows the College to send immediate, time-sensitive voice and text notifications to students, faculty and staff in the event of a campus emergency. Students, faculty and staff can update their emergency contact information via the College's Web portal.

## Federal Compliance Statements

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

Federal Educational Rights and Privacy Act. The College supports the Family Educational Rights and Privacy Act (FERPA) of 1974, as amended. This statement of policy incorporates the rights accorded and the privacy guaranteed the student by this Act. For more information concerning this regulation please see www.alma.edu.

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

Nondiscrimination Statement. Alma College is committed to providing equal educational opportunities for each student. Our non-discrimination policy applies to age, color, creed, gender, national origin, physical ability, race, religion and sexual orientation. Questions or concerns about our policies and practices regarding these matters should be directed to Dr. Nick Piccolo, Title IX Coordinator at (989) 463-7333 or piccolo@alma.edu.

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

## Alma College in Brief

## A Liberal Arts Education

More than 125 years ago, a group of devoted Presbyterian clergy and laymen had a dream: to establish a liberal arts college based upon the loftiest of ideals - unifying the human mind and spirit through knowledge.

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

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

## Academic Programs and Degrees

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

## Enrollment and Student Profile

With an enrollment of over 1,400, Alma College is a close-knit community where students and professors get to know each other, a place where people and their development are most important. Alma's students are high achievers who reflect the College's competitive admission standards. While the College maintains a regional base - 92 percent of Alma's students come from Michigan; current students represent 27 states and 16 foreign countries. Classes are small with a student/faculty ratio of 13/1.

## Religious Affiliation

Alma was founded by Presbyterians in 1886 and retains its affiliation with the Presbyterian Church (U.S.A.) while being governed by an independent Board of Trustees. Alma's students represent Protestant, Catholic, Jewish and other religions.

## Successful Graduates

The exceptional quality of Alma's undergraduate degree programs leads to placement in the nation's most prestigious graduate and professional schools. As a rule, Alma students find employment in fields related to their academic programs or enter graduate or professional schools within six months of graduation.

## 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.

## Section I General Information

- A College of Distinction
- Admission Information
- Accelerated Programs and Advanced Placement Options
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- Specialized Services



## A College of Distinction

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

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

## ALMA COLLEGE

## The Alma College Mission

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

## The Core Values

## Student-centered education in a residential setting

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

## Disciplinary expertise within an interdisciplinary context of learning

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

## Engaged learning

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

## Ethical integrity, aesthetic appreciation, spiritual sensitivity

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

## Admission Information

## Freshman Admissions

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

## How To Apply

1. Application for Admission. Students should complete the application and submit it with a $\$ 25$ nonrefundable application fee to their high school guidance counselor or apply online for free at www.alma.edu/admissions/apply or at www.commonapp.org.
2. School Personnel Recommendation. A high school guidance counselor recommendation form is required as a part of the application process. Students must request completion of the form by their guidance counselor. In the case that a school does not employ a guidance counselor, a student may have a teacher or school administrator complete the recommendation form.
3. Entrance Test Results. Students should arrange to take either the ACT or SAT examination and to send their scores to the Admissions Office at Alma College. Use the code 1958 for the ACT and 1010 for the SAT.
4. High School Transcripts. Students should arrange to have their high school send copies of official transcripts to the Admissions Office at Alma College.
5. Essay. Students must complete an essay of 250 words or more as a part of the application process.

Students are notified of their admission to the College on a continuing basis. To be considered for financial aid, students should file the Free Application for Federal Student Aid (FAFSA) by March 1 of their senior year in high school. For additional information about financial aid, refer to the Scholarships and Financial Aid section.

## Basis for Admission

To be considered for admission, high school students should have (1) approximately a "B" average or higher, (2) an ACT composite score of 22 or a combined SAT (Critical Reading, Math and Writing) score of 1530 and (3) made progress toward a total of 16 academic units which must include a minimum of four years of English, three years of mathematics, three years of social studies and three years of science. In addition, at least two years of one foreign language are strongly recommended. Students who do not meet these requirements are considered individually for admission. All applicants are considered on the basis of their academic and test records.

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

## Candidate's Reply Date

Alma College subscribes to the uniform Candidate's Reply Date. Once admitted, students must notify the College of their decision to enroll on or before May 1 of their senior year of high school by submitting a $\$ 200$ Commitment and Security Deposit. The College accepts payment by cash, check or credit card.

## Pre-Enrollment Requirements

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

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

## Campus Visits

Students are encouraged to schedule a personalized visit to Alma to meet with a member of the admissions
staff, tour campus, meet professors and sit in on classes. The Admissions Office is open for interviews Monday through Friday from 8 A.m. to 5 P.m. (EST) and selected Saturdays. Please consult www.alma.edu/admissions/visit for all our visit options. You may also call the Admissions Office at 1-800-321-ALMA or e-mail admissions@alma.edu.

## Home-Schooled Students

Applicants completing their secondary education through home schooling are required to provide the following for admission consideration:

1. A written statement of 250 words or more describing the anticipated impact of an Alma College liberal arts education on the candidate's personal and professional future.
2. High school transcripts.
3. Official ACT/SAT scores.
4. An application for admission with a completed counselor evaluation.

Students should be making progress toward completion of 16 academic units with at least four in English, three in mathematics, three in science and three in social studies. In addition, at least two years of one foreign language are strongly recommended.

## Transfer Admission

Students who have attended another college or university and are in good standing may apply for admission to Alma. Transfer students should have earned approximately a " B " average in coursework at other colleges or universities. Transfer students should arrange for the following to be sent to the Admissions Office:

1. A completed Application for Admission.
2. Transcripts from all high schools attended, including ACT or SAT scores.
3. Transcripts from all colleges or universities previously attended.
4. The Transfer Recommendation Form completed by the advisor, registrar or dean of students at the last
institution attended.
5. ACT or SAT scores are not required for students who have earned a 3.0 or greater college GPA (composed of academic coursework) from an accredited institution of higher education, if at least one full-year of study ( 25 credit hours) has been completed. Students would be subject to all required assessment and placement testing.
6. An essay of 250 words or more.

## Transfer Credit Evaluation

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

1. Only courses that are graded " C " (2.0) or higher will be accepted for credit.
2. A maximum of 68 credits ( 62 semester hours or 90 quarter hours) may be transferred from a two-year institution.
3. All transfer students must complete the final 68 credits for the degree in residence at Alma.
4. Proficiency in English composition must be verified by successful completion of the proficiency measures prescribed by the English Department.
5. Proficiency in mathematics must be verified by successful completion of the proficiency measures prescribed by the Mathematics Department.
6. Transferred credit must be documented by receipt of an official transcript from each institution attended.

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

## Continuing Education

Continuing education courses are offered at Alma College during Fall, Winter and Spring terms. Regular admission requirements are waived to continuing education students, who pay reduced tuition rates for such coursework. No more than eight credits each term and no more than 30 total may be taken in this manner.

After 30 hours, it is assumed that the individual is a degree student who must apply for regular admission in part- or full-time coursework and pay regular tuition rates. Any exception to this requires permission from the Provost's Office.

## Dual Enrollment

High school students interested in dual enrollment (high school/Alma College) should determine eligibility by consulting with their high school counselors. Students may apply for admission under Continuing Education status by submitting to the Registrar an enrollment form available from the Registrar's Office and a high school transcript verifying a " B " average. College enrollment is limited to four credits for the first term and eight credits in subsequent terms. Contact the Registrar's Office for further information at (989) 4637348.

## International Student Admission

Citizens of foreign countries with acceptable academic achievement may enroll at Alma College. To be considered for admission, students from other countries must submit the following items preferably by May 1 of the year of application:

1. A completed Application for Admission and a $\$ 25$ (U.S.) application fee, or completion of an online application with no application fee.
2. Official transcripts of most recent high school or college work translated into English.
3. Official TOEFL (internet, paper, or computer based) score, IELTS or ACT/SAT results.
4. The Affidavit of Support and Declaration of Finance forms documenting the ability to cover Alma College costs.

Admissions criteria are similar to those for other applicants. For students from non-English speaking countries, proficiency in English language may be demonstrated through the Test of English as a Foreign Language (TOEFL) or through successful completion of a course at an English Language Institute. A TOEFL score of 550 (paper-based) or 195 (computer-based) or 79 (internet-based) is recommended for academic success at Alma College. The International English Language Testing System (IELTS) may be considered for

English proficiency in tandem with the student's overall academic work.

Students are notified by e-mail of their admission on a continuing basis. To secure a place in the class, international students are required to deposit $\$ 500$ (U.S.) prior to arriving on campus for enrollment. Alma College enrolls international students in a health insurance program (and charges them for that program), with coverage in place by the first day of classes. Each student has until the first day of classes to provide verification to the Medical Center of acceptable coverage under a different policy. If such verification is not provided, the charges will stand for the year.

## Accelerated Programs and Advanced Placement Options

## Accelerated Program Options

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

## Advanced Placement (AP)

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

## College Level Examination Program (CLEP)

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

## International Baccalaureate (IB)

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

## Advanced Placement Courses and Qualifying Scores

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

## Scholarships and Financial Aid

## Financial Aid Eligibility

All financial aid administered through Alma College, including work, is governed by the provisions of the Civil Rights Act of 1964 and Executive Order No. 11246 which prohibit discrimination in employment on the basis of race, religion, color, creed, sex or national origin.

Students receiving federal, state and Alma College financial aid must maintain satisfactory academic progress to retain financial aid for subsequent terms.

## Academic Progress Standards

The various federal and state regulations governing financial aid programs require that an institution develop standards to measure students' reasonable progress toward a degree. Satisfactory academic progress will be evaluated at the end of the academic year (Fall, Winter, and Spring if the student enrolled in a Spring Term). The following satisfactory academic progress requirements apply to all students receiving financial aid through the programs listed below:

- Alma College scholarships, grants, and loans
- Michigan and non-Michigan state scholarship and grant programs
- National Merit Scholarships
- Federal grants, loans and work-study
- Other outside scholarships, grants and loans

Satisfactory academic progress is measured in cumulative grade point average (GPA), earned credit hours, and maximum time frame standard.

Cumulative Grade Point Measurement. Students must meet the cumulative GPA schedule as outlined under Academic Progress found in the Academic Rules and Procedures section of the Alma College Catalog. Students who are academically dismissed from the College are considered not meeting the cumulative GPA

Dismissed students who are granted readmission to the College through successful reapplication will be considered as having met this portion of the requirements.

Definitions and explanations on how incomplete grades, work in progress, and repetition of coursework affect a student's GPA can be found under Academic Rules and Procedures of the Alma College Academic Catalog.

Credit Hours Measurement. A student must successfully complete credits equal to at least $67 \%$ of the total cumulative Alma College and transfer credits attempted to be making satisfactory academic progress.

## Additional Definitions and Explanations

1. "Attempted Hours" are the cumulative hours a student has attempted during all enrollment periods at Alma College, regardless of receiving financial aid. Students who receive the following grades are considered to have "attempted" those credit hours and these hours therefore count toward the cumulative maximum: incomplete (IN, IP), withdrawal (W, WP, WF), failure (F, E), and all passing grades (A-AB-B-BC-C-CD-D-DE).
2. All transfer hours accepted by Alma College are treated as both attempted and earned hours.
3. If a student repeats a course, the credit hours for both the first and the repeated course will be included in the "Attempted Hours" figure when evaluating their academic progress. The credit hours for the first course will not be included in the "Earned Hours" figure.
4. Credit hours earned through Advanced Placement examinations, International Baccalaureate, high school dual enrollment, or Alma College proficiency examinations are included in both the measurement of "Attempted" and "Earned" hours.
5. Successful completion will be measured using the cumulative total number of "Earned Hours" as reflected on the student's academic transcript at the time of evaluation.
6. If a student is not making satisfactory academic progress at the close of the Winter Term or Spring Term (if enrolled), and subsequently earns additional hours during the following summer, these additional
earned hours will be considered in the reevaluation of their aid eligibility for the following academic year.

Maximum Time Frame Standard. A program of study must be completed within $150 \%$ of the number of credit hours required for degree completion to maintain aid eligibility. The $150 \%$ is measured on the basis of Alma College and transfer attempted credits. A bachelor's degree at Alma College requires a minimum of 136 credits to meet graduation requirements. This means a student must complete degree requirements within 204 credits ( 136 credits x $1.5=204$ credits). If the number of attempted credits exceeds $150 \%$ of the degree requirements for graduation, the student will be placed on satisfactory academic progress suspension.

## Failure to Maintain Satisfactory Progress

1. Students who fail to meet the cumulative GPA requirement will be notified of their academic dismissal status by the Provost Office.
2. At the time of evaluation, students not meeting the earned credit hours measurement will be ineligible to receive financial aid until they again meet the earned credit hours measurement requirement.

## Appeal Process for Reinstatement of Financial Aid

1. Students who are dismissed due to their failure to meet the cumulative GPA measurement may appeal to the Academic Standards Committee.
2. Students failing to meet the earned credit hours measurement may appeal to the Director of Financial Aid. Students must submit a Satisfactory Academic Progress Appeal Form to the Director of Financial Aid explaining the reason(s) for their failure in meeting satisfactory academic progress and what has changed that will allow the student to make satisfactory academic progress at the next evaluation.
3. Also required is an academic plan from the student's academic advisor or Registrar stating how and when the student will make up the deficiency. Students will be notified of the Director of Financial Aid decision within two weeks of the receipt of the appeal. The following types of information may be considered in determining whether the student's appeal will be accepted:
a. the student is making up incompletes, or
b. there have been unusual circumstances such as an extended illness or a death within a family, or c. the student withdrew from the college after the Drop/Add period.

A student who successfully appeals, and has had their aid reinstated is allowed one term of aid under a probationary status. However, after receiving one term of aid under a probationary status a student receives no financial aid unless
a. the student meets satisfactory academic progress standards or
b. the student is successfully following an academic plan that ensures satisfactory academic progress by a specific point in time.

## College Expenses

The total charges to attend Alma College for the 2013-14 academic year are $\$ 42,050$ for returning students and $\$ 42,400$ for first-time students. As shown in the accompanying chart, these charges include tuition, board and double room, and the student activity and technology fees for the Fall and Winter terms. Spring Term charges are reflected in the schedule below. The Board of Trustees reserves the right to change any charges prior to the opening date of any term.

The tuition charge shown ( $\$ 32,400$ and $\$ 32,750$ for the Fall and Winter terms) is for a term load of 13 to 18 credit hours. Students registering for more than the normal allowable credit hours per term are charged at the rate of $\$ 1,050$ per credit hour for the overload.

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

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

Costs for Full-Time First-time Students in 2013-14

| Term | Tuition Student <br> Fee | Activity Technology Fee | Double <br> Board | Room | and Total |
| :--- | :--- | :--- | :--- | :--- | :--- |


| Fall Term | $\$ 16,200$ | $\$ 130$ | $\$ 62.50$ | $\$ 4,632.50$ |
| :--- | :--- | :--- | :--- | :--- |
| Winter Term | $\$ 16,200$ | $\$ 130$ | $\$ 62.50$ | $\$ 4,632.50$ |$\$ \$ 21,025$

## Spring Term Expenses

Spring Term costs for full year students and those students who have been enrolled for only one term or who are entering as new students are shown below.

| Student Category | Tuition | Double <br> Board | Room | and Total |
| :--- | :--- | :--- | :---: | :---: |
| Full-Year Student | $\$ 1,050$ | $\$ 600$ | $\$ 1,650$ |  |
| New or One-Term $\$ 2,100$ | $\$ 900$ | $\$ 3,000$ |  |  |
| Student |  |  |  |  |

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

Housing Expenses. Costs shown for 2013-14 reflect double room occupancy. Students living in small single rooms will be charged $\$ 5,132.50$ each term for room and board.

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

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

Auditing Courses. Tuition for students who audit classes (for no credit) is $\$ 525$ for each credit hour.

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

Alma College makes a comprehensive student insurance program available to students that is compliant with the Patient Protection and Affordable Care Act. The plan provides for physician visits, prescription drug expense benefit, outpatient services including medical emergency, x-rays, lab procedures and miscellaneous tests, room and board, hospital miscellaneous, surgery (inpatient and outpatient), wellness benefits and a 24hour Nurse Advice Line. Full details about the plan and costs are available at http://www.CIRStudentHealth.com/Alma or at the Wilcox Health Center.

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

Off-Campus Programs. Alma College students will pay Alma College published tuition, fees, room and board for off-campus programs. Alma College will pay on behalf of the student, the tuition, room, board and associated academic fees charged by our partnering host institutions. Alma College student financial aid to such students will be reduced by the smaller of the amount paid to the off campus institution or the actual aid received from the college. If the total costs of the off-campus program exceed the published tuition, room and board rates for the same semester at Alma College, the student is responsible for the additional costs.

Orientation. All incoming students are required to attend Orientation before the Fall Term. Transfer students are strongly encouraged to attend Orientation. The charge for Orientation is $\$ 325$ and includes room and board.

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

Technology Fee. Alma College students are charged a technology fee of $\$ 125$ per year. This fee covers the cost of wireless internet service and allows the College to enhance technology services as new technology arises.

Summer Session. Tuition for the 2014 summer session is $\$ 525$ per credit hour or $\$ 2,100$ for a four-credit course.

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

1. Full payment is due on or before August 26, 2013, and January 2, 2014, 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 26, 2013, with a deferred second payment for the remaining balance on or before October 18, 2013. The first payment for Winter Term, plus a $\$ 20$ processing fee is due on or before January 2, 2014, and the deferred second payment on or before February 14, 2014. A signed Deferred Payment Agreement form must be received by the Business Office by the due date of the first payment for each term, August 26, 2013 and January 2, 2014 respectively.
3. An educational financing plan that permits payment of the annual expense over the academic year is available through Sallie Mae. Information can be obtained from Sallie Mae directly at 1-800-635-0120
or through their Web site at https://tuitionpay.salliemae.com/alma. Some literature is also available from the Business Office or Admissions Office.

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

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

## Miscellaneous Fees

| Auditing | $\$ 525 /$ credit |
| :--- | :--- |
| Continuing Education | $\$ 275 /$ credit |
| Early Examination Fee | $\$ 125$ |
| Freshman Orientation | $\$ 325$ |
| Late Registration Fee | $\$ 125$ |

## Motor Vehicle Registration

| Resident Students | $\$ 200 /$ year |
| :--- | :--- |
| Resident Students - Silver Parking | $\$ 175 /$ year |
| Commuter Students | $\$ 150 /$ year |
| Opera House Students | $\$ 100 /$ year |
| Proficiency Examination | $\$ 275 /$ credit |
| Room Change Fee | $\$ 50$ |

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

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

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

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

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

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

Financial Aid. Any financial aid other than a work-study grant awarded by the College for the entire year will be prorated; 50 percent to be available Fall Term and 50 percent to be available Winter Term. A workstudy grant may not be deducted from charges because this aid represents funds to be earned during the year. Scholarships and grants awarded by organizations other than Alma College will not be credited until actually received. The Director of Financial Aid must be notified of any scholarship or grant awarded by organizations and agencies other than Alma College.

Withdrawals from College. Students who wish to withdraw from Alma College must complete the withdrawal process by contacting the Academic and Career Planning office. If this process is not completed, students will forfeit their deposits and refunds. The College assumes that students beginning a term intend to complete it. Students who leave during a term without completing the withdrawal process may receive failing grades for course enrollments and will be responsible for any tuition, and room and board charges for the term.

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

## Refunds for Fall and Winter Terms

Withdrawal During Calendar Week No. Refund Percentage

| 1 | $90 \%$ |
| :---: | :---: |
| 2 | $85 \%$ |
| 3 | $80 \%$ |
| 4 | $70 \%$ |
| 5 | $65 \%$ |
| 6 | $60 \%$ |
| 7 | $50 \%$ |
| 8 | $45 \%$ |
| 9 | $40 \%$ |
| 10 and after | No Refund |

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

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

Refund of Federal Title IV Financial Aid. The Higher Education Amendments of 1998 require that when a student withdraws before completing $60 \%$ of the term, the institution must determine the percentage of Title IV assistance the student has earned. For Title IV financial aid regulations, the withdrawal date is the date on which the student states his or her intention to withdraw from the institution. The percentage is determined by dividing the total number of calendar days in the semester into the number of calendar days completed as of the withdrawal date. Any unearned aid must be returned to the Title IV program(s). Funds are returned in the following order: Unsubsidized Stafford Loan, Subsidized Stafford Loan, Perkins Loan, PLUS Loan, Pell Grant, SEOG and other Title IV programs. The student must either repay the federal overpayment in full or make satisfactory arrangements with either the Alma College Business Office or the federal Department of Education. The payment or arrangement for payment must be made within 45 days of the date of notification of the federal overpayment or the student will lose further eligibility of federal Title IV aid until the debt is paid in full.

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

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

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

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

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

## Living on Campus

The residential nature of Alma College is an important part of the educational experience. It is for this reason that all students are required to reside in College-owned housing unless approved for off-campus housing. Through its facilities, staff and programs, Alma's residential community seeks to provide a personal and informal environment.

Learning extends beyond the classroom, and student activities and organizations provide opportunities for social interaction and personal growth. Campus residence halls, dining commons and lounges are frequently the settings for experiences that students recall as some of the most meaningful of their lives. The residential concept means more than "students living on campus." It is part of the living and learning experience.

## Residence Halls

Alma College provides a variety of residence options. Size of units varies from eight to 200 students. Single, double occupancy, suite and apartment rooms are available. In its residence halls Alma seeks to provide opportunities for students to develop mature interpersonal relationships, social skills, leadership skills and an awareness of individual rights and responsibilities.

Alma's residential concept seeks to provide an environment which complements the College's rigorous academic program. It also acquaints students with campus and community resources where specialized assistance may be obtained.

Each residential facility is supervised by a full-time director and/or student staff members who promote the goals of the residence hall program. In addition, as representatives of the College, members of the residence life staff have authority and responsibility to provide for proper operation of the units. Each of the small housing units have a student manager that supervises the residence.

## Room Assignments

During the Winter Term of each academic year, currently enrolled students reserve rooms in College
residential facilities for the following year. Freshmen are assigned to rooms according to the preferences listed on their housing information form, in the order of the date they made their commitment and security deposit to the College. All changes in room assignments must be approved by the Student Life Office. No room assignments will be changed during the first two weeks of each term. After that period, students may move to an open location only after they have consulted with their Hall Director or a member of the Student Life Office. Students should understand that if allowed to change rooms, there is a room change fee and the cost of their new room may be different than their current location. The College reserves the right to make changes in room assignments whenever unusual mechanical, interpersonal, disciplinary circumstances or space requirements exist.

## Inspections

The Director of Facilities and Service Management and the staff of each residential facility are responsible for maintaining rooms in a safe and sanitary manner and for making necessary repairs to rooms and furnishings. Therefore, the College reserves the right to inspect the rooms and to change room assignments when it is deemed necessary.

## Dining

Sodexo, Inc., provides a variety of dining options and flexible meal times to accommodate the students' active lifestyles. All students are required to participate in the College's board program unless they are married, living with parents or otherwise approved for off-campus residency. Meal plans are available for 14 or 19 meals a week along with "Munch Money" to spend at Joe's Place (snack bar and convenience store). The College also offers a 210 -meal block plan. Unlike the traditional plans, students may use either of these block plans to take a guest for a meal. It also includes "Munch Money." Refunds are not issued for missed meals on any of the plans. Admission to meals is by student identification card. A committee of students, staff and food service personnel meets regularly to discuss the programs and operation of the food service.

## College Regulations

## Policies of Interest

In a setting where the actions of one person may have an effect on the lives of others, it is not only desirable, but logical, that grace and consideration for others should prevail. That this ideal is not always attained should not deter men and women from striving to achieve it. At a liberal arts college, it seems natural that social ideals should take their place beside all others.

A dedication to ideals, however, cannot obscure a college's responsibility to maintain an environment genuinely conducive to safety and learning. A student shall take no action that threatens or endangers his or her own safety, health or life; nor shall a student make any verbal threat of such action.


#### Abstract

Alma College reserves the right to take disciplinary actions against any student whose conduct is deemed contrary to its stated purposes and standards. At the same time Alma remains committed to the belief that the campus community is best served when members - sensitive to the rights and needs of all - accept responsibility for their own actions. The regulations which follow are indicative of the current standards and processes in effect at Alma College. The Alma College Student Life Handbook contains additional standards for student behavior.


The College reserves the right to alter or add to these rules and processes.

Right To Dismissal. Alma College reserves the right to dismiss or refuse to register a student (always by due process) whenever such action is considered to be in the best interest of the student or of the College. Such action may occur in cases of extreme or repeated violation of regulations, endangerment of self or others, academic failure, conduct deemed unsuitable or behavior that represents a real or perceived threat to the Alma College community.

Disciplinary action may be taken against individuals and/or organizations for misconduct while on or off the campus. This includes students whom College officials or city, county or federal courts may find negligent for violation of any of the criminal and/or civil laws.

Alma College may initiate disciplinary or counseling procedures in cases when behavior becomes detrimental to the academic or personal development of the student and other members of the campus community.

The Alma College Student Life Handbook presents a list of specific behaviors which can lead to disciplinary action. All students are expected to be familiar with the handbook, especially the section dealing with "Community Standards of Behavior and the Campus Judicial Process."

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.

Alcoholic Beverages. The statutes of the State of Michigan allow the purchase and use of alcoholic beverages by persons who have reached the age of 21 . Students of legal age may use alcoholic beverages within the privacy of their residence hall rooms with the door closed and in other areas as provided in the "Alma College Alcohol Policy." The excessive use of alcohol under any circumstances is not condoned by the College, and undesirable conduct resulting from the use of alcohol will be subject to disciplinary action.

Assembly. Within the context of established College policies, peaceful assembly and peaceful picketing are
recognized as legitimate methods of personal expression. However, protest need not and must not take the form of violence, destruction, damage, physical abuse or confrontation that substitutes physical force for orderly efforts to attain one's ends. It should be remembered that freedom to protest is protected only so long as it does not interfere with the rights and freedoms of others. Students who violate this regulation will be referred to the Campus Judicial Committee or the Vice President for Student Life for immediate action. Depending upon the degree of involvement, destruction of property, etc., the student may be warned, placed on disciplinary probation, suspended or expelled.

Destruction of Property. Students are responsible for the proper utilization and preservation of all furnishings provided in residence hall rooms and will be charged for the repair/replacement of damaged items.

Drugs and Narcotics. Alma College does not allow the possession, use or sale of drugs and narcotics on the campus or in any College facility. Students must observe the drug and narcotic laws of the State of Michigan as well as federal laws and regulations as they apply to the possession, use and sale of these substances. The possession, use and sale of illegal drugs and narcotics under any circumstances is not condoned by the College and will be subject to disciplinary action. Exceptions are those cases when a student is under a physician's care and can provide the college, if requested, with written orders that indicate the need for the medical use of such substances. The policies of Alma College comply with the provisions of The Drug-Free Schools and Communities Act Amendments of 1989, Public Law 101-226. Further information about drug prevention programs is made available in the Alma College Student Life Handbook.

Medical Marijuana Policy. Medical marijuana which is prescribed for healing purposes is prohibited at Alma College even though there may be state laws which permit its use. Background: Alma College receives federal funding through Title IV in the form of student financial aid (grants, loans, and work-study programs) and through federal research grants. As a condition of accepting this money, Alma College is required to certify that it complies with the Drug-Free Schools, and Communities Act (DFSCA) (20 U.S.C. 1145 g part 86 of the Drug and Alcohol Abuse Prevention Regulations). The federal government regulates drugs through the Controlled Substances Act (CSA) (21 U.S.C. A 811) which does not recognize the difference between
medical and recreational use of marijuana. Thus to comply with the Federal Drug Free School and Communities Act and avoid losing federal funding, Alma College must prohibit all marijuana use, including medical marijuana, and provide sanctions for its use.

Firearms, Fire Equipment and Fireworks. The possession or use of firearms, other dangerous weapons (including bows and arrows, knives and crossbows), fireworks or firecrackers is prohibited. Use of fire equipment (extinguishers, alarms, hoses) except in case of actual emergency is a violation of state and local laws. Violators will be subject to prosecution and to discipline by the College. Disciplinary action by the College may include suspension.

Gambling. Alma College does not allow gambling on the campus.

Harassment. Alma College's policy on harassment complies with federal regulations in the Title VII of the Civil Rights Act of 1964 and with Section 75.147b of the Michigan Ethnic Intimidation Statute. The Harassment Policy is published in the Alma College Student Life Handbook and in the Manual of Operation. Policies and procedures are further detailed in Procedures and Policies: Responding to Sexual Assault, Date Rape and Domestic Violence.

Identification Cards. Each enrolling student is issued a Student Identification Card. This card must be presented at the dining hall for each meal; the library to check out books; the Business Office to obtain student paychecks; the Mail Room when receiving registered mail, certified mail and packages; and at the request of any member of the Alma College staff. The identification card also allows the student access to their assigned residence hall while classes are in session as well as admitting the student to many campus activities.

Students using the identification cards of others, lending their ID card, or in any way misrepresenting or refusing to identify themselves will be subject to disciplinary actions and a $\$ 75$ fine.

Replacements for lost or damaged ID cards may be obtained through Sodexo Food Service. The card must be returned to the Student Life Office when a student withdraws from Alma College prior to the completion of the academic year.

Keys. Any student who possesses and/or uses an unauthorized key to any building or area on the campus will be subject to disciplinary action.

Misappropriation of Property. A fine of $\$ 25$ per item will be assessed to students who take furnishings and/or equipment designated for general student use, and appropriate disciplinary action will be taken.

Motor Vehicles. A student who wishes to operate a motor vehicle (automobile, truck, motorcycle or moped) on the campus must register the vehicle with Facilities and Service Management. An annual permit fee is charged for each vehicle. The area in which you choose to park your vehicle determines the amount of the fee. Vehicle registration for parking permits can be completed at https://secure.alma.edu/payments/parking. Registration for returning students begins around April 1 and freshmen registration begins around July 1. License number changes or change in vehicle shall be reported immediately to the Facilities and Service Management Office.

Students who live off campus and commute and wish to park in a campus lot may register their vehicle for a permit to the commuter lot also at https://secure.alma.edu/payments/parking. Visitor permits can be obtained at no charge to park in an assigned lot.

Students may park their vehicles only in authorized areas. A motor vehicle parking map and regulations are provided by Facilities and Service Management.

Improper or unauthorized use of a motor vehicle on the campus may result in fines, towing and/or disciplinary action.

Pets. For health, sanitation and insurance reasons, no animals except tropical fish are permitted in residence halls or other College-approved housing. Stray animals should be taken to the Gratiot County Animal Shelter. The exception to this rule is for full-time professional, live in staff members (Hall Directors) who are allowed to have one pet (a cat, fish, or small dog not exceeding 25 pounds) in the privacy of their College-owned apartments. Hall Directors who wish to have a pet are required to pay a refundable cleaning deposit of $\$ 250$ upon confirmation of employment with the College.

Physical Violence, Vandalism and Theft. Any student whose behavior involves either threatened or direct physical violence, malicious destruction of property or stealing will be subject to disciplinary action. Students are urged to keep their rooms locked whenever they are away. Alma College is in full compliance with Section 485 f of the Student Right-To-Know and Campus Security Act of the federal government and annually makes available statistical information on campus crime. The College is not responsible for the loss or theft of personal belongings, valuables or money. It is recommended that students provide their own renters insurance to protect their belongings in the case of damage or theft.

Residence. Alma College is a residential college. Students must live in College residence halls for the duration of their enrollment unless married, living at home with a parent or guardian or otherwise approved for off-campus residence by the Vice President for Student Life, or the vice president's designee.

Selling, Soliciting and Peddling. Any solicitation on campus for personal profit or group benefit by students or outside interests must be cleared through the Student Life Office. Student solicitations or fundraising projects in the community of Alma shall be cleared with the Director of Alumni Engagement.

Telephones. Students can place campus calls (4-digit number) and, local, toll-free and calling-card calls from their rooms by dialing 9 and the number. To place long distance calls from student rooms or any public phone on campus, students will need a calling card/prepaid card. Each student may request a free voicemail box upon receiving their room assignment. Students are strongly encouraged to set up their voicemail account for retrieving information given out by College officials

Visitation Hours. Students may entertain members of the opposite sex in residence hall rooms only during hours established by the Student Life Office. Residence Hall Councils may establish more stringent visitation hours. These hours are published in the Alma College Student Life Handbook.

## The Judicial Process

The steps followed at Alma College to resolve formal disciplinary matters are called the judicial process. This procedure exists to assure that basic due process is granted to all students of our Community who find themselves in conflict with the Community's standards. All such conflicts are resolved by members of the Alma College Community in a system which, while avoiding the formalities and complexities of a legal process, aims to respect the dignity of the individual as well as personal and community rights. With heavy reliance on the honesty of all participants, it is assumed that reasonable people, properly informed, can and will make judgments in the best interest of the College Community.

The judicial structures and procedures have been set in place and are to be considered binding on all parties. The formal responsibility for discipline rests with the Vice President for Student Life. All possible disciplinary matters begin with a complaint filed with a member of the Student Life staff (Vice President for Student Life, Residence Hall Director, Resident Assistant, etc.) by any member of the College Community. Each complaint is then investigated. If formal disciplinary action seems called for, then the student or group alleged to have violated College policy is notified by a staff member of the Student Life Office that the matter is being referred to an appropriate judicial body or hearing agent. Consult the Alma College Student Life Handbook for a detailed explanation of the process.

## Final Authority for Disciplinary Matters

As a result of the corporate status of the College, the President, as a chief administrative officer, is charged with the internal direction of the College. Implied in this statement is the President's and the Board of Trustees' authority to take whatever action they deem appropriate, within established College policy and procedures, to protect the best interest of Alma College. This authority may include the direct application of these policies and procedures by the President subject to review by the Board of Trustees.

## Disciplinary Records

Disciplinary records are kept in compliance with the Family Educational Rights and Privacy Act of 1974,
as amended. Thus, disciplinary actions are recorded on the student's "personal record" and are not placed on the student's transcript. These disciplinary records are typically retained for a period of one academic year after the student graduates or withdraws from the College. The College may determine it is in its best interest to retain these records for a longer period of time, for example if legal action is anticipated or pending. After such time all disciplinary records are destroyed. These personal records are confidential. However, in most cases parents will be notified of disciplinary action.

## The Family Educational Rights and Privacy Act and Alma College

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

Records Access Policy. Alma College accords all the rights under the law to students who are declared independent. No one outside the institution shall have access to, nor will the institution disclose any information from, students' education records without the written consent of students. The only exceptions to this accord are to (1) personnel within the institution, (2) officials of other institutions in which students seek to enroll, (3) persons or organizations providing students financial aid, (4) accrediting agencies carrying out their accreditation function, (5) persons in compliance with a judicial order, and (6) persons in an emergency in order to protect the health or safety of students or other persons. Within the Alma College Community, only those faculty, administrators or support staff who are acting in the students' educational interests are allowed access to student education records. All these exceptions are permitted under the Act.

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

Alma College will release information about student religious preferences to local churches only at the request of the student.

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

Students may withhold directory information by filing the Non-Disclosure of Directory Information Form with the Director of Communications within two weeks of the first day of class of the Fall or Winter term. Requests for non-disclosure will be honored by the institution for only one academic year; therefore, authorization to withhold directory information must be filed annually in the Communication and Marketing Office. Forms are available in the Communication and Marketing and Registrar's offices.

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

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

Students wishing to review their education records must make written request to the Registrar listing the item(s) of interest. Only records covered by the Act will be made available within 45 days of the request. Students may have copies made of their records with certain exceptions, (e.g., a copy of the academic record for which a financial "hold" exists, or a transcript of an original or source document which exists elsewhere). These copies will be made at the students' expense at prevailing rates which are listed in the Directory of Records.

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

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

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

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

Students who believe that the adjudications of their challenges were unfair or not in keeping with the provisions of the Act may appeal in writing within 60 days to the President of the College. If the appeal proves to be unsatisfactory, the student may file a written complaint with The Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20202-4605.

Revisions and clarifications will be published as experience with the law and institution's policy warrants.

## Academic Support Facilities

## Information Technology

Modern information technology resources are ubiquitous at Alma College. The infrastructure that enables all campus use of technology is AlmaNet, a fiber optic backbone that operates at gigabit speeds, connecting wired and wirelessly. The network includes around 6,000 data ports on campus, and 500 wireless access points. Regardless of whether you're in a classroom, residence hall, the Center for Student Opportunity, College Corner Coffee and Books, Joe's Place or Hamilton, students can connect to campus and Internet network services including the InsideAlma student portal, teaching and learning software, college library resources, file storage, printing and e-mail. The College also has access to Internet 2 , the next generation of high capacity Internet research, information and communications resources.

Students are encouraged to bring their own computers to campus. In addition, the College provides these public computing facilities:

Olofsson Computer Classroom. Located in the Colina Wing of the library, this classroom has 11 Microsoft Windows workstations, equipped with a variety of general purpose and specialized software applications. These computers feature flat panel displays, high quality audio and video subsystems and support for multimedia applications. More public computers are available throughout the library.

Swanson Academic Center Digital Media Commons. This is a state-of-the-art facility for creating and producing multimedia materials. The laboratory features Apple iMac and MacPro computers, specialized media creation and editing software, scanners, specialized printers and other peripheral devices to create professional quality digital multimedia output of all kinds.

Mobile Computing Classrooms. Alma College has a number of reconfigurable classrooms designed to be flexible learning spaces that support traditional and technology-enhanced classes. All rooms are equipped with an instructor podium that includes projection control, a computer, and other technology features to support teaching and learning. All campus buildings are equipped with numerous wired and wireless network
connectivity. To support hands-on computer learning situations, mobile laptop carts are available to instantly transform a classroom into a computer lab.

Residence Halls. Each residence hall has computers for public use when access to one of the larger facilities is inconvenient. These devices offer the same network services and software available at other public computing facilities.

In addition to these public labs, the College has created specialized computer laboratories for 16 departments: a digital piano and music composition music lab; Unix lab; molecular structures lab utilizing silicon graphics workstations; digital graphic arts lab; and a variety of others, each designed to meet the specialized teaching and research needs of the faculty and students.

Network and computing resources for teaching, learning and administrative computing systems are supported by the Information Technology Services (ITS) Department, located in the Kehrl Library, lower level. That is where you will find the ITS Help Desk, which can be reached by linking to http://www.helpdesk.alma.edu, or by calling (989) 463-7303.

## Monteith Library Collection

The Alma College Library, consisting of the Monteith Library Collection and housed in the Kehrl Building, makes a full range of information services available to the Alma College Community. It provides access to holdings of more than 262,000 bound volumes, 70,000 e-books, 1,000 current periodicals, and more than 10,000 full-text scholarly journals online. The library also supplies access to materials in over 15,000 libraries through interlibrary loan and the Michigan Electronic Library catalog.

The entire library building contains a wireless network that covers every corner of the space. The Colina Library Wing opened for use in February 1996. During the summer of 2006 the wing was renovated in order to expand its use for collaborative learning. The renovated Colina Wing also now includes a student-run cafe. A second renovation project during the summer of 2008, included additional collaborative space.

Open 108 hours each week, the Library is staffed by librarians, support staff and student assistants. The
librarians provide student and faculty with course-based information literacy instruction and individual research assistance as well as Internet access to many electronic databases. In addition to its general and reference collections, the Library houses the Alma College Archives.

## Specialized Services

Alma College provides a wide range of services designed to enhance the ability of students to successfully transition through their total college experience.

## Center for Student Opportunity (CSO)

The CSO, located in the Tyler-Van Dusen Student Campus Center, provides connections, opportunities and resources that empower all students to explore their own pathways to academic, personal and professional success. In the CSO , students can find:

Academic Support. Whether students need assistance overcoming a challenging course, maximizing study time, or finding a new approach to test taking, CSO staff can help by providing free tutoring, workshops and individual appointments.

Career/Internship Preparation. As students progress from summer jobs to internships to their careers, the CSO provides assistance with resume development and optimization, guidance on networking, and suggestions for finding job and internship opportunities.

Disability Services. For students with disabilities, the CSO offers support services and resources, including classroom accommodations and assistive technology, to maximize academic, social and cultural success at Alma.

Diversity and Inclusion Initiatives. All college students are trying to find their place and meet others like them. The CSO recognizes the importance of connecting students with various campus organizations that provide support and positive affiliation, and works specifically with LGBTQ, minority and out-of-state students.

Financial Counseling. Through one-on-one counseling, small groups and workshops, the CSO covers everything from identifying financial resources and spending wisely to paying for college and budgeting.

First Generation Student Support. Students who are first in their family to go to college may benefit
from extra guidance as they navigate life at Alma. Thanks to a King-Chavez-Parks (KCP) grant, the CSO offers mentoring and additional support for our many first generation students.

Health-Related Career Development. As part of the CSO, the Integrated Health Studies Institute helps students explore multiple career choices and majors related to the high-demand health fields.

Leadership Development. When students want to enhance their leadership skills, the Responsible Leadership Institute (RLI) offers leadership development guidance and helps them become agents for positive change. RLI provides leadership experiences through alternative break service opportunities, leadership workshops, conferences and international travel.

Off-Campus Study Planning and Assistance. For students who would like to travel during their time at Alma, the CSO staff is here to help identify the best options, navigate the application process and prepare for a successful experience.

Service/Volunteer Opportunities. Alma students serve others through academic service learning courses and participate in more traditional volunteer experiences on campus and throughout the local community. CSO staff can direct students to the best ways they can use their talents to serve generously.

Venture Program. Students should begin planning for their Alma Venture early - internships, research fellowships or travel experiences, for example - to maximize the impact of up to $\$ 2,500$ per student in their *Venture Fund. The CSO can help students explore and define this exciting opportunity.
*Eligibility begins with students who enter Alma College in fall 2013.

## Counseling, Health and Wellness Center

Counseling and Psychiatric Services. Alma College Counseling and Wellness Center offers counseling and psychiatric services that facilitate students' personal development to participate more successfully in the Alma living and learning community.

Some of the common issues that students bring to counseling are depressed and anxious feelings, family
difficulties, personal crises, coping with loss, and other impediments to personal and academic functioning. We also aid with self-esteem, self-acceptance, identity and sexuality difficulties, as well as healing from the effects of sexual assault/abuse, suicidal thoughts and other destabilizing experiences.

Our licensed professional counselors provide focused individual, relationship and group counseling. In addition, walk-in emergency services are available daily for students who feel in urgent need of help or crisis intervention. Students may also arrange for psychiatric evaluations and medication management with our psychiatrist.

Health Care Services. The Wilcox Health Center staff provides a variety of health related services to the campus community in a clinic setting. The staff welcomes the opportunity to consult with students wishing to take personal responsibility for their own health and wellness. The Center offers a wide variety of services, similar to those offered by a family doctor including diagnosis and treatment of illness and injury, routine physical examinations, medical consultation and referrals, vaccines, allergy shots, and women's and men's health issues.

We employ a registered nurse and a physician's assistant, and also have a supervising physician on staff. The city of Alma also has an Urgent Care and MidMichigan Medical Center-Gratiot close by for emergency and after-hour care. We accept most insurance health plans and offer a student health plan for students who need to purchase a plan. As a courtesy, we will submit a claim to your insurance company.

## Section II Programs and Opportunities

- Requirements for Degrees
- General Education Goals
- Guide to General Education Distributive Requirements
- Academic Honors
- Faculty Recognition
- Academic Rules and Procedures
- Honors Program
- Interdisciplinary Programs
- Leadership Programs
- Pre-Professional Programs
- Off Campus Study Programs



## Requirements for Degrees

## Degrees Awarded

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

Bachelor of Arts
Bachelor of Science

136 credits
136 credits
(68 of the total credits must be in Science and
Mathematics)

Bachelor of Fine Arts
148 credits
Bachelor of Music
136-156
credits

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

## Earning an Additional Bachelor's Degree

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

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

Note: Students who earn a Bachelor of Music degree cannot also earn a Bachelor of Arts degree unless the basis of qualification is a major other than music. Students who earn a

## Bachelor of Fine Arts degree cannot also earn a Bachelor of Arts degree unless the basis of qualification is a major other than art.

Students who desire multiple degrees must make application to the Registrar's Office during the week of registration of the term prior to graduation. All degrees for which a student qualifies will be awarded as completed.

## Statute of Limitation for Degree Requirements

If candidates are unable to fulfill all requirements, including requirements for teacher certification, by August 30 of the year of graduation, a five-year grace period is allowed for completion of deficiencies. This grace period is further defined as a maximum of nine years after the date of initial enrollment at Alma College. After the five-year period, the student must re-apply for candidacy and have his/her record reevaluated under the requirements then in force. If those requirements are significantly different, the candidate may be required to complete additional work for the degree and/or teaching certificate. Certification requirements are subject to change by action of the State Board of Education and may not be reflected in this catalog.

## Alma College Credit

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

## Cumulative Grade Point Average

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

## Area of Concentration

Each student must declare an area of concentration before the end of the sophomore year by filing the
approved form with the Registrar's Office. This area of concentration may be a Departmental Major (at least 36 credits as prescribed by the department), an Interdepartmental Major ( 56 credits in courses approved by two or more departments and the Educational Policy Committee), or a Program of Emphasis [POE] (56-68 credits in courses selected by the student to meet a specific educational goal as approved by the POE Committee no later than November 15 of the junior year).

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

## Programs of Emphasis (POEs)

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

## Comprehensive Evaluation

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

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

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

## Double-counting Credits

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

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

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

## Upper Level Courses

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

## Spring Term Requirements

Two Spring Term courses must be successfully completed, one of which must be a designated $\boldsymbol{\&}$ ("S") course. Transfer students of sophomore standing or above must successfully complete one Spring Term course and it must be an $\$$ course. These designations are found in the Spring Term Course Booklet published each January.
$\$$ courses take advantage of the unique format of Spring Term and cross geographical, cultural or disciplinary boundaries. A term spent off campus in an approved Alma College program (ex. Philadelphia, Germany, France, etc.) may meet the student's $\&$ requirement. The student must still take two Spring Terms.

