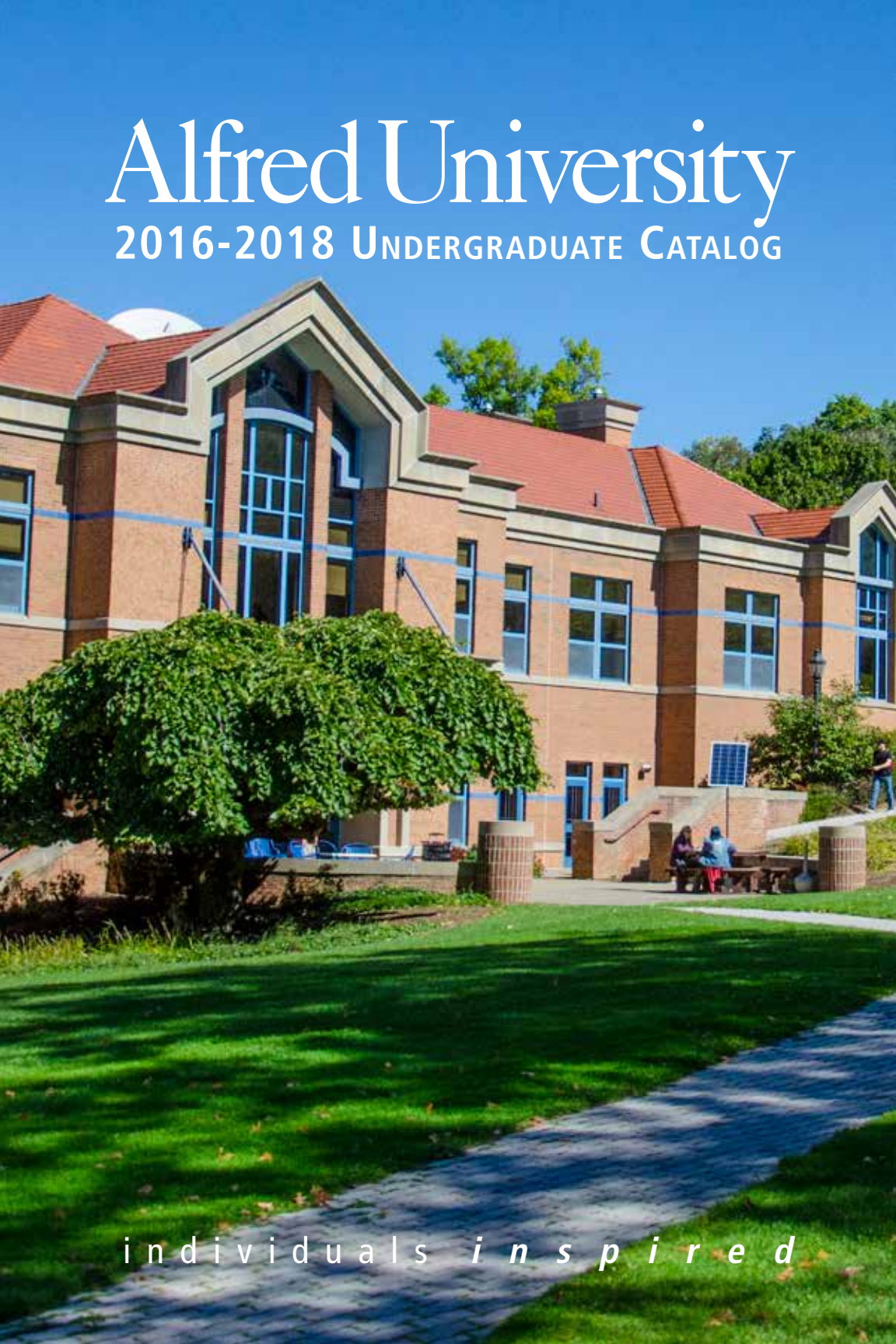
Alfred University

2016-2018 Undergraduate Catalog



individuals *inspired*

Table of Contents

Alfred University at a Glance

Accreditation
Middle States Commission on Higher Education
New York State Board of Regents
Accreditation Board of Engineering and Technology
Commission on Accreditation of Athletic Training Education
National Association of Schools of Art and Design
American Chemical Society
Association to Advance Collegiate Schools of Business
Teacher Education Accreditation Council,
American Psychological Association
National Association of School Psychologists
Commission on Accreditation of Counseling and Related Educational Programs

Academic Calendar
Two semesters, a Winter Term (Allen Term) and a Summer Term

Faculty (Full-time) 141
Doctorates or terminal degrees in their discipline: 86%
Faculty/student ratio: 1:12
Average class size: 18 students

College of Liberal Arts and Sciences
Offers the B.A. or B.S. degree with majors in:
- Biology
- Chemistry
- Communication Studies
- Comparative Cultures
- Criminal Justice Studies
- English
- Environmental Studies
- Foreign Language and Culture Studies
- General Science
- Geology
- Gerontology
- Global Studies
- History
- Individually Structured Major
- Interdepartmental Major
- Interdisciplinary Art
- Mathematics
- Math with Actuarial Science
- Philosophy
- Physics
- Political Science
- Psychology
- Sociology
- Spanish
- Theatre