## Residency Requirement

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

## Limitations

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

8 credits Music 151, 152, 153, 154, 155, 156,
157, 158 and 159

6 credits Exercise and Health Science 100-165

8 credits Theatre/Dance 150, 151 and 152

8 credits Practicums (numbered 385, 386 and
387 in any department)

24 credits Independent Study (in a single department)

36 credits Practicum, Independent Study, Field
Experience, Internship or Directed
Teaching (in total)

A minimum of 68 credits applied toward graduation must be earned at Alma College or through Alma College-approved programs. Credit earned by enrollment in English as a Second Language or in Mathematics 099 does not count toward the 136-156 credits required for graduation.

## General Education Goals

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

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

- the variety in human cultures, societies, histories, and aesthetic and ethical systems both within their own nation and in the larger global community;
- the interrelationships between different parts of the global community;
- their own place within and responsibility to this community.

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

## Literacies

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

## Composition

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

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

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

## Mathematics

All students are required to successfully complete at least four credits of college-level mathematical or computational science coursework as part of the Distributive Requirements listed on the following page. To ensure that all entering students are prepared for college-level work in mathematics, the College will determine the mathematical competency level of all entering first-year and transfer students. Students who are not exempt on the basis of the qualifying ACT sub-score are required to take a placement exam to determine a recommended initial course. MTH 101 (or demonstrated competency) is a prerequisite for many other courses. Credit for MTH 099 does not count toward the minimum degree requirements.

## Guide to General Education Distributive Requirements

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

## I First Year Seminar

## 2 credits

Minimum of 2 credits for all students entering Alma College as freshmen. Course may be taken in the first or second term.

## II Writing Proficiency

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

III Second Language/International Awareness
8 credits
One 4-credit course in a second language plus one of the following: an additional 4-credit course in the same or another second language, a term of study in a foreign country, or a 4-credit course with non-U.S. or comparative international content or perspective. In this catalog, Second Language/International Awareness courses are marked with a

IV Distributive Requirements
36 credits
At least 12 credits in each of the following three divisions with no more than 4 of these credits from any one program. Practicum and independent study credits cannot be counted toward this requirement.

## Arts and Humanities (AH)

12 credits
12 credits (no more than 4 credits from any one subject area) chosen from:
All courses in ART, COM, MUS, PHL, REL, THD
All ENG courses at the 110 level or higher
All language courses at the 112 level or higher
HUM 100

12 credits (no more than 4 credits from any one subject area) chosen from:
All courses in ECN, HST, POL, SOA
Natural Sciences (NS)
12 credits

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

NS-1 Life Sciences 4 credits

4 credits chosen from:
All courses in BCM, BIO, PSY
ENV 105
IPH 212, 214, 215, 220, 224, 225, 226, 327, 328, 331, 340, 344, 401, 428, 430
NS-2 Physical Sciences
4 credits

4 credits chosen from:
All courses in AST, CHM, GEO, PHY
ENV 110, PSC 101
NS-3 Mathematics/Computation 4 credits

4 credits chosen from:
CSC 120 or higher, MTH 110 or higher, PHL 303, PSY 220

## Academic Honors

## Barlow Trophy

Alma's most prestigious award for graduating seniors, the Barlow Trophy is awarded on the basis of scholarship and leadership. Candidates must rank in the top 10 percent of the graduating class, and the recipient is elected by a vote of the College faculty and Student Congress.

## Dean's List

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

## Departmental Honors

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

## President's Outstanding Senior Award

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

## President's Cup

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

## Honor Societies

Academic achievement is recognized through membership in honorary organizations affiliated with a student's area of academic specialty. Many of Alma's honor societies are local chapters of national and international organizations, providing social and professional contacts which supplement classroom experiences.

Membership standards for these honor societies can be found on the Alma College Web site:

Phi Beta Kappa National Honorary Society<br>Omicron Delta Kappa National Honorary Society

Membership standards for this honor society are at the Student Life Office:

Order of Omega National Greek Honorary Society

## Graduation Honors

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

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

Membership standards for the following organizations are available from each academic department:

Alpha Mu Gamma Modern Languages
Alpha Psi Omega Theatre

| Beta Beta Beta | Biology |
| :---: | :---: |
| Chi Epsilon Mu | Chemistry |
| IPH Honor Society | Integrative Physiology and Health Science |
| Kappa Delta Pi | Education |
| Kappa Pi Zeta | Art and Design |
| Lambda Pi Eta | Communication |
| Omicron Delta Epsilon | Economics |
| Phi Alpha Theta | History |
| Pi Delta Chi | Dance |
| Pi Mu Epsilon | Mathematics |
| Pi Sigma Alpha | Political Science |
| Psi Chi | Psychology |
| Rho Chi Epsilon | Business |
| Sigma Delta Pi | Spanish |
| Sigma Pi Sigma | Physics |
| Sigma Tau Delta | English |

## Faculty Recognition

As a liberal arts and sciences college, Alma is dedicated to providing a high quality educational experience. Alma's faculty demonstrate a strong commitment to undergraduate teaching - characterized by engagement, accessibility, interaction and collaboration. The College honors faculty members' distinguished achievement through a number of awards programs.

- Andison Excellence in Teaching Awards. Begun in 2010, these awards recognize an untenured, tenure-track faculty member, as well as a tenure-track faculty member who have demonstrated excellence in the classroom.
- William R. Angell Professorship. Established by the Angell Foundation to honor the late William R. Angell, this award recognizes excellence in teaching and productive research.
- Barlow Awards. Established in 1982 by the late Dr. Joel Barlow '29, this annual cash stipend recognizes high levels of faculty contribution "to furthering the educational mission of the College." Teaching, scholarship, creativity or performance, and College and community service are acknowledged.
- Charles A. Dana Professorships. A grant from the Charles A. Dana Foundation established four endowed professorships in 1972 (a fifth was added later). These awards recognize outstanding teacherscholars.
- Elma C. and Wesley C. Dykstra Professorship. Established by the late Wesley C. Dykstra, professor emeritus of philosophy, this endowed professorship is to be awarded to a faculty member from the Philosophy and Art and Design departments, or other discipline within the Humanities. The criteria for award include distinguished record of teaching, scholarship and service as well as a profound commitment to the liberal arts.
- Reid-Knox Chair of American History. Established in 1992 from the estates of Frank and Annie Reid Knox, alumni from the 1890s, the Chair recognizes excellence in teaching and scholarship in the field of American History.
- Secrest Professorship. Established in 1993, this award was funded by former Board of Trustees Chair Fred Secrest and his wife, Stephanie. The Professorship acknowledges excellence in performing
arts teaching and in outstanding direction of student performance activities.
- Russell Professorship of Political Science. "Excellence in teaching" defines the criteria the late Arthur L. Russell '41 of Harlingen, Tex., wanted to note in the recipient of this professorship.
- Towsley Professorship of Chemistry. This endowed professorship was established in 1987 by the Harry A. and Margaret D. Towsley Foundation of Ann Arbor (now of Midland), Michigan. The award recognizes excellence in the teaching of chemistry.


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

Course enrollments are confirmed at registration on the first day of each term. Students who fail to confirm their registration on the first day of the term will be charged a $\$ 125$ Late Registration Fee.

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

Withdrawal. Withdrawal from a class may occur through the ninth week of a 14 -week course, the fifth week of a seven-week course, or the third week of a four-week course. Neither the course nor the withdrawal will appear on the student's record.

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

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

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

Final Examination Schedule. The Final Examination Schedule is established by the Registrar and published at the beginning of each term. Instructors will announce testing plans in the course syllabus; if a final examination is to be given, it must be at the officially-scheduled time. A fee is charged for each make-up examination. These examinations are given only with the permission of the instructor.

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

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

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

## Grading Practices

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

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

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

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

Application of the " $\mathrm{S} / \mathrm{F}$ " option is limited as described below:

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

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

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

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

## Academic Progress

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

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

## Probation Guidelines. The

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

## Probation Guidelines

| Unsatisfactory Progress Satisfactory Progress |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| \# Terms | Dismissal | Jeopardy | Probation | Warning |
| 1 | - | $1.25(-12)$ | $1.75(-4)$ | $<2.00(-0.5)$ |

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

| 2 | $1.50(-16)$ | $1.70(-10)$ | $<2.00(-0.5)$ |
| :--- | :--- | :--- | :--- |
| 3 | $1.70(-14)$ | $1.85(-8)$ | $<2.00(-0.5)$ |
| 4 | $1.80(-12)$ | $1.90(-6)$ | $<2.00(-0.5)$ |
| 5 | $1.90(-10)$ | $1.95(-4)$ | $<2.00(-0.5)$ |
| 6 | $1.95(-6)$ | $<2.00(-0.5)$ |  |
| $7-10$ | $<2.00(-0.5)$ |  |  |

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

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

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

First-term transfer students will qualify for jeopardy status according to the criteria for first-term freshmen. After the first term of enrollment at Alma, however, the published guidelines will apply.

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

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

Notification of the above actions will be sent from the Office of the Provost to the student and to the student's parents (if applicable) after review by the Academic Standards Committee of the faculty.

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

## Other Procedures

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

The GPA in the area of the minor concentration must be at least 2.0 (" $\left.\mathrm{C}^{\prime \prime}\right)$.

Repetition of Coursework. Repetition of coursework is permitted. In each case, the most recent effort is counted. Each effort is recorded on the student's permanent record.

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

## Honors Program

The Honors Program at Alma College celebrates our identity as a liberal arts college. Above all, the program aims to create an intellectual community centered on both independent excellence and collaboration. Honors Scholars participate in special seminar opportunities and enroll in courses designed for Honors Scholars. Students pursue departmental honors and membership in Phi Beta Kappa, the nation's preeminent honor society.

## Program Requirements

## Freshman Year

- Participate in a Honors Seminar in the Winter Term that introduces various disciplinary perspectives and liberal arts education (2 credits)
- Participate in special events with other Honors Scholars
- Enrollment in a curriculum that eventually fulfills requirements for membership in Phi Beta Kappa


## Sophomore and Junior Years

The middle years of the Honors program highlight the mastery of disciplinary work but also making connections - inside and outside of classrooms

- Continue participating in special Honors Scholars events and seminars with visiting scholars and artists
- Enroll in a curriculum leading to departmental honors
- Enroll in an independent study project with a faculty mentor* (4 credits)
- Take at least one course that crosses disciplinary boundaries or links different subjects* (4 credits)
*A qualifying overseas semester may be substituted for one of these courses.


## Senior Year

- Participate in a Senior Capstone Course ( 2 credits) that provides cross-disciplinary links and mentoring
for new Honors Scholars
- Continue participating in special Honors Scholar events and seminars
- Complete departmental honors, including presentation of work at Honors Day or other qualifying venues


## Successful Honor Scholars will

- receive a transcript designation of Alma College Liberal Arts and Sciences Honors Scholar with Departmental Honors.
- receive invitation to join Phi Beta Kappa.


## Interdisciplinary Programs

In addition to providing a solid foundation in basic skills and knowledge, the Alma curriculum offers students many opportunities to specialize. Students may choose from any one or a combination of 33 majors and interdepartmental majors, 32 minors, four different degree programs, and individually designed areas of concentration called Programs of Emphasis which are aimed at specific professional careers.

| Interdisciplinary Program | Advisor |
| :--- | :--- |
| American Studies | Dr. von Wallmenich |
| Biochemistry | Dr. Beckmann |
| Cognitive Science | Dr. McNally |
| Communication and New Media Studies | Dr. Gilbert |
| Environmental Studies | Mr. Borrello |
| Foreign Service | Dr. Hulme |
| Gerontology | Dr. Davis |
| International Business | Mr. Baleja |
| Public Affairs | Dr. Lorenz |
| Public Health | Dr. Anderson |
| Women's and Gender Studies | Dr. Blanchard |

## Leadership Programs

Responsible Leadership Institute (RLI). The RLI provides innovative co-curricular programming and service opportunities for all students in support of Alma College's mission. All students benefit from the opportunity to participate in the Robert D. Swanson Responsible Leadership Speaker Series, book-group discussions, RLI sponsored seminars and workshops, alternative break service experiences and internship support in non-profit agencies. In addition to sponsoring these activities, the RLI also provides support for the Service Learning and Chapel programs of the College.

Exceptional opportunities for in-depth leadership training and development are available through the Institute's Leadership Fellows' Program. In addition to the opportunities open to all students, RLI Fellows participate in a summer leadership development program, projects offered to the campus community, special events connected to the Speaker Series, the Michigan Forum and sessions dedicated to developing and sharing personal leadership goals and visions. Additional opportunities available to RLI Fellows include participation in an international leadership experience, the Dow Chemical High School Leadership Institute and mentored partnerships in non-profit or for-profit organizations. The Responsible Leadership Institute is supported by a continuance grant from Lilly Endowment Inc., The Herbert H. and Grace A. Dow Foundation, as well as alumni and other friends of Alma College.

Integrated Health Studies Institute (IHSI). The Alma College IHSI has been created to produce graduates who are well positioned to take on leadership roles addressing the many challenges facing health care in the immediate and distant future. Experiential learning is the foundational principle of programmatic development and has been incorporated into all components of the student experience from their first year through graduation. Key components include first year student development of a four-year plan while working closely with a faculty advisor, seminars in which students actively engage in analysis of complex issues of health, student interaction with health experts through Institute-sponsored symposia, and completion of a required internship experience that enables students to connect the experience to broader health themes.

While the Institute provides critical resources for all students interested in health, more intensive and
explicitly integrative experience with the breadth of issues faced by professionals in health care delivery, administration, policy and communication is expected of those students admitted to the Institute.

The Posey Global Leadership Fellows Program. Funded by Lee and Sally Souders Posey '56, the Posey Global Leadership Fellows Program seeks to cultivate the next generation of global leaders by promoting innovative experiential and research opportunities anywhere in the world. Students selected as Posey Global Leadership Fellows will receive a Posey Fellowship that supports internships, independent research projects, and participation in colloquia, seminars, conferences and training opportunities that foster engagement with transboundary issues and provide an appreciation of the possibilities and obstacles to effective leadership in an international context. The fellowships are awarded to Alma College students to support global study or work related to global issues. This does not include for-profit internships. Advisor: Dr. D. Hulme.

## Pre-Professional Programs

## Career Opportunities

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

Military Service. An agreement with Central Michigan University enables students to enroll in Reserve Officer Training Corps (ROTC) military science courses there. After demonstrating suitable progress, students may qualify for scholarship aid or for commissions in the U.S. Army. Contact: Vice President for Enrollment.

Pre-Dentistry. A minimum of three years of college is required for admission to dental schools although most students complete four. Required courses usually include English composition, inorganic and organic chemistry, biology or zoology, and physics. Specific information can be obtained from the Pre-Dentistry advisor or the dental school. Contact: Integrated Health Studies Institute.

Pre-Engineering. Students can begin engineering studies at Alma College and complete them at an engineering college. Pre-engineering students typically choose majors in physics, chemistry, mathematics or computer science.

Pre-engineering students need not make an immediate choice between the two programs described below. Rather they should explore their interests by taking appropriate courses in physics and mathematics. It is usually sufficient to make a program decision by the midpoint of the junior year. The options for study are

- Dual-Degree (3-2) Program. Students may study three years at Alma and then transfer to an engineering college to complete engineering training in two more years. At the end of five years, the student will have earned two degrees: a Bachelor of Science from Alma College and a Bachelor of Science in Engineering from the engineering college.
- Bachelor's-Master's (4-2) Program. Students may study four years at Alma, earning a Bachelor of

Science degree in an appropriate major and then enter an engineering graduate program to complete a master's degree in a chosen field.

## Contact: Dr. V. Argueta.

Pre-Law. No particular major is required for students interested in law school. Students should elect courses which are academically and intellectually challenging. Students also should elect courses that focus on critical thinking, research and writing. Coordinator: Dr. K. Olbertson.

Pre-Medicine. Medical schools stress the need for a liberal arts education. Alma urges students wishing to enter medicine to complete four years of study before entering the professional school. Courses required usually include English composition, inorganic and organic chemistry, biology, physics and mathematics. A minimum CPA of 3.0 is required for medical school entrance; however, $3.5-3.8$ is more realistic. Contact: Integrated Health Studies Institute.

Pre-Ministry. To enter theological school, a student must obtain a bachelor's degree. The American Association of Theological Schools recommends undergraduate study include English, philosophy, religion, history, psychology, sociology, natural science and a second language. At Alma, students are advised to obtain at least a minor ( 24 credits) in Religious Studies. Advisor: Dr. B. Stratton.

Pre-Nursing. Alma College students interested in pursuing a career in nursing complete their bachelor's degree in a relevant major, together with all necessary prerequisite coursework such as chemistry, microbiology, pharmacology, developmental psychology and statistics. With the necessary coursework completed students typically seek admission into a one-year accelerated second degree program, obtaining the Bachelor of Science in Nursing. Contact: Dr. J. McKenna.

Pre-Occupational Therapy Alma offers a cooperative program in occupational therapy with Washington University in St. Louis, Mo. In this five-year program, students spend the first three years at Alma and the final two years at Washington University. The program enables students to earn both a bachelor's degree from Alma College and a Master of Science degree in occupational therapy from Washington University. The granting of these degrees is contingent upon completion of stipulated courses and a recommendation from the
program advisor. Contact: Dr. J. Davis.

Pre-Physical Therapy. Students should complete four years at Alma College, earning a bachelor's degree in an appropriate major, and then enter a graduate program in physical therapy to complete a master's degree and certification. Courses required include chemistry, physics, human anatomy, human physiology, psychology and statistics. See program advisor for specific requirements. Advisor: Dr. J. Davis.

Teaching. Alma graduates can be recommended for certification to teach in early childhood, elementary, middle and high schools. College certification programs are approved by the Michigan Department of Education. For details about Alma's programs in Education and requirements for certification, see the Education Courses of Instruction section of this catalog. Contact: Education Department Chair.

## Off-Campus Study Programs

In cooperation with institutions of higher education, Alma College offers a variety of both domestic and international study programs. Credit earned in these programs counts as residence credit. Off-campus study during the Fall or Winter term in an approved Alma College off-campus study program meets the College's $\leqslant$ requirement. Off-campus study programs approved through the Center for Student Opportunity (CSO) that are in session during an Alma College Spring Term will meet one Spring Term requirement. A maximum of 16 credits in language studies per term will count toward a language major or minor. For eligibility, requirements, detailed program information and application materials, consult the CSO.

Off-Campus Costs and Financial Aid. Students participating in semester off-campus study programs pay Alma College tuition. If the total cost of the off-campus study tuition exceeds Alma College tuition for the same semester, the student will be billed for the additional amount. All program related fees, other than tuition, that are invoiced to Alma College will also be added to the Alma College student account. Students participating in summer programs will pay directly the tuition, room, board and academic fees associated with the program and a $\$ 500$ administrative fee. The standard $25 \%$ reduction in Alma aid for students who do not reside on the Alma College campus also applies to all students enrolled in off-campus study programs.

Alma College aid can be used for off-campus Alma College-approved programs only by students who are U.S. citizens and who reside in the U.S. or a U.S. territory. Alma College financial aid can be used for one semester (not Spring Term) in an approved off-campus program. Federal or state aid is available for more than one term of off-campus course work. Exceptions are for Modern Language majors, who may study for a full academic year in one international language program, and students with a double major in two languages, who can receive aid for up to two terms if the programs are needed to fulfill international language requirements.

## Approved International Off-Campus Study Programs. Alma College offers international programs

 of study in the countries listed below. Additional information is available in the CSO. The programs in Ecuador, England and Peru have internship and volunteer experiences at their locations.- Argentina - Greece
- Australia - Ireland
- Austria - Italy
- Ecuador - New Zealand
- England - Peru
- France - Scotland
- Germany - Spain
- Ghana

Approved Domestic Off-Campus Study Programs. Each of the domestic programs provides opportunities for experiential and academic learning including internships and traditional coursework. Additional information is available in the CSO.

- Chicago Center for Urban Life and Culture; Chicago, IL
- New York Arts Program; New York, NY
- The Philadelphia Center; Philadelphia, PA
- American University; Washington, DC
- The Washington Center; Washington, DC

Spring Term Off-Campus Study. Each Spring Term, Alma College faculty members offer a variety of courses in international and domestic settings. Recent faculty-led international courses took place in Argentina, Australia, Austria, China, Ecuador, England, Germany, New Zealand, Nicaragua, Poland, Russia, Scotland and Spain. Language study is offered in France, Germany and Latin America. Domestic offerings have included various areas in Michigan and Colorado; the cities of Chicago, Key West, New York City, San Francisco and Washington, D.C.; and the U.S.-Mexico border. Additional information about these programs is available through the Provost's Office.

## Special Programs

Service Learning Experiences. Alma has an active academic service learning program. Service learning
courses include meaningful community service, a clear connection between course objectives and service activities and structured opportunities for reflection for the enhancement of academic learning. Most disciplines offer at least one service learning course in which students are engaged in meaningful service with a non-profit or service organization addressing economic development, education, employment, environmental and health related issues. Located in the CSO, service learning supports volunteer opportunities including: alternative break, Alpha Phi Omega, blood drives, College Positive Volunteer training and certification, Community Café partnership, community service work study, Mentor PLUS Program, and the Service House, a residential option. Service opportunities have been developed in the Alma area, throughout Michigan, and even outside the United States. To learn more, contact the Service Learning Coordinator: Ms. A. Ritz.

Undergraduate Research and Performance Programs. Many Alma students seek individualized opportunities to conduct research under the guidance of a faculty member in the field, laboratory, archives or studio. Students from all disciplines of the arts, humanities, sciences and social sciences often complete research and/or creative projects that are then presented at forums such as the Michigan Academy of Science, Arts and Letters; state, regional and national meetings of disciplinary honor societies; or invited showings, performances or presentations. Numerous competitive scholarships, including the Currie Scholars Program, the Kinney Research Scholarship and the Yehle Summer Internship Scholarship provide financial aid to support qualified students who wish to pursue summer research and internship opportunities. For more information, contact the Provost's Office or the appropriate department chair.

## Section III Courses of Instruction

- Courses of Instruction
- Guide to Understanding Course Listings
- General Studies
- American Studies (AMS)
- Art and Design (ART)
- Astronomy (AST)
- Biochemistry (BCM)
- Biology (BIO)
- Biotechnology (BTC)
- Business Administration (BUS)
- Health Care Administration (HCA)
- International Business Administration (IBA)
- Chemistry (CHM)
- Cognitive Science (COG)
- Communication (COM)
- Computer Science (CSC)

- Economics (ECN)
- Education (EDC)
- English (ENG)
- Environmental Studies (ENV)
- Foreign Service (FOR)
- Geography (GGR)
- Geology (GEO)
- Gerontology (GER)
- History (HST)
- Integrative Physiology and Health Science (IPH)
- Athletic Training (ATH)
- Public Health (PBH)
- Library Research (LIB)
- Mathematics (MTH)
- Modern Languages
- French (FRN)
- German (GRM)
- Spanish (SPN)
- Additional Languages Offered
- Music (MUS)
- New Media Studies (NMS)
- Philosophy (PHL)
- Physics (PHY)
- Political Science (POL)
- Psychology (PSY)
- Public Affairs Institute (PAF)
- Religious Studies (REL)
- Christian Education (CEP)
- Sociology and Anthropology (SOA)
- Theatre and Dance (THD)
- Women's and Gender Studies (WGS)


## 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 200level courses are open to all students unless otherwise indicated by prerequisites. Most 300 - and 400 -level courses are upper level work for which prerequisites are a necessity. Not all upper level courses are offered every year; they are frequently alternated with others and offered every other year.

Courses listed in this catalog are subject to change. New courses and changes in existing courses are initiated by the appropriate departments or programs, approved by the Provost, the Educational Policy Committee and the faculty. Additions to the curriculum for the ensuing year are published each fall in the Class Schedule.

## Divisions, Departments and Programs of the College

Humanities
Art and Design
Chinese
Christian Education
Communication
English
French
German
Greek
Hebrew
Humanities
Latin
Library Science

## Natural Sciences

Astronomy
Athletic Training
Biochemistry
Biology
Biotechnology
Chemistry
Cognitive Science
Computer Science
Environmental Studies
Geology
Health Studies
Integrative Physiology and

## Social Sciences

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

Music Health Science

New Media Studies
Philosophy
Religious Studies
Spanish
Theatre and Dance
Women's and Gender Studies

## Guide to Understanding Course Listings



## General Studies

The College offers not only departmental or single-discipline courses but also a variety of interdisciplinary courses which may not fall into the classical disciplines.

## First Year Seminar (FYS)

As part of the General Education curriculum, first year students are required to successfully complete a minimum of two credits of a first year seminar. These courses focus on the interdisciplinary nature of important and timely social, scientific and cultural issues and are designed to provide every new student with high quality student-faculty interaction that helps students develop skills in critical thinking and communication. Some courses will apply toward the Quill requirement, as indicated on the schedule for the term.

## Exercise and Health Science (EHS)

EHS 110.

## Beginning Tennis

1 credit \$3

EHS 112.

## Beginning Golf

1 credit \$4

EHS 118.

## Racquetball

1 credit
\$4

EHS 130.

## Beginning and Advanced Beginning Swimming

 1 credit
## EHS 150.

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

EHS 154.

EHS 156.

EHS 157.

EHS 160.

EHS 165.
Independent Group Activity
1 credit

Designed for a group of students to contract for a specific goal-centered learning experience. Goals,
activities and means of evaluation must be detailed with the instructor.

EHS 200.

## Lifeguarding

2 credits

Fundamentals of lifeguarding. Satisfactory completion of this course qualifies student for American Red Cross lifeguarding certification.

EHS 201.

## Water Safety Instruction

2 credits
Advanced Life Saving Certificate

## EHS 202.

## Scuba Diving

2 credits
\$100

Designed to prepare students for scuba certification as a Scuba Schools International (SSI) open water diver. Students complete a classroom component as well as a pool component.

## EHS 203.

2 credits $\quad \$ 100$
IPH 202
Designed to enhance the performance skills completed in IPH 202. Students complete a classroom component as well as a pool component.

## EHS *350.

## Principles of Coaching for Teachers

2 credits

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 *390.

## Field Work in IPH/Recreation

2 credits
Permission

## Health Studies (HSS)

HSS 201.
Health, Medicine and Humans
4 credits

MTH 099
Topics in physiology, health and medicine including a laboratory experience which emphasizes diagnostic testing. Sample topics include circulation, respiration, digestion, reproduction and excretion.

## Honors Program (HNR)

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

## Humanities (HUM)

HUM 100.
Fine Arts Education

4 credits
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. Designed for all students, but of special interest to Elementary Education majors.

## HUM 180. <br> Topics in Humanities

4 credits
Courses in the humanities, often incorporating an interdisciplinary focus from two or more programs, which do not fit within current departmental boundaries.

## Physical Science (PSC)

PSC 101.

## General Physical Science

4 credits
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 380.

## Physical Science Concepts

4 credits
EDC Major
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.

## Non-Departmental (STC)

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

STC 003.
©

Cross-Cultural Learning in Scotland

4 credits
Permission
Fee TBA

International experience emphasizes active involvement with Scottish people both at home and at work. Students will carry out a research project which takes advantage of the site.

STC 005.

## Interdisciplinary Seminar in Cross-Cultural Learning

4 credits
Fee TBA
By application
Cross-cultural learning experience offered in a significantly different culture. Consideration of the history, social structure, and geographic setting of the culture. Participation in community-oriented service. Location/country varies.

STC 006.

## Serious Games: Simulation in the Social Sciences

4 credits

Introduction of concepts in the social sciences and the use of simulations/games in teaching and research. The class: (1) examines the rationale for gaming and simulations; (2) participates in large-group games, small-group games and computer simulations; and (3) designs simulations/games for topics of interest.

STC 007.

## Understanding Relief Efforts

4 credits
Fee TBA

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

STC 009.
(4)

The Holocaust: Causes, Legacies
4 credits
Permission

Team-taught service learning course. Exploration of causes and legacies of the Holocaust. Includes restoration of a Jewish cemetery in Poland. Through interaction with members of a local Jewish community, visits to former centers of Jewish culture and tradition (Berlin, Prague, Krakow), students gain first-hand experience.

STC 012.

## New Zealand Experience

4 credits
Fee TBA
Permission

Students spend Spring Term studying natural history, flora and fauna, economics, politics, culture and other aspects of New Zealand.

## American Studies (AMS)

Assistant Professors Olbertson and von Wallmenich, co-coordinators; courses taught by faculty in art and design, communication, economics, English, history, music, political science, religious studies, and sociology and anthropology.

## Minor Requirements

1. Total credits: 30 . No more than eight credits that have been applied toward another major or minor may be applied to the AMS minor.
2. Core: 22 credits. Each student must take AMS 101, 102 and 301, plus four courses from the following list (no more than one course per department): ART 113; COM 110; ECN 201; ENG 260 or 261; HST 104, 105, 180A or 228; POL 101; REL 107; and SOA 101.
3. Advanced electives: eight credits. Each student must take two courses from the following list (no more than one course per department): ART 249 or 250 ; ENG 361, 362 or 366; HST 208, 277, 323, 325, 326 or 436; POL 231, 325 or 336; and SOA 241 or 380A; or other approved (with substantial American content) topics courses (e.g., African American literature or religion, Native-American literature, etc.) AMS independent study or practicum subject to approval of the AMS coordinator.
AMS 101. Introduction to American Studies 2 credits

Focuses on the multi-disciplinary perspectives needed to understand the complexity of "the American experience(s)." (Open only to freshmen and sophomores.)

## AMS 102. <br> Perspectives on the American Experience(s) 2 credits

Focuses on seminal sources for deepening one's perspectives on "America." (Open only to freshmen and sophomores.)

## AMS *301.

## American Studies Seminar

2 or 4 credits
AMS 101 and 102

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

## Art and Design (ART)

## Professors Lopez-Isnardi and Parks-Kirby; Associate Professor Rozier; Assistant Professor Connolly.

Three major programs are offered by the Art and Design Department. The Bachelor of Fine Arts (B.F.A.) degree is a pre-professional program in studio art or design. The B.F.A. is offered in the areas of ceramics, drawing, graphic design, digital art, painting, photography, printmaking, sculpture and three-dimensional design. The Bachelor of Arts (B.A.) degree program provides a more general study suitable for those wishing to combine their study of art with other liberal arts disciplines. The teaching major (B.A. with LQ comprehensive K-12 certification) is combined with a major in Secondary Education to prepare those planning to teach in the public schools. Graduates of Alma's Art and Design programs find career opportunities in such fields as advertising, design, illustration, museum work, photography, printing and teaching, and many continue to exhibit their work as producing studio artists.

## Bachelor of Fine Arts Degree Requirements

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

## Program Considerations for Bachelor of Fine Arts Major

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

## Bachelor of Arts (Art Major) Degree Requirements

1. Thirty-six credits in Art which must include ART 101, 121, 122, 220 or 223, 226, and 500; eight credits of Art History including ART 112 and at least one four-credit upper level Art History course. An upper level quill course in the major is required for graduation.
2. Students must retain their portfolio of artwork created throughout their college career in order to participate in ART 500A/500B and the senior exhibition.
3. The capstone experience, composed of three essential consecutive components, is to be completed during the thesis exhibition year: ART $500 \mathrm{~A} / 500 \mathrm{~B}$; a senior exhibition acceptable to the Department; and a successful completion of your Advisory Board Review.
4. The Department reserves the right to review your portfolio for acceptance into the program if the major is declared during the junior year or the overall GPA is less than 2.5 .

## Art Minor Requirements

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

## Art History Minor Requirements

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

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

## Program Considerations for Art History Minor

Students who have had little or no studio experience are strongly encouraged to complete at least one studio course from the 100-200 level series.

Because graduate programs in Art History typically require proficiency in at least two foreign languages, students who are considering advanced studies in this discipline should plan to include at least four semesters of foreign language coursework in their curriculum.
B.A. or B.F.A candidates in ART may count up to eight credits toward both the major and the Art History minor requirements.

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

## Teacher Certification Requirements

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

## Transfer Credits in Studio Art

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

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

## ART 101.

## Drawing Studio

4 credits
\$75

Exploration of graphic media with emphasis on developing drawing skills.

## ART 111.

## Art History I

4 credits $\$ 30$

Survey of human artistic achievement from its earliest visual record to the Medieval Period.

ART 112.
$\longrightarrow$ (4)

## Art History II

4 credits \$30

Survey of art from the Renaissance to the 20th century.
ART 121.
Two Dimensional Design Studio
4 credits
$\$ 100$

Introduction to the elements and principles of design as the foundation needed to create conceptually and aesthetically resolved visual problems in the plastic, graphic and media arts.

## ART 122. <br> Tools and Materials (Studio)

4 credits
ART Major or Permission
Introduction to studio work with emphasis on three-dimensional theory and the use of basic tools and techniques. Art majors are given first preference for enrollment.

## ART 180. <br> Topics in Studio Art

$$
4 \text { credits }
$$

TBA
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.

## ART *220. Sculpture Studio

$$
4 \text { credits }
$$

$$
\$ 165
$$

Exploration of sculptural form through the processes of modeling, carving and assemblage. Consideration of sculptural ideas and imagery from various times and cultures with emphasis on contemporary practices. Day trip to Meijer Sculpture Gardens, Grand Rapids.

## ART *222.

## Printmaking Studio

4 credits $\quad \$ 150$
Exploration of relief, intaglio and planographic techniques with emphasis on works of art in multiples. Some
attention to the history of the print as art, the craft of printing, and print preservation and connoisseurship.

## ART *223. <br> Ceramics Studio

## 4 credits

\$125

Introduction to direct forming processes; hand building and wheel-throwing. Investigation of the uses of slips, glazes and other methods of surface enrichment. Participation in class kiln firings. Fee for clay and glaze supplies.

## ART *224. <br> Photography Studio

$$
4 \text { credits }
$$

Introduction to basic 35 mm traditional and digital photography techniques. Students will develop and print using traditional black and white film. Scanning and Digital Asset Management techniques are used as means to edit, manage and archive photographic work. All final images are gelatin silver prints created using traditional wet darkroom methods. A 35 mm SLR film camera is required.

## ART *226. <br> Painting Studio

4 credits
\$125
ART 101 or 121 recommended
Introduction to basic procedures, tools and materials for oil and acrylic painting. Emphasis on composition, form and color. Discussion of historical development of all painting media.

ART *227.

## Life Drawing Studio

4 credits
ART 101 recommended
Introduction to expressive drawing of the human figure including some study of anatomy. Students are
charged a fee to cover the cost of models.

## ART *230.

## Graphic Design Studio

4 credits \$125

ART 121; or ART 101, 224, or 232
Development of communication skills through the organization of image and text to inform, persuade, identify, or clarify an idea to a specific audience. Students will design works for printed media and Webbased communications.

ART *231.
(4)

Raku Ceramics
4 credits
TBA
ART 223 or Permission
An introduction to the history, aesthetics and techniques of raku-fired ceramics.

## ART *232. <br> Digital Imaging Studio

4 credits
\$125
ART 101, 121 or 224 recommended
Exploration of aesthetic and technical relationships between still images, multiple prints and montage as they are presented in the form of the digital straight print, narratives, and/or series.

ART *250.

## Contemporary Art in New York

4 credits
TBA
Permission

Introduction to the major artistic movements and critical theory in the last two decades. Students spend a
week in New York City exploring galleries, museums and artists' studios. Seminar includes readings, discussion and a research paper on a special topic.

## ART *280.

## Topics in Art History

## 4 credits

\$30

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

## ART *290.

## Intermediate Directed Studio Projects

4 credits TBA
Permission
Exploration at the intermediate level through a studio project in a selected medium. Open to majors and nonmajors. Utilizes a directed studio format. (Past courses have included bookarts, jewelry, digital photography, watercolor, wheel-thrown ceramics, etc.)

## ART *299.

## Independent Studies

4 credits
TBA
Permission
Individual study of a subject in Art or Art History.

ART *341.
(4)

## Survey of Ancient Art

4 credits
\$30

Introduction to the arts of ancient Greece and Rome with emphasis on the context in which they were
produced. Survey of ancient history, literature and mythology are included to enrich students' comprehension of the artworks.

ART *342.
$\longrightarrow$ (4)

## Medieval Art

4 credits $\$ 25$

Introduction to the arts of Medieval Europe, with an emphasis on the context in which they were produced. Survey of Medieval history, literature and religion are included to enrich students' comprehension of the artworks.

## ART *343.

Renaissance Art
4 credits \$30

Introduction to the arts of the Renaissance in Northern and Southern Europe, with an emphasis on the context in which they were produced. Surveys of Renaissance history, literature and religion are included to enrich students' comprehension of the artworks.

## Survey of Non-Western Art

4 credits
\$30
Sophomore Standing

An introduction to the visual arts of India and Southeast Asia, China, Japan and Korea, the Pacific, and the Americas with emphasis on the historical and cultural contexts in which they were created.

$\longrightarrow$

## Modern American Art

4 credits $\$ 25$

Survey of American artists, architects and craftsmen from the Civil War period to the present day. Consideration is given to the influence of technology, women and minority artists in the development of

## ART *380. <br> Topics in Studio Art

4 credits
TBA
ART 101, 121, 122, 220, 223 or Permission
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 have included advanced illustration, landscape photography and architectural ceramics as well as studio courses that may be taught overseas during Spring Term.

## ART *385. <br> Practicum

4 credits
ART 101, 111, 112, 121, 122 or Permission
Designed to provide on-site working experiences in the student's area of interest. Examples of typical practica include: apprenticeships with professional artists, internships with museums or art centers, internships with community art councils, or short-term employment in firms specializing in an art-related area. Practicum arranged with assistance of faculty advisor. Departmental approval is required.

## ART *390-*490.

## Advanced Directed Studio Projects

$$
\begin{aligned}
& 4 \text { credits each } \quad \$ 50 \\
& \text { Permission }
\end{aligned}
$$

In-depth study in the student's area of interest under direction of a faculty member in that area. Designed for junior and senior Art and Design majors who have completed 12 credits of studio work. Exceptions to this policy made only with Departmental permission.

Subject matter arranged through close consultation with advisor according to individual needs or to specified curricula available. Advanced Directed Studio Projects have been offered in, but are not limited to, the following:

## 1. Series in Ceramics

- Wheel-thrown ceramics
- Ceramic sculpture
- Glaze chemistry
- Mold making and casting
- Advanced projects in ceramics

2. Series in Digital Art

- Advanced digital art
- Book structures
- Time-based media
- Digital comic layout
- Special projects


## 3. Series in Drawing

- Advanced drawing
- Advanced life drawing
- Mixed media drawing
- Color media
- Special projects in drawing

4. Series in Graphic Design

- Logo and visual design
- Corporate identity
- Web design
- Time-based media


## 5. Series in Illustration

- Advanced drawing
- Commercial illustration
- Scientific illustration
- Children's book illustration
- Color media

6. Series in Painting

- Advanced painting
- Watercolor
- Advanced watercolor
- Airbrush painting

7. Series in Photography

- Intermediate photography
- Digital photography
- Platinum/palladium printing
- Gum printing
- Special projects

8. Series in Printmaking

- Intaglio printing
- Lithography
- Relief printing
- Collagraphy
- Monotypes
- Mixed Media

9. Series in Sculpture

- Installation art
- Mixed media sculpture
- Welded metal sculpture
- Mold making and casting
- Ceramic sculpture

10. Series in Three-Dimensional Design

- Furniture design
- Jewelry and small metals
- Papermaking
- Advanced 3D design projects

Students may take up to six Advanced Directed Studio Project courses.

## ART *399-*499. Independent Studies

4 credits
TBA
Permission
Individual study of a subject in Art or Art History.

ART * 400 .
$\longrightarrow$

## Senior Thesis in Art History

4 credits $\$ 25$

Permission

Readings, discussion and research paper on special topics in Art History.

## ART $\mathbf{* 5 0 0 A} / * 500 B$.

## Senior Show/Thesis Exhibition

2 credits each
\$50 each

## Permission

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

## Astronomy (AST)

## Professors Reed and Strait.

## 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. <br> Planetary Science

4 credits $\$ 25$
MTH 099
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, laboratory and discussions.

## AST 112. <br> The Universe

4 credits $\$ 5$
MTH 112
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.

AST *225.

## Astrophysics

4 credits
PHY 221 concurrently

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.

## Biochemistry (BCM)

## Professors Ball and Beckmann; Associate Professor Turk; Assistant Professors Calhoun and Doyle.

Biochemistry is a broad and flexible discipline that uses all available approaches to discover molecular and genetic mechanisms of any biological process. Our program is truly interdisciplinary and requires a strong background in chemistry and biology. You will be trained in protein and nucleic acid methods, biophysical chemistry applications, and molecular biological techniques. Team research is built into the curriculum, and opportunities for independent research are numerous. A Biochemistry major thereby prepares you for either graduate or professional schools. Although most careers require an advanced degree, opportunities exist in academic, industrial and biotechnical research and development sectors.

## Major Requirements

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

## Program Considerations

1. Potential majors are advised to schedule Mathematics 121-122 and Physics 121-122 in the freshman and sophomore years so they may begin Chemistry 331-332 in the junior year.
2. Take note that BCM 422 and BCM 430 are offered in the winter terms of alternating years.
3. This is an excellent major for pre-medical students, but additional electives are strongly advised.
4. Students bound for graduate school should make careful course selections to support their area of emphasis. Participation in research and additional course work in biology, chemistry and mathematics is
desirable.
5. Completion of an independent research project culminating in a senior thesis is encouraged.
6. Students who declare a Biochemistry major may not elect a second major in Chemistry.

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

## ВСМ 180.

## Genes and Society

4 credits $\$ 50$

Intended for non-science majors, this course explores the revolution in molecular biology, beginning from a brief history of genetics through our current era of genomics. Additional topics covered in the lectures and laboratories include: gene structure and function, a survey of interesting genes relevant to human health, genetic engineering, mapping, fingerprinting, GMO's, cloning, ancient DNA, and much more.

## ВСМ *319. <br> Toxicology

4 credits \$100

BIO 121, CHM 230
Introduction to general toxicologic principles through the study of whole organism-through-genetic responses to xenobiotics (drugs, pollutants, toxins). Classification of chemical reactivities, kinetics, biomolecular targets, metabolism, disposition, sources, and risk. Laboratory. (Cross listed with BIO 319.)

## BCM *321. Biochemistry

$$
4 \text { credits } \$ 50
$$

BIO 121, CHM 224 and CHM 230

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.

## BCM *380.

## Topics in Biochemistry

$\begin{array}{ll}1-4 \text { credits } & \text { Fee determined by topic } \\ \text { Permission } & \end{array}$
Investigation of selected topics in biochemistry, such as molecular methods and toxicology, through student participation in lecture, discussion and/or laboratory work.

BCM *422. | Advanced Biochemistry |
| :--- |
| 4 credits |
| BCM 321 |

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.

BCM *430.

## Molecular Genetics

4 credits $\$ 50$
BCM 321 and BIO 204
Advanced-level literature-based study and training in nucleic acid structures, genetic engineering, regulation, transgenics, genomics, molecular medicine, and biotechnology applications. Investigational laboratory. (Cross listed with BIO 430.)
$B C M$ *499. Research in Biochemistry
1-4 credits

Permission

Independent research in biochemistry resulting in a written report.

BCM ${ }^{5000}$.


## Senior Thesis

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

## Biology (BIO)

## Professors Clark and Rowe; Associate Professor Keeton; Assistant Professors Calhoun and Doyle; Visiting Assistant Professor Juneau.

The Alma College Biology Program is designed to foster student learning through scientific investigation. As part of the core curriculum, students are introduced to the natural world through experiences in zoology, botany and genetics. By enrolling in designated electives, students expand their core knowledge through advanced coursework and project-based, real-world laboratory experiences.

Students can also tailor their major by selecting courses within the General Studies program or through any one of four Specialization Tracts; each of which allow students to delve deeper into the subjects that most interest them. A wide variety of primary research experiences, here on campus as well as on the 200 -acre Alma College ecological station, are also available to our students. Working alongside a faculty mentor, students learn modern research methods and contribute to the growing body of knowledge in biology while preparing themselves for job placement or admission into graduate or medical/health programs.

## Major Requirements

1. Twenty credits of Biology core: BIO 121, 202, 203, 204, 290 and 490.
2. Electives in either General Studies or an Area of Concentration (indicated on transcript).
a. General Studies:

Eight credits of the following electives: BIO $302,307,308,315,361,385$, or 430.

Eight credits of additional upper level BIO electives which may include Spring Term and/or independent study credits.
b. Pre-Medicine/Health: BIO 205, 226 or 307, 301, 308, and 330.
c. Pre-Veterinary Medicine: BIO 301, 305, 307, 308, and 361.
d. Cell and Molecular: BIO 226 or 307, 301, 308, 330, and 430.
e. Ecology and Evolution: BIO 302, 305, 322, 360, and 361.
3. Completion of the MFAT examination.

## Teaching Major

Thirty-six credits from the Department which must include the following:

1. Twenty credits of BIO core: BIO 121, 202, 203, 204, 290, and 490.
2. Four credits of BIO 302.
3. Twelve credits of upper level BIO electives.
4. Completion of MFAT examination.

## Program Considerations

Potential Biology majors should note that many career opportunities for biologists, including graduate and professional programs, require two terms each of Inorganic and Organic Chemistry, Physics and Mathematics. Therefore, Biology majors are encouraged to complete Chemistry 115, 223, 224 and 230, Physics 112-113 or 121-122, and Mathematics 112-113 or 116 or 121-122. Additional courses may be required for specific graduate/professional schools; majors should check prospective program websites for specific admission requirements.

Students are also encouraged to complete a primary research experience either through independent study or a summer internship at Alma College or another institution. For those students considering graduate school and/or a career in research, multiple experiences are highly recommended.

## Minor Requirements

Twenty-four credits which must include BIO 121, 202, 203; and 12 credits of upper level BIO electives.

## Teaching Minor Requirements

Twenty-four credits which must include BIO 121, 202, 203, 204, 290, 302, and 490.

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

## BIO 101. Biology for Non-Majors

4 credits$\$ 15$

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

Study of basic biological processes, mostly at the cellular level, including the chemical basis of life, cellular structure and function, heredity, reproduction and the genetic basis of evolution. Laboratory.

## BIO 125. <br> Molecular Techniques

4 credits Fee TBA
Freshman or Sophomore Standing
Introduction to basic molecular biology laboratory techniques. Prepares students for upper level courses and summer research internships in the molecular sciences. Spring Term offering. Laboratory.

## BIO 180.

Biological Topics
4 credits
Fee TBA

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.

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

BIO *203.

## General Zoology

4 credits $\$ 25$

An examination of the diversity of the animal kingdom. Animals will be studied in an evolutionary context, emphasizing morphology, life history, ecology and behavior. The laboratory includes dissections and demonstrates the physical differences across the major phyla. Laboratory.

BIO *204.

## Genetics

4 credits \$30

BIO 121 and Sophomore Standing
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.

## BIO *205.

## Developmental Biology

4 credits $\$ 30$

BIO 121

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.

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. (Cross listed with IPH 226.)

BIO *280. Biology Seminar
2 credits
BIO 121 or Permission
Biological topics selected by the instructor. May be taken more than once for credit.

BIO *290. Sophomore Seminar
2 credits
BIO 121 and Sophomore Standing
Designed to show students how to plan and prepare a portfolio for their senior capstone presentation. Library skills, basic statistics and experimental design will be emphasized.

## Independent Study

$1-4$ credits $\$ 15$
Permission
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.


BIO 204
Study of the fine structure of eukaryotic and prokaryotic cells, the chemical composition and organization of cells, and the particular organization and function of cell organelles and structural components. Laboratory.


## Ecology

4 credits
\$30

BIO 290 or Permission

Investigation of population, community and ecosystem structure, dynamics and energetics. Laboratory and field studies.

## BIO *305.

Comparative Anatomy
4 credits $\$ 25$

BIO 203
Explore 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.

## General Physiology

4 credits
\$15

BIO 290 or Permission
Study of the function of various animal organ systems, especially the ways in which they interact to maintain homeostasis of the individual. Most examples are from mammalian systems. Laboratory.

## BIO *308.

4 credits $\$ 40$
BIO 290 or Permission

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.

## BIO *309.

## Aquatic Biology

4 credits Fee TBA
BIO 121 or Permission
The physical, chemical and biological factors that affect fresh water organisms. Comparison of streams, rivers and lake habitats of Michigan. Laboratory.

## BIO *315.

## Behavioral Ecology (Field Studies)

4 credits
Fee TBA
BIO 290 or Permission
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. Spring Term offering.

## BIO *319. <br> Toxicology

4 credits
\$100
BIO 121, CHM 230
Introduction to general toxicologic principles through the study of whole organism-through-genetic
responses to xenobiotics (drugs, pollutants, toxins). Classification of chemical reactivities, kinetics, biomolecular targets, metabolism, disposition, sources, and risk. Laboratory. (Cross listed with BCM 319.)

## BIO *320.

## Medical Botany

4 credits \$25

BIO 121, CHM 223
Study of the contribution of plants to modern medicine. Topics include the botany, anthropology, chemistry, and pharmacology of plant derived drugs. Laboratory. (Cross listed with BTC 320.)

## BIO *322. Plant Physiology

4 credits $\$ 15$
BIO 121 and 202
Study of seed plant biology with an emphasis on relationships of physiology, anatomy and morphogenesis. Laboratory.

## BIO *330. Immunology

4 credits $\$ 20$
BIO 204
Examination of the immune system and its role in disease. Emphasizes current research articles and experimental procedures. Laboratory.

## BIO *333.

## Cancer Biology

4 credits
BIO 204
Basic concepts and principles of tumor evolution and behavior including an introduction to oncogenes,
tumor-suppressors and genome-maintenance genes, carcinogens and their roles in cancer initiation and progression, and a detailed look into several of the more common types of malignancies.

## BIO *344. <br> Human Dissection

2 credits
$\$ 40$
BIO 226 or 307 or Permission
Gross anatomy and dissection of the human body. Laboratory.

| BIO *360. | Evolution |
| :--- | :--- |
|  | 4 credits |
|  | BIO 121 |

Study of evolution as it applies to aspects of the biological sciences. Topics include history, mechanisms of evolution and population genetics. Laboratory.

| BIO *361. | Animal Behavior |  |
| :--- | :--- | :--- |
|  | 4 credits | $\$ 30$ |
|  | BIO 203 and 290; or Permission |  |

Animal behavior is examined from an ecological and evolutionary perspective. Topics include reproduction, habitat selection, foraging and fighting behaviors. Laboratory.

BIO *380.

## Biological Topics

4 credits
Fee TBA

BIO 121 or Permission (Additional prerequisites vary with topics)
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.

BIO *385. Practicum
2-4 credits

Permission

Biological knowledge is applied to an outside working situation. Pass/fail only.

## BIO *399. Independent Study

$1-4$ credits $\$ 20$
Permission
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.

BIO *430. Molecular Genetics
4 credits $\$ 50$
BCM 321 and BIO 204 or Permission
Study of the transmission of information at the molecular level and the techniques used in gene analysis. Topics include gene structure and function, gene expression, genetic mobility, genomics, transgenics and recombinant DNA methodology. Laboratory. (Cross listed with BCM 430.)

BIO *490.

## Senior Capstone Seminar

2 credits

BIO 290 and Senior Standing
Students will present the results of their biology portfolio in a public forum. A slide presentation of work

## BIO *499.

## Independent Study

$1-4$ credits $\$ 20$

Permission
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.

## BIO *500.



## Senior Thesis

4 credits $\quad \$ 20$
Permission
Independent laboratory research of an original problem culminating in a thesis.

## Biotechnology (BTC)

## Professors Ball, Beckmann and McNally; Associate Professors Keeton and Turk; Assistant Professors Calhoun and Doyle.

The science of biotechnology combines content and techniques from multiple disciplines in pursuit of a common goal; the solution of problems in medical science and health care, pharmaceutical science, agriculture and environmental science. Curricular components of distinction are extensive laboratory work that includes a summer research fellowship/internship, immersion in critical analysis of current research literature, and integration of coursework from the humanities and social sciences. The curriculum has been developed to prepare students for graduate work in biomedical sciences as well as employment in academic and commercial research laboratories, the underlying philosophy including an emphasis on experiential learning as well as placement of biotechnology into the appropriate social and ethical context.

## Major Requirements

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

## Program Considerations

1. Students with AP Biology test scores of 5 may elect to receive four credits of BIO 121 , thus fulfilling this requirement.
2. Yearly enrollment in a Journal Club offering is the expectation. These are currently provided in the Winter Term.
3. In order to ensure academic options within a four year plan, CHM 115/223 and BIO 121 are desirable first year courses.
4. For maximum benefit, consider enrolling in BTC 180 Molecular Techniques in the first available Spring Term.
5. An off-campus summer research experience is viewed as most valuable.
6. Students are invited to petition the Biotechnology Steering Committee in writing if they encounter new or distinctive offerings that are relevant to the major.

## BTC 101/*201/*301/*401. Biotechnology Journal Club

2 credits each ( 8 credits maximum)

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

## BTC 125. <br> Molecular Techniques <br> 4 credits

Receive hands-on experience to prepare for future work in research fellowships and/or graduate programs in the molecular sciences. Techniques vary slightly from year to year, but will include DNA and protein electrophoresis, restriction enzyme analysis, reverse transcription and PCR, eukaryotic cell culture, expressions of recombinant proteins, Western blotting and more.

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-*499. Research in Biotechnology

$1-4$ credits
Permission
Independent research in biotechnology.

## BTC *320. <br> Medical Botany

4 credits $\$ 30$
Study of the contribution of plants to modern medicine. Topics include the botany, anthropology, chemistry and pharmacology of plant derived drugs. (Cross listed with BIO 320.)
BTC *430.

## Molecular Genetics

4 credits $\$ 50$

BCM 321 and BIO 204
Advanced-level literature-based study and training in nucleic acid structures, genetic engineering, regulation, transgenics, genomics, molecular medicine, and biotechnology applications. Investigational laboratory.

BTC *500.
$\square$

## Senior Thesis

4 credits
Permission

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

## Business Administration (BUS)

## Professors Baleja, Cameron, Ealey and Jacques; Assistant Professors Lemmon and Sanders; Visiting Assistant Professors Balfanz and Rolling.

Alma's Business Administration faculty prepare students to enter post-graduate academic programs and to successfully embark on business careers. These objectives are accomplished by incorporating the following emphases into the business curriculum:

1. Analytical and critical thinking skills
2. Conceptual skills
3. Communication skills
4. Interpersonal skills
5. Entrepreneur skills
6. Global perspective
7. Student interaction with business professionals
8. International travel opportunities

Graduates are well prepared for careers in accounting, industry, and not-for-profit and government organizations. Alma Business graduates' career fields include accounting, banking, consulting, finance, insurance, international business, management, marketing, public relations, research and retailing.

The Business Administration Department also serves students interested in the role of business within society in such fields as science, law, exercise and health science, communication and education.

## Major Requirements

Thirty-six credits including 121, 221, 222, 309, 323, 333 and 440; and eight elective credits in Business Administration.

## Minor Requirements

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

## Health Care Administration Major (HCA)

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

## International Business Administration Major (IBA)

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

## Secondary Teaching Major Requirements

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

## Prerequisite Requirements

ECN 201, 202 and MTH 116 for upper level Business Administration courses.

## Certified Public Accounting Preparation

It is possible for students to meet the five year academic requirement for CPA certification within four years at Alma College. In order to accomplish this, students must complete 168 Alma College credit hours in four years - 18 credits per term plus two additional Spring Terms (for a total of four) and one summer internship or independent study.

## BUS 121.

## Introduction to Business

## 4 credits

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

## BUS 131.

## Introduction to Health Service Management

4 credits

Explore a wide variety of health care settings such as hospitals, nursing homes and clinics. Case studies are used to augment the students' learning in leadership, motivation, organizational behavior, management thinking, performance and quality improvement, information technology, ethics, and cultural competency. Geared toward those who desire a fundamental understanding of health service management.

## BUS 150.

## Entrepreneurs in Action I

1 credit

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

## BUS 151.

## Entrepreneurs in Action II

1 credit

## Permission

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

4 credits
BUS 121 or taken concurrently, MTH 101 or its equivalent, Sophomore Standing

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.

## BUS 222. <br> Managerial Accounting

4 credits
BUS 221
Study of accounting in the manufacturing and service sector, cost allocation and analysis, development of cash flow statements and analysis of financial statements. Emphasis on how cost and managerial accounting concepts and methods apply to the decision-making process.

## BUS 226/*446.

©

Cross-Cultural Studies
4 credits

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 credits
ENG 101 and BUS 121
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.

BUS *309.
Finance

4 credits

BUS 222; ECN 201 and 202; MTH 116
Introduction to the principles of managerial financial policies, leading to maximizing the value of a firm. Major emphasis on financial decisions facing a firm, management of current assets, capital budgeting, cash flow management, optimal capital structure, time value of money and financial/ratio analysis.

## BUS *315. <br> Personal Finance

4 credits
BUS 121, 222, and 309
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.

## BUS *319.

## Health Care Finance

4 credits
BUS 121 or 131, 221, 222, Junior Standing
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.

## 4 credits

BUS 222
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.

## BUS *322. Intermediate Accounting II

4 credits
BUS 321
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.

## BUS *323. <br> Management

4 credits
BUS 222; ECN 201 and 202, MTH 116 or Permission
Exploration of the four primary functions of management: planning, organizing, leading and controlling. Emphasis on understanding functions and role that managers play within organizational structure and within society.

## BUS *324.

## Human Resource Management

4 credits
BUS 323 or Permission
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 aiscussea. insignt is also provided into the legal issues involved with numan resource management and the framework for equal opportunity employment.

| BUS *325. | Business Law I |
| :--- | :--- |
|  | 4 credits |
|  | Junior Standing |

Explores the legal environment in which business actually operates. Topics include introduction to the court system, contracts, sales, commercial instruments, personal property and various other legal concepts impacting business.

BUS *326. Business Law II
4 credits
Junior Standing
Explores the legal environment in which business actually operates. Topics include the law of agency, partnerships, corporations, bankruptcy, and estates and trusts.

BUS *327.

## Law for Educators

4 credits
Junior Standing
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, agency law, partnerships, corporations, bankruptcy, estates and trusts.

## Health Care Law and Policy

4 credits

Provides a legal framework for students interested in health care administration and managing the legal issues they will face in a health care organization. Students 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.

## BUS *329.

## Health Administration

4 credits
BUS 121 or 131, 221, 222, Junior Standing
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, decisionmaking, productivity measurement, the TQM process, resources allocation, and mission and values development.

## BUS *331.

## Cost Accounting

4 credits
BUS 222
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, break-even analysis and variance analysis useful in decision making.

BUS *333.

## Marketing

4 credits

BUS 222, ECN 201 and 202, MTH 116 or Permission

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.

## BUS * 334 . <br> Health Care Marketing <br> 4 credits <br> BUS 222, ECN 201 and 202, MTH 116 or Permission

General survey course acquainting students with the marketing discipline from the perspective of Health Care Administration. Topics covered include target markets, marketing segmentation, marketing research and the marketing mix. Note: Students cannot earn credit for both BUS 333 and BUS 334 .

## BUS *336.

## Direct Response Marketing

2 credits
BUS 333 or Permission

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.

## BUS *337.

## E-Commerce

2 credits
BUS 333 or Permission
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.

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

BUS *350. Entrepreneurs in Action III
2 credits
Permission
Preparation to present strategic business cases and planning initiatives at regional and national competitions focused on entrepreneurship and the free enterprise system. Only four credits in total of BUS 150, 151 and BUS 350 count toward the Business Administration major.

## BUS *385/*386.

## Practicum

4 credits each
Junior Standing and Permission
Only four credits will count in the major.

## BUS *401.

## Advertising

4 credits
BUS 333 or Permission
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.

## Investments

4 credits
BUS 309 or Permission
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.

## BUS *415.

## Advanced Finance

4 credits
BUS 221, 222 and 309
Application of principles of finance to solving selected business case problems and analyzing current financial topics. Coverage includes capital structure decisions, working capital policy, current liability management, optimal capital budgets, dividend policy, and lease financing aimed at maximizing the value of a firm.

## BUS *422. <br> Advanced Accounting <br> 4 credits <br> BUS 322 and Senior Standing

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

## BUS *423.

## Small Business Management

4 credits
BUS 221, 222, 309, 323 and 333
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.

## BUS *425.

## Federal Individual Income Taxation

## 4 credits

BUS 222
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.

## BUS *426.

## Federal Business Taxation

4 credits
BUS 222
Explore corporate operating rules, capital structure, distributions, reorganization, partnerships, SCorporations, exempt entities, tax administration and practice, and multi-state and international transactions. Gain analytical and problem-solving skills for dealing with business tax issues.

BUS *427. (4)

## Transnational Management

4 credits
BUS 323
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.

BUS *428.
(4)

Global Marketing Management
4 credits
BUS 333 or Permission
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.

| BUS *429. | Multinational Finance |
| :--- | :--- |
| (4) | 4 credits |
|  | BUS 309 |

Analysis of foreign exchange issues and risk management, international investment and capital budgeting, global securities and capital markets.
BUS *435. $\quad$ Marketing Research

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.

BUS *440.
—(4)

## Global Strategic Management

4 credits

BUS 309, 323 and 333
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.

BUS *441.
Strategic Planning in Health Care $\square$

4 credits

BUS 121 or 131, 221, 222, 319, 329, Senior Standing

Introduction to strategic planning as it applies to health care organizations. 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. Also explores the leadership roles of governing boards, health care managers and clinicians.

## BUS *442. Accounting Information Systems <br> 4 credits <br> BUS 322 and Senior Standing

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.

## BUS *449. <br> Auditing <br> 4 credits <br> BUS 322 and Senior Standing

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.

## BUS *450. Long-Term Care Management

4 credits

This course covers the body of knowledge from the National Nursing Administrator licensing exams (leadership/management, human resources, resident care, management, physical environment, finance) as well as a thorough survey of long-term care modalities including assisted living, home care services, hospice and campus/community types of services.

## BUS *480.

## Topics in Business Administration

2-4 credits
Permission
Current topics in Business Administration including: Business Leadership and Society, Commercial Banking, Government and Not for Profit Accounting, Personal Finances, Physical Distribution Management, Real Estate Management, Sales Management and other topics as the need arises.

BUS *499.


## Independent Study

1-4 credits
Permission

## Senior Thesis

4 credits
Permission

## Chemistry (CHM)

## Professors Hill and Strait; Associate Professors J. Dopke and Turk; Assistant Professor N. Dopke.

The Chemistry Program at Alma focuses on the understanding of matter, its chemical behavior and the research methods utilized by chemists to gain that understanding. The program emphasizes experimental and research work using laboratories equipped with modern chemical instrumentation and computers. The program's quality and completeness is certified by the American Chemical Society for the training of professional chemists. Career opportunities for Alma's Chemistry graduates include industry, teaching, research, law, health professions and chemical engineering. Our students have successfully entered the workforce or teaching profession upon graduation or continued their study in graduate or professional schools.

## Major Requirements

1. Core: 28 credits consisting of CHM 115, 223, 224, 230, 320,331 , and 332 .
2. Areas of Concentration:
a. Chemistry: 8 credits from CHM 251, 300 or 400 level courses, BCM 321 or 422 . At least 4 credits must be at or above the 300 level.
b. American Chemical Society Certified Degree: CHM 313 and 314; BCM 321; and 4 credits chosen from CHM 399, 411, 499, or BCM 422.
c. Pre-Medicine: BCM 321 and 4 credits from 300 or 400 level courses in Chemistry; The American Chemical Society Certified Degree is also available with the pre-medicine concentration.
3. Successful completion of CHM 450.

## Program Considerations

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

Completion of an independent research project normally culminating in a senior thesis is recommended.

Students bound for graduate school should make careful course selections to support their particular area of emphasis; participation in research, completion of Chemistry 313, 314 and 411, Mathematics 210 and 211 should be considered. Experience with calculus based physics (Physics 121-122) is preferred over Physics 112-113.

Students bound for medical school should elect CHM 115 in the fall of the freshman year so that BCM 321 can be completed in advance of taking the MCAT at the end of the Junior year (CHM 115, 223, 224, 230 and BIO 121 are prerequisites to BCM 321). To be a competitive medical school applicant, the Chemistry Department strongly recommends students completing a Chemistry major also take genetics and physiology, in addition to considering upper level electives from Biology, Biochemistry or Integrated Physiology and Health Science.

## Departmental Honors

Students may achieve honors in the Chemistry Department by:

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

## Minor requirements

Twenty-four credits with eight credits numbered 300 or above and which may include Biochemistry 321 and 422.

## Teaching Major Requirements

Completion of the requirements for the Chemistry major.

## Teaching Minor Requirements

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

## American Chemical Society Certified Degree

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

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

## CHM 101.

## Basic Chemistry

4 credits
MTH 101
Study of basic principles of chemistry including atomic and molecular structure, stoichiometry, equilibria and chemical behavior. Intended for students who are non-science majors and may not count toward a Chemistry major or minor. DR and academic credit will only be awarded to one of CHM 101, CHM 103 or CHM 115.

## CHM 103.

## Basic Chemical Investigations

4 credits $\quad \$ 20$
MTH 101
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 101, CHM 103 or CHM 115. Laboratory.

## CHM 115. <br> Introductory Chemistry: Chemical Analysis <br> 4 credits <br> \$20 <br> MTH 112 concurrently or Proficiency

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 101, CHM 103 or CHM 115. Laboratory.

## CHM 199-*299. <br> Independent Study

$1-4$ credits $\$ 20$
Permission

Planned program of reading or laboratory experimentation.

## CHM *223-*224.

## Organic Chemistry

4 credits each $\$ 20$ each
CHM 115

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.

CHM 224 or Permission
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.
CHM *251.
Chemistry of Ordinary Things
4 credits $\quad \$ 20$
CHM 223

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

## CHM *280.

## Topics in Chemistry

$1-4$ credits
CHM 230
Chemical topics chosen by the instructor. May be taken more than once for credit.

## CHM *310.

## Medicinal Chemistry

2 credits
CHM 230
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.

## CHM *311. <br> Environmental Chemistry

2 credits
CHM 230
Introduction to environmental chemistry, emphasizing the origins, transport, reactions, effects and fates of chemical species in the environments.

## CHM *312.

## Fragrance and Flavor Chemistry

2 credits
CHM 230
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 laboratory, however students will be engaged in laboratory exercises.

## CHM *313.

## Inorganic Structures

2 credits
CHM 230
A survey of inorganic species including symmetry, bonding models and spectroscopy. An overview of the reactions of organometallic compounds are included.

## CHM *314.

## Bioinorganic Chemistry

2 credits
CHM 230
The study of the use of metals by biological species emphasizing inorganic models, reaction types and

## CHM *320.

## Instrumental Analysis

4 credits
\$20
CHM 230
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.

## CHM *331-*332. Physical Chemistry

4 credits each
\$20 each
CHM 230, MTH 122 and PHY 113 or 122
Study of the physical principles of chemistry with emphasis on thermodynamics, quantum mechanics, statistical mechanics and kinetics. Laboratory.

CHM *380-*480.
Topics in Chemistry
$1-4$ credits
CHM 230
Chemical topics chosen by the instructor. May be taken more than once for credit.
CHM *399-*499.
Research in Chemistry
1-4 credits
\$20
Permission

Laboratory investigation of an original problem.

## CHM *411.

## Advanced Organic Chemistry

4 credits $\$ 35$
CHM 224 and 331
Advanced study of modern synthetic reactions, mechanisms and theoretical perspectives. Laboratory.

## CHM *450.

Senior Seminar in the Chemical Sciences
1 credit
Senior Standing, CHM or BCM major
Analysis of the literature in a variety of chemical subfields. Culminates in an oral exam evaluating the ability to read and interpret the literature.

CHM *500.

## Senior Thesis

2 credits

6 credits in CHM 399/499 or taken concurrently
Preparation of a comprehensive thesis and a public presentation on an investigation of an original problem. Required for departmental honors.

Biochemistry Courses (BCM)

## BCM *321. Biochemistry

4 credits $\quad \$ 50$
BIO 121, CHM 224 and CHM 230
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

BCM * 422 . $\square$

## Advanced Biochemistry

4 credits $\quad \$ 50$

BCM 321
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.

## Cognitive Science (COG)

## Professors G. Beagley, W. Beagley, Dixon and McNally.

Cognitive science is an interdisciplinary approach to the study of the mind. Its constituent fields are computer science, psychology, philosophy, neuroscience and linguistics. The Cognitive Science Group consists of faculty representatives from the constituent disciplines. Students pursuing work in this area will find Alma's program appropriate preparation for specialization in either interdisciplinary study or a constituent field.

## Minor Requirements

1. Complete a major in one of the member disciplines (Computer Science, Psychology or Philosophy) or other approved program.
2. Twenty-four credits beyond the major, including
a. COG 120 and 180.
b. Six-10 additional credits chosen from COG 180, 280, 399, 480 or 499.
c. Remaining credits chosen from PSY 121, 201, 204, 231, 310; ENG 220; CSC 117, 120, 220; or PHL 303, 305, 347. Other courses in the constituent disciplines may be included with approval.
3. No more than eight credits that have been applied to another minor may be applied to the Cognitive Science minor.

## COG 120.

## Introduction to Cognitive Science

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

## COG 180.

## Topics in Cognitive Science

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

## COG *280.

## Advanced Topics in Cognitive Science

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

COG *399.

## COG *480.

## Seminar in Cognitive Science

4 credits
COG 120, 180 and Permission

Critical consideration of current research in Cognitive Science or across constituent disciplines. Student papers and projects reflect emphasis on skills in the evaluation, integration and formulation of inquiry within and across disciplines. Team taught by faculty from at least two of the member disciplines.

COG *499.

1-4 credits
Permission

## Communication (COM)

## Professors Gilbert and Vickery; Assistant Professor Diels.

The study of communication involves investigation of the way messages and media influence relationships, organizations, communities and cultures. Rigorous interdisciplinary coursework, critical and creative project work, and required internships prepare students for graduate study and for professional careers in communication.

Communication majors work closely with COM faculty to choose elective and cognate courses and internship opportunities that best connect the student's interests and goals to professional contexts of communication work. By mapping an individual learning trajectory within either relational or strategic communication, COM majors pursue coursework and practical experience geared toward specific career paths in public health and healthcare industries, sports and entertainment, advocacy of environmental and social justice issues, human resources, counseling, public relations, political campaigns, organizational consulting and leadership, and a variety of other professions. Examples of common learning trajectories include Sports Communication, Health Communication and Advocacy Communication. The COM Department has specific recommendations for students pursuing these trajectories, as well as others not listed above. Please contact a member of the COM Department to discuss options, requirements and recommendations.

## Major Requirements

Fifty-two credits which must include:

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

## Relational and Cultural Communication

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

## Strategic and Public Communication

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

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

## Departmental Honors

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

## Minor Requirements

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

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

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

## COM 111.

## Fundamentals of Speech Communication

4 credits
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

4 credits
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 180/*280/*380. <br> Topics in Communication

$1-4$ credits
4 credits in COM or Permission

Selected topics and problems in communication and problems in communication theory and research. May be taken more than once for credit.

2 credits

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 199/*299/*399/*499. Independent Study

1-4 credits
Permission

## COM 201.

## Relational Communication

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

## COM 202.

## Group Communication and Teamwork <br> 2 credits

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

## COM 211.

## Discourse and Democracy

4 credits

Explores the rhetorical and cultural foundations of tree speech and a tree press in democratic society. Topics include the historical and cultural foundations of civic values and public discourse, the influence of traditional and new social media on civic participation in public life, and contemporary challenges to civil discourse and participatory democracy.
COM *220. (4)

## Intercultural Communication

4 credits $\$ 60$

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.

## COM *223.

## Humor, Culture and Communication

4 credits

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.

## COM *227.

## Argumentation and Public Advocacy

4 credits

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.

## Health Communication

## 4 credits

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

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

## COM *281.

## Topics in Relational Communication

4 credits
Exploration of specific topics in relational communication, which may include nonverbal communication, conflict communication, intimacy and technology, family communication, communicating loss and other areas.

## COM *282.

## Topics in Strategic Communication

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

## Strategic Organizational Communication

4 credits

COM 202 or 4 credits in COM; or Permission
Study of strategic communication goals, messages, networks, and systems in organizations. Examines internal organizational processes of socialization, coordination, leadership, and change as well as external communication processes of issue management, corporate citizenship, and public relations.

## COM * 320 .

## Gender and Communication

4 credits
4 credits in COM or Permission; Sophomore Standing
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.

## COM *327.

## Propaganda and Persuasion

4 credits
COM 227 or Permission
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.


## Seminar in Communication Inquiry

## 4 credits

Junior Standing, 12 credits in COM, including COM 101 or Permission 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.

## COM *353.

## Risk and Crisis Communication

4 credits
COM 243 or 253 or Permission
Examine 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.

## COM *381. Advanced Seminar in Relational Communication Research and Practice

4 credits

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

## COM *382.

## Advanced Seminar in Strategic Communication Research and Practice

4 credits
Junior Standing and 4 upper level credits in COM; or Permission
Topics vary. Students engage in advanced reading, lead substantive discussions, and develop research-based presentations to demonstrate in-depth understanding of specific and timely topics and issues in strategic public discourse and advocacy.

## COM * 385. <br> Internship in Communication

2-4 credits
12 credits in COM and Junior Standing or Permission
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.


## Seminar in Communication Theory

4 credits

COM Major or Minor; Senior Standing and COM 385 or Permission 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.

COM *500.
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## Senior Thesis

2-4 credits
Senior Standing and Permission
Development and completion of original research. May be interpretive, critical, empirical, or theoretical. Required for departmental honors.

## Computer Science (CSC)

## Professor McNally; Associate Professors Sipka and Thall.

Computer Science is the study of computation and its embodiment in artifacts. This includes the study of computer hardware systems, methods for specifying the algorithms these systems run (computer programs) and analysis of the properties of algorithms, computing systems, and their interrelationship.

The Computer Science Program provides a wide range of experiences including programming languages and hardware systems. The Department maintains both Unix workstation and Macintosh computer laboratories for student use, and students have access to additional computing systems. Graduates are well prepared for a wide range of positions in the computing sciences, including Web site development, database administration, computer programming, information systems consulting and computer system administration.

## Computer Science Major

Thirty-six credits which must include:

1. Computer Science 120, 204, 220, 230, 240 and 310.
2. Fourteen additional credits from a. to c. below:
a. Eight credits must be chosen from CSC $410,420,430$ or 440.
b. Electives may be chosen from any CSC course numbered 114 or above; MTH 336; and COG 120.
c. No more than six credits from CSC 114,117 , and COG 120 may be applied to satisfy major requirements.
3. Three required cognate courses: MTH 120, 220 and any additional MTH course numbered 113 or higher (MTH 336 cannot be counted for this requirement and as a CSC elective).
4. The senior comprehensive examination includes three parts: successful completion of the Major Field Test in Computer Science, submission of an approved writing sample and an approved oral presentation.

## Program Considerations

Graduate school bound students are strongly encouraged to take CSC 420, 430, 440, and to minor in mathematics. Many graduate schools expect undergraduate research as part of entering students' background; thus, a senior thesis is also encouraged. Consult carefully with your advisor.

Students seeking a technical professional position upon graduation are strongly encouraged to take CSC $410,420,430,440$ and MTH 116 and 117; a practicum is recommended.

## Computer Science Secondary Teaching Major

Thirty-six credits, which must include:

1. CSC 120, 204, 220, 230, 240, 280A, 310 and 410.
2. Eight additional credits from a. to c . below:
a. Four credits must be chosen from CSC 420,430 and 440.
b. Elective(s) may be chosen from any CSC course numbered 114 or above; COG 120; and MTH 336.
c. No more than four credits from CSC 114,117 and COG 120 may be applied to satisfy the major requirement.
3. Three required cognate courses: MTH 120, 220 and any additional MTH course numbered 113 or higher. MTH 336 cannot be counted for this requirement and as a CSC elective.
4. The senior comprehensive examination includes three parts: successful completion of the Major Field Test in Computer Science, submission of an approved writing sample and an approved oral presentation.
5. Each candidate for a teaching certificate in CSC will participate in at least two terms of internship/practica, which entails maintaining and operating computer and network systems in the CSC laboratories and tutoring students taking lower-level CSC courses. No credit is given for internships, but students are paid the same as those doing paid jobs.

## Computer Science Minor

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

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

CSC 100.

## Introduction to Computer Systems

2 credits
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 credits
MTH 101 or equivalent
Introduction to the use of modern spreadsheets, with a particular emphasis on business applications. Taught in a laboratory setting.

CSC 114.

## Introduction to Web Development

4 credits
MTH 110 or above or Placement at 112 level
Introduction to 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. Students will construct media-rich digital portfolios. Laboratory.

CSC 117.

## Artificial Intelligence: Image and Reality <br> 4 credits

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.

CSC 120.

## Object-Oriented Programming and Design

4 credits
MTH 110 or above or Placement at 112 level
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.

CSC 204.

## Social and Ethical Issues in Computer Science

2 credits
Any CSC course or Permission
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.

CSC 220.
Data Structures and Advanced Programming Techniques 4 credits

CSC 120 and MTH 120
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.

4 credits
CSC 220
Software development: requirements, specification, modern design techniques, program testing methods, software metrics as used in quality evaluation, and project management.

CSC *240.

## Algorithms and Complexity

4 credits
CSC 220 and MTH 220
Advanced data structures and algorithms, algorithmic analysis, and an introduction to distributed and parallel algorithms.

CSC *280.

## Topics in Computer Science

2-4 credits
Permission
Topical study in computer science. While topics vary, the course usually introduces a particular computer programming language (e.g., $\mathrm{C}, \mathrm{C}++$, Prolog, etc.).

CSC *310.

## Computer Organization

4 credits
CSC 220
Advanced introduction to assembly languages and structure and organization of digital computers, including addressing schemes, digital representation of data and computer arithmetic.

## Computer Graphics

4 credits

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

CSC *345.

## Artificial Intelligence

4 credits
CSC 220
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.

CSC *380.
Topics in Computer Science
2-4 credits
Permission
Topics of current interest and importance.

## CSC *410.

## Database Management

4 credits
CSC 230
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.

## CSC *420.

## Operating Systems

4 credits
CSC 310

Survey of major concepts of operating systems. Investigation of relationships among the operating system, the architecture and the systems programs of a computer system.

## CSC *430. <br> Theory of Computing

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

CSC *440.

## Compiler Design

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

## Independent Study

1-4 credits
Permission

CSC ${ }^{500}$.

## Senior Thesis

$1-4$ credits
Permission

## Economics (ECN)

## Associate Professors Choksy and Cunningham; Assistant Professor Bose.

The Economics Program prepares students for successful completion of economics graduate programs, law school and MBA programs, and to successfully embark on business careers, especially in government and financial services.

This preparation is accomplished through an emphasis on the application of historical and modern economic theory to problem solving and policy analysis, at the micro and macro, domestic and international, and private and public levels. Students acquire an economics "tool kit" that underscores Alma's liberal arts curriculum and focuses on critical thinking and analysis, writing and research skills, and quantitative skills.

The Economics Program also serves students interested in applying economic analysis in such fields as business, law, public policy, environmental science, political science and history.

## Major Requirements

1. Thirty-six credits including ECN 201, 202, 301, 311, and 331; ECN 317 or 318; ECN 345 or 370; and eight additional credits of 300 -level or above ECN coursework. (Economics 180 courses do not count toward the major.)
2. All 36 credits that count toward the major must be taken for letter grade. Economics courses may be taken for $\mathrm{S} / \mathrm{F}$ credit but only above and beyond the 36 credits taken for letter grade for the major.
3. Successful completion of ECN 500 or a minimum score of 150 on the Major Field Achievement Test in Economics is required for the Department's comprehensive evaluation. Students should schedule the MFAT for the Fall Term of their senior year. Students who fail the Fall MFAT will retake it in the Winter Term. Students who fail a second time will be given an oral comprehensive evaluation.
4. Prior approval is required for all transfer credit for any 300 -level or above ECN coursework.
5. Honors candidates must have a minimum overall 3.3 GPA and a 3.5 GPA in the Economics Department, complete ECN 500 and present that work in some forum, either internal or external.
6. The Department recommends that students supplement the major with courses from Business Administration, Political Science, Mathematics and Philosophy. Students interested in Economics graduate work are strongly encouraged to take MTH 121-122, and/or MTH 116, 117, 192, 310, and 341342. Students interested in law school are strongly encouraged to take BUS 325-326, HST 121-122, PHL 103, and/or POL 131, 225, 335-336. Students interested in an MBA or a career in business are strongly encouraged to take BUS 221-222, 309, 323, 333, 440, MTH 113, 116, 192, and/or PHL 227.

## Minor Requirements

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

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

## ECN 180.

## Readings in Economics

1-4 credits
Permission
Selected readings of classic economic works in student interest area. Not counted toward Economics Major or Minor.

## ECN 201.

## Principles of Macroeconomics

4 credits

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.

## Principles of Microeconomics

## 4 credits

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

## ECN *301. <br> Intermediate Microeconomics

4 credits
ECN 201 and 202
Price mechanism and elasticity concepts. Theories of consumer behavior and producer behavior. Pricing in product and resource markets. General equilibrium theory.

# Intermediate Macroeconomics 

4 credits
ECN 201 and 202
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.

## ECN *317.

## Econometrics

4 credits
MTH 116
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.

# Mathematical Economics 

4 credits

ECN 201-202; MTH 113 or 121
Formal application of mathematical tools to micro- and macroeconomic analysis; algebra, sets, matrix algebra, and differential and integral calculus.

## ECN *320. Money and Capital Markets

4 credits
ECN 201 and 202
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.

## ECN *321.

## Public Finance

4 credits
ECN 201 and 202
The economics of government. Revenue and expenditure policies of federal, state and local governments in theory and practice; tax shifting and incidence. Study of current fiscal and related public policy issues.

## ECN *326.

(4)

## Economic Development

4 credits
ECN 201 and 202

Seeks to answer the question why some countries are rich and other countries poor. The role of the economist in development will be examined.

## International Trade

4 credits

ECN 202

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.

## International Finance

4 credits
ECN 201 and 202
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.

| ECN *339. | History of Economic Thought |
| :--- | :--- |
| 4 credits |  |

ECN 201 and 202
Historical development of economic ideas, paradigms and ideologies: Mercantilist, Physiocrat, Classical, Marxian, Neo-Classical, Institutionalist and Keynesian.

## Environmental Economics

4 credits

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-topay arguments, cost-benefit analysis, natural resource policy, hazardous waste, environmental policy, sustainable development, and environmental racism and classism.

## ECN *345.

## Labor Economics

4 credits
ECN 202
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.

## ECN *355.

 (4)
## Globalization in Latin America

4 credits
ECN 201 and Permission

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

## General Economic History

4 credits
ECN 201, 202 or Permission
Survey of major forms of economic systems from paleolithic times to present: Stone Age economy, Ancient

Egypt, Mesopotamia and Mesoamerica, Classical Greece and Rome, feudal and manorial Europe, mercantile and industrial Europe and America. Economic institutions of reciprocity, redistribution and market.
$\mathbf{E C N} * 370$.

## Regional Economics

4 credits

ECN 201 and 202
Industrial/agricultural location and human migration theories and cases. Economic bases for land-use patterns, central places, regional/urban structure. Examination of urban problems. Regional and urban growth models. Business feasibility studies and public cost-benefit analysis.

## ECN *380.

## Special Topics in Economics

4 credits
ECN 201 and 202
Selected topics in economics announced in advance. May be taken more than once for credit if topics are different.


## Practicum

4 credits
Junior Standing or Permission

ECN *499.

## Independent Study

4 credits
Permission

Under supervision, student formulates project topic, conducts research and prepares a properly documented paper presenting conclusions and support.

## ECN *500.

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## Senior Thesis

4 credits
Permission

## Education (EDC)

## Professor Seals; Associate Professors Findley and Thelen; Assistant Professor Store.

The goal of Alma's Education Department is to help students become effective teachers by developing general knowledge, specific subject expertise and teaching skills. One key to the education program's success is its strong emphasis on practical experience. Beginning in the first or second year, students explore various teaching roles and develop teaching skills by working in classrooms in local schools.

Career opportunities include teaching at the early childhood, elementary or secondary levels in public, private or parochial schools. The Michigan State Board of Education certifies all teachers. Alma College is authorized to recommend to the State Board those students who have completed a bachelor's degree, passed state required Subject Area Tests in teaching majors and minors, and successfully fulfilled all requirements of the Teacher Education Program. The Education Department offers majors leading to elementary or secondary certification. The Department also offers a non-certification Educational Studies Major and Minor.

## Certification requirements are subject to change by action of the State Board of Education and may not be reflected in this catalog.

Course requirements for Teaching Majors and Minors are subject to change and reflect compliance with the standards and rules established by the Michigan State Board of Education. Requirements for each of these majors and minors are in the subject area department listings. Requirements for group majors or minors are listed in the Education Department listing and students should consult with the EDC department chair about requirements. Majors and minors not listed here are not approved for certification.

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

## Alma students may seek either secondary or elementary certification.

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

## Secondary Education Major Requirements

The Secondary Education Major may only be completed with another valid Alma College teaching major and teaching minor, or two teaching majors, or K-12 comprehensive major in Music or Art education.

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

1. EDC 130 ( 2 cr ) with 103 ( 1 cr ).
2. EDC 230 ( 3 cr ) with 203 ( 1 cr ); EDC 240 ( 4 cr ).
3. EDC 311 ( 1 cr ); 312 ( 1 cr ); 303 ( 1 cr ) ( $\mathrm{or} \operatorname{EDC} 306$ ( 2 cr ) Art majors only); EDC 346 ( 4 cr ); 370 ( 2 cr ); 373 ( 3 cr ); Prerequisites include Admission to the Teacher Education Program.
4. EDC 430s ( 3 cr ) with 490s and 491s ( 10 cr ). Prerequisites include successful completion of all other courses of Secondary Education Major and Admission to Student Teaching.

## Michigan Secondary Provisional Certification Requirements

This certificate allows teaching in grades 6-12 in subjects in which the candidate has a teaching major or minor. The program listed here is for first year students entering Alma College Fall 2011 or later. To be recommended for certification, the candidate must complete the following:

1. The Secondary Education Major, requirements listed above, with a 2.5 GPA and no Education course grade below a C .
2. A Teaching Major and a Teaching Minor (or two teaching majors, or a K-12 comprehensive major in Art or Music), with a 2.75 GPA in each.
3. An overall GPA of 2.75 .
4. Students must also pass the appropriate MTTC subject area test in their subject area major. To be recommended for certification in a minor or second major, candidates must also pass the appropriate

MTTC subject area test in that subject.
5. Students must provide proof of valid CPR and First Aid cards as required by the Michigan Department of Education.

## Secondary Teaching Majors and Minors

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

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


## Social Studies Group Major (Secondary)

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

Forty-eight credits which must include:

1. ECN 201 ( 4 cr ) and 202 ( 4 cr ).
2. GGR 101 ( 2 cr ), 102 ( 2 cr ), and 201 ( 4 cr ).
3. POL 101 (4 cr) and 121 (4 cr).
4. HST $100(4 \mathrm{cr}), 101(4 \mathrm{cr}), 104(4 \mathrm{cr}), 105(4 \mathrm{cr})$, and 206 ( 4 cr ) (students may double count up to two of the above HST courses for the HST teaching major and the SST group teaching major).
5. EDC 445s (4 cr).
6. For certification, take and pass the MTTC Social Studies test.

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

## Special Education - Learning Disabilities (K-12 Major only; pending approval) (Secondary or Elementary)

Thirty-six credits which must include:

1. EDC 150 ( 2 cr ) with 105 ( 1 cr ) (to be offered W14).
2. EDC 250 (3 cr) with 205 ( 1 cr ).
3. EDC $255(4 \mathrm{cr}), 350(4 \mathrm{cr}), 355(4 \mathrm{cr})$.
4. EDC 450 ( 3 cr ) with 405 ( 1 cr ), EDC 453 ( 4 cr ).
5. EDC 455 (3 cr) with 495 ( 6 cr ).
6. For certification, take and pass the MTTC Special Education - Learning Disabilities test

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

## Additional Requirements

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

## Elementary Education Major Requirements

The Michigan Department of Education (MDE) has approved the two program options for elementary education now offered at Alma College. The elementary education program listed here is for all students entering in Fall 2010 and later. To be recommended the candidate must complete 60 credits of EDC courses, consisting of 36 credits of professional sequence courses and 24 credits of Elementary Education Content and Pedagogy courses.

1. 36 credits of Professional Sequence in the following required courses:
a. EDC 100 ( 2 cr ), 120 ( 2 cr ).
b. EDC 203 ( 1 cr ) with 230 ( 3 cr ); EDC 240 ( 4 cr ).
c. EDC 301 ( 1 cr ) with 311 ( 1 cr ).
d. EDC 302 ( 1 cr ) with 312 ( 1 cr ).
e. EDC 370 ( 2 cr ), 373 ( 3 cr ), 400 ( 2 cr ).
f. EDC $430(3 \mathrm{cr})$ with $490 \mathrm{e} / 491 \mathrm{e}(10 \mathrm{cr})$.
2. 24 credits of Elementary Education Content and Pedagogy in the following required courses:
a. EDC 160 (4 cr); 262 ( 4 cr ).
b. EDC 360 ( 3 cr ) with 362 ( 3 cr ).
c. EDC 361 ( 3 cr ) with 363 ( 3 cr ).
d. EDC $460(4 \mathrm{cr})$.

## Michigan Elementary Provisional Certification Requirements

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

Elementary Education majors may complete certification requirements for Option 1: Core Subject OR Option 2: Comprehensive Major. Students may elect to add an endorsement from either Option in addition to completing Option 1 or Option 2.

Option 1: Core Subject must include all of the following:

1. Elementary Education Major - 60 credits of required EDC courses including 36 credits of Professional Sequence courses and 24 credits of Elementary Education Content and Pedagogy courses (see above). $A$ 2.5 GPA is required for the Elementary Education certification major and no course for certification may be taken Pass/Fail, except for 1 credit classes, or be graded below a 2.0 (C).
2. Either a Teaching Major or two Teaching Minors selected from the following (as programs are approved by the Michigan Department of Education - check with EDC Department):
a. Social Studies Group Major.
b. Integrated Science Group Major or Group Minor.
c. Language Arts Group Major or Group Minor.
d. Elementary Mathematics Minor (Major in development).

A 2.5 GPA is required for each certification major and/or minor and no course required for certification may be taken Pass/Fail or be graded below a 2.0 (C).
3. As Cognates, a Planned Program of Elementary Education Content courses which must include the following:
a. MTH 202 ( 4 cr ).
b. HUM 100 ( 4 cr ).
c. HST 104, 121 or 254 (American History, 4 cr).
d. IPH 271a ( 2 cr ).
e. BIO 101 ( 4 cr ).

The Planned program must also include:
a. PSC 101 (4 cr) for non-Integrated Science majors/minors.
b. HST 206 ( 4 cr ) for non-Social Studies majors.
c. ENG 225 ( 4 cr ) for non-Language Arts majors/minors.

No cognate course required for certification may be taken Pass/Fail or be graded below a 2.0 (C).
4. An overall GPA of 2.75 is required for Alma College to recommend a student for certification.
5. The Michigan Test for Teacher Certification (MTTC) Test in Elementary Education (passing score required). Note: Elementary candidates must pass State tests in their subject area majors and/or minors to be certified in these subjects.
6. Students must provide proof of valid CPR and First Aid cards as required by the Michigan Department of Education.