Offers 41 minors
Pre-Professional advising available for Art Therapy, Law, Medicine and other Health Professions

College of Professional Studies
Offers the B.S. degree with majors in
- Athletic Training
- Accounting
- Early Childhood/ Childhood Education
- Finance
- Marketing
- Business Administration

NY State College of Ceramics
School of Art and Design
Offers the B.F.A. degree
Offers the B.S. degree with major in Art History and Theory

Kazuo Inamori School of Engineering
Offers the B.S. degree with majors in:
- Biomaterials Engineering
- Ceramic Engineering
- Glass Engineering Science
- Materials Science and Engineering
- Mechanical Engineering
- Renewable Energy Engineering

Graduation Requirements
- 120 to 133 semester hours
- Complete a major
- Global Perspective requirement
- PE requirement
- Cumulative GPA 2.0 or better
- Minimum of 45 semester credit hours earned at AU
- Final 30 credit hours in residence

Double-degree Program
Students may earn two baccalaureate degrees to be awarded simultaneously when the two degree programs are offered within the School of Art and Design (B.S. and B.F.A.) or when the two programs are offered by two distinct AU Colleges/Schools.

The Graduate School
Offers Master's Degrees and Doctoral degree programs (see Graduate School Catalog)

Facilities and Equipment
Arthur and Lea Powell Campus Center
A 60,000 sq. ft. center for students, faculty, staff, and community; one of the finest centers for academic and social activities of its kind.

John L. Stull Observatory
Six domes house a 9 inch refractor, reflectors of 14, 16, 20, and 32 inch apertures (the 32 inch is computer-controlled), two solar telescopes and two commercial 8 inch telescopes.

Art Galleries
Museum of Ceramic Art
Fosdick-Nelson Gallery
Robert Turner Student Gallery

Miller Theatre
A 31,000 sq. ft. facility with a 498-seat proscenium theater as the centerpiece

Libraries
- Herrick Memorial Library
- Scholes Library of Ceramics

Technology
500 Mbps connection to the Internet with a gigabit wired network and a wireless network in all academic, residential, and administrative buildings.
The University also maintains a secure, on-campus, climate-controlled data center backed up by an emergency power source. General and specialized computing labs are located throughout the campus.

Extracurricular Activities and Organizations
Over 75 special interest clubs
Family Weekend
Homecoming Weekend
Hot Dog Day
Student Senate
16 honor societies
Intramural and club sports
Comedy troupes
Campus media (yearbook, newspaper, radio and TV)
Student productions in theatre, dance and music
Music ensembles
Professional and student art exhibits

Athletic Facilities
75' long, 6-lane pool, 13' deep diving "L" with one- and three-meter boards
Basketball, volleyball, handball, racquet ball, tennis, badminton, and squash courts
Football, softball, soccer, lacrosse fields, including multipurpose artificial surface for intercollegiate sports, recreational, and intramural use
Daggett Equestrian Center
Gibbs Fitness Center
Harrington Softball Park and Practice Field
The Health/Wellness Center, a 33,000-square-foot addition to McLane Center

Intercollegiate Sports (NCAA Division III)

Basketball	M/W
Cross Country	M/W
Equestrian-English	Co-ed
Equestrian-Western	Co-ed
Football	M
Lacrosse	M/W
Skiing	M/W
Soccer	M/W
Softball	W
Swimming/Diving	M/W
Tennis	M/W
Track & Field	M/W
Volleyball	W

Housing Information
Six semesters of on-campus residence requirement for entering freshmen
Co-ed residence halls
Some single rooms available
Pine Hill suites
Ford Street apartments (on-campus apartments)
Common Interest Housing

Services
Airport and bus station shuttle
Career Development Center
Financial Aid Office
Peer tutoring
Peer mentor program
Residence Life
Services for students with disabilities
Shortline Bus service to New Jersey and New York City
Student Service Center (Registrar and Student Accounts Office)
Tutoring Assistance
Wellness Center (Counseling and Health Services)

Admissions Information
Application Deadlines
Freshman Applicants
Early Decision for Fall enrollment by **December 1**
Regular Fall enrollment priority deadline: **February 1**
Applications for Spring enrollment by **December 1** (no January enrollment of first-years in Art and Design)

Transfer Applicants
Fall enrollment by **August 1;**
Spring enrollment by **December 1**

Portfolio Deadlines for School of Art & Design Applicants:
Fall Semester Early Decision by **December 1; February 1** for Regular Decision; **March 1** for Fall transfer applicants; **November 15** for Spring transfers

Expenses
Non-Statutory units:
- College of Liberal Arts and Sciences, and
- College of Professional Studies
  Tuition: $30,100
- Inamori School of Engineering: Renewable Energy, Mechanical & Undecided Engineering:
  Tuition: $24,370

Student Service Fee $ 970
Room & Board (avg): $12,196
Statutory unit:
- New York State College of Ceramics (School of Art & Design and Inamori School of Engineering -- all majors except Mechanical, Renewable Energy, and Undecided Engineering

New York State Residents
Tuition $17,720
Student Service Fee $ 970
Room & Board (avg): $12,196
Out-of-State Residents
Tuition: $24,370
Student Service Fee $ 970
Room & Board (avg): $11,960

Financial Aid
90% of all undergraduates receive some type of financial assistance: university, federal, state, and private.