## Language Arts Major (Elementary only)

Forty credits which must include:

1. ENG 120 ( 4 cr ), 190 ( 4 cr ), 225 ( 4 cr ); EDC 160 (4 cr); four credits of any 300-level literature course.
2. Four credits from the following Literature courses: ENG 250 (4 cr), 251 (4 cr), 260 (4 cr), 261 (4 cr).
3. Eight credits from the following Writing courses: ENG 201 (4 cr), 202 (4 cr), 210 ( 4 cr ), 220 ( 4 cr ), 270 (4 cr), 291 (4 cr), 293 (4 cr).
4. Four credits from the following Communication Arts courses: COM 101 (4 cr), 111 (4 cr); NMS 201 (4 cr).
5. Four credits from the following Multicultural and Interpersonal perspective courses: COM 123 (4 cr), 220 ( 4 cr ), 201 ( 4 cr ); ENG 240 ( 4 cr ), 241 ( 4 cr ), 367 ( 4 cr ), 368 ( 4 cr ), 381 ( 4 cr ).
6. For certification, take and pass the MTTC Language Arts test.

## Language Arts Minor (Elementary only)

Twenty-eight credits which must include:

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

## Integrated Science Group Major (Elementary only)

Forty credits which must include:

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

## Integrated Science Group Minor (Elementary only)

Twenty-eight credits which must include:

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

## Social Studies Group Major (Elementary only)

Forty-four credits which must include:

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

## Elementary Education Minor in mathematics (see MTH Department course listings)

## Additional Requirements

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

Option 2: Comprehensive Major must include all of the following:

1. Elementary Education Major - 60 credits of required EDC courses including: 36 credits of Professional Sequence courses and 24 credits of Elementary Education Content and Pedagogy courses (see above). $A$ 2.5 GPA is required for the Elementary Education certification major and no course for certification may be taken Pass/Fail, except for 1 credit classes, or be graded below a 2.0 (C).
2. Either a Teaching Major ( 36 cr ) or Teaching Minor ( 24 cr ) in World Language - French, German or Spanish; or a Minor in Early Childhood (ZS) (24 cr) or Special Education — Learning Disabilities (K12 Major; pending approval) ( 36 cr ). A 2.5 GPA is required for each certification major and/or minor and no course for certification may be taken Pass/Fail or be graded below a 2.0 (C).
3. As Cognates, a Comprehensive Program of 30 credits of required Elementary Education Content courses which must include the following:
a. BIO 101 ( 4 cr ).
b. PSC 101 ( 4 cr ).
c. MTH 202 ( 4 cr ).
d. HST 104, 121 or 254 ( 4 cr ).
e. HST 206 (4 cr).
f. HUM 100 ( 4 cr ).
g. IPH 271a (2 cr).
h. ENG 225 ( 4 cr ).

No course required for certification may be taken Pass/Fail or be graded below a 2.0 (C).
4. An overall GPA of 2.75 is required for Alma College to recommend a student for certification.
5. The MTTC Test in Elementary Education (passing score required). Note: Elementary candidates must pass State tests in their Specialty Area Endorsement (major or minor) to be certified in these areas.
6. Students must provide proof of valid CPR and First Aid cards as required by the Michigan Department of Education.

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

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

1. EDC 183 Introduction to Early Childhood Education (4 cr).
2. EDC 281 Child Development and Learning: Birth-Age 8 (4 cr).
3. EDC 282 School, Family, and Community Partnerships ( 2 cr ).
4. EDC 283 The Care and Education of Infants and Toddlers ( 1 cr ).
5. EDC 383 Curriculum and Methods in Early Childhood Education (4 cr).
6. EDC 493 Directed Student Teaching in Early Childhood Education ( 5 cr ).
7. SOA 220 Sociology of Family (4 cr).
8. For certification, take and pass the MTTC Early Childhood Education test.

## Special Education - Learning Disabilities (K-12 Major only; pending approval) (Secondary or Elementary)

Thirty-six credits which must include:

1. EDC 150 ( 2 cr ) with 105 ( 1 cr ) (to be offered W14).
2. EDC 250 ( 3 cr ) with 205 ( 1 cr ).
3. EDC 255 ( 4 cr ), 350 ( 4 cr ), 355 ( 4 cr ).
4. EDC 450 ( 3 cr ) with 405 ( 1 cr ), EDC 453 ( 4 cr ).
5. EDC 455 ( 3 cr ) with 495 ( 6 cr ).
6. For certification, take and pass the MTTC Special Education - Learning Disabilities test

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

## Additional Requirements

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

## Classroom Placement Students - Background Check

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

## Student Teachers - Fingerprinting Procedure

School districts require fingerprinting of student teachers. All student teachers must have the Criminal Background Check Livescan fingerprinting procedure completed by June 1 prior to beginning student teaching in their assigned district. Livescan must be completed at a Michigan Department of Education-
approved site and is a statewide procedure. A fee is charged for this service and fingerprint records must be valid within one year. See the Education Department chair for more details.

## Admission to the Teacher Education Program (TEP)

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

1. Formal application for admission to the TEP, including completion of a writing component, submitted by the deadline posted in the Education Department Office located in the lower level of the library. This must be completed during the sophomore year. If you have any questions, please see the Chair of the Education Department. (Students who decide to seek teacher certification after the sophomore year can be admitted late but may require extra time to complete the program.)
2. A cumulative Grade Point Average of at least 2.75 and a grade of "C" or above in ENG 101 and MTH 101 or proficiency and evidence of proficiency in basic writing and mathematics skills. Proficiency is a grade of "C" or above in ENG 101 and MTH 101.
3. Passing scores on the Michigan Basic Skills Test.
4. Two recommendations from faculty outside the EDC Department at Alma College and recommendation of the Education Department.
5. Evidence that the student is making an effort to acquire competence in the humanities, natural sciences and social sciences.
6. Evidence that the applicant has personal characteristics conducive to success in the teaching profession.
7. Good standing (not on academic, social or administrative probation).

## Admission to Student Teaching

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

1. Admission to the TEP.
2. A formal application for student teaching submitted by November 15 of the academic year prior to
student teaching.
3. A 2.75 overall GPA.
4. For secondary: a GPA in the area(s) of concentration (Major field[s]) of 2.75. For elementary: a GPA in the major(s) of 2.5 with C or above in all courses.
5. A 2.5 GPA in Education courses and a grade of C or above in all courses.
6. Passing scores on the Basic Skills Tests as required by the State of Michigan.
7. Endorsement of the Department chair in each Teaching Major.
8. In compliance with State of Michigan specifications, satisfactory demonstration of
a. high academic achievement.
b. successful group work with children in classroom placements.
c. knowledge of research-based teaching.
d. working knowledge of modern technology and use of computers. This requirement will be met as students progress through the TEP.

## Additional Endorsements

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

## Additional Notes

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

## Educational Studies Major

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

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

1. Core courses ( 13 or 14 credits):
a. EDC $100(2 \mathrm{cr})$ and $120(2 \mathrm{cr})$ or $103(1 \mathrm{cr})$ with $130(2 \mathrm{cr})$; EDC $203(1 \mathrm{cr})$ with $230(3 \mathrm{cr})$.
b. EDC 311 ( 1 cr ) and 312 ( 1 cr ); 370 ( 2 cr ); $400(2 \mathrm{cr})$.
2. Concentration of at least 12 credits in one of the following or a concentration approved by the department:

- Young Children: EDC 160 ( 4 cr ), 183 ( 4 cr ), 281 ( 4 cr ), 282 ( 2 cr ), 283 ( 1 cr ), 373 ( 3 cr ) or 150 (2 cr) with $105(1 \mathrm{cr}), 383(4 \mathrm{cr})$ or approved courses.
- Special Needs: Select from EDC 150 ( 2 cr ) with 105 ( 1 cr ), 250 ( 3 cr ) with 205 ( 1 cr ), 354 ( 4 cr ), $460(4 \mathrm{cr})$, or approved courses (courses pending state approval of Special Education - Learning Disabilities K-12 major).
- Literacy: Select from EDC EDC 160 (4 cr), 346 (4 cr), $360(3 \mathrm{cr}), 460(4 \mathrm{cr})$, or approved courses.
- Pedagogy: Select from EDC $262(4 \mathrm{cr}), 301(1 \mathrm{cr}), 302(1 \mathrm{cr}), 303(1 \mathrm{cr}), 354(4 \mathrm{cr}), 360(3 \mathrm{cr}), 361$ ( 3 cr ), $362(3 \mathrm{cr}), 363(3 \mathrm{cr}), 373(3 \mathrm{cr}), 383(4 \mathrm{cr}), 460(4 \mathrm{cr})$ or approved courses.

3. Capstone: EDC 470 ( 5 cr ) Internship/experience in an appropriate setting as approved by the department.
4. Electives in EDC courses or other courses approved by the Education Department.

## Educational Studies Minor

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

Twenty-four credits which must include at least 8 upper level credits in EDC and must include:

1. Core courses:
a. EDC $100(2 \mathrm{cr})$ and $120(2 \mathrm{cr})$ or EDC $103(1 \mathrm{cr})$ with $130(2 \mathrm{cr})$.
b. EDC $311(1 \mathrm{cr})$ and $312(1 \mathrm{cr})$.
2. Electives in EDC courses or other courses selected in consultation with, and approved by the Education Department.

## EDC 100.

## Educational Foundations I: Introduction to Diverse Learners

2 credits

Part of the Level One introductory sequence of course for the Elementary Education major and certification program. Students consider the diversity of learning styles, aptitudes, interests, intelligences and diverse learner backgrounds. Begin to consider the role and responsibilities of classroom teachers towards all learners. Required for elementary certification.

EDC 103.

## Foundations of Secondary Education - Field

1 credit
EDC 130 concurrently
A 40-hour field experience to provide a hands on, realistic yet transitional experience/opportunity for those interested in teaching at the high school or middle school level. Required for secondary certification.

EDC 120.

## Educational Foundations II: Teaching in Context

2 credits
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.

EDC 130.

## Foundations of Secondary Education

2 credits

A foundation to assist the pre-service teacher in making a better, more informed career choice about becoming a secondary teacher while also providing cases that teachers must effectively face every day. Required for secondary certification.

## EDC 160.

## Children's Literature

4 credits

Introduction 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 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.

EDC 180.

## Issues and Ideas in Education

2-4 credits

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

EDC 183.

## Introduction to Early Childhood Education

4 credits

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

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

## EDC 203. <br> Child Development and Education - Field <br> 1 credit <br> EDC 230 concurrently; Sophomore Standing

Introduction to the professional roles and responsibilities of teaching all children. Students are placed in a "home" classroom and work closely with the teacher to observe, assist, and work with students, applying psychology principles and learning theories. Students visit several classes to better understand a variety of developmental levels, individual learner differences and teacher approaches. Required for elementary and secondary certification.

## EDC 230.

## Child Development and Education

## 3 credits

EDC 203 concurrently; Sophomore Standing
An overview of psychological theories and research applied to classroom learning. 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.

## EDC 240.

## Learning Environments and Reflective Teaching

4 credits

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 students; planning for classroom management. Includes peer teaching. Required for elementary and secondary certification.

## EDC 262.

Mathematical Thinking and Learning
4 credits
Sophomore Standing
Investigate particular teaching and learning strategies that may help or hinder different students' learning of mathematics. Focus on interpreting children's mathematical work and examine central questions in mathematics teaching. Develop familiarity with available resources and begin the development of skills and attitudes to learn from teaching and other opportunities. Required for elementary certification.

## EDC 281.



## Child Development and Learning: Birth to Age 8

 4 credits $\$ 20$EDC 183; Sophomore Standing
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. Classroom placement included. Fall only.

EDC 282.


## School, Family and Community Partnerships

2 credits
Sophomore Standing
Emphasizes the critical role of family-school partnerships in ensuring children's well-being and academic
success. Introduction to historical roles of the family and community in early childhood education. Discussion of barriers to family involvement as well as effects of successful family participation. Addresses various types of family involvement and best practice guidelines associated with each type. Explores models for involving communities as partners in children's care and education. Winter only.

## EDC 283.

## The Care and Education of Infants and Toddlers

1 credit

EDC 183, Sophomore Standing
Designed to provide students with a framework for understanding how infants and toddlers grow and learn. Developmentally appropriate curricula and materials are examined. Students will analyze quality environments and ways to work with families; have the opportunity to observe and analyze quality early care settings in mid-Michigan; and will be prepared to use evidence-based knowledge to create responsive, high quality programs for infants and toddlers. Fall only.

EDC *301.
Teaching Elementary Science and Social Studies - Field
1 credit

EDC 311, 361, and 363 concurrently; TEP
Classroom observation and participation in teaching science and social studies. Includes 40 hours of classroom placement. Pass/fail only. Required for elementary certification.

## EDC *302.

## Teaching Elementary Language Arts and Mathematics — Field

1 credit

EDC 312, 360, and 362 concurrently; TEP
Classroom observation and participation in teaching reading, language arts and mathematics. Includes 40 hours of classroom placement. Pass/fail only. Required for elementary certification.

1 credit
EDC 311 concurrently; TEP
Topics and issues in instructional planning, teaching, and instruction are explored in-depth and with particular emphasis on secondary education and specific subject areas. Students spend 30 hours in secondary classroom placements, working in both their major(s) and minor content areas, and will have specialized teaching methods support in those subjects with an emphasis on best practices. Required for secondary certification, except K-12 ART majors who will take EDC 306.

## EDC *306. Elementary Art — Field <br> 2 credits

EDC 345 concurrently; ART Major, TEP or Permission
Classroom observation and participation in teaching art at the elementary level. Required for Art and Design Majors seeking K-12 certification. Pass/fail only. Includes 72 hours of classroom placement.

## EDC *311.

## Topics Seminar A

1 credit
Elementary: EDC 301, 361, and 363 concurrently; TEP; Secondary: EDC 303 concurrently, except K-12 ART majors; TEP

Introduction to issues and topics in instructional planning, teaching and assessment. For example: national, state and disciplinary policies, standards and resources for planning, implementing and differentiating instruction; teaching methodologies and strategies; content literacy; current topics in education. Required for elementary and secondary certification.

## EDC *312.

## Topics Seminar B

1 credit

Introduction to issues and topics in instructional planning, teaching and assessment. For example: national, state and disciplinary policies, standards and resources for planning, implementing and differentiating instruction; teaching methodologies and strategies; content literacy; current topics in education. Required for elementary and secondary certification.

## EDC *345.

## Art for Elementary Teachers

4 credits \$10

EDC 306 concurrently; ART and EDC Majors; TEP
Examination of art materials and the construction of art programs in the elementary classroom. Required for Art and Design Majors seeking K-12 elementary and secondary certification.

## EDC *346.

# Teaching Reading in Middle and Senior High School 

4 credits
TEP
Survey of strategies for teaching, diagnosing and improving word recognition, comprehension and study skills. Survey of student language needs and program planning for reading instruction at the middle and senior high school levels. Includes a 10-hour off-campus service-learning component. Required for secondary certification.


## Secondary Principles and General Teaching Methods

3 credits
TEP or Permission; EDC 490s and 491s concurrently
Examination of principles and methods appropriate to middle and senior high teaching. Required for secondary certification. Old programs only.

# Art for Diverse Students 

## 4 credits

ART Major, TEP or Permission

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

## EDC *360. <br> Teaching Elementary Reading and Language Arts

3 credits
EDC 302, 312, and 362 concurrently; TEP
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.

## EDC *361.

## Teaching Elementary Science

3 credits
EDC 301, 311 and 363 concurrently; TEP
Examination of methods and materials in elementary science education. Exploration of student learning and experience of science and classroom conditions that facilitate science understanding; key concepts in Earth/space, Physical and Life science; focus on inquiry and problem solving and learning by doing. Includes service-learning project and action research project. Required for elementary certification.

# Teaching Elementary Mathematics 

3 credits
MTH 202 and EDC 262; EDC 302, 312 and 360 concurrently; TEP
Builds on EDC 262 and focuses on four areas: 1) teaching mathematics - represent the subject validly, teach for understanding, seek relevance and authenticity, promote independent learning; 2) working with students as individuals - adapt the curriculum employ multiple strategies, motivate and engage, assess and adjust, include, accommodate, and differentiate; 3) organizing a class - promote shared values, pursue equity and inclusion, organize democratic inquiry, structure participation, organize activity; and 4) professionalism and reflective learning - forge a teaching philosophy, teach responsibly, teach inquisitively, understanding the social contexts of mathematics education. Required for elementary certification.

## EDC *363. Teaching Elementary Social Studies

3 credits
EDC 301, 311, and 361 concurrently; TEP
Examination of methods and materials in elementary social studies education. Analysis of historical development of social studies curriculum, different perspectives and approaches; children's developing understanding of concepts in history, geography, civics and economics; planning, teaching and assessing for social studies learning. Required for elementary certification.

## EDC *370.

## Instructional and Assistive Technology

2 credits
Prerequisite modules completed; TEP
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. Acquire skill in the use of technological tools, operations, and concepts to enhance learning and assessment, productivity, communication, and professional development. Study the ethical, legal, physical, and psychological issues and principles of technology use in schools. Utilize technology for
curriculum planning and for instruction, including online learning experiences. 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.

## EDC *373. Special Education for Classroom Teachers

3 credits

TEP
Introduction to the teaching of exceptional students. Review of historical and legal issues in special education. Study the 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.

## EDC *383. <br> Curriculum and Methods in Early Childhood <br> 4 credits <br> EDC 183, 281, 282, 283; TEP

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. Acquire techniques for adapting instruction to culturally diverse learners and those with handicapping conditions. Preparation in appropriate management and guidance techniques, and designing relevant physical environments and schedules for young children. Practice integrating systematic observation of young children's behavior with instructional design and assessment and program evaluation techniques. Students learn approaches 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. Classroom placement included. Fall only

## EDC *385.

## Practicum in Education

$1-4$ credits

EDC *399.

## Independent Study

4 credits
Junior Standing; Permission
Individual investigation of an educational problem planned with faculty in Alma's Education Department.

EDC *400.

## Educational Foundations III: Issues and Contexts

2 credits
EDC 100 and 120; TEP; Junior or Senior Standing
Research into current topics and perennially important issues in education. Required for elementary certification.

EDC *430.

## Student Teaching Seminar

3 credits
EDC 490e and 491e, or 490s and 491s concurrently; TEP and ST
Reflection on student teaching and professional issues. Classroom inquiry and analysis; self-reflection and professional development plans; representation in portfolio, web and interviews; legal and ethical issues. Required for elementary and secondary certification.

EDC *440.


## Teaching Struggling Readers

3 credits
EDC 304 and 340; EDC 490e and 491e concurrently; TEP
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

EDC *445a.

## Methods Secondary Art Teachers

4 credits $\quad \$ 10$
TEP or Permission
Examination of art media and the construction of art programs in secondary, grades 6-12, classrooms. Topics include multicultural influences on world art, uses of technology in the classroom and current standards and practices in art education. Required for Art and Design Majors seeking K-12 certification.

EDC *445b-r.

## Special Methods in Secondary Teaching

2 credits
TEP or Permission
Survey of special teaching methods in student's major field: b, Biology; bu, Business; c, Chemistry; e, English; f, Modern Languages; h, History/Political Science; m, Mathematics; n, Vocal Music; o, Instrumental Music; ph, Physics. May be taken prior to or concurrently with Education 490s and 491s. Required for certification. Old program.

EDC *445s.

## Methods in Teaching Social Studies

4 credits
TEP or Permission
Survey of special teaching methods in student's major field: s, Social Studies. Must be taken prior to Education 490s and 491s. Required for certification. Incorporates EDC 445 h for History majors in old program.

EDC *460.

## Teaching the Struggling Reader

4 credits
EDC 302 and 360; TEP

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.

EDC *480.

## Selected Topics in Education

2-4 credits
Permission
Survey of a selected topic chosen for study. May be taken more than once for credit.

EDC *490e and *491e. Directed Teaching or *490s and *491s.

5 credits each
Approval by TEC; Senior or Post-Graduate Standing
Teaching under the direction of a cooperating teacher in K-12 schools. Concurrent enrollment in Education 348 and 445 , or 440 is usual - old programs. With Department's permission, graduates may enroll for 490e or s only. Applications must be filed by November 15 of the year prior to directed teaching. Pass/fail only. Required for certification.

EDC *493.

## Directed Teaching in Early Childhood Education

5 credits
EDC 183, , 281, 282, 283, 383, SOA 220
Directed teaching experience of 280 hours in an early childhood setting under the guidance of a professional early childhood educator. Students integrate and apply content area knowledge, pedagogical and professional knowledge and understanding of children's physical, cognitive, emotional and social needs, including special needs, in designing and facilitating learning experiences in an early childhood setting. Students apply knowledge of behavioral assessment and program evaluation, appropriate techniques for managing and
guiding young children, nutrition, health and safety standards, and characteristics of appropriate environments to their planning and teaching. Under guidance of cooperating teacher, students work effectively with parents as partners in their children's education. Students in the Directed Teaching course regularly reflect on and evaluate their experience with a College Field Instructor. Spring or summer of junior or senior year. Must apply for student teaching by November 15 of junior year and be approved prior to beginning ECE student teaching.

## EDC *499. Independent Study

4 credits

Senior Standing, EDC Major and Permission
Individual investigation of an educational problem or development of a creative, usable project.

## EDC $* 500$.

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## Senior Thesis

2-4 credits
Permission

Required for departmental honors.

## English (ENG)

## Professors Bender, Palmer and Selmon; Associate Professors Aspinall, Chen and Vivian; Assistant Professor von Wallmenich; Visiting Instructor Karbowiak; Instructors D. Brines and Dora-Laskey.

English Department courses challenge students to engage with the traditions and methods of literary study to become powerful critical and creative thinkers. Students balance thinking broadly with reading closely, building knowledge in world literatures and cultures to appreciate and understand their own.

The English Department's course offerings include introductory and advanced level courses in composition, creative writing and journalism; introductory surveys and advanced studies in literature and critical theory; and a senior seminar. The Department regularly offers opportunities for independent, offcampus and overseas study.

English graduates are prepared for professional opportunities in library and information science, media, the law, public relations, public and private education, and for jobs with non-profit foundations and research organizations. Our students often pursue graduate studies in literature, composition, creative writing, library science, law and human resources.

## Major Requirements

Thirty-six credits which must include:

1. ENG $120,190,220,320$, and 420.
2. ENG 250 or 251 ; and 260 or 261.
3. Eight additional credits of upper level literature selected from the following: ENG 340, 351, 353, 354, $356,360,361,364,365,366,367,368,380 \mathrm{~L}, 381,382$, and 383.
4. Required cognate: four credits of foreign language at or above the 112 level to help students appreciate sounds, structure and beauty of a language different from their own.
5. Students who meet Alma's requirements for honors and who present a senior thesis judged to be of
honors caliber are eligible for English Department honors.
6. Note: English 100, 101 and 110 do not count in the English major. No independent study counts toward the major unless it is approved as a substitute for a major requirement.

## Minor Requirements

Twenty-four credits which must include:

1. ENG 120.
2. ENG 250 or 251 ; and 260 or 261.
3. ENG 190, 201, 220, 225, 270, or 320.
4. Two additional upper level literature courses at the 300 -level chosen from: ENG 340, 351, 353, 354, $356,360,361,364,365,366,367,368,380 \mathrm{~L}, 381,382$, and 383.
5. Note: English 100, 101, and 110 do not count in the English minor.

## English Secondary Teaching Major

Same requirements as the English major.

## English Secondary Teaching Minor

Same requirements as the English minor.

## Language Arts Teaching Major and Minor (Elementary only)

See the Education section of the catalog for list of requirements.

## Writing Minor Requirements

Twenty-four credits which must include:

1. ENG 190, 202, and 220.
2. Twelve additional credits chosen from ENG 201, 210, 270, 290, 291, 292, 293, 301, 370, 390, or 391.

## Program Considerations

Prospective majors should plan to take English 120 in the first year, English 220 in the sophomore year, English 320 in the junior year, and English 420 in the senior year. Note: One foreign language course at or above the 112 level is required for the English major.

ENG 100, 101 and 110 do not count toward the English major or minor.

Students considering graduate school are urged to complete more than the required number of 300 -level literature classes and ENG 500 Senior Thesis. Students interested in pursuing a Ph.D. in literature are strongly recommended to take additional modern language courses.

English majors may also elect a writing minor. Up to eight credits may count toward both the major and minor requirements

## 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 credits

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 credits

ENG 100 or Placement

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.

## Studies in Literature

## 4 credits

Thematic approach to understanding, analyzing and appreciating literature. Courses may focus on particular genres, like poetry or the short story, or focus on themes like gothic writers, environmental literature, or the Holocaust. This course is designed to be introductory and is open to students with a wide range of backgrounds and experiences with literary studies. Course does not count toward the English major.

## ENG 120.



## Literary Analysis

4 credits

Preparation for advanced study of literature and language, including vocabulary, critical approaches, and writing strategies employed in literary analysis. This course is required for a major or minor in English, but open to all students with a solid foundation in reading and writing.

## ENG 180-*380.

## Studies in Literature and Language

1-4 credits

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. Prerequisite for 380 : two courses in literature.

## ENG 181-*381.

## Diversity Studies in Literature

4 credits
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. Prerequisite for 381: two courses in literature. (ENG 381 is a Quill course.)

# Off-Campus Studies in the American Experience: Literary and Cultural Voices 

4 credits
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. Prerequisite for 382: two courses in literature.

ENG 183-*383.

## Off-Campus Studies in British Literature and Culture 4 credits

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. Prerequisite for 383: two courses in literature.

ENG 190.

## Introduction to Creative Writing

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

ENG 201 .

## Advanced Rhetoric

4 credits
ENG 101 or Proficiency
Exploring the principles of invention, arrangement and style beyond the level of English 101. Emphasis on connections between what writers say and how they say it. In-depth critiquing of student and professional writing.

## ENG *202.

## Digital Rhetoric

4 credits
ENG 101 or equivalent and a 200-level writing course
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 210. Teaching Writing <br> 4 credits

Development of written fluency and critical evaluation skills; introduction to central theories of reading and writing instruction. Designed for future teachers in any discipline, writing center advisors, or those going into any field that requires evaluation of writing such as editing and publishing.


ENG 120
Writing workshop for those pursuing a major or minor in English studies. This course focuses on exploring the different creative and critical modes of writing used in the major and beyond. Students are also introduced to advanced research methods and advanced issues in researched writing.

ENG $\mathbf{* 2 2 5}$.


## General Linguistics

4 credits
ENG 101, 201, or 202; Sophomore Standing
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.

ENG 230.

## Shakespeare on Film

4 credits
ENG 101, 120, 201 or 202
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.

ENG 240 .

## Children in World Literature

4 credits
ENG 101, 120, 201 or 202
Study of literature written for children and young adults. The range of texts will include Rudyard Kipling's Jungle Book to the popular The Hunger Games trilogy. Lectures and discussions will attempt to describe the embedded cultural assumptions and colonial power structures implicit in children's literature.

ENG *241.

## Themes in World Literature

4 credits
ENG 101, 120, 201 or 202
Study of literature from a global perspective with such universal themes as family, love and identity using classics of world literature from Homer to Ngugi Wa Thiong'o (in English translation where necessary).

ENG $\mathbf{* 2 5 0}$.

## Survey of British Literature I

4 credits
ENG 101, 120, 201 or 202
Exploring British literature from its beginning to the end of the 18th century, from Medieval period through the Neo-Classical period.

4 credits
ENG 101, 120, 201 or 202
Exploring British literature of the 19th and 20th centuries, from the Romantic era to the present.

ENG 260.

## Survey of American Literature I

4 credits
ENG 101, 120, 201 or 202
Analyzing American literature from its beginnings to the Civil War, including the Puritan and Romantic periods.

ENG ${ }^{261}$.

## Survey of American Literature II

4 credits
ENG 101, 120, 201 or 202
Examining American literature from the Civil War and the Realistic movement to the present.

## ENG $\mathbf{* 2 7 0}$.

## Writing for the Media

4 credits
ENG 101 or Proficiency
Examine the basics of writing for various mass media forms - print, broadcasting, and online media. Learn and gain practical experiene on the particular journalistic writing skills required for the different media, along with examining related legal and ethical issues.

Exploring the craft of writing poems and practicing the habit of art. In-depth critiquing of student and professional writing.

ENG 2291 .

## Fiction Workshop I

4 credits
ENG 190 and Permission
Exploring the craft of writing short fiction and practicing the habit of art. In-depth critiquing of student and professional writing.

## ENG *292.

## Playwriting Workshop

4 credits
Permission
Exploring the craft of writing short plays and practicing the habit of art. In-depth critiquing of student and professional writing. (Also listed as THD 292.)

## ENG $\mathbf{* 2 9 3}$.

## Creative Nonfiction Workshop

4 credits
ENG 190 and Permission
Exploring the craft of writing creative nonfiction and practicing the habit of art. In-depth critiquing of student and professional writing.

## Independent Study

2-4 credits

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## Professional Rhetoric

4 credits
ENG 101 or equivalent and a 200 -level writing course
Advanced study of style and rhetoric in a variety of professional writing contexts, including creative, educational, and corporate environments.

ENG *320.


## Critical Theory

4 credits
ENG 220 and one upper-level literature course
Surveys modern literary and critical discourse with emphasis on understanding and applying different theoretical approaches to literature.

Prerequisites for advanced studies in literature (ENG 340 through 368) are ENG 240, 241, 250, 251, 260 or 261.


## Women's Literature

4 credits
Two courses in literature
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.

## ENG *351.

## Chaucer

4 credits

Study of Chaucer's major works, including the Canterbury Tales and Troilus and Criseyde, and/or selected works of Chaucer's contemporaries.

ENG *353. (4)

## The English Renaissance

4 credits
Two courses in literature
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.


## Shakespeare

4 credits

Two courses in literature

Study of Shakespeare's plays offering a representative survey of the major histories, comedies and tragedies.

ENG * 355.

## British Romantics and Victorians

4 credits
Two courses in literature

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.


## Modern British and Irish Literature

4 credits
Two courses in literature

## ENG *360.



## Transatlantic Eighteenth Century

4 credits
Two courses in literature
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.

## ENG *361. <br> $\longrightarrow$

## Major American Writers to 1865

4 credits
Two courses in literature
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.

## ENG *364.

## Studies in Drama

4 credits
Two courses in literature
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.

## Studies in the Novel

4 credits
Two courses in literature
Studies of issues and developments in the English-language novel. Individual sections might be organized by themes, by periods (Victorian or modern novels), or by focusing on multiple works by authors as diverse as Defoe and DeLillo, Richardson and Rushdie, or Melville and Morrison.

ENG ${ }^{266}$.

## Modern American Literature

4 credits
Two courses in literature
Studies in American literature from post WWII to the present. Includes authors such as Stein, Hemingway, Cather, Hurston, W.C. Williams, Faulkner, Cummings, Wright, Steinbeck, Plath, Morrison and Walker.


## African American Literature

4 credits
Two courses in literature
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. Examines the emergence of a Black Aesthetic across many genres, including poetry, fiction, autobiography, sermons, speeches and criticism.


## American Indian Literatures

4 credits
Two courses in literature
Study of the rich and varied literary tradition's roots in oral culture and its modern and contemporary
expressions. Explores authors of diverse tribal affiliations and genres who address significant themes such as mixed-blood identity, reservation and urban life, the impact of near genocide, cultural preservation and resistance, and survival humor, among other topics.

ENG *370.

## Journalistic Studies and Projects

4 credits
ENG 270 or Permission
Variable topics: magazine article writing and marketing, extended literary journalism, history of journalism, print promotion and group publicity.

## ENG *385-*386.

## Practicum

2-6 credits
Permission
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.

## ENG *390.

## Poetry Workshop II

4 credits
ENG 190, 290 and Permission
Advanced workshop in the art and craft of writing poems. In-depth critiquing of student and professional writing. Creating a chapbook of poems and giving a public reading.

## Fiction Workshop II

4 credits

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.

## ENG *399.

## Independent Study

## 2-4 credits

24 credits completed in the Department with " B " average and Permission

## ENG *420. <br> $\square$

## Senior Seminar

4 credits
ENG 320, three upper level literature courses, and Senior Standing
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.

ENG *490.

## Independent Study in Creative Writing

4 credits
ENG 390 or 391, and Permission

ENG *499.

## Independent Study

2-4 credits
30 credits completed in the Department with " B " average and
Permission

ENG ${ }^{500}$.
$\square$

## Senior Thesis

$1-4$ credits

Permission

## Environmental Studies (ENV)

## Professors Dixon, Lorenz and Vickery; Associate Professor Cunningham; Instructor M. Borrello; Visiting Assistant Professor Rogers.

Environmental problems involve issues of energy, environmental degradation, sustainability, health and global climate change. Questions about how we utilize and manage natural resources and foster and maintain healthy and sustainable communities test our understanding of the technologies, organizational structures, institutional processes, and cultural norms that contribute to our quality of life. Students engaged in the Environmental Studies Program will find that definitions of these problems and creation of effective solutions must be approached from multiple, overlapping disciplinary as well as international perspectives.

## Major Requirements

Potential majors are highly recommended to consult with the ENV program chair(s) as soon as possible to develop an appropriate curricular plan. A firm grasp of statistics is critical for all of the major tracks and a minimum of MTH 116 (which counts towards the Distributive Requirements in the Natural Sciences Mathematics/Computation) is expected. Further mathematical and analytical requirements will be discussed between the potential major and program chair(s) and will be tailored to the student's specific academic and career goals.

1. The ENV major consists of 30 core credits and 28 credits in one of three tracks of study according to the student's interest.
2. Core: ENV 105; ENV 110 or GEO 101; BIO 120 or BIO 121; CHM 115; and three courses selected from: POL 141, PHL 225, COM 253, and ECN 340; Capstone experience: ENV 480.
3. Tracks: Complete 28 credits in one of the following tracks:
a. Environmental Health: Eight upper-level credits in science including: BIO 207 or IPH 226; BIO 308 or 309; four additional upper-level credits in an environmental topics course (ENV 380); 12 credits from: IPH 270, 328, 331, 430; four credits from: COM 243 or 343.


341; four credits from: HST 122 or POL 335; four credits from: COM 227 or 327; four credits from: PHL 228 or SOA 325; four credits from: ECN 340.
c. Environmental Science: Twenty upper-level credits from programmatic coursework from IPH, BIO, CHM, BCM, PHY, MTH/CSC; eight additional, upper-level elective credits that refine the student's interest in the realm of environmental studies.

## Minor Requirements

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


#### Abstract

Environmental Studies students are recommended to conduct research or take a Spring Term experience abroad that utilizes our relationships with various institutions such as Equatorialis Universidad in Quito, Ecuador. 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. Introduction to Environmental Studies (NS-1)

4 credits
$\$ 40$
Examination of humans and their relationship to the natural environment. Explores current status of environmental problems, controversies and solutions. Laboratory.

## ENV 110.

## Environmental Geology (NS-2)

4 credits
MTH 101
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.

## Environmental Problems and Issues

4 credits
ENV 105, 110 and one additional course from the ENV curriculum.
Examination of selected environmental issues and problems. Content varies. Topics may include pollution, energy, natural resources, land use planning and recycling.

ENV *385.

## Practicum

2-4 credits
ENV 105, 110 and one additional course from the ENV curriculum.

ENV *480.

## Topics Seminar in Environmental Studies

2 credits
16 credits of ENV or Senior Standing or Permission
Capstone course in environmental studies. Interdisciplinary approach incorporating scientific knowledge with policy and humanistic issues that are applied to real-life environmental problems.

ENV *499.

## Independent Study

1-4 credits
ENV 105, 110 and one additional course from the ENV curriculum.

## Foreign Service (FOR)

## Advisor: Dr. Hulme.

The interdepartmental major in Foreign Service prepares students for careers in the State Department or for graduate work in international relations, geographic area studies and foreign service. Requirements should be discussed with the advisor since they change as departments change their course offerings; most of the courses are in economics, history and political science.

FOR *440.

## Seminar

4 credits
Permission
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.

FOR *500.
$\square$

## Senior Thesis

4 credits
Permission

Individual research culminating in the preparation of a major paper. Work should be initiated during the Fall Term of the senior year.

## Geography (GGR)

## Instructor Douglas.

Geography is the study of relationships and interactions between humans and the environment. Geography utilizes a spatial approach to examine the patterns and distributions of human activities and natural features on the earth's surface. Geography, by nature, is a holistic, synthesizing and integrating discipline.

## GGR 101.

## Human and Environmental Relationships

2 credits
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 credits
GGR 101
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.

## GGR *201.

## Contemporary World Geography

## 4 credits

GGR 101 and 102 or Permission
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.

## Geology (GEO)

## Instructor M. Borrello.

Geology is the study of the Earth - its composition, evolution, history and uniqueness among other planets in our solar system. Offerings in Geology provide an introduction for the non-science major as well as supplement the curriculum for science majors seeking careers in the environmental field. Geology complements the Environmental Studies major curriculum.

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

## GEO 101.

## Physical Geology

4 credits $\quad \$ 15$
MTH 099
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.

## GEO 112.

## Introduction to Michigan Basin Geology

4 credits
$\$ 35$

MTH 101
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.

4 credits $\$ 15$
MTH 101
Study of the Earth's dynamic systems as explained by plate tectonics theory. Tectonic investigation from the origin of the solar system to the most recent period of continental glaciation. Examination of rock and fossil records. Laboratory.

## Gerontology (GER)

Professors Anderson, G. Beagley, Davis, Dixon, Fobes and Thorsen; Assistant Professor Batchelder.

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

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

## GER *385. <br> Practicum

4 credits
Permission

## GER *480.

## Senior Seminar

2 credits
Permission

Multidisciplinary capstone seminar for gerontology minors.

## History (HST)

## Professors Bu, Furlong and Lorenz; Associate Professor Olbertson; Assistant Professor Wasserman-Soler; Instructor Wise.

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. Course offerings in History vary in emphasis. Students may identify 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 (see General Education Objectives for details). Similarly, courses which emphasize a multinational or global perspective are noted by the caption (GP).

All courses require students to analyze historical factors and to communicate the results of such analysis in oral and written forms. History is appropriate for careers in law, journalism, industrial management, banking, civil service, library and museum management, ministry, politics and teaching.

## Major Requirements

1. Thirty-six credits which must include HST $323,325,326$ or another 300 -level American history course pre-approved by the Department; HST 300, 330, 331 or another 300-level European history course preapproved by the Department; HST 353, 360 or another 300 -level non-Western history course preapproved by the Department; and one 400 -level seminar (not an independent study).
2. All 36 credits that count toward the major must be taken for letter grade. History courses may be taken for $\mathrm{S} / \mathrm{F}$ credit but only above and beyond the 36 credits taken for letter grade for the major.
3. No more than eight credits may be taken by proficiency to count toward the 36 credits required for the major. Students seeking credit by proficiency must obtain permission from the instructor for the courses in question and from a History Department committee. Students seeking credit by proficiency must pay the appropriate fee(s) and show proof of such payment to the Department chair. The instructor must prepare a written statement indicating what a student must do to obtain credit for proficiency.
4. Successful completion in the student's senior year of the comprehensive examination administered by the Department is mandatory.
5. Honors candidates must have a minimum overall of 3.3 GPA and a 3.5 in the History Department, complete a one-credit advanced bibliography course, submit an honors thesis, and, where possible, present the thesis in an external forum.

## Teaching Major Requirements

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

## Additional Notes

100 and 200 level courses are recommended for first-year students and sophomores. HST 300 and above are recommended for sophomores, juniors and seniors; freshmen admitted only with permission of the instructor.

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

HST 100. (4)

## World History Survey I

4 credits
Introductory overview of ancient world history from Paleolithic times until the 16th century, with emphasis
on the deveropment and reationsmps or eariy civinzations. rammarization wim me major characiensucs on early societies, highlighting the continuity and change as societies developed around the globe. (ESPIT/GP)

HST 101. ©

## World History Survey II

4 credits
Introductory overview of modern world history since the 16 th 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. (GP)

HST 104.
(4)

## The Making of America to 1877

4 credits

Examines American history from colonial times to Reconstruction; concentration on political, constitutional, social, economic and intellectual problems. (ESPI/GP)

HST 105.
(4)

The American Century: 1877 to Present
4 credits

Political, economic, social and intellectual issues from Reconstruction to the present. Focuses on 1877-1990. (ESPITH/GP)

HST 121.
©

## American Legal History I

4 credits

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.

HST 122. (4)

## American Legal History II

4 credits
Introductory survey, 1877-2001. Labor and industrialization in the law, legal education and philosophies, civil rights, the New Deal and the courts, law and the economy, the growth of government and the expansion of presidential power, terrorism and the law. (ESPI/GP)

## HST 130.

 ©
## Women in European History

4 credits

Survey of Western European history, focusing on women's (and men's) roles in the family and society from the Roman Empire through the French Revolution in Europe and highlighting particular women whose contributions have been celebrated through the ages as well as discussing what kind of lives most women led. (GP)

HST 140. (4)

## American Women's History

4 credits

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/GP)

HST 180.
(4)

## Topics and Problems in History

1-6 credits

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

HST 199.

## Independent Study

$1-4$ credits
Permission

HST 200.
©

## Ancient Near East

4 credits

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

4 credits

An overview of ancient Greece from Minoa through Mycenae, the Dark Age, Archaeic 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

4 credits

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.

(4)

## Medieval World

## 4 credits

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. (GP)

## Approaches to Michigan History

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## 4 credits

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. (GP)

HST 207.
(4)

## American Foreign Relations

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

## HST 209.

## Selected Problems in Historical Research and Library Practicum

2-6 credits
Permission
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. (GP)

## 4 credits

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 228.

## Immigration and Ethnicity in American History

4 credits
Examination of the experiences of immigrants and their transformation into ethnic Americans during the 19th and 20th centuries. Discussion of what it means to be American and the diversity of American society in a historical perspective. (ESPI/GP)

## HST 238.

(4)

## Europe in Upheaval, 1914-45

4 credits

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

## 4 credits

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

## HST 249.

## Russian Studies

4 credits

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 Weternizers; abolition of serfdom; Bolsheviks and the Russian Revolution; and others. (ESPI/GP)

HST 253.
—(4)

## Asian Studies: Modern China and Japan

4 credits

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. (ESPIH/GP)

## HST 254.

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## Colonial Americas

4 credits

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. (4)

Struggle for Modernization: Latin America Since 1825
4 credits

Analyzes selected countries. Caudillos and dictators, reform and revolution, neocolonialism and imperialism, economic growth and development. (ESPI/GP)

## Introduction to African History

## 4 credits

Introductory survey of African history, emphasizing the sub-Saharan region. Chief focus is on the precolonial 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.

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## Science and Public Health: A Global Study

4 credits

Germ theory and bacteriology revolutionized the knowledge of disease. Study modern public health in a global perspective, covering details about Europe, the United States and China. (ISPT/GP)

## HST 277.

(4)

## American Studies: Civil War and Reconstruction <br> 4 credits

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/GP)

HST 280.

## Topics and Problems in History

1-6 credits
Permission
Analysis of topics which include military and naval history; global economy, multinational corporation and foreign relations; and Supreme Court in modern era. No more than six credits may count toward the History Major. (ESPIT/GP)

# 300-, 400- and 500-level courses are recommended for sophomores, juniors and seniors. Freshmen admitted only with permission of the instructor. 

HST *323.

> American Studies: Creating the Republic, 1763-1815
> 4 credits

Sophomore Standing, and one HST course or Permission
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)


## American Studies: Reform and Search for Order

4 credits
Sophomore Standing, and one HST course or Permission
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)

## American Studies: The Roosevelt Revolution, 1932-45

4 credits
Sophomore Standing, and one HST course or Permission
Analvsis of the Great Denression. 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)


## Constitutional History

## 4 credits

Sophomore Standing, and one HST course or Permission
Analysis of the Constitution and how it has shaped government, politics and society and, in turn, has been influenced by changes in American politics, society, culture, technology and the economy. Focus is on the interplay between the Constitution and constitutional law, and other major historical events and trends.

HST *330.


## The Medieval Mediterranean (SO)

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

HST *331.
—(4)

## The Renaissance and Reformation <br> 4 credits

Sophomore Standing, and one HST course or Permission
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)

## 4 credits

HST 238 or another approved HST course and Permission
An introduction to advanced historical research, focusing on World War II, required of participants in the

London Research Seminar. Interpret the relevant aspects of World War II, as well as the rudiments of British culture and history. Includes major research project. (Alma) (ESPIT/GP)


## China's 20th-Century Revolution

## 4 credits

Sophomore Standing, and one HST course or Permission
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)

HST *360.

## South African History

4 credits
Sophomore Standing, and one HST course or Permission
Introductory survey of main themes and problems in recent South African historiography. Focuses on early colonial roots of segregation and white supremacy, impact of British rule and mineral revolution, development of institutionalized racism through segregation and radical apartheid program, ethnic conflict, constitutional problems, industrialization and urbanization, and Afrikaner and black nationalism. Also analyzes contemporary crisis and potential for conflict resolution in this key area of confrontation between the developed and developing worlds. (ESPI/GP)

Sophomore Standing, and one HST course or Permission
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.

## HST *385-*386-*387. Internship in History

4-12 credits
Permission
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.

HST *399.

## Independent Study

$1-4$ credits
Permission

HST *407.
Foreign Policy Seminar
4 credits
Permission
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)

HST *434.
$\longrightarrow$ (4)

## Comparative Fascism

4 credits

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)

HST *435.

## London Research Seminar

4 credits
HST 238, 335, and Permission
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)


## Topics and Problems in History

$1-12$ credits
Permission

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.

HST *499.

## Independent Study

1-12 credits
Permission

Advanced bibliography and selected problems.

HST *500.
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## Senior Thesis

$1-4$ credits
Permission

## Integrative Physiology and Health Science (IPH)

Professors Anderson, Ball, Davis and Luetkemeier; Associate Professor McKenna; Visiting Instructor Luckett; Instructors Andre, Curry, Griffin, B. Knight, D. Knight, Munderloh and Wenta.

The Integrative Physiology and Health Science Department emphasizes a combination of strong science education with generous laboratory experiences in human physiology, exercise testing and prescription, gross anatomy, athletic training, senior fitness, and exercise biochemistry.

Graduates of Alma's IPH Program are prepared for graduate work in various pre-professional medical programs including schools of medicine, physician's assistant, physical therapy, occupational therapy and public health. Graduates are also prepared for employment in clinical rehabilitation programs such as cardiac and pulmonary rehabilitation along with corporate or private health and wellness programs. For physical education teaching, the IPH major can be combined with the secondary teacher education program.

## IPH Major Requirements

1. Core: 20 credits consisting of IPH $220,225,226,327$, and 344.
2. Concentration: 16 credits from one of the following:
a. Clinical Exercise Physiology: IPH 310, 328, 340, 418, 419, and 420.
b. Pre-therapy: IPH $310,345,346,401$ and 6 credits from IPH $323,324,328,418,419$, and 420.
c. Pre-medicine: IPH 310; 270 or 331 or 430; 328 or 340 ; and 6 credits from the previous options or IPH 270, 328, 340, 345, 346, 401, 418, 419, 420, or 430.
d. Public Health: IPH 270, 331, and 430 and 4 credits from IPH 223, 310, 328, or 340.
3. Either completion of the Senior Oral Comprehensive Examination administered by the Department, completion of Senior Seminar (IPH 480) or completion of a Senior Thesis (IPH 500).
4. At least one practicum experience is strongly recommended for all IPH Majors. Note: For some concentrations. First Aid and CPR certification are reauired bv external internshin/practicum programs.

## IPH Minor Requirements

Twenty-four credits which must include IPH 225, 226, 327 and 344.

NOTE: No activity courses (EHS 110-165) may count toward the non-teaching major or minor and no more than six activity course credits may be applied toward the 136 required for the bachelor's degree.

## Athletic Training Major (ATH)

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

Admission Requirements: Students must apply to the ATEP. The program is competitive and acceptance is based on the number of available clinical positions. Students must complete the following to be reviewed for admittance: apply and be accepted into Alma College; and a separate application to the ATEP is required.

Contact Phil Andre, MS, AT, ATC for an application packet. The admission process takes place once a year and admission occurs by April 1 of each year.

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

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

Preference will be given to those applicants who have:

1. Completed the Athletic Training Application
2. High college grade point average
3. High grade point average in high school
4. Three letters of recommendation
5. Interviewed by the Athletic Training staff. These interviews will take place following submission of application material.

After being provisionally accepted into the ATEP, students must complete the following to achieve full admittance:

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

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

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

## Athletic Training Major Requirements

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

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

## Secondary Physical Education Teaching Major Requirements

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

## IPH 105.

Clinical Experience in Athletic Training I
1 credit
Combines the required proficiencies of a level one student with a clinical field experience.

## IPH 106.

## Clinical Experience in Athletic Training II <br> 1 credit

IPH 105 or Permission
Combines the required proficiencies of a level one student with a clinical field experience.

## IPH 205.

Clinical Experience in Athletic Training III
1 credit
IPH 106 or Permission
Combines the required proficiencies of a level two student with a clinical field experience.

## IPH 206.

Clinical Experience in Athletic Training IV
1 credit
IPH 205 or Permission
Combines the required proficiencies of a level two student with a clinical field experience.

IPH 210.

## Health Careers Seminar

2 credits
Examination of current information and practices relating to human health. Includes discussions,
independent research, on-campus presentations by invited professionals, and off-campus visits to observe health practices, services, agencies and businesses. Pass/fail only.

## IPH 212.

## Physiology of Aging (NS-1)

4 credits

BIO 121
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.

## IPH 214.

## Faith and Physiology (NS-1)

4 credits
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 mindbody connections are addressed through extensive laboratory experiences. Intended for non-science majors. Laboratory.

## IPH 215.

## Human Structure and Function (NS-1)

## 4 credits

Provides basic understanding of human anatomy and physiology with emphasis on applications to health and medicine. Intended for non-science majors and may not count toward an IPH Major or Minor. Students who have taken IPH 226 or BIO 207 should not take this course. Laboratory.

## IPH 220.

## Nutrition (NS-1)

4 credits
\$10

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.)

## IPH 221.

## First Aid and CPR

2 credits

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

## IPH 222.

Principles of Athletic Training
4 credits $\$ 15$

IPH 221
Introduction to the general principles of athletic injuries.

## IPH 223.

## Issues in Global Women's Health

2 credits

Develop an understanding of the full spectrum of factors which define illness or well-being in women's health from a global perspective. This includes investigating and understanding the social conditions of populations and how these conditions affect the health of women.

## IPH 224.

## Substance Use and Abuse (NS-1)

4 credits
BIO 121
An introductory analysis of the physiological, pharmacological, psychological and sociological aspects of substance use and abuse. Emphasis on the biological basis for drug action, tolerance development, physical
ana psycnologicaı dependence, as well as aadictive benaviors will provige stuaents with an understanaing or key physiological and biochemical concepts.

## IPH *225-*226. Human Physiology (NS-1)

4 credits each $\$ 20$ each
BIO 121; IPH 225 before 226
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. (IPH 226 is cross listed with BIO 226.)

IPH 270.
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## Community Health

4 credits $\quad \$ 30$
Permission

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.

## IPH 271a.-b.

## School Health and Physical Education

2 credits
EDC 100, 120, 160, 200 or Permission
Designed to cover topical health and physical education content required for state teaching certification and methodology for teaching at either the elementary (a) or secondary (b) level.

1 credit
Junior Standing

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

## IPH *303.

## Stress Management

2 credits
Sophomore Standing
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.

## IPH *305.

Clinical Experience in Athletic Training V
1 credit
IPH 206 or Permission

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

## IPH *306.

Clinical Experience in Athletic Training VI<br>1 credit<br>IPH 305 or Permission

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

IPH *310.


## Introduction to Methods

2 credits
Permission or Junior Standing
Introduction to the research process. Typically students make a formal research proposal. Students are encouraged to nursue an individual studv of a narticular subiect in Fxercise Science

## IPH *323. Therapeutic Modalities

2 credits for IPH majors; 3 credits for ATH majors

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

IPH *324.

## Therapeutic Exercise

2 credits for IPH majors; 3 credits
for ATH majors
Permission
Methods and principles utilized in the rehabilitation of injuries of the physically active. Laboratory.

## IPH *325.

## Orthopedic Assessment I

2 credits for IPH majors; 3 credits
for ATH majors
Permission
Knowledge and practical application of theory and assessment methods necessary for the recognition of
signs and symptoms of upper extremity injuries. Laboratory.

## IPH *326.

## Orthopedic Assessment II

2 credits for IPH majors; 3 credits for ATH majors

Permission

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

IPH * 327.
Physiology of Exercise (NS-1)
4 credits $\$ 15$
IPH 226 or BIO 207
Exploration of the physiological process in relation to exercise in everyday life, and to sports and recreational activities. Laboratory.

IPH *328.
Human Diseases (NS-1)
4 credits
IPH 226, BIO 207 or Permission
Introduction to the pathophysiologic study of disease in humans.

IPH *331.


## Health Promotion (NS-1)

4 credits
Junior Standing
Provides critical information for planning, implementing, and evaluating health promotion programs in the workplace, schools, community or health care setting.

IPH *334.

## Theory and Practice of Individual Sports

4 credits $\$ 30$
Permission

Analysis of the skills of badminton, tennis and golf, and methods of instruction unique to each sport. Assumes basic proficiency in each sport.

## IPH *340.

## Pharmacology (NS-1)

4 credits
IPH 226 or BIO 207
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.

## IPH *344.

Human Anatomy (NS-1)
4 credits
$\$ 50$
IPH 226
In-depth study of human anatomy with laboratory experience.

## IPH *345.

## Biomechanics I

2 credits
IPH 344
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.

## IPH *346.

## Biomechanics II

2 credits
IPH 345 or Permission
Continuation of IPH 345. Emphasis on experimental procedures in biomechanics and kinesiology. Laboratory.

## IPH *380.

## Topics in Exercise and Health Science

1-4 credits
Designed as a variable topic and credit course which may include adaptive and corrective physical education, injury rehabilitation, environmental physiology and sports medicine.

## IPH *385-*386-*387.

## Practicum

1-4 credits
Permission
Designed for off- or on-campus placement combining academic orientation with practical preprofessional experience. Maximum of eight credits.

IPH * 401.

## Molecular Aspects of Muscle Physiology (NS-1) <br> 4 credits <br> $\$ 25$

IPH 226 and CHM 115
Detailed analysis of recent advances in our understanding of muscle function. Includes basic mechanisms of contraction, neuromuscular control and plasticity/adaption of muscle tissue. Important comparisons between the major muscle types are made. Emphasis placed on understanding these concepts at the molecular level and how these mechanisms translate to overall tissue function. Laboratory.

IPH * 405.

> Clinical Experience in Athletic Training VII
> 1 credit

IPH 306 or Permission
Combines the required proficiencies of a level four student with a clinical field experience.

1 credit

IPH 405 or Permission
Combines the required proficiencies of a level four student with a clinical field experience.

IPH *418.

## EKG Interpretation

2 credits
IPH 327 or Permission
Assessment and interpretation of the normal and abnormal electrocardiogram. Includes analysis of EKG changes associated with disease states and pharmacological treatments. Laboratory.

IPH *419.

## Stress Testing

2 credits
IPH 418
Application and interpretation of functional capacity and diagnostic stress testing. Includes analysis of normal EKG and hemodynamic responses to graded exercise testing. Laboratory.

IPH * 420.

## Exercise Prescription

2 credits
Develop and implement exercise prescription principles for healthy individuals as well as individuals with various diseased states. Design a comprehensive exercise program, including health and fitness screening, goal assessment, and development of an individualized exercise prescription. Laboratory.

IPH * 427.
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## Administration of Athletic Training

2 credits
Permission

Prepares the athletic training student with the organizational and administrative theories utilized in the management of an athletic training facility.

## IPH * 428.

## Exercise Testing and Prescription (NS-1)

4 credits $\$ 20$
IPH 327
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.

## IPH *430.

## Epidemiology (NS-1)

4 credits
BIO 121 and Junior Standing, or Permission
Presents concepts, principles and methods generally used in the surveillance and investigation of heathrelated events.

## IPH *499.

## Independent Study

2-4 credits
Permission
Research in Exercise and Health Science under the supervision of the Department culminating in a thesis or research project. Open to Majors only.


## Senior Thesis

4 credits

Permission

## Public Health (PBH)

Professors Anderson, Dixon, Fobes, Lorenz and Vickery.

Public Health is an interdisciplinary minor designed to educate students through a broad scientific base of courses, providing fundamental understanding of public health activities.

## Minor Requirements

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

## PBH *385. Practicum

4 credits
Permission

## Library Research (LIB)

## Associate Professors Kelleher, Vest and Zeile; Assistant Professor Richter.

Library research courses, along with other reference services and bibliographic lectures, teach students to make good use of the library's resources.

## LIB 180.

## Special Topics

2 credits

Courses in beginning academic research skills. May be repeated for credit if topics vary.

## LIB *380.

## Special Topics

2 credits
Courses in advanced library research skills offered to those preparing for senior theses or graduate study.

## LIB *385.

## Practicum

$1-4$ credits
Study-work program in the College Library or another library.

## Mathematics (MTH)

## Professors Molina, Nyman and Putz; Associate Professors Dai and Sipka; Visiting Assistant Professors Peterson and Jones; Instructors T. Goggin, C, Goggin, K. Jensen and Reed.

Working within a structured, quantitative framework and thinking abstractly are experiences encountered by all who study the mathematical sciences. Because mathematics is the study of pattern as well as content, its applications span diverse fields.

Students trained in mathematics find employment in actuarial science, computer systems analysis and programming, engineering, industrial research and development, statistical quality control and teaching. Graduates of Alma's Mathematics Programs have entered graduate school in actuarial science, economics, engineering, law, management science, medicine, operations research and statistics.

## Mathematics Major

1. Thirty-six credits which must include:
a. Mathematics $121,122,210,223,310$, and 421 or 431.
b. Twelve other upper-level Mathematics credits.
2. Two required cognate courses:
a. Computer Science 120.
b. A course, other than a Mathematics course, approved by the Department, with a Mathematics prerequisite numbered 113 or higher.
3. The senior comprehensive examination includes three parts: successful completion of the Major Field Test in Mathematics, submission of an approved writing sample and an approved oral presentation.
4. At least one statistics course is recommended.
5. Students interested in graduate school in mathematics should complete both Mathematics 421 and 431 and an honors project. Students interested in business and industrial careers should consider additional
courses in Applied Mathematics, Computer Science and fields which apply mathematics in significant ways.

## Mathematics Minor

Twenty-four credits which must include Mathematics $121,122,210$ and at least two other upper-level

Mathematics courses. (Mathematics 099, 101 and 202 do not count toward the Minor.)

## Mathematics Secondary Teaching Major

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

## Mathematics Secondary Teaching Minor

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

## Mathematics Elementary Teaching Minor

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

## Mathematical Sciences Major

Fifty-two credits which must include Mathematics $121,122,210,223,310,336,341$, and 421 or 431; Computer Science 120 and 220, and 12 additional credits in upper-level Mathematics or Computer Science courses, at least four credits of which must be Computer Science. Courses which combine applications and theory are encouraged (e.g. Mathematics 211, 342, 391, 399 or 499; and Computer Science 240, 310, 420, 430,440 , or 499 ). The senior comprehensive examination includes three parts: successful completion of the Major Field Test in Mathematics, submission of an approved writing sample and an approved oral presentation.

## Restrictions

The following combinations of double majors are not permitted: Mathematical Sciences and Mathematics; and Mathematical Sciences and Computer Science.

## Four credits from MTH 110 or higher, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Natural Sciences Mathematics/Computation.

MTH 099.

## Basic Core Mathematics

4 credits
Placement
Designed for students with very weak backgrounds in mathematics. Focuses primarily on skills development, including the arithmetic of real numbers, construction and interpretation of graphs, introduction to linear relationships and simple notations from statistics. Students required to enroll in this course must complete four additional credits for the bachelor's degree. Pass/fail only.

## MTH 101.

## Basic Algebra

4 credits
MTH 099 or Placement
Fundamentals of elementary algebra. Includes addition, subtraction and multiplication of polynomials, factoring of polynomials, the quadratic formula, graphing of equations, systems of equations and inequalities. May not be taken for credit by students who have successfully completed Mathematics 112 or a higher course.

MTH 110.

## Liberal Arts Mathematics

4 credits
MTH 101

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

## MTH 111.

## Mathematics in Art and Nature

4 credits

MTH 101
Mathematics in the visual and musical arts and the plant and animal worlds. Topics include Fibonacci sequence, the golden section, Archimedean and logarithmic spirals, one- and two-point perspective, tessellations of the plane, and Escher-like constructions.

## MTH 112.

## Pre-Calculus

4 credits
Placement
Designed for students with strong high school mathematics backgrounds who plan to include a calculus course (Mathematics 113 or 121) in their programs. Investigates polynomial, rational, exponential, logarithmic and trigonometric functions. Explores the ideas of functions and graphs, with emphasis on concepts and skills central to calculus. May not be taken for credit by students who have successfully completed Mathematics 121,122 or 210.

## MTH 113.

## Brief Calculus

$$
4 \text { credits }
$$

MTH 112 or placement
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.

MTH 101
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.

## MTH 117. <br> Introduction to Matrices and Linear Methods <br> 2 credits

Placement in MTH 112 or 4 years of High School Math Introduction to solving systems of linear equations, linear programming, elementary matrix theory, and the modeling of situations which are linear. Applications from business and natural and social sciences. Note: The content of this course is necessary background for Mathematics 310.

МТН 120.

## Discrete Mathematics

4 credits
MTH 112 or Placement or 4 years of High School Math
Introductory survey of propositional logic, functions, relations, counting methods and graph theory. Discussion of applications to computer science.

MTH 121-122.

## Calculus

4 credits each
MTH 112 with "C" or better or 4 years of High School Math
Introduction to the calculus of one variable. Includes limits and continuity, the derivative and applications, the integral and applications, infinite series and sequences.

A reading and writing course about dimensions greater than three with emphasis on Euclidean fourdimensional space. In addition to a mathematical text, readings include works from other disciplines. The goal is to gain a better understanding of four (or more) dimensions through various ways of thinking, both mathematical and otherwise.

## MTH 180.

## Topics in Mathematics

2-4 credits
Selected topics of current or historic importance. Prerequisites vary with topics selected.

## MTH 192. <br> Mathematical Modeling

4 credits
MTH 113 or 121
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.

## MTH 202.

## Mathematics for the Elementary Teacher

4 credits
MTH 101 or Placement; Sophomore Standing; EDC Major
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.

Continuation of Math 122. Includes functions of several variables, vectors, vector-valued functions, threedimensional analytic geometry, partial differentiation and multiple integration.

## MTH *211.

## Differential Equation

4 credits
MTH 210

Techniques and theory of solving ordinary differential equations. Includes series solutions, numerical methods and applications.

## MTH *220.

## Mathematical Foundations of Computer Science

4 credits
MTH 120
Topics in the mathematical foundations of computer science. Includes graph theory, logic, Boolean algebras, languages and automata, and the analysis of algorithms.


## Introduction to Cryptography

4 credits
MTH 122
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.

Study of predicate logic, proof techniques, set theory, relations, functions, cardinality and various discrete structures.

MTH *280.
Topics in Mathematics
2-4 credits
Selected topics of current or historic importance. Prerequisites vary with topics selected.

MTH *310.

## Linear Algebra

4 credits
MTH 210; MTH 117 strongly recommended
Study of finite-dimensional real vector spaces; kernel, dimension, basis, linear transformations and their matrices, and eigenvalues.

## MTH *323.

## Complex Analysis

4 credits
MTH 210
Introduction to the theory of functions of a single complex variable. Analytic functions, complex series, Cauchy's theorem and conformal mapping.

MTH *336.

## Numerical Analysis

4 credits
MTH 122 and CSC 120
Analysis and implementation of numerical algorithms for approximating functions, derivatives and integrals,


Discussion of standard software packages and techniques for writing efficient and reliable mathematical software in Pascal and/or FORTRAN.

## MTH *341-*342. Probability and Statistics

4 credits each

MTH 122 for 341 ; MTH 341 for 342
Introduction to mathematical theory of probability and statistical inference. Includes data analysis and presentation, discrete and continuous probability models, random variables, mathematical expectation, generating functions, estimation, hypothesis testing, sampling distributions, regression, correlation, time series and other selected topics.

## MTH *351. Elementary Number Theory

4 credits
MTH 223

Study of integers, including divisibility, the theory of prime numbers, congruences and solutions of equations in integers.

MTH *380.

## Topics in Mathematics

4 credits

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

## MTH *390.

## Combinatorics

4 credits
MTH 120 or 122
Introduction to combinational theory. Topics include enumeration, recurrence, generating functions, graph theory and optimization.

# MTH *391. Introduction to Graph Theory <br> 4 credits <br> MTH 122 or Permission 

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

## MTH *399.

## Independent Study

$1-4$ credits
Permission

MTH *411.
College Geometry
4 credits
MTH 223
Axiomatic systems, models, finite geometries, Hilbert's axioms, independence of the parallel postulate, and introduction to non-Euclidean geometries with emphasis on hyperbolic geometry.

## MTH *413.

## Topology

4 credits
MTH 223
Introduction to point-set topology. Includes topological properties of Euclidean spaces, abstract spaces and metric spaces. Explores connectedness, compactness, continuity and homeomorphisms.

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

MTH * 431 .
Advanced Calculus
4 credits

MTH 210 and 223
In-depth examination of the calculus of one variable, including topology of the real line, sequences and series of functions.

## MTH *491. Mathematical Methods of Physics

4 credits
MTH 211; MTH 310 recommended
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.

MTH *499.

## Independent Study

1-4 credits
Permission

MTH *500.

## Senior Thesis

4 credits
Permission

## Modern Languages

## French $\mid$ German $\mid$ Spanish

## Professors Arnold and Dougherty; Associate Professor Liu; Assistant Professor Slaughter; Instructor M. Brines.

Alma's Modern Language Majors emphasize language acquisition and the study of culture, civilization, literature and literary analysis. Students who complete majors in French, German or Spanish are required to spend at least one semester in an approved international program. Alma overseas programs in France, Germany, Mexico, Spain, and South America provide students with total immersion in a foreign culture and help them gain fluency in the foreign language.

Alma's Modern Language Program graduates enter teaching careers or, more commonly, combine a degree in language study with another major to create a variety of career options. Satisfactory completion of any foreign language major should enable students to meet the language and literature requirements for teaching and for advanced study in language or other appropriate disciplines, or to satisfy standards for acceptance into the training programs of the government, social agencies and business enterprises.

## Department Honors

Students may achieve honors in the Modern Languages Department by

1. Having a 3.5 CPA in all language classes.
2. Performing beyond minimum requirements on the Language Exam portion of the Departmental Comprehensive Evaluation.
3. Presenting a senior thesis of honors caliber.

## Advanced Credit

Advanced Credit in a second language may be earned by
2. Successfully completing the International Baccalaureate Program (IB) or the National Foreign Language Examination.

## French (FRN)

## Professor Arnold.

## Major Requirements

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

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

## Minor Requirements

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

## Teaching Major Requirements

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

## Teaching Minor Requirements

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

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

## FRN 111-112.

## Beginning French I-II

4 credits each

FRN 111 or Permission for 112
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 169-*369. (4)

## Quebec

## 4 credits

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. Spring Term.

## FRN 170-*370.

## Paris in May

4 credits

Provides two academic components: language study and French culture. Students attend a regular language class through Alma College at the Alliance Français (any level) and study cultural history of Paris through selected readings, directed visits and shows. Spring Term.

## FRN 207-*307.

## French Conversation I- II

## 2 credits

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 221-222.

## Intermediate French I-II

(4)

4 credits each
FRN 112 or Placement
Systematic study of grammar and further development of speaking and writing skills through readings and discussions.

## FRN 255.

## French Literature in Translation

4 credits

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

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The course numbers FRN 291-*391, 292-*392, 293-*393, 294-*394, and 295-*395 are reserved for courses taken on College-approved programs of study abroad. Level determined by FRN 222 and placement.

FRN 291-*391.
(4)

French Language Studies
2-4 credits

Further study of grammar and development of reading, writing, speaking and listening skills.

FRN 292-*392.
(4)

Targeted French Language Studies
2-4 credits
Targeted study of written French, oral French, or pronunciation.

FRN 293-*393. Studies in History and Civilization
(4)

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

FRN 294-*394.
Studies in French and Francophone Literature
2-4 credits
Studies in literature on a variety of topics or genres.

FRN 295-*395.

## Studies in Business French

2-4 credits
Study of business French for commercial communication with the French-speaking world.

FRN *321.


French Composition and Conversation
4 credits
FRN 222
Advanced composition and conversation with extensive writing and emphasis on speaking skills. Includes reading, discussions and debate on a wide variety of cultural topics.

FRN *330.
©

## Current Issues

4 credits
FRN 321 or Permission

Advanced composition and conversation. Contemporary French social problems contrasted with those of the U.S. using newspapers, magazines and TV broadcasts.

## FRN *350.

(4)

## Study in French Literature

4 credits
FRN 321 or Permission

Studies in literature which emphasize different centuries, genres or themes. May be taken more than once for credit.

FRN *354.


# From La Belle Époque to the 1990s 

4 credits
FRN 321 or Permission
Study of major literary movements and authors of the 20th century.

(4)

History of French Literature I-II
4 credits each

Study in French literature from its origins to the late 20th century. Readings from significant works of each literary period.

FRN *360.
$\rightarrow$ (4)

## Francophone Literature

4 credits
FRN 321 or Permission

Studies in French-speaking, non-European countries' literatures. Addresses Afro-French literature, FrenchCaribbean literature, or French-Canadian literature.

FRN *371-*372.

## History of French Civilization I-II

4 credits each
FRN 321 and Permission

Introduction to French civilization and culture. Political, social and religious institutions; art, architecture, music and literature. French civilization to 1715 (FRN 371); and from 1715 to present (FRN 372).

FRN *377.

## Studies in French Film

4 credits
FRN 321 or Permission

Studies in French film, emphasizing the critical analysis of technical and artistic applications, sociohistorical contexts and directors' personal styles.

FRN *380.

## Topics in French Language, Literature and Civilization

4 credits
FRN 321 or Permission

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.

FRN *495. ©

## Senior Thesis Part I

1 credit
Permission

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.

FRN *499.
©

## Independent Study

4 credits

Senior Standing and Permission

## Senior Thesis

4 credits

## German (GRM)

## Associate Professor Liu.

## Major Requirements

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

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

## Minor Requirements

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

## Teaching Major Requirements

1. Thirty-four of Alma's 36-credit-hour major must be beyond GRM 222 .
2. A minimum of one semester of approved international study in a German-speaking country.
3. Successful completion of ENG 225 (formerly 220) and EDC 445f.
4. Write and defend in open forum an acceptable paper of moderate length reflecting on their study of

German, their study abroad experience and how they combine with the mission of a liberal arts education.
5. In order to be recommended for teacher certification, students must pass the Michigan Test for Teacher Certification subject area test in German as well as the American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Exam at the Advanced Low level. The Teacher Education Program is proactive about informing students of opportunities for taking these tests.

## Teaching Minor Requirements

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

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

## GRM 111-112.

## Beginning German I-II

4 credits each
GRM 111 or Permission for 112

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 *200. ©

## German Masterpieces in Translation

4 credits

Reading and dicouccion of celected varorks of German literature in Fnolich tranclation includino Röll Rresht

Fontane, Goethe, Grass, Hesse, Hochhuth, Hauptmann, Kafka, Th. Mann, Maron, Plenzdorf. Does not count toward major or minor. (Alma)

## GRM *221.

## Language and Culture

 (4)
## 4 credits

GRM 112 or Placement

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)

## GRM *222.

## Introduction to Reading

4 credits
GRM 221, Placement or Permission
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)

## GRM *231-*232.

 ©
## Composition and Conversation

4 credits each
GRM 112 or Permission
Systematic study of grammar and further development of speaking and writing skills through reading, discussion, intensive laboratory and classroom drill; 24 class periods a week. (Germany)

## GRM *251-*252.

## Aspects of German Culture

(4)

4 credits each

Intermediate level investigation of various aspects of contemporary German civilization and culture through speaking, writing, laboratory exercises, reading exercises and discussion. (Germany)

GRM * 299.
Readings in the Arts and Sciences
1-2 credits each
GRM 112 or Permission
Designed for students who wish to develop reading abilities in sciences and humanities. Specific readings reflect individual needs and interests. (Alma)

GRM *311-*312.

## Advanced Conversation and Composition

4 credits each
GRM 222 or Permission
Refinement and extension of language skills through consideration of contemporary issues and experiences from internet, newspapers, magazines and audio-visual materials. Expanded oral composition, extensive and intensive written composition. Review of selected grammatical problems. (Alma and Germany)

## GRM *313.



## Intensive Language Practice

4 credits
GRM 222 or Permission
Review of selected grammatical problems; refinement of speaking, reading and writing skills through extensive classroom and laboratory practice. (Germany)

## GRM *315.

## Selected 20th Century Authors

4 credits

GRMM 7 つつ ar Darmiccinn

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)

## GRM *316.

$\longrightarrow$ (4)

## The German Novelle

4 credits
GRM 222 or Permission

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, Hauptmann, Kafka and Mann. (Alma)

## GRM * 321 .

## German Culture and Civilization I

4 credits

GRM 222 or Permission
In-depth investigation of modern German culture and civilization from Bismarck to emergence of National Socialism. (Alma)

## GRM * 322.

## German Culture and Civilization II

4 credits

GRM 222 or Permission
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)

## Introduction to German Literature

4 credits

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)

GRM *350.
(4)

## Postwar German Short Stories

4 credits
GRM 311 or Permission
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)

## GRM * 401 .

 (4)
## Advanced Composition and Stylistics I

4 credits

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

GRM *402. (4)

## Advanced Composition and Stylistics II

4 credits
GRM 401
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)

4 credits
GRM 402
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)

## GRM *411.

(4)

## The Age of Goethe

4 credits
GRM 341 or Permission

Study of literature and society surrounding the lifetime of Goethe, generally including the most significant authors and works from 1750-1825. (Alma)

GRM *412.

## Social Engagement in the 19th and 20th Centuries

4 credits
GRM 341 or Permission
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)

## GRM *420.

 (4)
## Advanced German for Teachers

2 credits
GRM major or minor; prior teaching experience

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)

## GKIVI "49Y.

(4)

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4 credits
Senior Standing and Permission

GRM *500.
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## Senior Thesis

4 credits

Permission

## Spanish (SPN)

## Professor Dougherty; Assistant Professor Slaughter; Instructor M. Brines.

## Major Requirements

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

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

## Minor Requirements

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

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

## Teaching Major Requirements

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

## Teaching Minor Requirements

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

## Four credits from SPN 112 or higher, with the exception of practicum or independent study

# courses, count towards the Distributive Requirements in the Humanities. 

## SPN 111-112.

## Beginning Spanish I-II

4 credits each
SPN 111 or Permission for 112
Intensive course for beginners in Spanish. Primary objective: to help students begin early and meaningful communication in Spanish by acquiring necessary basic skills. Emphasizes all four language skills: reading, writing, and especially listening and speaking. Secondary objective: to provide insight into Hispanic culture and society through readings, discussions and activities. Students who have earned credit for three or more years of high school Spanish may not enroll in SPN 111 or 112. (Alma, Alma Programs Abroad)

## SPN 185/*385. <br> Service Learning in Spanish

1 credit
Permission and Placement
May be repeated for credit with a maximum of four credits applied toward the major or minor. (Alma)

SPN 221-222.

## Intermediate Spanish Language I-II

4 credits each
SPN 112 or Placement
Continuing study of the Spanish language with additional emphasis on reading and writing skills. Study of Hispanic culture and close reading of selected Hispanic texts from various genres. Extensive grammar review, composition, and oral-aural practice. Students who have earned credit for three or more years of high school Spanish will have a default placement of SPN 221. These students are encouraged to take the placement test to continue their study at a higher level. (Alma, Alma Programs Abroad)

SPN 223-224.
(4)

## Intermediate Spanish Language III-IV

4 credits each

Intermediate level study of Spanish. Designed for students who have completed second year college Spanish but whose language skills need strengthening before they enter upper level courses while studying at the Universidad Iberoamericana. (Alma Programs Abroad)

## SPN 230.

## Hispanic Readings

(4)

4 credits<br>SPN 222 or Placement

Development of reading and vocabulary skills necessary for success in upper level study in Spanish. Practice of strategies and techniques to become more efficient and better readers, deciphering the meaning of unfamiliar vocabulary from structure and context, and improving comprehension of texts representative of a variety of genres. (Alma)

SPN *255.

## Peninsular Literature in Translation

4 credits
Reading and discussion of selected representative works of Spanish Peninsular literature in English translation. Content may vary. Does not count toward the Spanish majors or minors. (Alma)

## SPN 261/*361. <br> Language and Culture in Spain

4 credits
Permission
Spanish language instruction, investigation and comparative studies of social and ethnic issues. Students live with a host family. Destination may vary. (Spring Term course)

## The Other America

## Permission

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. (Spring Term course)

SPN *265.

## Hispanic-American Literature in Translation

4 credits

Reading and discussion of selected representative works of Hispanic-American literature in English translation. Content may vary. Does not count toward the Spanish majors or minors. (Alma)

## SPN 281.



Conversation
2 credits

SPN 221 or Permission

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.
(4)

## Independent Reading

2 credits
Permission

Supervised study and research of an area not covered in available courses. (Alma)

## Spanish Grammar I-II

4 credits each

## Placement

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. (Alma, Alma Programs Abroad)

## SPN *313-*314.

(4)

## Spanish Grammar III-IV

4 credits each
Placement
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. (Alma Programs Abroad)

## SPN *315-*316.

(4)

## Advanced Spanish Language

4 credits each
Placement
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. (Alma Programs Abroad)

SPN *321.


## Advanced Composition

4 credits
SPN 222 or Placement

Advanced composition in a variety of genres aimed at developing skills appropriate to professional as well as academic contexts. (Alma)

## Investigation of Grammar

Intensive review of Spanish grammatical theory and structures. (Alma)

## SPN 330.

(4)

## Myths, Tales and Legends

4 credits
SPN 321 or Permission

Reading and discussion of Hispanic folktales and traditional stories. Focus on cultural context and narrative tradition, combined with principles of orality and storytelling. (Alma)


## Introduction to Hispanic Literature

4 credits
SPN 321 or Permission

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)

SPN *334.
(4)

## Mexican Culture and Civilization

4 credits
SPN 222 and Placement
Introduction to the society and culture of Mexico from a historical perspective: political, religious and social institutions. (Alma)

SPN *335.
©

## Spanish for Business and Commerce

4 credits

Acquisition of specific commercial concepts and vocabulary in Spanish and the study of worldwide and local economic factors. (Alma, Alma Programs Abroad)

SPN *340.


## Survey of Hispanic-American Literature

4 credits
SPN 321 or Permission
Reading and discussion of selections from major works of Hispanic-American Literature and their relationships to contemporary and subsequent society and culture. (Alma, Alma Programs in HispanicAmerica)

SPN *343.

## Survey of Spanish Literature

4 credits
SPN 222 and Placement
Reading and discussions of selections from the major works of Spanish literature and their relationship to contemporary and subsequent society and culture. (Alma Programs in Spain)

SPN *344. (4)

## Survey of Regional Hispanic Literature

4 credits
SPN 222 and Placement
Reading and discussion of regional literature, poetry, novels and epics. Themes and authors include preColumbian legend, Romanticism, Modernism. (Alma Programs in Hispanic-America)

SPN *350.
(4)

## History of Spanish Civilization

4 credits
SPN 321 or Permission

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)

SPN *352. Hispanic-American Culture and Civilization 4 credits

SPN 321 or Permission
Introduction to society and culture of contemporary Hispanic-America through examination of political, social, religious and artistic forces. Emphasis on social-political problems and their affect on the United States. Readings, lectures, compositions and discussions in Spanish. (Alma, Alma Programs in HispanicAmerica)

SPN *355. History of Art and Architecture ©

## 4 credits

SPN 222 and Placement
Period and manner studies of the great Spanish and Hispanic-American painters. Vision of aesthetic ideas through painting. Architectural concepts and styles. (Alma Programs Abroad)

SPN *360.
—(4)

## Spanish Literature to 1700

4 credits
SPN 321, 331, or Permission

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, Góngora and Quevedo; drama of Lope de Vega, Tirso de Molina and Calderón. (Alma)

4 credits
SPN 321, 331, or Permission
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)

SPN *364.

## Indigenous Cultures

©
4 credits
SPN 222 and Placement
Period, cultural, economic, and ethnic studies of the people of a specific country in Hispanic America. (Alma Programs Abroad, Alma Programs in Hispanic-America)

SPN *370.

- (4)


## Spanish Literature Since 1700

4 credits
SPN 321, 331, or Permission
Reading and discussion of representative works from the Romantic period to the present in Spain: Bécquer, Galdós, Unamuno, Ortega y Gasset, García Lorca and others. (Alma, Alma Programs in Spain)


Hispanic-American Literature Since 1888
4 credits
SPN 321, 331, or Permission
Reading and discussion of representative works in Hispanic-American literature from Modernism to the present: Darío, Martí, Borges, Neruda, Paz, Cortázar, Vargas Llosa, Fuentes, García Márquez and others. (Alma, Alma Programs in Hispanic America)

A comprehensive study of the history of specific regions of Hispanic America including pre-Columbian through contemporary issues. (Alma Programs in Hispanic-America)

## SPN *380.

(4)

## Special Topics

2-4 credits
Permission
Offered periodically for the study of a particular issue, theme or topic in Hispanic literature or civilization; for example, Spanish cinema, revolution in Central America, literary theory and criticism. Courses may be given in English as interdepartmental or interdisciplinary courses. (Alma, Alma Programs Abroad)

## SPN *460.

## Seminar in Spanish Literature

4 credits
SPN 321, 331, or Permission
Advanced study of a specialized area, movement, writer or work in Peninsular literature; for example, Don Quijote, the picaresque, the post-Civil War novel. (Alma)


## Seminar in Hispanic-American Literature

4 credits
SPN 321, 331, or Permission
Advanced study of a specialized area, movement, writer or work in Hispanic-American literature; for example, Literature of the Conquest, the gaucho in Argentine society and literature, and the literature of the "Boom." (Alma)

Preparation of the bibliography，outline and prospectus for a forthcoming thesis．

SPN＊499．
©

Independent Study
4 credits
Senior Standing and Permission
Supervised reading and research in an area not covered by available courses．（Alma）

SPN＊500．
——

## Senior Thesis

4 credits
Senior Standing and Permission
Definition of a question，thesis paper and oral defense in Spanish．（Alma）

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

Four credits from the courses numbered $\mathbf{1 1 2}$ or higher, with the exception of practicum or independent study courses, count towards the Distributive Requirements in the Humanities.

The courses listed below are offered periodically upon sufficient demand.

## CHN 111-112.

## Beginning Chinese I-II

4 credits each
CHN 111 or Permission for 112
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 221-222.

## Intermediate Chinese I-II

4 credits each
CHN 112 or Placement
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.

## GRK 111-112.

## Classical Greek

## 4 credits each

Study of basic Greek grammar, morphology and vocabulary, culminating in the reading of elementary classical and New Testament texts.

4 credits

Introduction to Old Testament Hebrew. Includes grammar and elementary reading.

## HEB 112.

## Advanced Biblical Hebrew

4 credits
HEB 111
Advanced reading of a variety of styles of Old Testament Hebrew with emphasis on grammatical form analysis and word study as related to critical-literary examination of the Old Testament.

## LAT 111-112. Elementary Latin

4 credits each
Phonetics, morphology, syntax and semantics preparatory to the translation of simple texts such as Caesar and Pinius.

Professors Messing, Nichols and R. Riley; Associate Professor Zerbe; Assistant Professor Gross; Instructors Abo, Ayres, Burdick, Duncan, Fiste, Kelly, Melendez, Miller, Sampson, Straus, Tracy, VonWald, Walker, Warnhoff, Westmoreland and Worful; Artist in Residence Patterson.

The Music Department at Alma provides a curriculum designed to meet the needs of a broad range of students. The faculty and resources of the Department are committed equally to the following: 1) providing courses and curricula for music majors so that they will acquire the necessary foundation to pursue graduate study, teaching, performing or music-related fields; 2) strengthening students' musical skills by expanding proficiency in technique, heightening interpretive insight, and facilitating the understanding of pedagogical tools and methods; 3) providing courses designed to introduce non-music majors to a range of musical topics; 4) being an artistic presence within the Alma College community and beyond by providing opportunities for students, faculty, and community to share the experience of musical performance.

Alma's Music Department, accredited by the National Association of Schools of Music, offers three degree options: Bachelor of Music in Performance, Bachelor of Music in Music Education and Bachelor of Arts with a major in Music.

## Bachelor of Arts in Music

Forty credits which must include MUS 111, 111a, 112, 112a, 211, 212, 214, 443, 444, 445, 500, two credits of Ensembles and two credits of Applied Lessons. MUS 500 is a senior project and may take the form of a recital, research paper or other Department-approved project. Requests for MUS 500 projects must be received by the end of the year preceding graduation. Students are strongly advised to continue their study of voice or an instrument through studio lessons and ensembles.

## Bachelor of Music in Music Education

Seventy-six credits including MUS 111, 111a, 112, 112a, 116, 211, 212, 214, 215, 237, 337, 344, 431, 443,

444,445 ; seven credits of Ensembles, one of which must be MUS 155 or 159; and 14 credits of Applied Lessons on one instrument. Students with a vocal emphasis must complete MUS 132, 138, and one term of an instrumental ensemble or instrumental pedagogy course. Students with an instrumental emphasis must complete MUS 134, 135, 136, 137 and either MUS 138 or one term of a vocal ensemble. All candidates must complete MUS 116 (piano proficiency) by the end of the fall term of the junior year.

Education courses required: EDC 130/103, 230/203, 240, 303, 311, 312, 346, 370, 373, 430, and 490/491.

## Bachelor of Music in Performance

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

## Minor Requirements

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

## 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

2 credits
Placement
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. Does not count toward any major or minor. (Offered every year)

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

2 credits
MUS 106 or Audition
Second semester introductory piano for non-majors. Continuation of study involving more advanced technique, expanded repertoire, and basic improvisational skills.

## MUS 111.

## Comprehensive Musicianship I

## 4 credits

MUS 101 or Placement
Study of the structure and use of intervals and chords in a basic harmonic vocabulary including diatonic triads and their inversions in major and minor keys, functional tonal principles, harmonic cadences, embellishing tones, principles of harmonization, part-writing chords, melodic relationships and periodicity, and dominant seventh chords. (Offered every year)

## MUS 111a.

## Aural Skills I

2 credits
Develops aural skills through a range of melodic, harmonic and rhythmic exercises. Introduces solfege syllables. Should be taken concurrently with MUS 111. (Offered every year)

## Comprehensive Musicianship II

4 credits
MUS 111
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)

## MUS 112a. Aural Skills II

2 credits
MUS 111a
Continuation of Aural Skills I. Should be taken concurrently with MUS 112. (Offered every year)

## MUS 114. <br> Piano Proficiency I

2 credits
MUS Major
Preparation for piano proficiency required of Performance and Music Education majors. Fundamental skills, technique and repertoire development. Scales, simple accompaniment patterns, harmonization and improvisation. (Offered every year)

## MUS 115.

Piano Proficiency II
2 credits
MUS 114 or Audition, MUS Major
Level II piano proficiency. Continuations of scale and arpeggio technique, chord progressions, solo and ensemble repertoire. (Offered every year)

## MUS 116.

2 credits

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)

## MUS 117-118.

Class Voice
2 credits each
Permission for 118
Basic principles of singing for the student with little or no previous training. (Offered every year)

MUS 119.
Guitar
2 credits
Basic fundamentals for the beginning guitar player.

MUS 120.
—(4)

## Survey of Music Literature

4 credits
Introductory survey of major musical works representative of the styles and genres of the important periods of musical development. Extensive listening. (Offered every other year)

## MUS 131.

## Piano Pedagogy

1 credit
8 credits of MUS 196 or 396
Principles of musicianship on the piano. Designed for Music Education majors. Emphasis on pedagogical methods and material used in teaching piano to beginning and intermediate students. (Offered as needed)

2 credits
Introduction to the physiology of the vocal mechanism. Development of fundamental techniques used in private and group voice instruction. Introduction to voice classification and the changing adolescent voice. (Offered every other year)

## MUS 134.

## Woodwind Pedagogy

1 credit
Principles of tone production, fingering and embouchure for flute, oboe, clarinet and bassoon (or saxophone). (Offered every other year)

## MUS 135. <br> Brass Pedagogy

1 credit
Principles of tone production, fingering and embouchure for trumpet, French horn, trombone and tuba. (Offered every other year)

## MUS 136.

## String Pedagogy

1 credit

Principles of musicianship on the violin, viola, cello and double bass. Designed for music education students. Emphasis on elementary string teaching methods and large group ensemble techniques necessary for school orchestral directing. (Offered every other year)

## MUS 137.

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

## Choral Pedagogy

2 credits
2 terms MUS 151,157 or 158
Principles of voice production, sight reading and singing. Emphasis on the selection of choral literature particularly with regard to developing voice. (Offered every other year)

## MUS 140. <br> Introduction to Non-Western Music <br> 4 credits

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.

## Ensembles

## Applies to: MUS 150-159 and 351.

Ensembles are open to all students who audition and receive permission from the instructor prior to registration. No more than eight credits of participation in all ensembles combined may be applied toward degree requirements. All ensembles are offered every year.

MUS 150.

## Accompanying

1 credit

## College Chorale

1 credit

MUS 152.

MUS 153.

MUS 154.

MUS 155.

MUS 156.

MUS 157.

MUS 158.

MUS 159.
Chamber Music
1 credit

## 2-4 credits

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

## Performance Courses

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

Private lesson offerings are open to both majors and non-majors who complete an audition and receive permission to register.

The 300-level (391-398) represents upper level performance skill and experience and requires Departmental approval. Candidates for the Bachelor of Music in Performance are advised to enroll at the 300 -level by the second semester of the first year. Only 300 -level students may elect four hours of credit. The Department will consider all candidates for the Bachelor of Music in Performance for 300-level suitability at the end of the first term of study.

Private instruction fee is $\$ 160$ per term for all levels (191-198, 391-398).

## MUS 191-*391. Strings

2-4 credits each term
A-Violin; B-Viola; C-Violoncello; D-Double Bass; Y-Guitar

MUS 192-*392.

## Woodwinds

2-4 credits each term
E-Flute; F-Oboe; G-Clarinet; H-Bassoon; I-Saxophone; P-Bagpipes

## Brass

2-4 credits each term
J-Trumpet; K-Horn; L-Trombone; M-Euphonium; N-Tuba

MUS 194-*394.

## Percussion

2-4 credits each term

MUS 195-*395.

## Voice

2-4 credits each term

MUS 196-*396.
Piano
2-4 credits each term

MUS 197A-*397A.

MUS 197B-*397B.

MUS 198-*398.

## Composition

2-4 credits each term
MUS 111 and Permission
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.

## MUS *201. <br> Music and Sound for Digital Media <br> 4 credits

Examines theoretical and technical elements of digital sound and music, including sound design and synthesis, sound editing, Musical Instrument Digital Interface (MIDI) sequencing, studio recording techniques, digital signal processing, computer-based music publishing, sound effect and narration tracks for video and the role of sound in interactive development. Emphasis on sound in digital media projects. (Offered every year) (Cross listed with NMS 204.)

## MUS *211.

## Comprehensive Musicianship III

4 credits
MUS 112
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)

MUS *212.

## Comprehensive Musicianship IV

## 4 credits

MUS 211
Continuation of Music 211. Study of new musical resources and techniques in the 20th and 21 st 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 related techniques and idioms. (Offered every year)

2 credits
MUS Major or Permission
Examines Musical Instrument Digital Interface (MIDI) techniques and applications for recording, scoring and musical production. Covers MIDI configurations, sequencing, multi-track recording, mixing and composing/arranging techniques. Approximately half of the course is used to train students in Finale, an industry standard application for music notation. (Offered every year)

## MUS *215. Music and Computers

2 credits

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. (Offered every year)

## MUS 225.

## Orchestration and Arranging

2 credits
MUS 112
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.