Pioneer Seventh Day Baptists who had settled in the foothills of the Allegheny Mountains founded Alfred University as a select school in 1836. Alfred became the first coeducational institution in New York State and the second in the nation. About 2,000 full-time undergraduate and 300 graduate students work and live in 52 buildings on a scenic 232-acre hillside campus adjoining the village of Alfred. Another 400 acres of recreational land is just minutes away.

The nonsectarian University is comprised of the privately endowed College of Professional Studies, the College of Liberal Arts and Sciences, and the New York State College of Ceramics (Kazuo Inamori School of Engineering and School of Art and Design). Bachelors, masters and doctoral degrees are awarded as the culmination of Alfred University's academic and professional programs.

Vision and Mission

Vision

Alfred University will be an innovative leader in the delivery of academic excellence and enduring educational value, preparing all students for success in their studies and throughout life.

Mission

The mission of Alfred University is to provide excellent quality and enduring value through academic and co-curricular programing that is both intellectually challenging and practically relevant. We are culturally diverse and student-centered, and aim to serve an ever changing student population. We seek students with the aspiration and dedication to do well for themselves and for their greater communities. Thus, we prepare our students with the knowledge, skills and life-habits that will enable them to succeed, and to live lives of continuous personal growth and service to others. These outcomes are achieved through a commitment, by the entire AU community, to teaching and research, the pursuit of scientific and technical expertise, artistic creativity, and humanistic learning.

Policy for Applicants

Alfred University seeks talented, motivated students, nationally and internationally, of diverse cultural, ethnic, and economic backgrounds, who will contribute to the campus learning community, with particular attention to students who will pursue intellectual and cultural achievements consistent with the University mission.

The mission of Alfred University is to provide excellent quality and enduring value through academic and co-curricular programing that is both intellectually challenging and practically relevant. We are culturally diverse and student-centered, and aim to serve an ever changing student population. We seek students with the aspiration and dedication to do well for themselves and for their greater communities. Thus, we prepare our students with the knowledge, skills and life-habits that will enable them to succeed, and to live lives of continuous personal growth and service to others. These outcomes are achieved through a commitment, by the entire AU community, to teaching and research, the pursuit of scientific and technical expertise, artistic creativity, and humanistic learning.

In reviewing applications, the Committee on Admissions considers the following factors most important:

- Rigor of high school or preparatory curriculum
- Grades
- Standardized test results, including the ACT or the SAT
- Extracurricular involvement
- Letters of recommendation
- Essay
- Interview/demonstrated interest

Individualized attention is given to every applicant.

Freshman Requirements

Academic Preparation

Students will be considered for admission if they are secondary school graduates in a college preparatory program, or when they submit evidence of having completed an equivalent degree of education. The secondary school program should include a minimum of 16 academic units. Each academic division of the University suggests a different distribution of the academic units, as follows:

College of Liberal Arts and Sciences

- 4 units of English
- 3-4 units of social studies and history
- 2-3 units of college preparatory mathematics
- 2 units of laboratory science (biology, chemistry, and physics)
  The remainder of the 16 academic units should be earned within the fields listed or in a foreign language.

College of Professional Studies

- 4 units of English
- 3-4 units of social studies and history
- 3-4 units of college preparatory mathematics
- 2-3 units of laboratory science
  The remainder of the 16 academic units should be earned within the fields listed above, in a foreign language, or in business courses.

School of Art and Design

- 4 units of English
- 3-4 units of social studies and history
- 2 units of college preparatory mathematics preferred
- 2 units of laboratory science
- Portfolio (see below)

The remainder of the 16 academic units should be earned within the fields listed above, in a foreign language, or in art courses.

Inamori School of Engineering

- 4 units of English
- 4 units of college preparatory mathematics preferred (algebra I and II, geometry, pre-calculus and/or calculus)
- 3 units of laboratory science (biology, chemistry, and physics preferred)
- 2-3 units of social studies and history

  The remainder of the 16 academic units should be earned within the fields listed above, in a foreign language, or computer science.

Procedures for Freshman Applicants

Applicants should submit the following items when applying for admission:

- Application for Admission along with a $50 non-refundable fee or a fee waiver certificate
- An official high school transcript which includes all academic work to date
- At least one letter of recommendation (guidance counselor, teacher, principal, headmaster, etc.)
- Essay
- Results from ACT or SAT tests
- School of Art & Design applicants please refer to the School of Art and Design Portfolio Requirements section

Forward all items to:

Office of Admissions
Alfred University
One Saxon Drive, Alumni Hall
Alfred, New York 14802

In addition, all applicants are strongly encouraged to visit the campus. To schedule an appointment, contact the Office of Admissions (800-541-9229 or campusvisits@alfred.edu) at least two weeks prior to the visit. During a campus visit, a student can take a campus tour, have an admissions interview, meet with a financial aid counselor, attend a class, meet with a faculty member, and/or meet with a coach. Specialized tours are available for the School of Art and Design and the Inamori School of Engineering.