## MUS *237.

## Conducting and Score Reading

2 credits
MUS 112
Art of conducting, rehearsal techniques and procedures, score reading, problems of interpretation, organization and activities of choral and instrumental groups. (Offered every year)

## Musical Theatre Techniques

4 credits
The staging of and participation in the performance of a work for the musical theatre - including acting, singing and movement - which is presented at the end of the term. Course may be repeated once for credit.

## MUS *284.

## Music in Film

- 


## 4 credits

ENG 101
Examine 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.

## MUS * 337.

## Advanced Conducting

## 2 credits

Continuation of MUS 237. Emphasis on advanced analytical, interpretive, and technical conducting skills, as well as practical aspects of successfully leading instrumental and choral ensembles. (Offered every year)

## MUS *340.

## Piano and Chamber Music Literature

4 credits
Students attend the Gilmore International Keyboard Festival. A survey of keyboard and chamber music literature ranging from the classical to jazz repertoire. Analysis and study of works appropriate to class participants as well as critical listening, and theoretical-historical study. (Offered every other year)

Examination of methods and materials in music. Required of Music Majors who wish to be certified to teach music at elementary and secondary levels. Open also to Education students with music background. (Offered every other year)

## MUS *350.

## Opera Workshop

1 credit
Basic techniques of operatic performance: role preparation, body movement related to music, acting, and techniques. May be repeated for up to a total of 4 credits.

## MUS * 351 .

Alma College Choir
1 credit
(Offered every year)

MUS * 380 .

## Topics in Music

2-4 credits
Selected topics in music. May be taken more than once if topics differ. Only two registrations count toward a Music Major. (Offered every year)

MUS *399.

MUS * 431 .

## General Methods of Music Education

4 credits

Principles of group process teaching and classroom management. Accompaniment skills in piano and recorder, rehearsal techniques, teaching basic instrumental and vocal skills in grades 5-12 and a pedagogical overview of the human voice and standard band and orchestral instruments including tone production, practical ranges and related functions in an ensemble. (Offered every other year)

MUS *443.


## Music History I

4 credits

MUS 112
Antiquity, the Middle Ages and the Renaissance. (Offered every other year)

MUS *444.


Music History II
4 credits
MUS 112
Baroque and classical music. (Offered every year)

## MUS *445.



## Music History III

4 credits
MUS 112
Music of the 19th and 20th centuries, including relationships between the popular, folk and art music traditions of the United States and other non-Western European cultures. (Offered every year)

MUS *499.

## Independent Study

2-4 credits

Permission

## MUS *500.

## Graduation Recital or Senior Thesis

2 credits
Permission
Satisfies the Department's comprehensive evaluation requirement.

## New Media Studies (NMS)

## Professors Gilbert, Lopez-Isnardi, R. Riley and Vickery; Associate Professor Thall; Assistant Professors Collamati and Diels; Instructor Bare.

The New Media Studies major is a multidisciplinary program that combines theory and practice in the study of emerging forms of media and technology. Through interdisciplinary coursework, hands-on applications, and professional experiences, the major integrates the following areas of knowing, making and doing:

- camera media and sound production - photography, cinematic arts, sound design
- interactive design - web development, graphic design, app and game production
- critical media studies - media history, media theory and criticism, digital law

NMS majors learn about each of the three areas and focus their advanced studies in one or more of them. Working closely with an NMS faculty advisor, majors create individualized learning trajectories with the common goal of building flexibility, innovative approaches and expertise. Access to cutting-edge resources and applied learning experiences help students align their trajectories with careers in video production, graphic design, social media networks, app development, sound design and information technologies.

## Major Requirements

Fifty-two credits which must include:

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

## Departmental Honors

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

## Minor Requirements

Twenty-eight credits that must include:

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

## NMS 101.

## Introduction to Digital Media

## 4 credits

Introduction to technical, social and cultural aspects of new media. Topics include media convergence, interactivity, social networking and participatory culture. Includes laboratory work exploring basic principles of effective communication employing a variety of digital media for designing and delivering graphics, audio and video. Emphasis on creating multimedia projects for delivery over digital networks. Laboratory.

NMS 114.

## Introduction to Web Development

4 credits
Introduction to the theory and practice of communication in a digital format, including text, hypertext, visual, audio and video. Surveys the technologies underlying the World Wide Web, including Web page construction and site management. Explore both structural and presentational principles in Web design including XHTML markup for layout and arrangement, Cascading Style Sheets (CSS) for presentation and style, as well as valid methods for embedding multimedia (photos, video, audio, etc.) to convey both informative and persuasive messages. Laboratory.

## Principles of Visual Design

4 credits $\$ 100$
Investigation of foundational elements and principles of visual design, as components of visual communication. Two dimensional design and time-based media are explored traditionally and digitally, using programs such as: Illustrator, Photoshop Lightroom, iMovie and others. Topics include color theory, composition, narrative and non-narrative storytelling, among others.

NMS 180-*280-*380.

## Topics in New Media Studies

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

NMS 199-*299-*399-*499. Independent Study
$1-4$ credits
Permission

NMS 201.
Media Systems and Influence
4 credits
Introductory study of the major media industries and effects. Emphasis on analyzing how media technologies affect information flow and social networks and the influence of media on human perception, behavior and identity.

## Camera Media

4 credits

Acquire skills in the critique and authorship of camera media through perspectives from the arts, humanities and sciences. Theories are wed to hands-on practices with photography, time-based narratives, virtual environments, video chat, citizen journalism, microscopy, telescopy, and wearable media.

## NMS 204.

## Sound Design

4 credits

Overview of digital audio and video applications and the work flows designed to produce and manipulate digital sound and moving images. Includes music and sound for video, animation, and using audio and video on the Web. Students are introduced to important media standards such as NTSC, HDV, MIDI, QuickTime, MPEG and various SD and HD formats. (Cross listed with MUS 201.)

NMS 210.

## Motion Graphics and Animation

4 credits

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 *220.

## Introduction to Media Programming and Computation

## 4 credits

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 objectoriented design. Introduction to basic ideas in hardware, software and computing.

## Digital Film Production

4 credits
$\$ 100$

Introduction to the fundamentals of filmmaking and production of films. Elements covered include preproduction - financing, screenwriting, and scheduling; production - cinematography, sound recording and directing; and post-production — editing, basic effects, marketing and distribution.

NMS *250.
Media, Power and Ownership
4 credits

Introduction to the business practices and regulations that shape the American media industry. Emphasis is placed on the roles of audience characteristics and media technology in shaping the content of media, and the role of the First Amendment as the basis for media regulation.

NMS *260.

## Visual Communication

4 credits

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 *282.

## Network Analysis

4 credits

Examination of tools and techniques used in analyzing social relations, focusing on substantive and theoretical origins and applications of these techniques. Emphasizes basic network concepts and common approaches to network analysis. Introduces advanced methodologies for analyzing social networks.

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 *320.
Computer Game Design and Interactive Narrative
4 credits
NMS 120; NMS 220 or CSC 120
Using coursework and team projects, students explore the process by which games go from conception to formal design to implementation. Explore all facets of the game development process, from brainstorming techniques, to art and sound design, to testing and marketing. Laboratory.

## NMS *381.

## Documentary Video

4 credits
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.

## Internship in New Media

## 2-4 credits

Junior Standing and 12 credits in NMS, or Permission
Application of new media concepts and skills through participation in communities, institutions, agencies, schools and businesses. Supervision by faculty and sponsoring organizations. Includes interpretive journal and substantive paper or project.

# Seminar in Media Applications and Implications 

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

## NMS *500.



## Senior Thesis

2-4 credits
Senior Standing and Permission
Development and completion of original scholarly/creative work. May be applied, interpretive, critical, empirical or theoretical. Required for departmental honors.

## Philosophy (PHL)

## Professors N. Dixon and Stratton; Assistant Professor S. Dixon.

The philosophical temper begins with wonder and is nurtured by disciplined thought. Through its course offerings, for the major and non-major alike, Alma's Philosophy Department stimulates this sense of wonder and develops the capacity for analytical and critical judgment. Philosophy is the foundation of all disciplines and philosophers draw on all fields of study.

Because of the centralness of philosophy, Alma's Philosophy Program is useful preparation for careers in business and industry, government, journalism, law, ministry and teaching.

## Major Requirements

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

## Minor Requirements

Twenty-four credits, including PHL 102, 103, 111 or 112, and 126. Others selected in consultation with the Department.

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

PHL 102.


Exploration of issues in and development of individual positions in respect to basic philosophical questions.

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 111-112.

## Survey of Western Philosophy

4 credits each

Survey of major ideas which have helped shape the Western tradition and the thinking of contemporary persons. 111: Beginnings in Greece to Renaissance, including meeting of Greek and Christian worldviews. 112: Renaissance to 20th century.

PHL 126.

## Introduction to Values

4 credits

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

4 credits

Introduction to normative political theory, both historical and contemporary. Includes analysis of central concepts of politics, such as power, freedom, justice, democracy and equality. Explore key modern ideologies, such as liberalism, conservatism, socialism, fascism and political Islam. (Cross listed with POL 131.)

PHL 180.

## Topics in Philosophy

2-6 credits

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
4 credits

Examination of recent feminist studies in philosophy and religion. Focus on method, style, approach and arguments of the feminist critique. (Cross listed with REL 202.)

PHL 215.
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## Philosophy of Religion

4 credits

Examination of classical and contemporary issues in the philosophy of religion such as arguments for and against the existence of God, religious language, the relation between faith and reason, the evidential value of religious claims, and the relationship between morality and religion. (Cross listed with REL 215.)

PHL 216.
Themes in Existentialist Literature
4 credits

Examination, evaluation and discussion of selected subjects - the individual, freedom, responsibility, anxiety, hope, death, meaning of life - as treated in various essays, short stories and dramas. Focus on analysis and interpretation of texts. (Cross listed with REL 216.)

PHL 217.

## Eastern Religion and Philosophy

4 credits

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 with REL 217.)

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

4 credits

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

4 credits

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

4 credits

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.

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

4 credits
Examination of the relationship between religion and science through both historical and contemporary issues. (Cross listed with REL 230.)

PHL 232. ©

## Ancient Political Thought

4 credits
Exploration of key ideas in ancient and medieval political thought. The works of Socrates, Plato, Aristotle, the Stoics, Epicurus, Augustine and Aquinas are considered. Key questions addressed include: Is democracy superior to rule by the enlightened few? Are humans by nature political creatures? What is the proper relation between the individual and the state? Is the state a natural entity? (Cross listed with POL 232.)

PHL 234. Modern Political Thought

## 4 credits

Analysis of selected original works of Machiavelli, Hobbes, Locke, Rousseau, the American founders, Bentham, Mill, Marx and Nietzsche. Emphasis on relevance to contemporary political thought and issues. (Cross listed with POL 234.)

PHL 235.

## Ethics and Education

4 credits

Examination of ethical issues and education. Emphasis on the ethics of education, such as the very idea of compulsory education; and ethics in education, such as the tension between moral education and indoctrination, and issues pertaining to multiculturalism, gender and disability. Of special interest to students planning to become elementary or secondary teachers, but accessible to all interested students.

## PHL 240.

## Philosophy of Love and Sex

4 credits
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

4 credits
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

2-4 credits
Selected topics in philosophy in such areas as historical studies, epistemology, metaphysics and values. May be taken more than once if different topic.

## Independent Study

4 credits

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Planned program of individual study of a particular subject in philosophy, developed with the supervising professor.

## PHL *303. Symbolic Logic (NS-3) <br> 4 credits

PHL 103 or MTH 120 or Permission
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

## 4 credits

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.


## Virtue Ethics

4 credits
Any ethics course (PHL 126, 202, 225, 227, 228, 229, 235, 240, or 242) or Permission

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?

## Philosophy of Mind

## 4 credits

Any philosophy course or COG 120 or Permission
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.

PHL *380.

## Seminar

2-4 credits

Permission
Selected topics in philosophy which arise in various fields. Generally interdisciplinary, team-taught. Reading, discussion, papers and critiques. Subjects and credits to be announced.

PHL *399.

## Independent Study

4 credits
Permission
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.

## PHL *499.

## Independent Study

4 credits
Permission
Planned program of individual study of a particular subject in philosophy, developed with the supervising professor.

PHL *500.


## Senior Thesis

4 credits
Permission
Individual research culminating in preparation of a major paper and departmental oral examination.

## Physics (PHY)

## Professor Reed; Associate Professor Jensen; Assistant Professor Argueta-Diaz.

Physicists seek to understand natural phenomena at the fundamental level of space, time, matter and motion. This quest encompasses everything from the formation of stars to the best design for a bridge. Alma's Physics Department offers a balanced program of pure and applied physics, introducing essential scientific understanding and investigating its applications.

Physics is appropriate for students seeking careers in engineering, product development or in areas of sales or management requiring technical expertise. Careers in basic research or college or university teaching require advanced degrees.

## Major or Teaching Major Requirements

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

## Minor or Teaching Minor Requirements

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

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

## PHY 101.

## Making of the Atomic Bomb

4 credits

Review of the scientific. engineering. militarv and social factors involved in the develonment of the atomic
bomb from 1900-1945. Does not count toward Physics major.

## Students may not receive credit for both Physics 112-113 and 121-122.

## PHY 112.

## General Physics I

4 credits \$7

MTH 112, 113, or 121 ; or Permission
First half of an introductory survey of physics with emphasis on problem-solving. Uses algebra and trigonometry, but not calculus. Appropriate for students who plan no further study in physics. Topics include motion, forces, rotation, conservation laws and thermal physics. Laboratory.

## PHY 113.

## General Physics II

4 credits $\quad \$ 7$
PHY 112
Second half of the introductory survey of physics started in PHY 112. Uses algebra and trigonometry, but not calculus. Topics include vibrations and waves, sound, electricity and magnetism, optics and modern topics. Laboratory.

PHY 121.

## Introduction to Physics I

4 credits \$7
MTH 121 concurrently or Permission
First half of an introductory survey of physics with emphasis on problem solving. Uses calculus. Appropriate for students who plan to major in physics, chemistry or mathematics, and pre-engineering and pre-medical students who have had calculus. Includes mechanics, dynamics and rotation. Laboratory. Permission will be immediately granted to students who have credit for MTH 113 or 121.

4 credits $\$ 7$

PHY 121; MTH 122 recommended
Second half of the introductory survey of physics started in PHY 121. Uses calculus. Includes oscillations, waves, gravity, sound, fluids and thermal physics. Laboratory.

## PHY 140.

## Machine Shop

2 credits \$7

Permission
Introduction to machine shop tools and techniques.

## PHY * 212.

## Mechanics I: Statics

4 credits

PHY 121 and CSC 120; MTH 210 concurrently
Study of static equilibrium of rigid bodies. Includes translational and rotational equilibrium; stresses, strains and deformations; strengths of materials.

## PHY *220.

## Introduction to Electromagnetism

## 4 credits <br> \$7

PHY 122; and MTH 210 or Permission
Continuation of survey of physics begun in PHY 121-122. Study of fundamentals of electricity and magnetism: charge, current, fields, potentials, resistance, capacitance, inductance and an introduction to electromagnetic waves.

PHY *221.

## Modern Physics

4 credits
\$7

Survey of fundamentals of modern physics: special relativity, atomic physics, nuclear physics, and introductory quantum wave mechanics.

## PHY *225.

## Astrophysics

4 credits
PHY 221 concurrently

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.

PHY *299.

## Independent Study

1-4 credits
Permission
Planned program of study. Topic selected by instructor and student.

PHY *312.
Mechanics II: Dynamics

4 credits
PHY 122 and MTH 210
Study of motion. Includes particle dynamics, central force motion, rigid body motion, Lagrange's and Hamilton's equations of motion.

PHY * 321 .

## Electricity and Magnetism

4 credits
PHY 220 and MTH 210

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.

PHY * 323.

## Thermodynamics and Statistical Mechanics

4 credits
PHY 221 and MTH 210
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.

PHY * 333.
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## Optics

4 credits \$7

PHY 122; PHY 220 recommended
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.

## PHY * 380 .

## Topics in Physics

4 credits
Permission
Study of topic of current or historical importance chosen by instructor. Prerequisites vary with selections.

## PHY *399.

## Independent Study

1-4 credits
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Planned program of study. Topic selected by instructor and student.

PHY * 421 .

## Quantum Mechanics

4 credits
PHY 221 and MTH 310
Study of wave and matrix mechanics, the harmonic oscillator, the hydrogen atom and angular momentum and spin.

## PHY * 480 .

## Topics in Physics

4 credits
Permission
Study of topic of current or historical importance chosen by instructor. Prerequisites vary with selections.

PHY *499. Independent Study
1-4 credits
Permission
Planned program of study. Topic selected by instructor and student.

PHY *500.

## Senior Thesis

$2-4$ credits $\quad \$ 2.50$ each credit
Planned program of research performed on campus or as part of research group at major university or national laboratory.

## Astrophysics

4 credits
PHY 221 concurrently
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.

## Political Science (POL)

## Professors Hulme and Lorenz; Associate Professors Cartrite and Gorton.

How do government and politics operate both within the United States and in foreign countries? How do nations and people interact in the international arena? What consequences result from these activities? How can we use knowledge to promote our human and social values through the political process? Alma's Political Science Program is designed to help students learn the answers to these questions and thereby become more effective citizens and professionals.

Courses in comparative politics broaden our political knowledge by the examination and comparison of the political systems in other countries. International relations courses focus on the problems and conflicts in international politics and the ways by which they can be resolved or minimized. Courses in American politics offer both an introductory and an in-depth understanding of American political institutions and processes, public management, policy making and policy analysis, and public law. Political theory relates politics to ethical and normative considerations, human values, and means-end problems.

Graduates completing Alma's Political Science Program are successfully pursuing careers in government, law, business, teaching, journalism, public administration and non-profit organizations, and public relations.

## Major Requirements

1. Common requirements - 12 credits that must include POL 201, 202, 302 and 401.
2. Disciplinary breadth - 16 credits that must include one course from each of the following four groups: Group A-Comparative Politics: POL 111, 115, 211, 212, 215, 217, and 315; Group B-International Relations: POL 121, 127, 221, 225, 226/227, 325, 326, 327 and 328/329; Group C-Political Theory: POL 131, 231, and 335; Group D-American Politics, POL 101, 141, 241, 242, 245, 341 and 345.
a. POL 100 may be used to satisfy any one group. With instructor approval based on content, the following courses may be used to satisfy any group: POL 381, 382 (Washington Semester); POL 385, 386, 387; POL 499; or POL 500. Only 8 credits of POL $226 / 227$ and $328 / 329$ may count tnwarde the mainr
3. Sub-disciplinary expertise - 8 credits: Students must complete two additional upper-level courses, 200 or higher, from a single group.
4. Major Cognates: MTH 116.
5. Additional major requirements: All majors must satisfactorily complete the Graduate Record Advanced Examination, or the MFAT, or a departmental comprehensive examination to satisfy the College comprehensive evaluation requirement; at least 24 credits of upper-division coursework within the Department; and have a minimum 2.75 cumulative GPA.
6. Departmental honors: Completion and public presentation of a senior thesis; minimum 3.5 GPA in Political Science, and 3.3 GPA overall.

## Minor Requirements

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

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

POL 100.

## Introduction to Political Science

4 credits

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

## POL 101.

## The American Political System

## 4 credits

Study of institutions and processes of politics and government. Contemporary political problems. Primary
focus on federal government with some attention to state and local politics.

POL 103.

## Reel Politics

2 credits

Exploration of the portrayal of American politics in historical and contemporary films.

POL 111.

## Introduction to Comparative Politics

4 credits

Examines concepts and approaches to comparative political study, comparative functions, processes and structures. Explores issues and concerns such as political change, democracy, effectiveness and stability.

POL 115-*315.

## Ethnic Politics Case Studies

4 credits

Explore the nature of ethnic identity, its potential for and actualization of political activism and violence, and survey the role political institutions play in mitigating or eliminating ethnopolitical activism.

POL 121.

## World Conflicts and Problems

4 credits

Examines a selection of world conflicts in terms of their causes and prospects for war, control or settlement. Explores world-wide problems, needs and efforts among states to deal cooperatively.

POL 127-*327. Presidential Library Research

4 credits

Research visit to a presidential library. Lower level focuses on primary source investigations on topics of student interest. Upper level is preparation for a substantial research paper potentially leading to a senior
thesis and/or published article.

POL 131.
Introduction to Political Theory
4 credits

Introduction to normative political theory, both historical and contemporary. Includes analysis of central concepts of politics, such as power, freedom, justice, democracy and equality. Explore key modern ideologies, such as liberalism, conservatism, socialism, fascism and political Islam. (Cross listed with PHL 131.)

## POL 141.

Introduction to Public Management and Policy Analysis 4 credits

Study of leadership and administration in public organization, including relationship between bureaucracy and the executive, judicial and legislative branches; development of organizational theory; policy-making and implementation process; bureaucratic ethics; and reconciliation of democracy and bureaucracy. Recommended for those considering careers in public service or jobs affected by public policy.

## POL 180.

## Topics and Problems in Political Science

2-4 credits

Examines special political subjects in both the foreign/international and American realms.

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

Introduction to contemporary research in political science. Evaluate recent peer-reviewed articles published in top-tier political science journals. Students are expected to engage with material and actively participate in discussion.

POL ${ }^{2}$ 211.

## Western European Politics

4 credits
Comparative study of the main political systems of Western Europe. Examination of European Union and its policies, processes and outcomes. Comparative analysis of short- and long-term implications of European economic integration for the rest of the world.

POL *212.
—(4)

## Eastern European Politics

4 credits

A survey of contemporary Eastern European politics at a turbulent time that often attracts international attention to that region. Analysis of some of the transformation and continuity in the region's politics and society.

POL *215.
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## Ethnic Politics

4 credits

Explore the nature of ethnic identity, its potential for and actualization of political activism and violence, and survey the role political institutions play in mitigating or eliminating ethnopolitical activism.

POL *217.

## Arctic Politics and Science

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

POL *221.

## Analysis of International Politics

4 credits
Study roles of the state, international and non-state actors in international politics; theories of conflict, conflict control and resolution; and prospects for world community.

POL *225.

## International Law and Organizations

4 credits
Analyzes historical evolution of international law, its purposes, principles and relationship to the international arena. Study of international organizations and their impact on international legal order.

POL *226-*227.

## Model United Nations

2 credits each
\$150 for POL 226
Preparation to represent an assigned country at a Model UN competition through examination of current international issues and UN organizational structures and processes.

POL *231.

## American Political Thought

4 credits
Historical and contemporary meanings of democracy, its assumptions and implications: tensions between theory and practice, majority rule and minority rights, civil disobedience, economic-political democracy, institutionalization of democratic procedures, and the future of democracy.

Exploration of key ideas in ancient and medieval political thought. The works of Socrates, Plato, Aristotle, the Stoics, Epicurus, Augustine and Aquinas are considered. Key questions addressed include: Is democracy superior to rule by the enlightened few? Are humans by nature political creatures? What is the proper relation between the individual and the state? Is the state a natural entity? (Cross listed with PHL 232.)

## POL *233.

## Current Controversies in U.S. Politics

4 credits

Examine the ethical and empirical dimensions of some current political controversies in the U.S., such as the death penalty, gay marriage, torture, terrorism, affirmative action and euthanasia. Introduction to relevant concepts in ethical theory, law, political philosophy and empirical inquiry in order to provide the framework to think knowledgeably and critically about these issues.

POL *234.
(4)

Classics of Political Thought
4 credits

Analysis of selected original works of Machiavelli, Hobbes, Locke, Rousseau, the American founders, Bentham, Mill, Marx and Nietzsche. Emphasis on relevance to contemporary political thought and issues.
(Cross listed with PHL 234.)

## POL *241.

## Presidential Leadership

## 4 credits

Study 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.

## 4 credits

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. <br> Public Opinion and Voting

4 credits
Explore how Americans form their political beliefs and values, and how those beliefs and values influence their voting behavior. The impact of ideology, economic class, ethnicity, religion and education are considered.

## POL *245.

## The Political Experience

## 4 credits

Explores nature of elective and administrative politics in state and local governments. Integrates cognitive and experiential learning. Includes field trips and interviews with state/local leaders in government, interest groups and media.

POL *280.

## Topics in Political Science

2-4 credits
Variable topics in political analysis.

POL *302.

## Journal Club

2 credits

POL 202
introauction to contemporary research in poitical science. Evaluate recent peer-reviewed artucies pubisned in top-tier political science journals. Students are responsible for article selection and leading discussion of material. In addition, students will prepare a substantive research proposal, including literature review, which can be developed into a senior thesis.

POL * 325 .

## U.S. Foreign Policy

4 credits
Study of goals of American foreign policy and U.S. role in changing world; structure, processes and politics of foreign policy-making; and U.S. foreign policy since end of WWII. Analysis of selected current U.S. foreign policy concerns.

POL *326.

## U.S. National Security Policy

4 credits
Analyzes emergence and evolution of post- WWII national security state. Assesses impact of changing international environment on conceptions of "national security."

POL *328/*329. (4)

## Advanced Model UN

2 credits each
$\$ 150$ for POL 329

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.

POL *335.

## Constitutional Law I

4 credits
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.

POL *341.

## Public Policy Analysis

4 credits

Study of policy process, particularly policy evaluation. Focuses on such policies as educational, environmental, economic and social welfare. Emphasis on learning evaluation methodologies through application to current public policy issues.

POL *345.

## Public Administration History and Theory <br> 4 credits

Study of the development of modern public bureaucracies and the relationship of bureaucracy and other governmental institutions, particularly through analysis of original works on public administration from Woodrow Wilson and Max Weber to more recent commentaries.

POL ${ }^{2} 380$.
Topics and Problems in Political Science
4 credits

Courses on special political subjects in both the foreign/international and American realms.

POL *381-*382. Washington Semester
4 credits each
Credit awarded for student participation in seminars and coursework. (American University)

## Practicum

1-4 credits each

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.


Comprehensive capstone study of politics within the context of a distinct theme in political science.

POL *499. Independent Study: Readings
$1-4$ credits

Individual study of particular topic or problem area; intensive reading; problem formulated with instructor consent.

POL $* 500$.

## Senior Thesis

4 credits

Under supervision, student formulates a project topic or research program, conducts research, then prepares and publicly presents a senior thesis. Required for departmental honors.

## Psychology (PSY)

## Professors G. Beagley, W. Beagley and Setterlund; Assistant Professors Batchelder and Stupica.

Alma's Psychology Department encourages students to look at thought and action from a scientific perspective, to undertake independent research projects and to gain experience in practicum settings.

Undergraduate work in Psychology is required for professional preparation in a wide range of psychological specialties and neuroscience; it also provides an appropriate foundation for work in such areas as cognitive science, public health, law, medicine, social work, management and the ministry.

## Major Requirements

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

## Minor Requirements

Twenty-four credits of Psychology.

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

Survey of major areas of psychology: learning, perception and cognition, human development, individual differences, social psychology and abnormal psychology. Laboratory.

PSY *200.

## Animal Social Behavior

4 credits
PSY 121 or BIO 122 and Permission
Introduction to the ethological approach: aggression, courtship, cooperation, social structure and means of communication in a variety of species. Includes laboratory and field experience in observation and recording of behavior.

PSY *201.

## Physiological Psychology

4 credits $\quad \$ 35$
PSY 121

Study of physiological processes and structures underlying behavior and development. Laboratory techniques for investigation of electrical and chemical brain activity.

| PSY 204. | Sensation and Perception |
| :--- | :--- |
|  | 4 credits |
|  | PSY 121 |

Study of sensory processes and their relationship to human perception. Concentrates on vision and audition with attention to recent theoretical approaches to perception. Laboratory.

## Personality I

4 credits

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.

## PSY *220. <br> Statistics (NS-3)

4 credits

PSY 121

Introduction to descriptive and inferential statistics, and factorial analysis of variance. Appropriate for both life and social sciences.


## Research Methods

4 credits \$5
PSY 121 and 220
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.


Developmental Psychology
4 credits
PSY 121

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.

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.

PSY *240.
Behavior Modification: Applied Psychology

4 credits
PSY 121

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

PSY *245.

## Human Sexuality

4 credits

PSY 121

Examination of variety and origins of human sexuality from physiological, evolutionary and social-learning perspectives.

PSY *260.

## Psychology of Aging

2 credits

PSY 121

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

Consideration of principles involved in constructions, use and evaluation of tests of ability and personality. Application to such issues as personnel selection, sex differences and therapeutic practice. Emphasis on actual clinical data, ethical and value issues in test construction and use.

## PSY *280.

 Topics in Psychology2-4 credits
PSY 121; others as indicated
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.

## PSY *305. Motivation and Learning

4 credits
PSY 201 or 204; 220, 225 or Permission
In-depth study of theoretical background and current research on motivation and learning among human and non-human species.

## PSY *310.

## Cognition

4 credits
3 courses in PSY or Permission
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.

# Personality II 

4 credits
PSY 121 and 212

In-depth examination of personality theory and of major controversial issues in the contemporary literature.

PSY *314. Abnormal Psychology
4 credits
PSY 121 and 212
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.

PSY * 315.

## Introduction to Survey Research

4 credits
PSY 121 and either PSY 220 or MTH 116
Introduction to sampling strategies, questionnaire construction, interviewing technique, coding of data and the analysis, interpretation and presentation of results. Emphasis on ethical and political considerations in conduct and application of survey research.

PSY * 339.

## History and Systems

2 credits
PSY 121, 3 courses in PSY and Junior Standing
Critical consideration of conceptual issues in psychology. Examination of role of internal and external contexts in its conduct and development.

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.

## PSY *390. Clinical Field Experience

4 credits
PSY 121, 212, 240 or 280, and 314 or Permission
Participation in programs in hospitals, agencies, schools, businesses or the judicial system. Faculty and onsite 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.

## PSY *399.

## Directed Reading/Research

$1-4$ credits
Permission
Either (1) an individually-designed program of reading on a topic not covered by formal courses or (2) research experience on a faculty-directed project.

PSY *499.

## Independent Study

2-4 credits
Permission
Planned program of reading in preparation for senior thesis.

## Senior Thesis

2-4 credits

PSY 499, Senior Standing and Permission
Development and conduct of original, independent, empirical investigation. Required for departmental honors.

## Public Affairs Institute (PAF)

## Professors Lorenz and Vickery; Instructor Borrello.

Alma's Public Affairs Institute offers interdisciplinary experiences for students who, regardless of particular majors, have common academic and vocational interests in public affairs. The program includes workshops, visiting speakers, scholars-in-residence, professional consulting and advising.

## Requirements

To earn certification in the Public Affairs Program, students must earn a minimum of 18 credits drawn from the following classes: Public Affairs 150, 160, 350, 360, 385, 450 and 499; and Political Science 141 or comparable classes, independent studies or seminars in other disciplines pre-approved by the Director of Public Affairs as alternatives of PAF 385, 450, or 499. Participants are encouraged to satisfy general education requirements by completing coursework in History 105 or 121; Philosophy 126, 225, 227, 228, 229, 235 or Religious Studies 210; Economics 201 and 202, Political Science 101, or Sociology and Anthropology 101; and Environmental Studies 105 or Psychology 121. Elective coursework will be recommended by the program advisor to enhance skills and broaden perspectives.

Candidates who complete Alma's degree requirements and all Institute components will graduate with a bachelor's degree in the major subject and will have the following noted on their permanent record: Completed the Public Affairs Program. Candidates who satisfy the requirements prescribed above and who achieve a 3.0 overall GPA together with a 3.25 GPA in the Institute Program will have the designation Public Affairs Fellow inscribed on their permanent record. Admission to the Institute requires formal application and acceptance.

## PAF 150.

## Public Affairs Colloquium

2 credits
Introduction to selected, critical public affairs issues through multidisciplinary and case-study approaches. Presentations by visiting speakers, other resource people and students.

Investigation and implementation of projects related to economic and social development issues in local, regional and global community.

PAF * 350 .
Public Affairs Seminar I
2-4 credits
Fee TBA
Permission
Topical study of public affairs issues examined from interdisciplinary and multidisciplinary perspectives. Focus on formulation, implementation and effects of selected decisions and programs in public and private sectors. Provides preparation for PAF 450.

PAF * 360 .

# Community Issues and Public Leadership II 

$1-4$ credits
PAF 150, 160 or Permission
Advanced investigation and continuing implementation of projects related to economic and social development issues in local, regional and global community.

## PAF * 380. <br> Topics and Problems in Public Affairs

2-4 credits TBA
Permission
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.

## Practicum

4-12 credits
PAF 450 and Permission
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.

## PAF * 450 .

## Public Affairs Seminar II

4 credits Fee TBA
PAF 350
Investigation of selected public affairs issues, policies and programs from interdisciplinary and multidisciplinary perspectives.

## PAF * 499 .

## Independent Study

2-8 credits
PAF 385 and Permission
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.

## Religious Studies (REL)

## Professor Stratton; Associate Professor Blanchard.

Religious Studies examines the way a person or community makes sense out of life (world views) and the way a person or community acts out and lives in a world view (practices). The study of religion includes (1) exploration of the nature and meaning of the religious dimensions of human experience; (2) study of the major traditions which remember and transmit religious experience and expressions; (3) encouragement of an inquisitive, analytical and open approach to multiple religious perspectives; and (4) exploration of the ethical frameworks in various religious perspectives.

Many graduates of Alma's Religious Studies program have continued their studies in graduate schools or seminaries. Others have entered church work, chaplaincies, teaching, social work agencies, personnel offices, communications, journalism, law and business or have volunteered for service in VISTA and the Peace Corps.

## Major Requirements

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

## Minor Requirements

1. Twenty-four credits in Religious Studies including REL 100 and 400.
2. Remaining program of study will be constructed on an individual basis in consultation with members of the Department.

Four credits from REI. with the excention of nracticum or indenendent studv comrses.

# count towards the Distributive Requirements in the Humanities. 

## REL 100.

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## Introduction to World Religions

4 credits

An introduction to the histories, major figures, sacred texts and belief systems of selected "world religions" such as Hinduism, Confucianism, Daoism, Judaism, Jainism, Buddhism, Christianity, Islam, and/or newer religious movements such as Mormonism or Baha'i Faith.

REL 101. ©

## Introduction to the Hebrew Bible

4 credits

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

REL 102.

## Introduction to the New Testament

4 credits
Introduction to the New Testament, its history, environment, literature and interpretation. Formative years of Judaism and growth of the Christian community.

REL 103.

## Vocation in Christian Traditions

4 credits
Examination of history of Christian thought and traditions from early church through modern period. Analysis and interpretation of selected documents.

REL 130.
—(4)

## Creation Stories and the Religious Traditions <br> 4 credits

Examination of diverse creation myths from many cultures and the role cosmologies play in forming a

## REL 150.

## Good Life in World's Religions

4 credits

Examination of what constitutes a good life according to Judaism, Hinduism, Buddhism, Islam and Christianity.

## REL 180-*380.

## Topics in Religion

4 credits

## REL 181-*381.

## Topics in Biblical Study

4 credits
Topics may include Torah, Paul's Letters, Prophetic and Wisdom Literature, Synoptic Gospels, and/or Biblical Ethics and Social Problems. May be repeated for credit for distinct topics.

REL 202-*302.

## Women, Gender and Religion

4 credits
1 REL course or Permission for 300 level
This course addresses questions about women in various religious traditions and examines the ways feminist theory interacts with the study and practice of religion. (Cross listed with PHL 202.)

## Christianity

4 credits
1 REL course or Permission for 300 level

An moroaucion to Cnmstan mougnt and pracince mom the nrst century to me present. Course menuaes 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-*306. ©

## Reformation

4 credits
1 REL course or Permission for 300 level
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-*307. Religion in America <br> 4 credits <br> 1 REL course or Permission for 300 level

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. <br> Biblical Ethics and Community Service <br> 4 credits

Examines the Biblical ethic which underlies the religious understanding, worship and community service of Jewish and Christian religious communities. Opportunities to participate in community service agencies and programs.

Philosophy of Religion
4 credits
1 REL course or Permission for 300 level

Examination of classical and contemporary issues in the philosophy of religion such as arguments for and against the existence of God, religious language, the relation between faith and reason, the evidential value of religious claims, and the relationship between morality and religion. (Cross listed with PHL 215.)

## REL 216-*316.

## Existentialism

4 credits
1 REL course or Permission for 300 level
Examination, evaluation and discussion of selected subjects - the individual, freedom, responsibility, anxiety, hope, death, meaning of life - as treated in various essays, short stories and dramas. Focus on analysis and interpretation of texts. (Cross listed with PHL 216.)

## REL 217-*317.

Eastern Philosophy and Religion
4 credits

1 REL course or Permission for 300 level
Exploration of the major religious traditions and philosophical systems of the Far East: Hinduism, Buddhism, Confucianism, and Taoism. History, thought and contemporary role of these non-Western religions and philosophies. (Cross listed with PHL 217.)

## REL 219-*319.

## Judaism and Islam

4 credits
1 REL course or Permission for 300 level
An examination of Judaism and Islamic thought and practice from the formative periods to the present, including contemporary debates. Includes reading, discussion, and written analysis of various primary and secondary texts.

4 credits

## Permission

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 with SOA 221).

## REL 220-*320. <br> Creation and Cosmology <br> 4 credits <br> 1 REL course or Permission for 300 level

Examination of diverse creation myths from many cultures and the role cosmologies play in forming a culture's worldview.

## REL 225.

## Environmental Ethics

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

REL 230-*330.


## Religion and Science

4 credits
1 REL course or Permission for 300 level
Examination of the relationship between religion and science through both historical and contemporary issues. (Cross listed with PHL 230.)

## Jesus in Gospel and Film

4 credits
1 REL course or Permission for 300 level
An introduction to the context, life, and teaching of Jesus of Nazareth through the media of film, primary texts (canonical and non-canonical gospels), and secondary texts in biblical criticism.

REL 250-*350.
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## Christian Ethics

4 credits
1 REL course or Permission for 300 level

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-*380.

## Special Topics in Religious Studies

4 credits
1 REL course or Permission for 300 level Special topics in Religious Studies will be explored.

## REL 281-*381.

## Special Topics in Biblical Studies

4 credits
1 REL course or Permission for 300 level
Special topics in Biblical Studies will be explored.

REL 299.

## Independent Study

2-4 credits

## REL *385-*386.

## Practicum

2-6 credits
Permission

REL *399.

## Independent Study

2-6 credits
Permission
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 credits
REL 100
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.

REL *500.


## Senior Thesis

4 credits
Permission
Individual research culminating in preparation of major paper and departmental oral examination. Required for departmental honors.

## Christian Education (CEP)

## Professor Stratton.

Alma's Christian Education Program is designed to prepare individuals for certification as Associate Christian Educators in the Presbyterian Church in the USA (PCUSA) by providing courses which partially fulfill that certification. To finish the certification process, one must complete additional requirements as identified and assessed by the PCUSA. This program does not lead to an Alma College minor or any program designation. See Dr. Stratton for more information.

## Program Offerings

1. Biblical interpretation: Religious Studies 101 and 102.
2. Reformed Theology: Religious Studies 106.
3. Religious Educational Theory and Practice: Christian Education 499.
4. Church Polity (Government): Christian Education 280 or 499.
5. Church Program and Mission Development: Christian Education 280 or 499.
6. Practicum in Christian Education: Christian Education 385.

## The following courses are offered when there is sufficient demand and when certified Christian Educators are available to supervise students.

## CEP *280.

## Christian Education Seminar

2-4 credits

Examination, evaluation and discussion of issues related to Christian Education and the certification program.

CEP *385.

## Christian Education Practicum

4-12 credits

church setting.

CEP *499.

## Independent Study

2-8 credits
CEP 385 and Permission

## Sociology and Anthropology (SOA)

## Professors Fobes and Thorsen; Associate Professor Bonhage-Freund; Visiting Instructor McCullen.

Sociology and Anthropology investigate basic processes, structures, culture and change in social reality and what it means to be human in that complex reality. This investigation encompasses: (1) method and theory - the logic of inquiry; (2) vocation - the ethically self-conscious examination of actions; and (3) the intended and unintended consequences of social action. While this investigation entails challenge and intellectual risk, it also promotes intellectual and ethical development in the best traditions of liberal education.

Alma's Sociology and Anthropology graduates successfully pursue graduate education in many fields as well as careers in sociology and social work, business and personnel administration, law, ministry, corrections, government, museum curatorship, archaeology, international development and many other areas. It is our hope that one can have a life as well as a living; liberal education can lead to both.

## Sociology Major Requirements

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

## Sociology Minor Requirements

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

## Antnropoiogy iviajor kequirements

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

## Anthropology Minor Requirements

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

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

## SOA 101.

## Principles of Sociology

4 credits
Introduction to the discipline and its connections to the liberal arts. It examines "society," "culture," and "self" as they interact to form institutions, history and the future. Prerequisite for all other Sociology courses except those in the Anthropology sequence.

## SOA 111.

## Introduction to Anthropology

$$
4 \text { credits } \quad \text { Fee TBA for field trip section }
$$

Introduction to the holistic study of human kind. Development, organization, and functioning of cultures, as
well as the relationship between biology and culture. Field trip to The Field Museum (Chicago). Fall Term.

SOA 141.

## Social Problems

4 credits
SOA 101
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.

## SOA 180.

## Topics in Sociology

## 2-4 credits

SOA 101
Investigation of a selected topic. May be taken only once for credit toward the major.

SOA *212.
(4)

## Introduction to Cultural Anthropology

4 credits
SOA 111 recommended
Study of the development and variety of human cultures, or non-genetic adaptations to natural and social environments. Using a variety of theoretical perspectives, explore a range of contemporary and recent historic cultures to gain an appreciation of diversity of human world views and life ways. Investigate the process and effects of globalization.

SOA *213.

## Principles of Archaeology

4 credits
SOA 111 recommended
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.

## SOA *214.

## Fundamentals of Biological Anthropology

4 credits
SOA 111 or BIO 122, or Permission
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.

SOA *215.
Michigan Archaeological Fieldwork
4 credits Fee TBA
SOA 111, 115 or 312 recommended
Survey and excavation of a local archaeological site. Field methods and record-keeping, preservation of finds, laboratory experience, record-keeping, and public education. Includes classroom, field, and laboratory work including a service-learning component.

## SOA *216.

## Ethnobotany: Plants and People

4 credits
SOA 111 recommended
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.

SOA 101
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.

## SOA *221.

## Bible and Society

4 credits
SOA 101 or Permission
Explores how the social context (ethnic, economic, class, etc.) of faith communities shapes the study, understanding, and use of scripture in worship and impacts values and daily lives. Emphasis on lectionary readings shared by Protestants and Roman Catholics, and the Hebrew scriptures. (Cross listed with REL 220).

SOA *224.
Women, Work and Calling
4 credits
SOA 101
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.

## Aging and Health Institutions

SOA 101

Examine key concepts, main theories and important substantive issues related to aging and health institutions from a sociological perspective. Among the central issues explored are gender and racial differences in aging, ethnic minorities and institutions connected to aging and public policy.

## SOA *241. <br> Race and Ethnic Relations

4 credits
SOA 101

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.

## SOA *243.

## Deviance

4 credits
SOA 101

Examination, evaluation and discussion of major theories and approaches to deviance, forms of deviance, their institutional relationships, implications for individuals and applications of concepts to "real world" events.

SOA *251.

## Social Psychology

4 credits

SOA 101 and PSY 121

Consideration of current theory and research on "self," "cognition," "perception," attitudes and attitude formation, heuristics and biases, and intergroup relations as they inform our existence in society.

Fundamentals of logic and procedures of social research. Emphasis on research design, measurements of attitudes and behavior, techniques of scaling, coding and analysis of data
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## Sociological Theory

4 credits
12 credits of SOA or Permission

Examination, discussion and evaluation of major frameworks, concepts and theories developed since mid19th century. "Social order" serves as a major organizing concept for this exploration and its subsequent implications for application of theory in social policy.

## SOA *311.

## Topics in Anthropology

2-4 credits
SOA 111
Analysis of selected anthropological problems and/or culture areas, acculturation, applied anthropology and ethnography.


## North American Archaeology

4 credits
SOA 111 or 213, or Permission

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 handson, post-excavation laboratory research.
4 credits
Fee TBA

## SOA 215 or Permission

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

## SOA *325.

## Conflict and Class

## 4 credits

SOA 101
Examination of class inequality and its consequences. Topics may include ideology, social movements, and issues in war and peace. Attention is paid to how race and gender issues intersect with class in both national and international settings.

SOA *326.

## Complex Organizations

4 credits
SOA 101
In-depth examination of organizational theory with special focus on organizational metaphors and the social construction of structure, behavior and quality.

## SOA *328.

## Media: Impact and Consequences

## 4 credits

SOA 101
Examination of media changes (from oral to print to electronic) as they hold consequences for "society," "culture," and "self." These consequences are literally revolutionary at each level of analysis and understandino them can he of oreat henefit

SOA *353.
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## Sociology of Gender

4 credits

SOA 101
How gender practices are socially constructed and enacted. Examine through ethnographic and observation methods how family, religion, race/ethnicity and social class have shaped gender relations. Explore movements to change and resist change in gender arrangements.

SOA *380.

## Topics in Sociology

## 2-4 credits

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

SOA *385-*386.

## Practicum

4 credits each

## Permission

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

## Research Seminar

2-4 credits

Designed as a culminating experience for junior or senior anthropology majors. 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.

SOA *499. Independent Study
2-4 credits
Permission
Supervised reading or project in special area of sociology, general sociology, social psychology or anthropology.

SOA *500.
Senior Thesis
4 credits

Permission
Designed for senior sociology or anthropology majors with the consent of the Department. Program of empirical or theoretical research. Projects are generally begun during the first term of the senior year.