Application Deadlines

- December 1 - Early decision for fall enrollment.
- February 1 - Priority deadline for regular fall enrollment. This includes the portfolio deadline for Art & Design.
- December 1 - Deadline for spring enrollment. (Freshman applications for spring enrollment are not accepted from students wishing to major in Art & Design.)

School of Art and Design Portfolio Requirements

You are strongly encouraged to submit the required portfolio electronically through our SlideRoom portal: alfred.slidroom.com. Your portfolio should include 15 to 20 samples of work, 4 of which should be drawing from direct observation. You may upload images (jpg), video (mov, wmv, flv), music (mp3) or .pdf files.

For good image quality and fast upload, image files should be sized with a maximum dimension of 1024 px @ 72 dpi. Please keep video files under 60 MB each.

There is a nominal non-refundable fee for this service and an email address is required to register. SlideRoom's online portal offers additional instructions for submitting your work. If you need technical assistance, please email support@slideroom.com.

The deadline for early decision is December 1. The deadline for regular admission is February 1. Dates for submitting transfer student portfolios vary and are outlined in the following Transfer Admissions section.

Freshman Applicant Options

Early Decision

The early decision admission option offers applicants, whose first choice is Alfred University, the opportunity to apply for the fall semester by December 1 and receive a decision by December 15. Accepted early decision candidates are expected to withdraw their applications from all other post-secondary institutions. Early decision applicants should:

- Submit the application for admission and $50 fee or application fee waiver certificate to the Office of Admissions by December 1, checking the Early Decision box on the application.
- Ask the high school guidance office to submit an official academic transcript with ACT or SAT scores and a letter of recommendations to the Office of Admissions by December 1.
- Submit an Early Decision Agreement (requires multiple signatures) and an essay by December 1.
- School of Art & Design applicants please refer to the School of Art and Design Portfolio Requirements section

Final acceptance is contingent upon successful completion of the senior year. Early decision applicants who are not accepted may be deferred to regular decision and reviewed by mid-March for the fall semester. For early decisions candidates, a $300 non-refundable deposit is due by January 15.

Financial aid applicants must submit the deposit within ten days of receiving a financial aid award letter; however, financial aid forms must be submitted in accordance with the early decision application deadline.

Deferred Admission

Alfred University understands that some students may benefit by postponing entrance for a year. To defer admission:

- Follow the application procedures for regular admission, including paying the enrollment deposit.
- Notify the Office of Admissions by August 1 of the intention to delay entering the University.
- Notify the Office of Admissions in writing at least three months before planning to enroll.

Should the one-year deferment period lapse without written notification, the $300 deposit will automatically be forfeited. A deferral student who enrolls at another college sacrifices the deposit and relinquishes his/her place in the freshman class. Such students may reapply as transfer students and, if accepted, will have the previous deposit applied toward first semester tuition charges.

Common Application

Alfred University is a member of the Common Application and only accepts applications through Common Application for undergraduate admission. Common Application forms are available at high school guidance offices or on-line at commonapp.org.

Notification of Freshman Applicants

Notification for Early Decision applicants begins in November and continues on a rolling basis until December 15 for all on-time applications. Notification for Regular Decision applicants begins in late November and continues on a rolling basis.

When the Office of Admissions receives the final secondary school transcript, an acceptance becomes final. Applicants must also fulfill any specific requirements set by the Committee on Admissions.

A $300 deposit for fall semester enrollment is due by May 1, or within two weeks of admission notification for those accepted after May 1. Students enrolling in January should submit the deposit by December 15, or within two weeks of acceptance if notified after December 15.

Of the $300 deposit, $100 is credited toward matriculated students' first semester charges, and $200 is held throughout a student's enrollment. This is returned, less any unpaid University charges, after graduation or withdrawal (if done in accordance with established procedures). The $300 deposit is non-refundable to those who choose not to attend Alfred University.

Transfer Requirements

Applicants who are attending or have attended a junior or senior institution will be considered for admission if they meet the following criteria:

- Completed/Attempted credit hours at an accredited college or university
- Achieved a cumulative GPA of at least 2.5 on a 4.0 scale
- Demonstrated good social standing at the previous institution

The applicant's most recent academic performance is the primary consideration in transfer application review. Transfer candidates with GPA's below 2.5 but above 2.0 may be considered for admission; however, a personal interview with an admissions counselor is recommended and a specific essay is required.

The essay should discuss why the student's academic performance has been inconsistent with ability and why the student expects to achieve greater success at Alfred University. Additional faculty recommendations are also encouraged.

Transfer applicants should submit the following credentials:

- Application for transfer admission along with a $50 non- refundable fee or a fee waiver certificate. The deadline for the fall semester is August 1 and the spring is December 1. (Please refer to Transfer Art Applicants for application and portfolio deadlines.)
- Official transcripts from all colleges and universities previously attended
- An official high school transcript
- At least one letter of recommendation from a faculty member at the institution from which the student is transferring. If a faculty recommendation cannot be obtained, recommendations may also be submitted by professional members of the student's community who are not relatives and who can serve as valid references.
- Essay
- School of Art & Design applicants please refer to the School of Art and Design Portfolio Requirements section in the Freshman Applicant Procedures
- International transfer applicants should refer to the International Student Policies and Procedures.

Final acceptance is contingent upon the student successfully completing his/her current academic program and paying the required $300 deposit.

Transfer Art Applicants

Please refer to the School of Art and Design Portfolio Requirements section in the Freshman Applicant Procedures for specific portfolio requirements.

In addition, please note the following:

Fall transfer art applicants with 24 or fewer studio credit hours should follow freshman application deadlines (see previous section). Other transfers interested in fall acceptance should apply by March 1 for maximum consideration. After March 1, transfer applicants will be considered depending on availability of space in specific media areas.

Spring transfer art applicants should submit their portfolios by November 15. Applicants will be notified of the admissions decision by December 1, and portfolios will be returned on or before that date. Transfer art students accepted and placed at the freshman studio level may not enter in the spring semester; they must begin the Freshman Foundation program in the fall semester.

In order for a portfolio to be reviewed, a transfer student must have previously submitted a transfer application with essay, fee, college and high school transcripts, and letter(s) of recommendation to the Office of Admissions.

Notification of Transfer Applicants

Decisions will be mailed on a rolling basis, usually within two weeks after the application is completed. Initial acceptance becomes final only after the University is notified that current course work is successfully completed. Transfer applicants must also fulfill any specific requirements set by the Committee on Admissions.

For students who are accepted for the fall semester, a $300 deposit is due no later than May 1, or within two weeks of acceptance if notified after May 1. For students who are accepted for the spring semester, the deposit is due no later than January 1, or within two weeks of acceptance if notified after January 1.

Of the $300 deposit, $100 is credited toward matriculated students' first semester charges, and $200 is held throughout a student's enrollment. This is returned, less any unpaid University charges, after graduation or withdrawal (if done in accordance with established procedures). The $300 deposit is non-refundable to those who choose not to attend Alfred University.

Transfer of Credits

It is Alfred University policy to provide transfer students with the greatest possible recognition of their previous college work while maintaining the integrity of its own academic programs. . Please note the maximum number of semester credit hours transferable toward any Alfred University degree program from all sources combined is 75. See the Academics section of the catalog for the University's detailed policy on transfer of credit

International Student Policies and Procedures

Alfred University welcomes applications from qualified international students. The procedures listed below are necessarily strict in order to protect the University's visa-granting privileges. All international students (degree candidates and special students) must conform to the procedures and deadlines.

An international student wishing to matriculate must submit:

- A completed International Student Application Form by:
  Fall Semester - March 15
  Spring Semester - October 15
- The $50 (non-refundable) application fee.
- Original or certified copies of all secondary transcripts showing proof of graduation and a certified English translation of those records

- A letter of recommendation from your instructor, teacher, school counselor, or principal.
- Art and Design applicants are required to submit a portfolio (see the freshman or transfer section on portfolio submission).
- Proof of English Proficiency:
  Student's whose native language is not English must show evidence of English proficiency. Please submit your official results for the Test of English as a Foreign Language (TOEFL) or International English Language Test System (IELTS).
- Standardized Tests:
  All undergraduate international applicants are required to submit official scores from the SAT, ACT or TOEFL examinations. International Applicants must take either the SAT or ACT examinations in order to be considered for any merit based scholarships through the Office of Admissions.

Transfer Students:

Students who have completed any post-secondary studies must also submit:

- Original or certified copies of all Post-Secondary studies
- A certified English translation of those records
- Official evaluation of those classes by either the World Evaluation Services organization (www.wes.org) or Education Evaluation International (www.educei.com).

International students transferring to Alfred University from another U.S. college or university must verify that they are in status. Please have your current International Student Advisor complete an Alfred University Transfer Form and fax it to (607)871-2198.

- Required Essay for International Students
  Please provide a written statement that describes any personal experiences or circumstances that have affected your educational performance and/or personal development. Choose from the following essay topics:
  1) Write an article about yourself that would appear in your local newspaper. Be sure to include a headline.
  2) Briefly, why do you feel Alfred University is a good match for your academic and personal goals?
  3) Build a web-page on the Internet and give us the address. As part of the review process for your application, the Admissions Committee will explore your web site. This essay option must also include a paragraph (submitted with your application for admission) sharing your creative process as you designed the web page.
  4) Media and technology have had a significant impact on today's society. How have your ideals, experiences or goals been shaped by these influences? Write this in light of your relationships with others such as parents, friends, etc.

  Applicants to the School of Art and Design: Please respond to the following question in addition to OR in place of the above essay choices:

  Over the past several years, how has your art transformed you and how have your artistic motivations and inspirations changed?