## Theatre and Dance (THD)

## Professor Fike; Associate Professor J. Jezewski; Assistant Professor Sabas; Instructors Bennett, DeGood and Sheldon.

Movement is the common denominator of theatre and dance. Both the actor and the dancer use their bodies in space as a prime means of expression. Alma's Theatre and Dance Department joins these two areas, stressing the development of imagination, creativity and performance skills. Several theatre and dance productions are presented each term.

Theatre and Dance graduates find employment in professional, educational and community theatre; arts administration; or in such non-theatre areas as broadcasting, social work and public relations.

## Major Requirements

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

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

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

## Minor Requirements

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

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

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

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

THD 125.


#### Abstract

Acting 4 credits


Introduction to acting through participation in exercises which emphasize moment-to-moment acting from the actor's impulse in contact with a partner. Culminates with class performance.

## THD 140.

## Modern Dance I Beginning

1 credit
Development of modern dance as a performing art. Movement exploration exercises and beginning techniques of modern dance. May be repeated for credit.

## THD 141.

## Social Dance

1 credit
Application of basic steps and variations of the cha cha, Charleston, jitterbug, polka and waltz.

## THD 142.

## Tap Dance I Beginning

1 credit
Elementary exploration of rhythms and steps basic to the art form of tap dancing. Study of terminology and technique. Beginning tap routines with elementary progressions. May be repeated for credit.

## THD 143.

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

## THD 144.

## Ballet I Beginning

1 credit
Development of ballet as a performing art. Build strength and develop body carriage/posture and learn basic techniques of ballet. May be repeated for credit.

## THD 145.

## Jazz Dance I Beginning

1 credit
Development of jazz dance as a performing art. Principles of basic jazz dance. May be repeated for credit.

## THD 146.

## Dance/Theatre Experience

4 credits
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.

## THD 147.

## Techniques of the Male Repertoire

1 credit
Development of the male repertoire of dance as a performing art. Building strength, developing body
carriage/posture, and learning the skills of the specific male repertoire of movement. May be repeated for credit.

## THD 148.

## Highland Dance I

1 credit
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.

## THD 149.

## Pointe I Beginning

1 credit
THD 144 or Permission
Development of classical ballet skill techniques en pointe. Principles of beginning pointe technique are displayed and discussed. May be repeated for credit.

## THD 150.

## Theatre Company

1 credit
Participation in acting and technical work on departmental productions with actual rehearsal and performance. May be elected more than once for credit.

## THD 151.

## Alma College Dance Company

1 credit
Permission/Audition only
Participation in dance concerts throughout the term. Opportunities for choreography, performance and organizational planning. May be repeated for credit.

## THD 152.

## Theatre Administration

1 credit
Participation in business areas required to create, manage and address audience needs for all departmental productions: publicity, programs, box office and house management. May be elected more than once for credit.

## THD 170.

## Theatre Crafts

4 credits
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.

## THD 171.

## Design for the Theatre

## 4 credits

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.

Supervised reading, research or projects.

THD 201.

## Choreography I

4 credits

Analysis of choreographic styles. Principles of various choreographers examined and experienced. Development of individual skills for choreographing.

## THD 211.

## Partnering

1 credit
Permission
Introduction to partnering through participation in exercises in a hands-on environment. Build strength, develop body awareness, learn specific partnering skills. May be repeated for credit.

## THD 220.

## Creative Movement for Children

4 credits
Sophomore Standing
Exploration of movement as a means to improve communication, body/kinetic awareness, creative expression and perceptual-motor development. Focuses on the learning/teaching process, creativity, dance materials, methods and lesson planning. Observation and assisting in elementary school classrooms to facilitate student understanding of components listed above.

## THD *225.

## Intermediate Acting

4 credits

THD 125

Continuation of THD 125 through exercises and scene study with emphasis on actions, objectives and characterization. Exercises and character analysis with scenes from the "Realists" and "Post-Realists."

THD *226. Voice and Language on Stage
4 credits
Development and training of the student actor's vocal instrument for theatrical performance. Principles and exercises to free, develop and strengthen the actor's voice.

## THD *227.

## Stage Combat

4 credits
Study of the art of physical combat in a theatrical setting using the Society of American Fight Director's guidelines. Focus is on performing a hand to hand combat scene and a rapier fight scene.

## THD *232.

## Directing

4 credits
THD 125
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.

THD 240. Modern Dance II Intermediate

1 credit
THD 140 or Permission
Continuation of Modern Dance I. Emphasis on movement patterns and development of body alignment. May be repeated for credit.

## THD 242.

## Tap Dance II Intermediate

1 credit
THD 142 or Permission
Continued exploration into rhythms and steps basic to the art form of tap dancing. Study of terminology and technique. Intermediate tap routines with intermediate progressions. May be repeated for credit.

THD 243.

## Yoga II - The Experience

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

THD 244.

## Ballet II Intermediate

1 credit
Permission
Continuation of Ballet I. Development of ballet combinations and concentration on body alignment. May be repeated for credit.

## THD 245.

## Jazz Dance II Intermediate

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

## The World of Theatre I

2 credits

7-week course
Introduction to the theatre as a unique artistic activity which reflects and transforms life experiences by shaping them into popular theatre forms: comedy, farce, tragedy and melodrama.

## THD *247.

## The World of Theatre II

2 credits

7-week course
Consideration of the work of those who create the theatre event: actor, playwright, director and designer. The theatre experience as a communal experience resulting from collaboration of artists in dynamic interaction with audience.

## THD 248.

## Highland Dance II

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

## THD 249.

## Pointe II Intermediate

1 credit

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

## Great Ages of Theatre I

4 credits
Survey of the physical structure, production methods and styles of theatre and the cultures that produced them from their beginnings to the Elizabethan Period. Considers primitive rituals and Eastern Theatre as well as Western Theatre. Includes reading representative plays and their place in the theatrical development of the period.

THD *262. (4)

## Great Ages of Theatre II

4 credits

Survey of the physical structure, production methods and styles of theatre and the cultures that produced them from Elizabethan England to the Modern Period. Considers Renaissance Spain and France, Restoration England, and Baroque and Romantic Europe through the Modern Theatre. Includes the reading of representative plays and their place in the theatrical development of the period.

THD 263.

## Modern Drama

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

## THD *271.

## Scene Design

4 credits
Exploration of scenery as a tool for expression in live performance. Exploration of visualization of the intellectual concept of a production, research for scenic design development, advanced presentation techniques. Culminates in assembly of a portfolio of scenic designs for plays chosen by the student from approved list.

## Lighting Design

## 4 credits

Exploration of lighting as an expressive tool in live performance. Intensive work in color theory, distribution, intensity, focus, and motion with light; advanced presentation techniques. Culminates in a student presentation of selected lighting moments for a play chosen by the student from approved list.

THD *273.

## Costume Design

4 credits

Exploration of costumes as an expressive tool in live performance. Intensive work in color theory, line, mass, texture; survey of historical fashion; advanced presentation techniques. Culminates in assembly of a portfolio of student renderings for plays chosen by the student from approved list.

## THD *274. <br> Sound Design

4 credits
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.

## THD *275.

## Stage Management

4 credits

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.

Learn basic scene painting techniques such as marble, stone work and wood grains and apply them to scene painting projects. Course culminates in a major project including multiple techniques.

## THD 280.

## Topics in Theatre and Dance

4 credits

Special topics and projects selected by instructor. Background prerequisites vary with selections.
THD *292. Playwriting
4 credits
Permission

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.

THD *299. Independent Study
$1-4$ credits
Permission
Supervised reading, research or projects.

THD *301.

## Choreography II

4 credits
THD 201 or Permission
Further investigation of the analysis of choreographic styles. Continued development of individual skills for choreographing.

## THD *325T.

Theatre Studio: Acting
2-4 credits
THD 125 and Permission
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.

## THD *326. Meisner Activity Exercise <br> 4 credits

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

## THD *327.

## Meisner Action Exercise

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

THD *332.

## Intermediate Directing

4 credits
THD 232
Continuation of THD 232. Principles and techniques of stage directing culminating in the analysis, casting and direction of a one-act play for public presentation.

1 credit
THD 240 or Permission

Continuation of Modern Dance II. Emphasis on refinement of performance techniques, style and improvisation. May be repeated for credit.

## THD *342.

## Tap Dance III Advanced

1 credit
THD 242 or Permission
Continued exploration into rhythms and steps basic to the art form of tap dancing. Study of terminology and technique. Advanced tap routines with advanced progressions. May be repeated for credit.

## THD 343.

## Yoga III - The Experience

1 credit

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

## THD *344.

## Ballet III Advanced

2 credits
Permission
Continuation of Ballet II. Emphasis on further development of style and technique. May be repeated for credit.

Continuation of Jazz Dance II with emphasis on advanced rhythmic patterns and isolations. May be repeated for credit.

## THD *346.

Dance/Theatre Trip
4 credits
Permission
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.

## THD *347.

## Dance Criticism

4 credits
Sophomore Standing
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.

THD * 349.

## Pointe III Advanced

1 credit
THD 149, 249 or Permission
Continued development of classical ballet skill technique en pointe. Principles of advanced pointe displayed

## THD * 350.

## Dance History I

4 credits

Survey of culture, styles and methods of dance from its beginnings until the end of the Baroque period. Primitive rituals and liturgical, theatrical, Western and non-Western dance forms.

THD *351.
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## Dance History II

4 credits

Survey of culture, styles and methods of dance from the Baroque period to the Modern period. Ethnic, concert and interpretative forms. Emphasis on theatrical ballet and 20th century contemporary dance.

## THD *371T. <br> Theatre Studio: Scenery <br> $$
2-4 \text { credits }
$$ <br> <br> 2-4 credits

 <br> <br> 2-4 credits}THD 271 and Permission
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 environment for a public performance and a written analysis of the project. May be repeated for credit.

## THD *372T. <br> Theatre Studio: Lighting

2-4 credits
THD 272 and Permission
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 atmosnhere for a nublic nerformance and a written analvsis of
the project. May be repeated for credit.

## THD *375T.

## Theatre Studio: Management

2-4 credits
THD 170 and Permission
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.

## THD *385-*386.

## Practicum

4 credits each
Permission

Study-work participation in community institutions, schools or professional organizations combined with faculty supervision. Practical experience in teaching, directing or performance of theatre and dance. Culminates in written report.

THD *399.

## Independent Study

$1-4$ credits
Permission
Supervised reading, research or projects.

## THD *432T. <br> Theatre Studio: Directing

2-4 credits
THD 232 and Permission
Advanced tutorial in the principles and techniques of stage directing culminating in the analysis, casting and

## THD *480.

## Topics in Theatre and Dance

4 credits

Special topics and projects selected by the instructor. Background prerequisites vary with selections.

THD *499. Independent Study
1-4 credits
Permission

Supervised reading, research or projects.

THD *500.

## Senior Thesis

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

## Women's and Gender Studies (WGS)

## Associate Professors Blanchard and Chen, co-directors; all courses taught by faculty from various cognate disciplines.

Alma's Women's and Gender Studies minor develops a substantial interdisciplinary background in the Humanities, Social Sciences and Natural Sciences on topics and issues concerning women's images, realities and choices. It intends to develop awareness of women's contributions, concerns, perspectives and theories by considering diversity of class, ethnicity, race, sexual orientation, age and ability from various feminist perspectives which counterbalance traditional biases. Valuable to students from many disciplines, the components of this minor offer a broad, socio-historical and multicultural study of women's status, roles and efforts toward survival, change and transformation.

## Minor Requirements

Twenty-four credits which must include:

1. WGS 101 and 102 (eight credits).
2. At least four credits elected from the following: WGS 280, 385 or 399.
3. At least 12 credits elected from the following, eight of which must be at least 200 level or higher: COM 123 or 301 ; ENG 340; IPH 223, 301 or 303; HST 140, 228 or 253 ; POL 141, 231, or $381 / 382$; REL 202; SOA 220, 234, 353, or additional approved course.

## WGS 101.

## Introduction to Women's Studies

## 4 credits

Brings together a rich and varied selection of classic and contemporary works from the humanities and social sciences centered on women's images, realities and choices. Interdisciplinary survey of women's contributions, concerns, perspectives and theories. Diversity of class, ethnicity, race and sexual orientation addressed from feminist perspectives which counterbalance traditional biases.

4 credits
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.

## Special Topics

1-4 credits
WGS 101
Specific topics concerning gender issues, choices, realities and self-expression chosen by the instructor. May be taken more than once for credit with no more than four credits counted toward the minor.

## WGS *385.

## Practicum

2 or 4 credits
WGS 101 and Permission
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 and gender studies coordinator and the department chair.

WGS *399.

## Independent Study

2 or 4 credits
WGS 101; one of the following: ENG 340, HST 140, REL/PHL 202, SOA 353, WGS 102 or WGS 280 and Permission

In-depth study in the student's major area as related to the Women's and Gender Studies minor; under faculty member's direction.

## Section IV Academic Directories

- Board of Trustees 2013-14
- Administration 2013-14
- Faculty 2013-14
- Scholarship and

Loan Funds

- Named Facilities



## Board of <br> Trustees <br> 2013-14

## Officers

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David V. Buhl '79, Treasurer. Vice President of Business Affairs, Alma College.

Sandra A. Gadde '96, Assistant Secretary. Executive Assistant to the President, Alma College.

## Board Members

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Eric P. Blackhurst '83, Assistant General Counsel, The Dow Chemical Company; Midland, Michigan.

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Michigan.

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Candace Croucher Dugan, Of Counsel, Warner, Norcross \& Judd, LLC; Holland, Michigan.

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Nancy E. Gallagher '80, Attorney, Nancy E. Gallagher, P.L.L.C.; Alma, Michigan.

Glenn D. Granger '83, President, Granger Construction Company; Lansing, Michigan.

Douglas B. Gross '80, Financial Advisor/Branch Manager, Raymond James Financial Services; Saline, Michigan.

Greg Hatcher '83, Chief Executive Officer, The Hatcher Agency; Little Rock, Arkansas.

Thomas J. Haverbush, Orthopaedic Surgeon; Alma, Michigan.

Richard P. Heuschele '59, Physician, Radiology — Retired; Saginaw, Michigan.

David R. Hubbard '60, Retired Vice President of Finance, Edison Sault Electric; Cheboygan, Michigan.

Cardell D. Johnson '02, Senior Policy Analyst, U.S. Environmental Protection Agency; Washington, D.C.

David P. Larsen '84, Partner, Bodman PLC; Detroit, Michigan.

Donald A. Lindow, Senior Managing Director, Azimuth Capital Management LLC; Bloomfield Hills, Michigan.

John McCormack, Retired President and Chief Executive Officer, Firstbank Corporation; President and Chief Executive Officer, Firstbank-Alma; Alma, Michigan.

Thomas J. McDowell, Retired Executive Vice President, First Chicago NBD; Galesburg, Illinois.

James T. McIntyre '69, President, C.S. McIntyre and Associates; Monroe, Michigan.

Roger L. Myers, President and Chief Executive Officer, Presbyterian Villages of Michigan; Southfield, Michigan.

Erika K. Powers Appelt '90, Partner \& Attorney, Barnes \& Thornburg, Chicago, Illinois.

Carolyn E. Schultz '84, Senior Quality Operations Professional, Zoetis; Kalamazoo, Michigan.

Ron R. Sexton '68, Retired Treasurer, Dow Corning Corporation; Midland, Michigan.

Lynne Sherwood, Vice Chairman of the Board, JSJ Corporation; Grand Haven, Michigan.

Kirk L. Smith '80, Owner, Integrity Printing; Breckenridge, Michigan.

Matthew E. Steinmetz '84, Attorney/Partner, Kirkland \& Ellis, LLP; Chicago, Illinois.

## Trustees Emeriti

James F. Anderson, Pastor Emeritus, Kirk in the Hills; Glen Allen, Virginia.

Lawrence Beck, Harbor Springs, Michigan.
Warren F. Boos, Senior Vice President, UBS Financial Services; Troy, Michigan.

John Colina, President, Colina Foundation; Grosse Ile, Michigan.

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Philippe Dunoyer, Retired Chairman and Chief Executive Officer, Total Petroleum (N.A.), Ltd.; Denver, Colorado.

Charles L. Guess '50, Phoenix, Arizona.

James R. Jenkins, Senior Vice President and General Counsel, Deere and Company; Moline, Illinois.
F. Martin Johnson, Retired Chairman of the Board, JSJ Corporation; Grand Haven, Michigan.

David F. Lau, Owner/Director, Lau and Lau Associates, LLC; Bloomfield Hills, Michigan.

Michael A. Leonard '59, Retired Managing Partner, Executive Consultants, Inc.; Tucson, Arizona.

Judith L. Maze; Kalamazoo, Michigan.

Calvin P. Owen, Retired President, Owen-Ames-Kimball Company; Grand Rapids, Michigan.

Fred G. Secrest, Retired Executive Vice President, Ford Motor Company; Dearborn, Michigan.

Louis R. Somers, Senior Vice President, Finance - Retired, Kellogg Company; Battle Creek, Michigan.

Eugene C. Yehle, Retired Director, Investor Relations and Pension Investments, The Dow Chemical Company; Midland, Michigan.
R.C. Youngdahl Sr., Retired President and Chief Operating Officer, Long Island Lighting Company; Jackson, Michigan.

## Administration 2013-14

With the exception of the Officers, the members of the administration are listed in sector and office groups indicating the organization of the College. The year of appointment is given after each name. The appointments indicated are for the academic year 2013-14.

## Officers

## President

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

## Provost and Vice President for Academic Affairs

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

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

## Vice President for Communication and Marketing

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

## Vice President for Enrollment

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

## Vice President for Student Life

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

## Vice President of Business Affairs

David V. Buhl, B.S., Alma College; M.B.A., Michigan State University. (2009)

## Executive Assistant to the President

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

## Academic Affairs Staff

Associate Vice President for Academic Affairs; Director of Center for Student Opportunity
Karen S. Klumpp, B.A., Alma College; M.B.A., Central Michigan University; Ph.D., Michigan State University. (1978)

## Assistant Director of Center for Student Opportunity - Career Services

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

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

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

## Associate Provost

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

## Assistant Provost

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

## Registrar

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

## Director of Center for Responsible Leadership

Murray Borrello, B.A., Albion College; M.S., University of Massachusetts. Also Instructor of Geology and Environmental Studies. (1987)

## Assistant Director of Center for Responsible Leadership

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

## Remick Heritage Center Building Coordinator



## Music and Dance Staff Accompanist

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

## Costume Designer/Costume Shop Supervisor

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

## Library Director

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

## Science Laboratory Coordinator

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

## Laboratory Coordinator

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

## Service Learning Coordinator

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

## Grants and Government Reports Specialist

Sheryle Dixon, B.Ed., M.A., Ph.D., University of Manitoba. (2007)

## Advancement Staff

## Director of Alumni Engagement

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

Associate Director of Alumni and Parent Engagement
Robyn Carr, B.M., Alma College; M.S., Eastern Illinois University. (2013)

Director of Annual Giving and Community Relations
Brent Neubecker, B.A., Alma College; M.P.A., Central Michigan University. (2006)

## Director of Planned Giving

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

## Regional Director of Advancement

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

## Prospect Research Specialist

Wendy Carter, B.S., Madonna University; M.L.S., Wayne State University. (2011)

## Athletics Staff

## Athletic Director

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

Assistant Athletic Director; Senior Women's Administrator; Volleyball Coach
Sarah Dehring, B.S., Ferris State University; M.A., Lakeland College. (2011)

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

Assistant Sports Information Director; Multimedia Coordinator TBA

## Baseball Coach

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

## Men's Basketball Coach

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

## Women's Basketball Coach

Keisha Brown, B.S., M.S.W., Tulane University. (2009)

## Women's Bowling Coach

Ken Shunk. (2011)

## Cheerleading Coach

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

## Cross Country Coach; Track and Field Coach

Gordon Aldrich, B.S., Michigan State University; M.Ed., Central Michigan University. (2007)

## Football Coach

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

Assistant Football Coach; Recruiting Coordinator; Assistant Track and Field Coach Mark Merlo, B.A., Alma College. (2010)

## Assistant Football Coach

Nate Cochran, B.S., South Carolina State University; M.A., Webster University. (2013)

## Assistant Football Coach

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

## Men's and Women's Golf Coach

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

Men's Lacrosse Coach
Jason Levesque, B.A., Canisius College. (2011)

## Women's Lacrosse Coach

Laurie Jordan, B.A., Belmont Abbey College. (2011)

## Men's Soccer Coach

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

## Women's Soccer Coach

Jeff Hosler, B.A., Alma College. (2006)

## Softhall Coach

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

## Men's and Women's Swimming and Diving Coach

TBA

## Men's Tennis Coach

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

## Women's Tennis Coach

TBA

## Wrestling Coach

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

## Assistant Wrestling Coach

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

## Director of Athletic Training Program

Phillip H. Andre, B.S., Penn State University; M.S., Michigan State University; A.T., C. (2007)

Assistant Athletic Trainer; Integrative Physiology and Health Science Laboratory Coordinator
Drew Currey, B.S., Alma College; M.S., East Stroudsburg University. (2009)

## Head Athletic Trainer

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

## Athletic Trainer, Director of Clinical Instruction of Athletic Training

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

## Business Affairs Staff

Director of Business Services and Controller
Daniel Henris, C.P.A.; B.S., Ferris State College. (2007)

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

## Business Office Specialist

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

## Payroll Specialist

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

## Student Accounts Specialist

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

## Director of Human Resources

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

## Employment Specialist

Kathleen Sommerville. (2004)

## Benefits Specialist

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

## Director of Facilities and Service Management

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

## Associate Director, Facilities and Service Management

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

## Energy Management Engineer

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

## Chief Technology Officer

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

## Director, Enterprise Information Systems

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

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

## Director for Systems and Networking

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

Assistant Director, Instructional Technologist
Andrew Bare, B.A., Central Michigan University; M.A., Michigan State University. (2006)

## Associate Web and Database Developer

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

## Senior Programmer/Analyst

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

## Advancement Programmer/Analyst

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

## Network Manager

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

## Technical Support Specialist

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

## Technical Support Specialist

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

## System Specialist

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

## Media Services Coordinator

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

## Manaoer. Itser Services

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

## General Manager - College Corner Coffee and Books

Donna Sinclair. (2011)

## Wholesale Book Specialist

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

Manager of College Corner Retail Sales/Auxiliary Services
Ashley Strawn, B.S., University of Phoenix. (2011)

## Communication and Marketing Staff

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

## Director of Marketing

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

## Graphic Designer

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

## Digital Media Coordinator

Justin Garant, B.S., Northern Michigan University. (2012)

## Web Editor

Kimberly A. Lauffer, B.A., M.A., Michigan State University; Ph.D., University of Florida. (2010)

## Electronic Communications Coordinator

Daniel S. Tack, B.A., Michigan State University. (2013)

## Enrollment Staff

## Director of Admissions

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

## Senior Associate Director of Admissions

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

## Associate Director of Admissions

Megan Stevenson, B.A., Alma College; M.Ed. Grand Valley State University. (2007)

## Senior Assistant Director of Admissions

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

## Senior Assistant Director of Admissions

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

## Assistant Director of Admissions

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

## Assistant Director of Admissions

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

## Assistant Director of Admissions

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

Assistant Director of Admissions for International Recruitment and Programs
Andrew Davis, B.A., Cedarville University; M.S., Central Michigan University. (2013)

## Admissions Representative

Carrie Frame, B.A., Alma College. (2013)

## Admissions Representative

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

## Director of Financial Aid

Michelle McNier, B.B.A., Northwood University. (2010)

Laura Kohn, B.A., Alma College; M.B.A., Central Michigan University. (2013)

## Student Life Staff

## Director of Diversity and Inclusion

Denelle N. Brown, B.A., M.S., Southern Illinois University. (2013)

## Coordinator of Financial Counseling

Cindy Smith, B.S., Michigan State University; M.A., Central Michigan University. (2013)

## Director of Counseling, Health and Wellness

Anne Lambrecht, B.S., University of Wisconsin-Stout; M.A., Northern Michigan University; L.P.C.

Licensed Professional Counselor
Anna Grajek, B.A., Lake Superior State University; M.A., Central Michigan University. (2004)

## Limited License Professional Counselor

Jennifer Showers, B.A, Alma College; M.A., Central Michigan University; L.L.P.C. (2007)

## Director of Campus Life

David K. Blandford, B.S., University of Idaho. (2000)

## Greek Advisor

Danielle E. Brandreth, B.S., Northern Michigan University. (2012)

## Hall Director

Jalani Jackson, B.S., M.A., Eastern Michigan University. (2012)

Hall Director
Willard Korson, B.S., Central Michigan University; M.A., Michigan State University. (2006)

## Hall Director

David L. Lewis, B.A., Alma College; M.S.A., Central Michigan University. (2012)

## Hall Director

Joshua J. Todd, B.A., Northern Michigan University. (2012)

## Hall Director

Alice M. Richard, B.A., Alma College. (2013)

## Chaplain

Noel A. Snyder, B.A., Hope College; M.Div., Ph.D., Fuller Theological Seminary. (2013)

## Director of Campus Recreation and Conferences

Tammy Rees, B.S., Western Michigan University; M.S., Eastern Michigan University. (2007)

## Assistant Director of Campus Recreation

Garrett Thelen, B.A., Alma College. (2013)

## Faculty 2013-14

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 2013-14.

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

Michael L. Selmon, Provost and Vice President for Academic Affairs, Professor of English. B.A., M.S., Miami University; M.A., Ph.D., University of Maryland. (1991)

Robyn Lin Anderson, Professor of Integrative Physiology and Health Science. B.S., M.S., Indiana University of Pennsylvania; M.P.H., Ph.D., University of Pittsburgh. (1993)

Victor Argueta, Assistant Professor of Physics; Pre-Engineering Coordinator. B.S., National Autonomous University of Mexico; M.S., Ph.D., The Ohio State University. (2009)

Julie Wegner Arnold, Professor of French. B.A., Alma College; M.A., University of Illinois; Ph.D., Michigan State University. (1981)

Dana Aspinall, Associate Professor of English. B.A., University of Maine at Fort Kent; M.A., University of South Carolina; Ph.D., University of Connecticut. (2008)

Gregory Baleja, Professor of Business Administration. B.A., M.B.A., Michigan State University. (1988)

Henry Balfanz, Visiting Assistant Professor of Business Administration. B.S., Southern Illinois University; M.B.A., Bradley University. (2013)

Karen L. Ball, Professor of Integrative Physiology and Health Science. B.A., Alma College; Ph.D., University of Illinois at Chicago. (1995)

Thomas Batchelder, Assistant Professor of Psychology. B.A., Princeton University; M.A., Michigan State

Gwyneth Hill Beagley, Professor of Psychology. B.A., Middlebury College; M.A., Bryn Mawr College; Ph.D., Michigan State University. (1985)

Walter Beagley, Professor of Psychology. B.A., Middlebury College; M.A., Ph.D., University of Pennsylvania. (1976)

Joe D. Beckmann, Professor of Biochemistry. B.S., University of Nebraska-Lincoln; Ph.D., Medical College of Wisconsin. (1996)

Carol Bender, Professor of English. B.A., M.A., Central Michigan University; Ph.D., Michigan State University. (1986)

Kathryn Blanchard, Associate Professor of Religious Studies. B.A., Kenyon College; M.Div., Princeton Theological Seminary; Ph.D., Duke University. (2006)

Mary Theresa Bonhage-Freund, Associate Professor of Sociology and Anthropology. B.A., University of Pennsylvania; M.A.T., Duke University; M.B.A., University of Connecticut; M.A., Ph.D., The Pennsylvania State University. (1999)

Murray C. Borrello, Instructor of Geology and Environmental Studies. B.A., Albion College; M.S., University of Massachusetts. (1987)

Feler Bose, Assistant Professor of Economics. B.S., Hope College; M.S., Georgia Institute of Technology; Ph.D., George Mason University. (2008)

Kevin Boyd, Visiting Assistant Professor of Chemistry. B.S., B.S., Ph.D., University of Houston. (2013)

Dirk Brines, Instructor of English. B.A., University of Michigan-Flint; M.A., Central Michigan University. (2009)

Mary Ellen Brines, Instructor of Spanish. B.S., Central Michigan University; M.S., Pontificia I Tnivarcidade Catalina de Can Danle (1007)

Liping Bu, Professor of History. B.A., M.A., Beijing University; M.S., Ph.D., Carnegie Mellon University. (1999)

Barbara Burdick, Assistant Professor of Music. B.M., M.M., Indiana University; D.M.A., University of Cincinnati College-Conservatory of Music. (2005)

Eric Calhoun, Assistant Professor of Biology. B.S., Truman State University; Ph.D., Mayo Graduate School. (2008)

Elizabeth A. Cameron, Professor of Business Administration. B.B.A., M.B.A., Saginaw Valley State University; J.D., Thomas M. Cooley Law School. (1988)

Britt Cartrite, Associate Professor of Political Science. B.A., M.A., University of Denver, M.A., Ph.D., University of Colorado at Boulder. (2005)

Chih-Ping Chen, Associate Professor of English. B.A., National Chengchi University; M.A., National Taiwan University; Ph.D., University of Massachusetts. (2000)

George Dorian Choksy, Associate Professor of Economics. B.A., Roanoke College; M.A., Ph.D., University of Tennessee, Knoxville. (1989)

David L. Clark, Charles A. Dana Professor of Biology. B.S., M.S., Central Michigan University; Ph.D., University of Cincinnati. (1992)

Anthony J. Collamati, Assistant Professor of Communication and New Media Studies. B.A., St. Anselm College; M.A., Loyola University of Chicago; Ph.D., Clemson University. (2012)

Daniel K. Connolly, Assistant Professor of Art and Design, and Gallery Director. B.A., Trinity University; M.A., University of Texas; Ph.D., University of Chicago. (2011)

Robert Cunningham, Associate Professor of Economics. Also Associate Provost. B.A., The Pennsylvania State ITnivercitv. M $\Delta$ Dh $\cap$ Rinorhamton I Tnivarcitar (1000)

Zhewei Dai, Associate Professor of Mathematics and Computer Science. B.S., Wuhan University; M.S., Ph.D., Michigan State University. (2005)

John E. Davis, Charles A. Dana Professor of Integrative Physiology and Health Science. B.A., Kenyon College; M.S., Ed.D., State University of New York at Buffalo. (1985)

Janie Diels, Assistant Professor of Communication. B.A., University of Wisconsin-Madison; M.S., Ph.D., Cornell University. (2006)

Nicholas John Dixon, Elma C. and Wesley C. Dykstra Professor of Philosophy. B.A., University of Leeds; M.A., Ph.D., Michigan State University. (1986)

Joel Dopke, Associate Professor of Chemistry. B.S., St. Norbert College; Ph.D., University of WisconsinMadison. (2007)

Nancy Dopke, Assistant Professor of Chemistry. B.S., Millikin University; Ph.D., University of WisconsinMadison. (2007)

Prathim "Maya" Dora-Laskey, Instructor of English. B.A., M.A., Stella Maris College; M.Phil, University of Madros. (2012)

Deborah A. Dougherty, Professor of Spanish. B.A., Aquinas College; M.A., Ph.D., Michigan State University. (1996)

Brian J. Doyle, Assistant Professor of Biology and Biochemistry. B.S., Ph.D., University of Illinois. (2010)

Thomas Ealey, Professor of Business Administration. B.S., M.A., Bowling Green State University. (2006)

Carol Fike, Professor of Theatre and Dance. B.S., Brockport State University; M.F.A., University of North Carolina at Greensboro. (1984)

Nicola Findley, Associate Professor of Education. B.Ed., University of Bristol; Ph.D., Michigan State

Catherine Fobes, Professor of Sociology. A.B., Muhlenberg College; M.Div., Yale University; M.S., Ph.D., Florida State University. (1998)

Patrick J. Furlong, Professor of History. B.A., M.A., University of Cape Town; Ph.D., University of California, Santa Barbara. (1993)

Joanne R. Gilbert, Charles A. Dana Professor of Communication. B.A., M.A., University of North Carolina at Chapel Hill; Ph.D., University of Texas at Austin. (1994)

William Gorton, Associate Professor of Political Science. B.A., College of William and Mary; Ph.D., University of Minnesota. (2005)

Dennis Griffin, Instructor of Integrative Physiology and Health Science. Also Softball Coach. B.A., Hope College; M.A., Western Michigan University. (1983)

Murray Gross, Assistant Professor of Music. B.A., M.M., Oberlin Conservatory of Music; D.M.A., Michigan State University. (2004)

Scott T. Hill, Professor of Chemistry. B.A., Gettysburg College; Ph.D., University of Pittsburgh. (1988)

Derick Hulme, Arthur L. Russell Professor of Political Science. B.A., St. Lawrence University; M.A.L.D., Ph.D., Tufts University. (1992)

Steuard Jensen, Associate Professor of Physics. Also Associate Provost. B.S., Harvey Mudd College; Ph.D., University of Chicago. (2009)

Joseph A. Jezewski, Associate Professor of Theatre and Dance. B.A., Lycoming College; M.A., University of Kentucky; M.F.A., Rutgers University. (1993)

Lin Jiang, Visiting Assistant Professor of Chemistry. B.S., Harbin Institute of Technology; Ph.D., Miami University. (2013)

Ryan Jones, Visiting Assistant Professor of Mathematics. B.S., M.A., Ph.D., Western Michigan University. (2013)

Kevyn Juneau, Visiting Assistant Professor of Biology. B.S., The State University of New York; M.S., University of Florida; Ph.D., Michigan Technological University. (2013)

Jessica Karbowiak, Visiting Instructor of English; Writing Center Director. B.A., M.A., University of Texas at Austin; M.F.A., The Pennsylvania State University. (2012)

Timothy P. Keeton, Associate Professor of Biology. B.A., Wittenberg University; Ph.D., University of Cincinnati College of Medicine. (1998)

Angela Kelleher, Associate Professor of Library Science. B.A., Michigan State University; M.L.S., Wayne State University. (2003)

Ronald Lemmon, Assistant Professor of Business Administration. B.A., Aquinas College; M.B.A., Western Michigan University. (2002)

Holly Liu, Associate Professor of German. B.A., M.A., Peking University; M.A., Texas Tech University; Ph.D., Vanderbilt University. (2006)
C. Sandy Lopez-Isnardi, Professor of Art and Design. B.S., SUNY College at New Paltz; M.F.A., University of Cincinnati. (1995)

Edward C. Lorenz, Reid-Knox Professor of History and Professor of Political Science. B.S., Towson State University; M.A., Georgetown University; Ph.D., University of Chicago. (1989)

Brittany Luckett, Visiting Instructor of Integrative Physiology and Health Science. B.A., Adrian College; M.S., Pennsylvania State University College of Medicine. (2012)

Maurie Luetkemeier, Professor of Integrative Physiology and Health Science. B.S., M.A., Ball State University; Ph.D., The Ohio State University. (2001)

Megan McCullen, Visiting Instructor of Anthropology. A.B., University of Illinois at Urbana- Champaign; M.A., Michigan State University. (2010)

Judith McKenna, Associate Professor of Nursing Education, Director of Nursing Education. R.N., St. Joseph Mercy School of Nursing; B.S.N., Mercy College of Detroit; M.S.N., D.N.P., Oakland University. (2013)

Myles Frances McNally, Professor of Mathematics and Computer Science. B.S., Drexel University; Ph.D., Temple University. (1992)

Scott Messing, Charles A. Dana Professor of Music. B.A., Rutgers University; M.A., Ph.D., University of Michigan. (1982)

Robert R. Molina, Professor of Mathematics and Computer Science. B.S., Southern Oregon State College; M.S., Ph.D., Colorado State University. (1993)

William Nichols, Secrest Professor of Music. B.M., Western Michigan University; M.M., D.M.A., Michigan State University. (1983)

Melvin Andrew Nyman, Professor of Mathematics and Computer Science. B.S., Ferris State University; M.S., Ph.D., Michigan State University. (1981)

Kristin Olbertson, Associate Professor of History. B.A., Carleton College; J.D., University of Michigan Law School; Ph.D., University of Michigan. (2006)

William W. Palmer, Charles A. Dana Professor of English. B.A., M.A., Central Michigan University; Ph.D., Michigan State University. (1977)

Carrie Anne Parks-Kirby, Professor of Art and Design. B.F.A., Wesleyan College; M.F.A., Virginia Commonwealth University. (1982)

James Peterson, Visiting Assistant Professor of Mathematics. B.A., St. Olaf College; Ph.D., Rice Itnivarcity (9n12)

John F. Putz, Professor of Mathematics and Computer Science. B.S., Southeast Missouri State University; M.S., Ph.D., Saint Louis University. (1981)
B. Cameron Reed, Charles A. Dana Professor of Physics. B.S., University of Waterloo; M.S., Queen's University; Ph.D., University of Waterloo. (1992)

Marcus Richter, Assistant Professor of Library Science. M.Th., Seminary of the ELFK, Leipzig, Germany; M.L.S., College of St. Catherine/Dominican University. (2009)

Kathleen Riley, Instructor of Music. M.M., DePaul University. (1999)

Raymond Riley, Professor of Music. B.M., University of Illinois; M.M., DePaul University; D.M.A., Michigan State University. (1988)

Tina M. Rolling, Visiting Assistant Professor of Business Administration. B.S., M.B.A., Central Michigan University. (2012)

John Rowe, William R. Angell Professor of Biology. B.S., Central Michigan University; M.S., Eastern Michigan University; Ph.D., University of Nebraska at Lincoln. (2002)

Robert L. Rozier, Associate Professor of Art and Design. B.A., St. Mary's Seminary College; M.F.A., Michigan State University. (1983)

Hazel Sabas, Assistant Professor of Theatre and Dance. M.F.A., New York University - Tisch School of Arts. (2013)

Dale L. Sanders, Assistant Professor of Health Care Administration and Business Administration, Director of Health Care Administration. B.A., University of Tennessee; M.B.A., Northwood University; D.O., University of Health Sciences College of Osteopathic Medicine. (2010)

Mark Seals, Professor of Education. B.S., Eastern Oregon University; M.S., Ph.D., Purdue University. (1999)

Mare B. Setterlund, Professor of Psychology. B.A., Gustavus Adolphus College; M.A., Ph.D., Johns Hopkins University. (1997)

Timothy A. Sipka, Associate Professor of Mathematics and Computer Science. B.A., Anderson College; M.A., M.S., Western Michigan University; M.S., Central Michigan University. (1979)

Stephany Slaughter, Assistant Professor of Spanish. B.A., Washington College; M.A., Millersville University; Ph.D., The Ohio State University. (2009)

Jessie C. Store, Assistant Professor of Education. B.E., University of Malawi; M.E., University of Botswana; Ph.D., The University of North Carolina at Greensboro. (2012)

Melissa M. Strait, Towsley Professor of Chemistry. B.S., Oregon State University; Ph.D., Arizona State University. (1985)

Brian Stratton, Professor of Religious Studies. B.A., Pikeville College; M.Div., Ph.D., Princeton Theological Seminary. (2000)

Brandi Stupica, Assistant Professor of Psychology. B.S., Otterbein College; M.S., Ph.D., University of Maryland. (2012)

Andrew Thall, Associate Professor of Mathematics and Computer Science. B.A., Kalamazoo College; M.S., Ph.D., University of North Carolina at Chapel Hill. (2008)

Peggy Thelen, Associate Professor of Education. B.S., M.A., Central Michigan University; Ph.D., Michigan State University. (2004)

Timm Norman Thorsen, Professor of Sociology. B.A., M.A.T., Beloit College; M.A., Ph.D., University of Massachusetts, Amherst; E.M.B.A., Claremont College. (1979)

Jeffrey A. Turk, Associate Professor of Chemistry. B.S., Cleveland State University; M.S., Ph.D., I Thivarcity of Cinninnati (7nOK)

Steven T. Vest, Associate Professor of Library Science and Head, Reference and Instruction Services. B.F.A., Bowling Green State University; M.F.A., Indiana University; M.S.L.S., Clarion University of Pennsylvania. (1999)

Micheal R. Vickery, Professor of Communication. B.S., University of Alabama; Ph.D., University of Texas at Austin. (1992)

Robert Vivian, Associate Professor of English. B.A., M.A., University of Nebraska at Omaha; Ph.D., University of Nebraska at Lincoln. (2001)

Laura von Wallmenich, Assistant Professor of English. Also Interim Associate Vice President for Student Opportunity and Diversity. B.A., Colby College; M.A., Ph.D., University of Washington at Seattle. (2001)

Daniel Wasserman, Assistant Professor of History. A.B., University of Chicago; M.A., Ph.D., University of Virginia. (2013)

Marlene Wenta, Instructor of Integrative Physiology and Health Science. B.S., M.A., Central Michigan University. (2008)

Carol Zeile, Associate Professor of Library Science and Head, Technical Services. B.A., Alma College; M.A., Indiana University; M.L.S., Western Michigan University. (1998)

David Zerbe, Associate Professor of Music. B.M., M.M., Central Michigan University. (2004)

## Part-Time

Phillip Andre, Integrative Physiology and Health Science. M.S., Michigan State University. (2008)

Jonathan Arlt, Sociology and Anthropology. M.A., Central Michigan University. (2010)

Amy Beatty, Physics. B.S., Alma College. (1997)

Kristen Bennett, Dance. B.A., Grand Valley State University. (2008)

Michael Bishop, Biology and Laboratory Coordinator. M.S., Central Michigan University. (1998)

Dianne Borrello, Geology and Environmental Studies. B.S., Michigan Technological University. (1998)

Drew Curry, Integrative Physiology and Health Science. M.S., East Stroudsburg University. (2009)

Katherine DeGood, Dance. M.S., Wayne State University. (2011)

Sheryle Dixon, Education and Philosophy. Ph.D., University of Manitoba. (2007)

Rory Douglas, Geography. Ed.S., Michigan State University. (2007)

Andrew Duncan, Music. M.S., Wayne State University. (2006)

Christopher Goggin, Mathematics. J.D., University of Notre Dame Law School. (2007)

Tincy Goggin, Mathematics and Computer Science. M.B.A., Michigan State University (2005)

Linda Johnson, Education. M.A., Central Michigan University. (2005)

Brett Knight, Integrative Physiology and Health Science. M.S., Western Michigan University. (2011)

Danielle Knight, Integrative Physiology and Health Science. M.S., California University of Pennsylvania. (2012)

Kenneth Marable, Philosophy. B.A., Alma College. (2011)

Carlos Melendez, Music. (2007)

Aaron Munderloh, Integrative Physiology and Health Science. M.S., University of Indianapolis. (1997)

Kathy Paul, Education. M.A., Central Michigan University. (2011)

Chuck Sandro, Education. M.A., Central Michigan University. (2007)

Karen Stiffler, Communication and New Media Studies. M.S., Central Michigan University. (2005)

Kenneth Tabacsko, English. M.A., Central Michigan University. (2005)

Larry Timm, Education. M.A., Central Michigan University. (2000)

Ted Troxell, American Studies. M.M., Central Michigan University. (2009)

Victoria Walker, Music. M.M., Michigan State University. (2000)

Keith Wise, History and Religious Studies. Ph.D., American University. (1994)

## Emeriti

John W. Arnold, Professor Emeritus of German. B.A., M.A., Ph.D., Michigan State University. 19772006.

Richard G. Bowker, Charles A. Dana Professor Emeritus of Biology. B.S., Cornell University; M.S., Ph.D., Northern Arizona University. 1977-2001.

Burnet V. Davis, Arthur L. Russell Professor Emeritus of Political Science. A.B., Dartmouth College; M.A., Ph.D., University of Chicago. 1976-2002.

Eugene C. Deci, Professor Emeritus of Physics. B.A., Hamilton College; Ph.D., State University of New York at Binghamton. 1978-2002.

Peter A. Dollard, Professor Emeritus of Library Science. A.B., A.M.L.S., University of Michigan; M.A., University of Wyoming. 1974-2002.

George Gazmararian, Charles A. Dana Professor Emeritus of Business Administration. B.S., M.B.A., University of Detroit. 1966-1996.

John Holman Gibson, Professor Emeritus of Physics. B.S.E., Ph.D., University of Michigan. 1968-2007.

Charles A. Gray, Professor Emeritus of Exercise and Health Science. B.S., M.S., Ithaca College; Ed.D.,

University of Oregon. 1965-1993.

Philip R. Griffiths, Professor Emeritus of Theatre and Dance. A.B., Whitman College; M.A., Stanford University; Ph.D., New York University. 1965-1993.

Karin A. Grimnes, Professor Emeritus of Biology. B.A., University of South Florida; Ph.D., Michigan State University. 1986-2013.

Lawrence E. Hall, Associate Professor Emeritus of Library Science. B.A., M.A., M.A.L.S., University of Michigan. 1969-1999.

Sedley Duane Hall, Professor Emeritus of Education. B.S., M.E., Ed.D., University of Nebraska. 19631987.

James Robert Hutchison, Towsley Professor Emeritus of Chemistry. B.S., Wittenberg University; Ph.D., Princeton University. 1973-2006.

Randolph Jacques, Professor Emeritus of Business Administration. B.A., Michigan State University; M.B.A., Wayne State University. 1977-2012.

Gunda S. Kaiser, Professor Emeritus of Spanish. B.A., Northwestern University; M.A., Ph.D., University of Wisconsin. 1958-1988.

Henry E. Klugh, Charles A. Dana Professor Emeritus of Psychology. B.A., Geneva College; M.S., Ph.D., University of Pittsburgh. 1955-1986.

Margarita Krakusin, Professor Emeritus of Spanish. B.A., Universidad Pontificia Boulivariana; M.Ed., Central Michigan University; M.A., Ph.D., Michigan State University. 1998-2008.

Lynda R. Ludy, Charles A. Dana Professor Emeritus of Education. B.S., Centenary College; M.A., Ph.D., University of Texas at Austin. 1976-1999.

Ronald Lee Massanari, Charles A. Dana Professor Emeritus of Religious Studies and Philosophy. B.A.,


James V. Mueller, Associate Professor Emeritus of Economics. B.A., Cornell College. 1976-2008.

Richard Allen Roeper, Professor Emeritus of Biology. B.A., Lawrence University; M.A.T., Miami University; Ph.D., Oregon State University. 1972-2000.