- Evidence of Financial Support
  The Department of Homeland Security requires Alfred University to verify that a student planning to study in the United States on an F-1 or J-1 visa provide financial evidence documenting sufficient funds for their student careers. To verify evidence of financial support, please submit the following:
  1) Alfred University Financial Statement with an official stamp from a notary or bank. This form must be completed by the student's sponsor.
  2) An official letter from your sponsor's bank indicating sufficient funds (translated into English) or an official award from your government or other sponsoring organization indicating the terms of support.

- Upon acceptance submit your $300 (non-refundable) enrollment deposit by:
  May 1 - Fall Semester
  November 15 - Spring Semester

After the enrollment deposit is received, Alfred University will prepare an I-20 to be sent to your mailing address listed on the application. An I-20 is required to apply for a student visa at the nearest U.S. Embassy or Consulate in your home country.

Special Programs

Arthur O. Eve Opportunity Programs:
Educational Opportunity Program (EOP); Higher Education Opportunity Program (HEOP)

Opportunity programs enable students whose economic and educational circumstances have placed limitations on their opportunities to further their education. To qualify for admission, students must be New York State residents, demonstrate the potential to succeed academically and socially, and demonstrate financial need as dictated by New York State guidelines.

Opportunity Programs provide support services, including tutoring and regular academic, personal, financial and career counseling to students throughout their enrollment at Alfred University.

Students accepted into the Opportunity Programs at Alfred University are required to participate in a Pre-Freshman Summer Program. This program is designed to assist students in gaining an understanding of the demands and challenges that come with college enrollment and introduce them to the University campus and its surrounding communities.

The Summer Program includes courses in reading, writing, mathematics, introduction to sociology, computer literacy, and student success strategies. Instruction is provided in these areas to enhance proficiency in the basic skills necessary to be successful in college. HEOP (Higher Education Opportunity Program) is a partnership between Alfred University and the New York State Education Department and is intended for private colleges and universities. EOP is a sister program for public institutions within the SUNY system. Alfred University has both programs because of our affiliation with SUNY.

Non-Degree (Special) Students

Individuals who wish to attend Alfred University as special students should contact the Student Service Center about course registration. Non-degree students need not apply to the Admissions Office. Since these students are seeking educational enrichment at Alfred University rather than a college degree, they are not eligible to receive financial aid.

Reserve Officers Training Corps (ROTC)

Alfred University students may enroll in the Army ROTC program in cooperation with the Seneca Battalion at St. Bonaventure University. This program leads to a commission as a second lieutenant in either the active Army, U.S. Army Reserve, or the U.S. Army National Guard.

The program is structured in two separate phases: a basic course for freshmen and sophomores and an advanced course for juniors and seniors. With the exception of ROTC scholarship recipients, students may enroll in the basic course without incurring any military obligation. Alfred University does not award credit toward degree completion for military science courses, but records them on the AU transcript.

Admission of Veterans and Service Personnel

Alfred University values service to our country; service personnel are encouraged to apply for admission by contacting the Office of Admissions for further information.

Readmission

A student whose study at Alfred University has been interrupted through voluntary or involuntary withdrawal from the University and who wishes to return must:

- Complete the Application for Readmission by August 1 for fall enrollment or December 1 for spring enrollment
- Submit a $50 non-refundable application fee
- Submit a brief statement indicating why you wish to return to AU

Please make arrangements for the following materials to be sent directly to the Admissions Office by August 1, for fall enrollment or December 1, for spring enrollment:

- Official transcripts of college work taken at other institutions since attending AU (if applicable); Art & Design students must submit an updated portfolio consisting of 15-20 examples of recent work.
- A readmission form from the Office of Student Affairs (contact Student Affairs at 607.871.2132 to have the form sent to the Admissions Office on your behalf).
- A readmission clearance form from the Student Service Center (contact the Student Service Center at 607.871.2123 to have the form sent to the Admissions Office on your behalf).
- At least one letter of recommendation from an employer (if employed since leaving AU) or from a faculty member (can be an AU faculty member or a faculty member from an institution attended while not enrolled at AU).
- For HEOP/EOP students only, a readmission recommendation from the Director of Opportunity Programs.

Please note: Before reaching a readmission decision, the Admissions Office will request a statement of support from the Dean of the College or School to which you are reapplying.

Additionally, if you are seeking financial aid, you will need to file the FAFSA (Free Application for Federal Student Aid) and the Alfred University Financial Aid Application by the deadlines listed above. The AU aid application can be found online at: http://www.alfred.edu/finaid/.

Involuntary Withdrawal of Acceptance

Alfred University reserves the right to withdraw acceptance of any prospective student prior to matriculation who engages in or has engaged in any activities, academic, social or financial, that are considered to be violations of accepted standards of conduct. This includes, but is not limited to, any penal laws.

Tuition, Expenses, and Financial Aid

Tuition, Room and Board 2016-2017

Tuition*:
Alfred University is a private institution. However, some of our academic programs receive support from New York State resulting in individual programs with different tuition structures. Stated below is Alfred University's tuition structure by individual programs, and where applicable, by NY State residency status, for the 2016-2017 academic year.