Susan Root, Professor Emeritus of Education. B.A., Michigan State University; M.A.T., Oakland University; Ph.D., Michigan State University. 1987-2003.

Douglas J. Scripps, Professor Emeritus of Music. A.B., Calvin College; M.M., University of Michigan. 1985-2002.

Donald W. Shontz, Associate Professor Emeritus of Education. B.S, M.S., Ph.D., Florida State University. 1970-1987.

Carol W. Slater, Charles A. Dana Professor Emeritus of Psychology. B.A., University of Michigan; M.A., Ph.D., Michigan State University. 1967-2009.

Robert Wayne Smith, Professor Emeritus of Speech Communication. B.A., M.A., University of Southern California; Ph.D., University of Wisconsin. 1962-1992.

Paul L. Splitstone, Professor Emeritus of Physics. B.A., Western Michigan University; Ph.D., The Ohio State University. 1963-1991.

Ute Stargardt, Charles A. Dana Professor Emeritus of English. B.A., M.A., Texas A \& I University; Ph.D., University of Tennessee, Knoxville. 1982-2009.

Charlene L. Vogan, Associate Professor Emeritus of Education. A.B., Case Western Reserve; M.Ed., Westminster College; Ph.D., Michigan State University. 1971-1987.

Joseph G. Walser, Charles A. Dana Professor Emeritus of Religious Studies. B.A., University of North


Lawrence W. Wittle, William R. Angell Professor Emeritus of Biology. B.S., Lebanon Valley College; Ph.D., University of Virginia. 1970-2008.

Michael J. Yavenditti, Professor Emeritus of History. A.B., Occidental College; M.A., University of North Carolina at Chapel Hill; Ph.D., University of California, Berkeley. 1968-2006.

## Scholarship and Loan Funds

Alumni, friends, churches, foundations and other organizations generously provide a major portion of the funds available for financial assistance to Alma College students. In addition to the following named endowed scholarships, $\$ 1$ million in assistance is also provided by generous patrons through the Alma Fund.

## Endowed Scholarships

## Assigned by Financial Assistance Office

Assigned scholarships help support the merit-based awards of the College. Students are notified if awarded assigned scholarships.

Jean Fox Abruzzino '78 Memorial Endowed Scholarship
Ethelyn Adams '27 Endowed Scholarship
Theil K. Alexander Memorial Endowed Scholarship
Alma College Chicago-Area Alumni Endowed Scholarship
Alma College Facilities and Service Management Endowed Scholarship
Alma Alumni Legacy Endowed Scholarship
George Easton Amendt '25 Endowed Music Scholarship
Amsbury/Hooper Endowed Scholarship
John R. '33 and Kathryn Berry Anderson '33 Endowed Scholarship
William G. Anderson '59 Endowed Scholarship
Kenneth T. and Nellie McKay Andison Memorial Endowed Scholarship
Thomas K. Andison Endowed Scholarship
Adam E. Armstrong Educational Fund
Frank G. Artinian Memorial Endowed Scholarship
Harold H. Baker Endowed Scholarship
William J. and Hannah Baker Endowed Scholarship
Barstow Endowed Scholarship

Brian E. and Heidi L. Bartes Endowed Scholarship
Battle Creek First Presbyterian Church Endowed Scholarship
Ceo E. Bauer Endowed Scholarship
William Baxter '77 Memorial Endowed Scholarship
Thelma Potter Beam '26 and W. Allen Beam '25 Endowed Scholarship
Dr. Verne C. Bechill Endowed Sociology Scholarship
Flora Beck Endowed Scholarship
Florence M. Becker Endowed Scholarship
Helen M. Beyer Endowed Scholarship
Arnold R. and Marjorie Bjork/James and Kim Cornetet Endowed Scholarship
Carl W. Bonbright Endowed Scholarship
Harry J. and Iva E. Bond Scholarship
Warren F. and Beverly B. Boos Endowed Scholarship
Bowen Family Endowed Scholarship
Reid and Ruby Brazell Endowed Scholarship
Hugh Brenneman Family Endowed Scholarship
Margaret P. and James F. Brinkerhoff Endowed Scholarship
Barker H. Brown '32 Memorial Endowed Scholarship
Robert L. Brown '35 Endowed Scholarship
Vernon J. Brown Endowed Scholarship
William Elbert, Class of 1904, and Carolyn Hastings Brown, Class of 1905, Memorial Endowed Scholarship

Wanzer Hull Brunelle Memorial Endowed Scholarship
Garth M. and Jewel G. Bryan Endowed Scholarship
Mildred M. Bushouse Memorial Endowed Scholarship
Elizabeth H. Caldwell Endowed Scholarship
Lynn Ann Wight Cambron Endowed Scholarship
Ward "Bud" and Katherine "Sis" Campbell Endowed Scholarship

Genevieve Carlson and Paul E. Guider '43 Endowed Scholarship
Celtic Cross Presbyterian Church Endowed Scholarship
Andrea Chaney, Class of 1990, Memorial Endowed Scholarship
Werner Clabuesch Endowed Scholarship
Margaret McPherson Clark Endowed Scholarship
Class of 1962 Endowed Scholarship
Cleland-Horne Endowed Scholarship
Colina Family Endowed Scholarship
Elfriede Colm Memorial Endowed Scholarship
Franklin and Lulu Cook Endowed Scholarship
Grant L. Cook Memorial Endowed Scholarship
Kathleen Geerlings Craig and Marianne Geerlings Jewell Endowed Scholarship
Keith Allen Crandall Memorial Endowed Scholarship
Cara Cresswell Endowed Honor Scholarship
Gwendolyn O. Cross '56 Memorial Endowed Scholarship
Gilbert A. and Eleanor H. Currie Endowed Scholarship
Daily Family Pre-Medical Award
Hugh P. Davies Memorial Endowed Scholarship
Don E. Davis '35 Memorial Endowed Music Scholarship
Robert G. and Sara E. Davis Endowed Scholarship
A. Dale Dawson and Helen Dawson Jacob '39 Endowed Scholarship

James '36 and Jane Allen Day '36 Endowed Scholarship

Trudeau DesJardins Memorial Endowed Scholarship
Eric M. Didocha Memorial Endowed Scholarship
Dillon Family Scholarship
Draper Family Endowed Scholarship
Ecken Wellness Endowed Scholarship
Robert W. and Brenda L. Emens Endowed Scholarship
E. V. Erickson Endowed Scholarship

Herbert Estes '34 Endowed Scholarship
Jeanne R. Etter Scholarship
William W. Fenchuk Scholarship
First Presbyterian Church of Battle Creek Endowed Scholarship
First Presbyterian Church of Bay City-Ambrose Wight Endowed Scholarship
First Presbyterian Church of Jackson Memorial Endowed Scholarship
First Presbyterian Church of Lansing-Benjamin R. Leyrer '34 Memorial Endowed Scholarship
First Presbyterian Church of Paw Paw Endowed Scholarship
First Presbyterian Church of Rosebush Endowed Scholarship
Charles K. Ford Endowed Scholarship
David C. Ford '70 Memorial Endowed Scholarship
Forest Avenue Presbyterian Church Endowed Scholarship
Samuel H. and Louise L. Forrer Endowed Scholarship
Foss-Weenink Endowed Scholarship
Harold C. Freundt and Gladys L. Freundt Endowed Scholarship
Louis C. Friedrich '41 Memorial Endowed Scholarship
Jon R. Gamble, Class of 1996, Memorial Endowed Scholarship
Gerish Family Endowed Scholarship
Rollin M. Gerstacker Endowed Scholarship
Dean M. and Jean W. Gettemy Endowed Scholarship
Julie J. '72 and Robert S. '70 Gigliotti Endowed Scholarship

John A. and Diana H. Gilbert Endowed Scholarship
David K. and Florine R. Goodman Endowed Scholarship
Meda Graham Educational Trust Fund
Grand Rapids Westminster Presbyterian Church Endowed Scholarship
Rita and R. Lorimer Grant '28 Endowed Scholarship
Dr. C. A. Gray Endowed Scholarship

Fred and Sarah Greer Endowed Scholarship
Martha Hale Endowed Scholarship
Joy Olney Hamann '36 Memorial Endowed Scholarship
Chloe Hampton Endowed Music Scholarship
Alden W. Hanson Endowed Scholarship
Chester R. '38 and Marian E. Hardt Endowed Scholarship
Hartig Family Endowed Scholarship
Robert F. Hastings Memorial Scholarship
William and Nola Havelka Endowed Scholarship
Sheldon G. Hayes Endowed Scholarship
Mildred E. Helfer Endowed Scholarship
Heritage Scholarship Endowed Fund
Karen Crimmins Herron Memorial Endowed Scholarship
Richard '59 and JoAnne Heuschele '60 Endowed Scholarship
Richard and JoAnne Heuschele Health Professions Endowed Scholarship
Wayne Hintz Endowed Scholarship
David B. Hirtzel '78 Memorial Endowed Scholarship
Stanley J. and Myrtle E. Hocking Endowed Scholarship
Ruth Hooper Endowed Scholarship
David R. and Patricia Sweeney Hubbard Endowed Scholarship
Lelah H. Hubbell Endowed Scholarship
B. J. and Laura L. Humphreys Endowed Scholarship

Edna Pence Huthwaite Endowed Scholarship
Ellory and Ruth Ingersoll Memorial Music Scholarship
Jack's Scholarship
Edna V. Jacobson Endowed Scholarship
Marjorie Jarvis Endowed Art Scholarship
Jefferson Avenue Detroit Presbyterian Women Endowed Scholarship

Jefferson Avenue Presbyterian Church of Detroit Endowed Scholarship
James R. and Anita H. Jenkins Endowed Scholarship
Arnold W. and Evelyn M. Jeruzal Endowed Scholarship
Matilda N. Johnson Endowed Scholarship
Sara MacLeod and Weston T. Johnson Memorial Endowed Scholarship
Louanna Baker Jones '12 Endowed Scholarship
JSJ Corporation Endowed Scholarship in memory of B. P. Sherwood, Alvin E. Jacobson and Paul A. Johnson

Gunda S. Kaiser Outstanding Junior and Senior Spanish Major Endowed Scholarship
Jolene M. Kanary, Class of 1991, Memorial Endowed Scholarship
Ronald O. Kapp Memorial Endowed Scholarship
Jane H. and Bethel B. Kelley Memorial Endowed Scholarship
Kelso-Battle Memorial Scholarship
William L. King '58 Memorial Endowed Scholarship
Durward E. Kinyon Endowed Scholarship
Kirk in the Hills Endowed Scholarship
Grace L. Kurkowsky Endowed Scholarship
Carol Dengler Lacey Endowed Scholarship
Russell E. LaCoursier Memorial Endowed Scholarship
Ellen Laman '23 Endowed Scholarship
Harry M. Landis Memorial Endowed Scholarship
John B. and Iva M. Landon Endowed Scholarship

Hilma S. and J. Wesley Lee Endowed Scholarship
Harriet Ralph Leonard Endowed Scholarship
Michael and Frances Leonard Endowed Scholarship
Melvin Lievense and Carlie G. Lievense Endowed Scholarship
Dr. Irene C. Linder Endowed Scholarship
Alfred Baker Lindley '41 Memorial Endowed Scholarship

Marlys Gascho Lipe '79 Endowed Scholarship
Robert J. and Jeannie L. Long Endowed Scholarship
Helmuth B. and Marie Lueth Endowed Scholarship
Caro Ann '70 and Kurt Mabbitt '69 Endowed Scholarship
Delbert M. '30 and Rita M. MacGregor Endowed Scholarship
Malcolm Endowed Scholarship
Malpass Fund Endowed Scholarship
Eric Matthews Endowed Music Scholarship
Blanche Bahlke Maxwell '42 Endowed Scholarship
Harlan R. and Marie Diehl McCall '57 Memorial Endowed Scholarship
Thomas McClelland Memorial Endowed Scholarship
John McCormack Endowed Scholarship
Dr. Alfred G. McCuaig '42 Memorial Endowed Scholarship
Teresa McDowell-Ott Endowed Scholarship
Charles S. and Marion F. McIntyre Endowed Scholarship
McLeod Family Endowed Scholarship
Fred R. McNabb Endowed Scholarship
Norma A. Messecar Meltzer '24 Memorial Endowed Scholarship
Martha K. Merkley Endowed Scholarship
Helen and Stephen Meyer Endowed Scholarship
Francis L. and Helen M. Michaels Endowed Scholarship
Michaels Family Endowed Scholarship

Milham Endowed Scholarship
James E. Mitchell, Class of 1893, Endowed Scholarship
John S. Morgan Memorial Endowed Scholarship
C. M. Muilenburg Memorial Endowed Scholarship

Myhrum-Wilson-Trainor Memorial Endowed Scholarship
Neeland-McFarland Endowed Scholarship

Joseph A. Nelson, Class of 2006, Memorial Endowed Scholarship
Antje Popp Newhagen Endowed Scholarship
Daniel S. Nichelson, Class of 1999, Memorial Endowed Scholarship
Niles First Presbyterian Church Endowed Scholarship
Charles F. and Myrtle K. Nims Endowed Scholarship
Stephen R. and Norma Nisbet Endowed Scholarship
Jonathan W. Nugent, Class of 2003, Memorial Endowed Scholarship
Robert C. Nunn '32 Endowed Scholarship
Esther A. Oldt '26 Endowed Scholarship
Calvin F. and Rosemary B. Opperthauser Endowed Scholarship
Mary Jansen Opra, Class of 1988, Memorial Endowed Scholarship
Outer Drive United Presbyterian Church of Detroit Endowed Scholarship
Charles H. and Elizabeth C. Patterson Endowed Scholarship
Jeanette L. Patterson Memorial Endowed Scholarship
Rose Peck Endowed Scholarship
Edward H. Pence and Jessie Archer Pence Endowed Scholarship
Fred R. Perry, Class of 1897, Endowed Scholarship
Irene B. Phelan Endowed Scholarship
Joann Wilson Piermattei '51 Endowed Music Scholarship
Margaret T. and Fraser E. Pomeroy Endowed Scholarship
Lee '56 and Sally Souders '56 Posey Endowed Scholarship
Sheila Huxley Potter '32 and Dr. Howard A. Potter Jr. '32 Endowed Scholarship

Bernice Ireland Powels '16 and William Louis Ireland Endowed Scholarship
Raymond Provost Endowed Scholarship
Gordon J. and Alma M. Ramsay Endowed Scholarship
Charles J. and Augusta Rayner Endowed Scholarship
Reader's Digest Endowed Scholarship
Reader's Digest Foundation Endowed Scholarship

Harper Reed Memorial Endowed Scholarship
Emma O. Reed Endowed Scholarship
Ruth Redman Reed Memorial Endowed Scholarship
Matthew J. Reinke Memorial Endowed Scholarship
The Robins Scholarship
Culbertson W. Ross Endowed Scholarship
May Mitchell Royal Endowed Scholarship
Arthur L. Russell '41 Endowed Scholarship for Political Science
Arthur L. Russell '41 Endowed Scholarship for Biology and Music
Eva E. and William L. Ruttledge Endowed Scholarship
E. Richard Salisbury Endowed Scholarship

Sawvel-Hoffmeyer Endowed Scholarship
Peter J. Schmidt Endowed Scholarship
Scholl Family Endowed Scholarship
Alberta Gobel Schubel '26 Endowed Scholarship
Shirley Drury Schweinsberg Endowed Scholarship
Kevin P. Scott Metro Detroit Roundtable Endowed Scholarship
Josephine Seeley Memorial Endowed Scholarship
Thelma T. Seifert Memorial Endowed Scholarship
Ron R. Sexton Endowed Finance and Accounting Scholarship
Thomas W. Sharpe '31 Endowed Scholarship
Dr. George Patrick Shaw '53 and Dr. Robert Arthur Willits '53 Memorial Endowed Scholarship

Dr. John H. Shroyer '25 and Clarissa Vreeland Shroyer '25 Endowed Scholarship
Sidebotham-White Endowed Scholarship
Roberta Welch Sims '63 Endowed Scholarship
Charles E. '39 and Alice Bronson Skinner '38 Endowed Scholarship
Catherine A. and Frank J. Sladen Endowed Scholarship
Carra Jones Smith Endowed Scholarship

Dr. Michael J. J. Smith Endowed Scholarship
Nellie Snow Smith Endowed Scholarship
Rhea Stinson Smith '25 Endowed Scholarship
Carl J. and Elvira R. Snyder Memorial Endowed Scholarship
Frederick J. Soule Endowed Scholarship
Thomas John Sova, Class of 1993, Memorial Endowed Scholarship
Anne '42 and Herbert Spendlove '41 Endowed Scholarship
Stafford Endowed Scholarship
John Marvin and Marguerite L. Stapleton Endowed Scholarship
Edward C. and Hazel L. Stephenson Scholarship
Sharon Lee Sterne '72 Memorial Endowed Scholarship
William Marshall and Mildred (Midge) Ann Strait Endowed Scholarship
Ernest G. Sullivan Vocal Music Endowed Scholarship
Dorothy B. Swanson Endowed Scholarship
Robert D. Swanson Endowed Scholarship
Roberta B. Swanson Pre-Medical Endowed Scholarship
Pamela M. Temple '78 and Marjorie A. Brown Memorial Art Award and Scholarship
Susan Thomas Endowed Scholarship
Lawrence H. Thompson '60 Endowed Scholarship
Thompson-Carless Endowed Scholarship
Thompson Urban Minority Endowed Scholarship
Samuel Thorndike Memorial Endowed Music Scholarship

Louis Toller Memorial Physics Award
Emmet and Frances Tracy Endowed Scholarship
Glenn F. Turnbull Endowed Scholarship
Lyder and Haldis Unstad Endowed Scholarship
Helen and Duane Van Duzen Endowed Scholarship
Villard-Wolf Endowed Scholarship

Robert L. '57 and Donna J. '60 Wallace Endowed Scholarship
Louis E. and Margaret C. Ward Endowed Scholarship
Bernard B. Waske Memorial Endowed Scholarship
Craig Weaver Endowed Scholarship
Jeffrey D. Weenink Endowed Scholarship
Mary Louise Westcott Memorial Endowed Scholarship
Dr. and Mrs. Rex A. Wilcox Endowed Scholarship
Clarence L. Williams '22 Endowed Scholarship
Edna Campbell Williams Endowed Scholarship
Russell H. and Fromilda Y. Wilson '23 Memorial Endowed Scholarship
Russell Allen Woodruff '64 Memorial Endowed Scholarship

## Restricted Scholarships

These scholarships include specific criteria and are awarded to students in addition to merit awards. Contact Admissions or Financial Assistance office for information.

Chemistry Alumni Scholarship
Eric C. and Kathleen S. Dreier/Traverse City Scholarship
Fenchuk National Merit Scholarship
First Presbyterian Church of Dearborn Scholarship
First Presbyterian Church of Monroe Scholarship
First Presbyterian Church of Mt. Clemens Scholarship

Karen Jo Rice Hill Memorial Scholarship
Linder Sociology Award
Bishop Dr. Thomas Mar Makarios Scholarship
Olofsson Family Scholarship
Virginia Schultz Scholarship
St. Andrews Society of Detroit Scholarship

Emily C. VanDyke Memorial Scholarship
John S. '35 and Claire Wilson Volk '34 Memorial Scholarship

## Loan Funds

Loans are available on a short- or long-term basis through the following named loan funds and the generosity of their donors. The funds help support low interest loans to students who demonstrate financial need; loans are available through the financial aid award process.

Nelson W. Abernethy Memorial Loan Fund
Alma College Student Loan Fund
F.J. Barrett Foundation Loan Fund

Bishop Class of Flint First Presbyterian Church Student Loan Fund
Gilbert A. Currie Student Loan Fund
Katherine Dennis Memorial Student Loan Fund
Dorotha and Mario Epina Student Loan Fund
Ida B. Fink Student Trust Fund
Harold and Wilma Good Foundation Loan Fund
Clarence R. Goodrich, Class of 1915, Loan Fund
Stanley A. Graves, Class of 1910, Memorial Loan Fund
Marguerite Howe Memorial Loan Fund
Mr. and Mrs. Fred J. Hubbell Loan Fund
Janis Joynt Memorial Loan Fund

Lois Fraker MacDonald Loan Fund
Celia Manwaring Loan Fund
Barbara Marnock Rotary Loan Fund
Catherine McIntosh-Anna Robinson Loan Fund
Oscar D. Morrill Loan Fund
Paul Louis Reed Loan Fund

Robert Benjamin Shaver Loan Fund
Sidebotham-White Student Loan Fund
D.C. Smalley Memorial Fund

Dr. C. J. Strosacker Memorial Loan Fund
Tammy Taylor, Class of 1980, Student Loan Fund
Larry D. Thompson, Class of 1976, Memorial Loan Fund
Louis E. and Margaret C. Ward Loan Fund
Westminster Women's Association of Detroit Loan Fund
Richard D. Whittier Memorial Loan Fund
Dr. and Mrs. Rex A. Wilcox Pre-Medical Loan Fund
Jack L. Williams, Class of 1932, Memorial Student Loan Fund
Women's Association of Kalamazoo Loan Fund

## Endowed Program Funds

The special funds listed below have been endowed by generous benefactors for a specific purpose or project at Alma College.

Collin Alexander Talent Award in Physics
Collin H. Alexander, Class of 1937, Physics Professorship
William R. Angell Endowed Professorship in Biological Sciences
Barlow Endowment for Faculty Awards
Baseball Endowment Fund
Biology Student Research Fund

Wendell and Charlotte Klein Cole Memorial Fund
Rodkey Craighead Endowment Fund
Communication Studies Endowment Fund
Currie Student Research Fund
Charles A. Dana Professorships
Elma C. and Wesley C. Dykstra Professorship

Arlan L. Edgar Biology Research Fund
Faculty Development Fund
George Gazmararian Endowed Global Experience Program Scholarship
Edwin G. Gemrich Endowed Biology Student Research Fund
Gerstacker Science Endowment
Dr. James H. Hudson Memorial Library Endowment Fund
Johnson Endowed International Institute
Kinney First Amendment Scholarship
Reva Jane Leach Endowment for Gallery
Ellen Baker Lindley Memorial Lectureship
Elizabeth Becker Miner Memorial Fund
Model UN Endowment
Betty E. Morris Endowment for Ballet
Eugene Hamilton Pattison Writing Award
Posey Global Leadership Fellows
Remick Heritage Center Endowment Fund
Revels-Roe Family Endowment Fund
Richard Roeper Endowed Lecture Series
Reid-Knox Endowed Chair of American History
Arthur L. Russell, Class of 1941, Endowed Political Science Professorship
Paul Cameron Russell Endowed Music Professorship
Stephanie and Fred G. Secrest Performing Arts Professorship

Service Learning House Fund
Sherman Leadership Seminars Endowed Fund
Art Smith Alumni Endowed Award
M.J.J. Smith Collaborative Research Program

Dr. Michael J. J. Smith Endowed History Professorship
Student Summer Research Scholarship

Robert D. Swanson Memorial Endowment Fund
Joseph, Class of 1931, and Kathryn Boyd Taylor, Class of 1930, Golden Thistle Awards Program
Rex and Mae Teeters Fellowship
Towsley Professorship
Katherine Ardis Ux Literature Fund
Dr. and Mrs. Elmore C. VonderHeide Fund
Joseph and Catherine Walser Global Service Scholarship
Edward W. Wilke Endowed Percussion Equipment Fund
Larry Wittle Endowed Fund for Collaborative Research
Wright Hall Endowment Fund
Donald J. Yehle Endowed Internship

## Named Facilities

Many of the buildings on the Alma campus, as well as major facilities within buildings, have been named in honor of individuals whose exceptional contributions have been particularly significant in helping the College to fulfill its mission. Facilities have been named for former presidents and faculty members, trustees, alumni and many generous benefactors. Information concerning possibilities for naming buildings on the Alma campus may be obtained from the Vice President for Advancement, Alma College, 614 W. Superior St., Alma, MI 48801-1599, or telephone (989) 463-7081.

Bahlke Field. Mr. and Mrs. William A. Bahlke contributed this tract of about eight acres for use as an athletic field in December 1923. Mr. Bahlke was admitted to the bar and moved to Alma to begin his practice the same year that Alma College was founded, 1886. He was involved in local government and in the organization and operation of several businesses. His wife, Mary E., was a member of the Alma College Board of Trustees from 1920 to 1942.

Louanna Baker Jones Auditorium. This 150 -seat auditorium in Tyler-Van Dusen Campus Center is named in honor of Louanna Baker Jones, Class of 1912, whose generosity has provided facilities and scholarships for Alma students. She never sought recognition, but when she was presented a Founders Day Award at Alma's 90th anniversary convocation in 1976, the power of her example prompted the student body to rise in unison and applaud her.

## Bauervic Educational Media Center and Strosacker Collaborative Learning Center. This

 facility on the third floor of the Swanson Academic Center began with a generous grant from the Charles M. Bauervic Foundation in 1981. A grant from the Charles J. Strosacker Foundation in 2002 made possible purchase of high-end multimedia equipment that has turned the space into the Collaborative Learning laboratory. Now in place are workstations for digital imaging, video and multimedia; a large format color printer; and scanner to scan photographs, film and slides.Beck Courtyard. This courtyard at the center of the Tyler-Van Dusen Campus Center is named in honor of Mr. and Mrs. Lawrence Beck of Harbor Springs and their family. Their leadership and support helped make
possible remodeling the former Tyler Student Center and Van Dusen Commons to provide a new campus center in 1983-84. Mr. Beck, a member of Alma's Board of Trustees and its chair from 1991-94, has served as an executive with Atlas Disposal; Waste Management, Inc.; Chemical Waste Management, Inc.; and Blockbuster Videos.

Flora Kirsch Beck Gallery. Site of exhibitions of work by Alma students and faculty as well as other professional artists, this gallery is at the heart of the Clack Art Center. It is named in honor of Flora Kirsch Beck, a trustee of the College from 1959 to 1992. Mrs. Beck was on the Board simultaneously with her daughter, Judith L. Maze, who became a trustee in 1972 and served as Chair of the Board from 1994 to 1997. Both have contributed much to the improvement of Alma's programs and facilities.

Bonbright Hall. One of four units of South Residence Complex, erected in 1969-70, this hall is named for Carl W. Bonbright of Flint, who was chairman of the Board of Genesee Merchants Bank \& Trust Company and a member of Alma's Board of Trustees for 45 years. Mr. Bonbright replaced his father on the Alma Board in the mid-1920s. He was active in Flint civic and service groups and for 27 years was chairman of the Flint City Planning Commission.

Brazell Hall. This hall in South Residence Complex is named in honor of Reid Brazell, member of the

College's Board of Trustees for 44 years (1942-86) and its chair from 1962 to 1970. Dr. Brazell, who began his oil industry career in Oklahoma in 1927, was for many years the president and chief executive officer of Leonard Refineries in Alma. After this company became a part of Total Petroleum (N.A.), Ltd., his leadership continued for a year until his retirement in 1971.

Bruske Hall. A residence hall constructed in 1966-67, this building is named in honor of August F. Bruske, second president of the College (1891-1912). He was a tireless worker for Alma even before he became president, actually beginning his efforts on behalf of the College prior to its founding. A speaker at his retirement program noted that "for Dr. Bruske to live was Alma. 'This one thing I do,' was his motto. He thought Alma, he talked Alma, he dreamed Alma."

Carey Hall. One of the units of South Residence Complex, Carey Hall is named in honor of Walter F.

Carey, a member of Alma's Board of Trustees for 45 years, from 1952 to 1997. Mr. Carey, of Petoskey, served as president of the Chamber of Commerce of the United States, the American Trucking Association, the Michigan Trucking Association and the National Automobile Transporters, and as chairman of the Defense Advisory Council of the National Defense Transportation Association and the National Safety Council.

Clack Art Center. Originally constructed in 1922-23 as Memorial Gymnasium in memory of the veterans of World War I, this building was converted to an art center in 1970-71. It is named in honor of Dr. and Mrs. Robert Clack and in memory of Mr. and Mrs. Hugh L. Clack and their four children who died in a 1957 airplane crash. A contingency clause in the wills of Mr. and Mrs. Hugh Clack provided nearly a quarter of the funds for the 1970-71 renovation. Robert Clack was a professor and registrar at Alma. Hugh was a member of the Class of 1942, and his wife, Ann, graduated in 1943.

Colina Library Wing. Opened in January 1996, the Colina Library Wing is named in honor of John Colina and his wife, Nancy, of Riverview. Mr. Colina, a member of the Board of Trustees since 1989, served as its Chair from 1997 to 2000. Former Alma Parent Board members, the Colinas have two daughters who are Alma graduates, JoMarie Colina Goerge, Class of 1989, and Lori Colina Lee, Class of 1990. The Colinas generously donated the initial $\$ 1$ million gift for the wing, which adds 8,000 square feet to the Kehrl Building and houses stacks and student study areas. The $\$ 2$ million project included a new computer system for library circulation and remodeling of the main floor of the existing structure. The wing also offers students additional resources through three special rooms. The Olofsson Computer Classroom was named by a gift from Gustav Alex and Patricia Newburg Olofsson '52 of Harbor Springs, Michigan, and Stuart, Florida. On the first floor, the Stephen R. Christner Memorial Study Room was named by a gift from Richard and Michele Christner of Big Rapids in memory of their son Stephen, Class of 1997, who died in April 1995. On the second floor, the John R. Smith Memorial Study Room was named by a gift from Rhea Stinson Smith '25 of Big Rapids in memory of her husband John '28.

Dow Science Center. When built in 1958-59, this was the first new academic facility on the Alma campus in more than 50 years. Funding for the $\$ 1.5$ million building was provided by a grant from the Herbert H . and Grace A. Dow Foundation. Mr. Dow was founder of the Dow Chemical Company in Midland. In the late

1980s the same foundation provided a grant of $\$ 3$ million to make possible extensive renovation of the science center.

Dunning Memorial Chapel. Constructed during the troubled early years of World War II, this chapel is named in honor of Dr. John Wirt Dunning, Class of 1904, the only Alma alumnus to become president of the College (1938-42). Its $\$ 75,000$ cost was met by contributions from Presbyterians. The largest gift was one of $\$ 25,000$ from Adam E. Armstrong of Three Rivers. While an Alma student, Dr. Dunning interrupted his studies for a year to serve as a sports writer in Grand Rapids and Los Angeles. He also was a Presbyterian pastor.

Eddy Music Center. The first campus building to be devoted exclusively to the teaching of music, the facility was erected in 1974-75. Funds for construction were made available from the estate of Mrs. Sara Eddy of Flint, and the building is named in her honor. Mrs. Eddy and her husband, Fred G. Eddy, were members of First Presbyterian Church of Flint and were generous friends of Alma. Both were members of pioneer Michigan lumbering families.

Gelston Hall. Members of Alma's Board of Trustees contributed a third of the cost of this residence hall, which was constructed in 1955-56. Additional gifts were made by the Kresge Foundation and other friends of the College. Presbyterian women's organizations throughout Michigan provided funds for furnishings. The building is named in honor of Mary C. Gelston, Alma's first dean of women and a member of the faculty from the College's opening in 1887 until 1906.

Hamilton Commons. Constructed in 1966-68, this dining facility is named in honor of Roy W. Hamilton, sixth president of the College (1943-46). The composer of Alma's alma mater, Dr. Hamilton came to the College as a professor of English in 1919 after serving in the Army during World War I. Before that he was a pastor. He was Alma's vice president and acting president before being named president. After he left the presidency, he taught English at Alma until his death in 1952.

Heather Room. A gift from Saga Food Services, the Heather Room was added to Van Dusen Commons in the early 1960s. It was operated as a public dining room, serving luncheons and dinners, by Saga Foods (now

Sodexo Food Services) for a 10 -year period until the early 1970s. It is now used for special dining arrangements by both College and community groups.

Herrick Foundation Computer Center. Located in Swanson Academic Center, the offices for Information Technology and the College's computer facilities were dedicated as the Herrick Foundation Computer Center in 1983. The foundation was established in 1949 with Mr. and Mrs. Ray Wesley Herrick as donors. Mr. Herrick was a Ford Motor Company executive and founded the predecessor of Tecumseh Products Company.

Hogan Center. The Hogan Center, built in 1969, was named in May 1999 to honor Romain G. and Helen Kempf Hogan, Alma alumni from the Class of 1928, through a generous gift from their son, James Patrick Hogan of Scottsville, Virginia. This structure provides space for intercollegiate, intramural and recreational athletics, along with a Fitness Center. The three main sections of the building are the Baker Jones Educational Unit, Cappaert Gymnasium and McClure Natatorium.

Baker-Jones Educational Unit. Offices and classrooms of the Hogan Physical Education Center are named in honor of Mr. and Mrs. William J. Baker, Louanna Baker Jones and Harold H. Baker, all of Midland, whose contributions to construct the building in 1969 were made in memory of their parents. William Baker,

Class of 1914, served on Alma's Board of Trustees from 1953 to 1976. Louanna Baker Jones graduated from Alma in 1912.

Cappaert Gymnasium. The site of intercollegiate and intramural athletic contests and of major campus events such as commencement, this facility is named in honor of Mr. and Mrs. F. L. Cappaert of Vicksburg, Mississippi. Their generosity helped to make possible the Physical Education Center. A 1942 graduate, Mr. Cappaert was a varsity athlete at Alma.

McClure Natatorium. This facility for intercollegiate and recreational swimming as well as swimming instruction is a popular feature of the Hogan PE Center. It is named in memory of Harold M. McClure Sr., pioneer Michigan oilman and Alma civic leader. A professional athlete before he entered the oil business in 1919, Mr. McClure at one time was mayor of Alma. Funds for the facility were given by Mrs. Harold M.

McClure Sr., and Mr. and Mrs. Harold M. McClure Jr. of Alma.

Art Smith Arena. Construction on a new gymnasium for the Hogan Center began immediately following commencement in 2008. The estate of long-time Alma residents Arthur L. Smith '38 and Carra Jones Smith ' 42 provided the $\$ 1$ million naming gift. The 29,000-square-foot addition to the Hogan Center provides the new home court for Almaâ $\epsilon^{T M}$ s volleyball and menâ $\epsilon^{T M}$ s and womenâ $\epsilon^{T M_{S}}$ basketball teams. The arena also serves as a primary venue for commencement, convocations, major speakers, concerts and other major campus events. The facility was opened in fall 2010.

Hood Building. The oldest structure on the campus today, Hood Building was originally constructed in 1899-1900 as a museum. During World War I it was a barracks for members of the Student Army Training Corps. Later it was used for instruction of biology and psychology and then for offices. The building was given as a memorial to Francis A. Hood of Saginaw, owner of a barrel manufacturing company, by his widow and his son Frank. The Hood family were members of First Presbyterian Church in Saginaw. In 1975 Hood Building was remodeled for the Admissions Offices by a grant from the Herrick Foundation. The building now houses the Advancement and Marketing and Communications offices.

The Ronald O. Kapp Science Laboratory Center. Opened in September 1990, the Kapp Science

Laboratory Center provides laboratories and state-of-the-art scientific equipment to support the College's programs in chemistry and biochemistry. This building honors Dr. Ronald O. Kapp who served Alma College as biology professor, vice president and provost, friend and mentor for 32 years. Dr. Kapp's encouragement of student participation in scientific research played a large role in the design of the Center.

Kehrl Building. The College's library building is named in honor of Floyd A. Kehrl, a Detroit-area banker and generous benefactor to Alma who left a sizable portion of his estate to the College. In recognition of many gifts from Presbyterians for construction of the building, the library's collections are named in honor of the Reverend Mr. John Monteith, the first Presbyterian minister to reach Michigan in 1816. The Dr. Bernard J. Graham Book Collection was established by his brother Ford M. Graham '32, a trustee of the College from 1969 to 1996, along with family and friends. Dr. Bernard J. Graham '26 was a local physician who frequented the library's reading lounge. The Anderson Reading Area was named in memory of John R. and Kathryn

Berry Anderson '33. The Olofsson Computer Classroom was a gift of Patricia and Al Olofsson, members of the Class of 1952.

Kimball Court. This garden area on the north side of Eddy Music Center is named in honor of Dr. John R. Kimball, who served Alma from 1959 to 1974 as director of admissions, dean of students, vice president for administrative services and professor of education. The court was a gift to the College from Dr. Kimball's many friends after his death in 1974. An Alma graduate, Dr. Kimball was superintendent of schools at Nashville, Michigan, before working for the College.

Kirk in the Hills Religious Life Center. The lower level of the Dunning Memorial Chapel was remodeled in 2002 with a gift from Kirk in the Hills Presbyterian Church of Bloomfield Hills. Located there are meeting rooms and the offices of the Chaplain, Center for Responsible Leadership and Service Learning Program.

Klenk Park. Named for former baseball coach Bill Klenk '59, the baseball park northwest of campus on Charles Road opened in March 2000, and in 2002 the Scotland Yard soccer field was added. The Skinner Room, built in 2003, which houses the Alma College Baseball Hall of Fame, is named after Charlie Skinner ' 39 , former faculty member, player and coach.

McIntyre Center for Exercise and Health Science. Opened in October 1997, this building was named in honor of the McIntyre Foundation of Monroe, Michigan. The 6,500 -square-foot wing was added to the north side of the Hogan Physical Education Center. The McIntyres have been closely associated with Alma College for many years; the central campus mall is named for them. Mr. Charles S. McIntyre, a member of the Board of Trustees from 1952 to 1982, served as chair from 1975 to 1977, and son James T. McIntyre '69 has been a member of the board since 1983. The Colina Human Performance Laboratory, on the wing's north side, is named for JoMarie Colina Goerge, Class of 1989, and Lori Colina Lee, Class of 1990. Dr. Richard '59 and Mrs. Joanne ' 60 Heuschele provided a gift to fund the Cardiovascular Physiology Laboratory. Gilbert A. and Eleanor Currie funded the Human Anatomy Laboratory.

McIntyre Mall. The scenic mall around which Alma's academic buildings are clustered is named in honor of Charles S. and Marion F. McIntyre of Monroe. Mr. McIntyre was a member of the College's Board of

Trustees from 1952 until his death in 1982, chairman of the board of Monroe Auto Equipment Company, and a leader in civic affairs and in the First Presbyterian Church of Monroe. In 2004 the mall was renovated and an obelisk was added that features four important areas of the College's history - the founding resolution by the Presbyterian Synod of Michigan to establish the College, the introduction of the College into the Michigan Intercollegiate Athletic Association in 1902, the alma mater written by Dr. Roy Hamilton in 1922, and a plaque that honors the McIntyre Foundation for its support of the College.

Mitchell Hall. This was the first campus residence to be constructed for men. Earlier men's dormitories, Pioneer and the first Wright halls, were originally built as women's residences and then converted for use by men. It is named in honor of James E. Mitchell, an 1893 graduate who returned to the campus four years later as a professor of history and advocate of student activities. His term of service was longer than that of any other faculty member in Alma's history - 44 years.

Newberry Hall. A women's residence hall constructed in 1961, this building is named in honor of Helen Newberry Joy, who made several gifts to Alma College during her lifetime. After her death, administrators of the Helen Newberry Joy Foundation, which she established, made a gift to the College to make possible construction of this now co-educational residence hall. Her husband, Henry B. Joy, was president of Packard

Motor Car Company.

Nisbet Hall. A part of South Residence Complex, Nisbet Hall is named in honor of Stephen S. Nisbet '19, who served on Alma's Board of Trustees from 1944 until his death in 1986. In 1961-62 he presided over the convention that formulated Michigan's present Constitution. An educator and administrator for many years before becoming an executive with Gerber Products Company in Fremont, he was chairman of the State Board of Education and also served with many other state and local groups.

President's House. The President's House provides an on-campus residence for the president and the president's family. Since 1894, Alma College's presidents had resided in what is now Smith Alumni House. The President's House was built in response to needs of Harry Means Crooks' family. The three-story Georgian (Colonial) structure was built at a cost of $\$ 36,000$ by the Board of Trustees and other friends of the

College. During the 1970s the house was used at various times as a music building, conference center and location of the Admissions and Development offices. When President Oscar Remick became president in 1980, the House was restored for use again as the President's House.

Redman Gate. This red brick marker at the corner of West Superior and Grant streets signals the eastern entrance to the campus. Displaying the College's name and seal, the Redman Gate records the College's appreciation for the leadership and significant financial support of Trustee and Mrs. James E. Redman and the Redman Foundation. It also honors the memory of Clara and Harold Redman, James Redman's parents. James Redman served on Alma's Board of Trustees from 1969 until his death in 2004.

Reid-Knox Administration Building. This building was given by Mrs. Annie Reid-Knox as a memorial to her husband, W. Franklin "Frank" Knox, both Alma alumni. Frank Knox came to Alma in 1893 at the suggestion of a Presbyterian pastor, and he left in 1898 to join Teddy Roosevelt's Rough Riders. After the Spanish-American War, he began a career in journalism. He was editor and publisher of The Chicago Daily News when he became the Republican candidate for vice president in 1936. During World War II he was secretary of the Navy. The building's largest room, the Reid-Knox Memorial Room, is a replica of the Knox's living room in Manchester, New Hampshire.

Oscar E. Remick Heritage Center for the Performing Arts. Opened in October 1993, the Remick Heritage Center supports the College's programs in dance, music and theatre. Through its performance hall, theatre, dance studio and supporting facilities, the Remick Heritage Center provides a comfortable setting for applied studies, rehearsals and performances. The initial $\$ 2$ million gift for the project from the Lawrence Beck family of Harbor Springs was supplemented by the donations of nearly 3,000 other contributors. Beck, a member of the Board of Trustees since 1981, and its chair from 1991 to 1994, named the building to honor his parents, immigrants from Denmark, and all other immigrants throughout the nation's history. Through fund-raising efforts of Michigan Presbyterian churches, the concert hall was named Presbyterian Hall in June 1994. In 2003 the Heritage Center was renamed the Oscar E. Remick Heritage Center for the Performing Arts in memory of the College's 10th president (1980-87), who died in 2002. In recognition of a gift that provided for facility upgrades and equipment enhancements in 2007, the theatre was named The Charles J. Strosacker
roundation I heatre.

Smith Alumni House. Renovated in 1999, the Smith Alumni House is across from Dunning Memorial Chapel at the corner of Philadelphia and Superior streets. Coach Arthur L. Smith '38 and Carra Jones Smith ' 42 provided the naming gift for the renovation. The Board of Trustees purchased the property from Dr. August Bruske, Alma's second president, in 1917. The house was known as Kirk International Center from 1982 to 1999 and was named after Dr. Florence A. Kirk, professor of English from 1954 to 1967. As headquarters for the Alumni Relations Office, it has space for Alumni Board meetings and receptions, and houses displays of memorabilia and guest rooms for visiting alumni.

Jerry G. Smith Atrium. The atrium, located on the second floor of the Swanson Academic Center, is named for Dr. Jerry G. Smith '65. Dr. Smith was Alma's first Africa Fellow (later the Jerry G. Smith Global Service Fellow) in 1963 and was the recipient of the Barlow Trophy in 1965. The Global Service Program annually provides one or more Alma students with the opportunity to have a teaching internship in a developing area such as Africa or India. In memory of Jerry G. Smith, following his death in 1972, gifts from members of his family and friends provided a bronze memorial sculpture by Glen Michaels for the atrium.

## Alan J. Stone Center for Recreation. Named after Alma College's 11th president, Alan J. Stone (1988-

2000), this 53,000 -square-foot facility houses four courts and a suspended three-lane track. Each court has tennis, basketball and volleyball lines, and one of the courts is designed for in-line hockey and indoor soccer. The Center, which opened in 2001, also includes a spacious fitness room, a climbing wall, and a multipurpose room.

Strosacker Library Expansion. In 1986, a major gift from the Charles J. Strosacker Foundation of Midland made possible an expansion of the Kehrl Building. The Special Collections Room and Archives of the Strosacker Library Expansion were named in honor of former head librarian Helen MacCurdy '36, who served on the library staff from 1950 to 1979.

Swanson Academic Center. The College's main classroom and faculty office building, Swanson Academic Center is named in honor of President Emeritus Robert D. Swanson (1956-80) and his first wife,

Roberta B. Two-thirds of the present campus buildings were constructed during President Swanson's administration. With assistance of a $\$ 500,000$ grant from the Kresge Foundation, construction of Swanson Academic Center began in 1972 and was completed by Winter Term 1974.

Tyler-Van Dusen Campus Center. Originally two separate buildings that were constructed in the early 1950 s, this campus center is the result of a 1983-84 renovation project funded by a $\$ 200,000$ grant from the Kresge Foundation and gifts from other friends of the College. Dr. and Mrs. Leon Tyler of Niles gave $\$ 200,000$ for construction of one of the original buildings in memory of their son Jerry and his family, who died in the LaSalle Hotel fire in Chicago in 1946. Mr. and Mrs. Charles Van Dusen of Detroit gave \$250,000 for the other original structure.

Wilcox Medical Center. This building was constructed in 1969 to provide temporary office space for faculty who were displaced by a fire that leveled the College's principal classroom and faculty office facility. When a new academic center was completed in 1974, a gift from Dr. and Mrs. Rex A. Wilcox of Alma made possible conversion of part of the structure as a medical center. It also is used for College mailing and copy operations. Dr. Wilcox was a member of the Board of Trustees and physician for College athletic teams.

Wright Hall. Named for and built on the site of one of the College's first residence halls, Wright Hall is a
model of environmental sustainability. The newest residence hall balances the heritage of old Wright Hall with the needs of today's students. Opened for residency at the start of Winter Term 2005, the new building is designed for 60 students in double and single rooms equipped with private baths, living rooms and kitchens. Designed to be more like apartments than dorm rooms, the building includes suites and apartments conducive to the "family" atmosphere Alma College projects. The building has rooms set aside for student collaboration and game rooms. Keeping with the commons theme envisioned in the College's strategic plan, a Commons Area provides a venue for social activities and a place for student poets, musicians, actors and artists to showcase their talents. Alumni's fond memories of the first Wright Hall provided the financial impetus for the name and construction.