College of Liberal Arts and Sciences and College of Professional Studies	$30,100
Mechanical, Renewable Energy, and Undecided Engineering	$24,370
School of Art and Design, Biomaterials Engineering, Ceramic Engineering, Glass Engineering Science, and Materials Science and Engineering	
New York State Residents	$17,720
Non-NY State Residents	$24,370
Student Service Fee:	$970 per year
Average Room and Meal Plan*** (on campus):**	$12,196

*** Tuition rates are subject to annual increases.**

**** Room cost used above is $6,140 for double occupancy. A limited number of single rooms are also available at $6,770 per year. These rates are subject to annual increases.**

***** Meal Plan cost used above is $6,056 for a King Alfred Plan (Unlimited dining in Ade Hall plus additional meal options on campus.) There are flexible meal plan options to choose from. Rates are subject to annual increases.**

The above figures do not include costs for books and supplies. The rates listed apply only to the 2016-2017 academic year. Rates for 2017-2018 are subject to increases.

The tuition and fees provide for academic instruction, University services and student activities. Services include use of the Campus Health Center, Career Development Center, Counseling and Wellness Center, Gibbs Fitness Center, and attendance at cultural programs. Activities include WALF (student radio station), Fiat Lux (student newspaper), Kanakadea (student yearbook), all student organizations, and some dances and concerts. Services also include use of all technology and library resources available to the campus population.

Room and board charges are only applicable when school is in session. Residence halls are closed and campus food service is not available for the scheduled vacation periods during the academic year. Students are responsible for their own linen service and telephone. All University charges are subject to change without notice.

Other Fees & Expenses

The $50 application fee has been discussed as part of the admissions procedure. The $300 acceptance deposit required of all students matriculating as degree candidates is non-refundable to those who do not attend the University. For those who attend, $200 is held as a deposit as long as the student is enrolled. The remaining $100 is credited against the University tuition for the first semester. The $200 is returned, less any unpaid charges, after graduation or following the student's formal withdrawal, if done according to the official procedures. Students who do not notify the University before the semester begins that they will not be returning, forfeit their advance deposit.

Undergraduate students registered for twelve to eighteen credit hours (twelve to twenty credit hours for engineers) inclusive, are considered full-time students for billing purposes. Students who are registered for credits in excess of eighteen (twenty for engineers) are billed at a part-time instruction rate for the extra credits. The overload tuition rate is 1.5 times the normal tuition rate per credit. There are a few courses exempt from overload charges, such as select music or theatre performance courses that might be of interest to some students. All students registered for less than 12 credits are billed at a part-time instruction rate. The part-time instruction rate is $960 per credit hour for 2016-2017.

All registered students are expected to carry health insurance. Proof of student health insurance must be provided, prior to their arrival on campus, by all international students and all students that are participating in an intercollegiate sports team. For the student that needs coverage, the University does offer a Student Health Insurance Plan through a private carrier. The yearly coverage runs from August 2016 through August 2017 and the premium is subject to annual change.

All students with motor vehicles must register with the Director of Safety and obtain a parking permit. Parking Registration may be paid on-line or through the student account.

Additional charges are added to those students registered in courses requiring special materials (e.g. studio art courses, lab equipment, etc.) or individual instruction (e.g. private music lessons, equestrian fees, etc.). These charges will vary and are projected to be from $15 to $150 per credit hour or $5 to $125 per course. Private music lesson fees are projected to be $300 per credit hour, while Equestrian fees are projected to be $125 to $250 per course. Course associated fees (except for private music lessons) are refunded on the same percentage schedule as tuition. Refunds are not given for private music lessons after the second lesson.

Students who sign a housing contract for the academic year and break the contract by not attending Alfred University, by withdrawing from the University, or by moving off-campus, are responsible for a contract cancellation fee as specified by the housing/dining contract.

If a student with a signed contract withdraws from the University prior to the start of the semester a $100 breakage fee is assessed. If the withdrawal is after the semester begins, the fee is $100 plus a percentage of the room rent prorated based on the point of withdrawal within the semester. For refund purposes, the weeks end on Saturday beginning with the first week of classes.

For continuing students, a $500 housing contract cancellation fee is charged for off-campus after June 1st or $500 plus a prorated amount of the room rent after the semester begins.

Students who withdraw or take a leave of absence after the semester begins or otherwise drop the board plan will be charged $100 plus a prorated amount of the balance of the board payment, or the balance of the board payment, whichever is less. The prorated amount is based on the number of calendar weeks of the semester elapsed. Board contract cancellation fees at any other time are the same as those stated immediately above.

In addition to actual University charges, the Financial Aid Office uses the following educational cost estimates in determining need-based awards. These are average figures and will vary depending on individual preferences and personal circumstances. The estimated cost of textbook and supplies is $1,250 per year. Off-campus room and board costs are estimated at $11,790 per person per year. Personal expenses and transportation costs related to college attendance will vary according to life style and distance from campus. Resident students should plan for about $1,950 in travel and personal expenses. Commuter students should estimate about $4,200 in travel and personal expenses.

Billing and Payments

Statements covering all charges for the semester are available through the university web-based e-Commerce system in July and must be paid by August 5th. Statements covering charges for the second semester are available during December and must be paid by January 5th. Statements are issued on a regular basis for those students that have new charges or a balance outstanding. There is a $35.00 fee for late registration changes. Past due accounts will be charged a late fee at the rate of 18% per annum on the unpaid balance. The University reserves the right to charge a flat fee of $75 if an account balance is not cleared by the due date of a bill.

Students should access the CASHNet billing system through their AU Banner Web student access portal. Parents or other users can log on to this secure site using their own login ID and password as soon as the student gives them authorization to do so. Once a parent or other authorized user has their own separate access, they will receive notification when a bill is created and uploaded to the CASHNet site. They can also use the site to make payments through a checking or savings account, verify that the account is paid in full, and review activity on a student account. The website is certified as PCI compliant, and is extremely safe and reliable.

Refunds for overpayments on accounts are issued after financial aid is disbursed, after the class drop period has ended – typically the end of the second week of classes each semester. A small amount may be advanced at the beginning of a term to assist with the purchase of books and other supplies.

Refunds for full-time undergraduate students during the regular academic year are prorated based on the point of withdrawal within the semester. For refund purposes, the weeks end on Saturday beginning with the first week of classes.

It is important that the student formally withdraws from the University since refunds are determined by the date of receipt of the withdrawal notice. Formal withdrawal starts at the Student Affairs Office in Carnegie Hall. New students who withdraw during their first semester at Alfred may apply their non-refundable acceptance deposit against any charges accrued for tuition, room, or board.

Students are required to meet all financial obligations to the University when due. They will not be allowed to register for the following semester if there is a significant balance outstanding on their account. Students will not be allowed to receive a diploma or transcripts if they are delinquent in meeting financial obligations due the University or any University organization.

All students are required to sign a statement each semester certifying their understanding that if the university does use a collection agency or take legal action for any account balance due, they will be liable for and shall pay all costs and expenses incurred by Alfred University, including reasonable attorney's fees and/or collection agency fees (which may be based on a percentage at a maximum of 33.3% of the debt) resulting from the referral.

Treatment of Federal Title IV Aid When a Student Withdraws

The law specifies how Alfred University must determine the amount of Title IV program assistance that you earn if you withdraw from school. The Title IV programs that are covered by this law are: Federal Pell Grants, Iraq and Afghanistan Service Grants, TEACH Grants, Stafford (Federal Direct) Loans, PLUS loans, Federal Supplemental Educational Opportunity Grants (FSEOGs) and Federal Perkins Loans.

When you withdraw during the semester, the amount of Title IV program assistance that you have earned up to that point is determined by a specific formula. If you received (or Alfred University or parents received on your behalf) less assistance than the amount that you earned, you may be able to receive those additional funds. If you received more assistance than you earned, the excess funds must be returned by the school and/or you. Title IV funds are returned to the programs from which they originated, in the following order, up to the net amount disbursed from each source:

1. Unsubsidized Direct Stafford loans (other than PLUS loans)
2. Subsidized Direct Stafford loans
3. Federal Perkins loans
4. Federal PLUS loans
5. Direct PLUS loans
6. Federal Pell Grants for which a return is required
7. Federal Supplemental Education Opportunity Grants (FSEOG) for which a return is required
8. Federal TEACH Grants for which a return is required
9. Iraq and Afghanistan Service Grants for with a return is required

The amount of assistance that you have earned is determined on a pro rata basis. For example, if you completed 30% of a semester or period of enrollment, you earn 30% of the assistance you were originally scheduled to receive. Once you have completed more than 60% of the semester or period of enrollment, you earn all the assistance that you were scheduled to receive for that period.

If you did not receive all of the funds that you earned, you may be due a Post-withdrawal disbursement. If your Post-withdrawal disbursement includes loan funds, Alfred University must get your permission before it can disburse them. You may choose to decline some or all of the loan funds so that you don't incur additional debt. Alfred University may automatically use all or a portion of your Post-withdrawal disbursement of grant funds for tuition, fees, and room and board charges (as contracted with the school). Alfred University needs your permission to use the Post-withdrawal grant disbursement for all other school charges. If you do not give your permission, you will be offered the funds. However, it may be in your best interest to allow Alfred University to keep the funds to reduce your debt to Alfred University.

There may be some Title IV funds that you were scheduled to receive that cannot be disbursed to you once you withdraw because of other eligibility requirements. For example, if you are a first-time, first-year undergraduate student and you have not completed the first 30 days of your program before you withdraw, you will not receive any Direct Loan funds that you would have received had you remained enrolled past the 30th day.

If you receive (or Alfred University or parent receive on your behalf) excess Title IV program funds that must be returned, Alfred University must return a portion of the excess equal to the lesser of:

1. your institutional charges multiplied by the unearned percentage of your funds, or
2. the entire amount of excess funds.
   Alfred University must return this amount even if it didn't keep this amount of your Title IV program funds. If Alfred University is not required to return all of the excess funds, you must return the remaining amount.

Any loan funds that you must return, you (or your parent for a PLUS Loan) repay in accordance with the terms of the promissory note. That is, you make scheduled payments to the holder of the loan over a period of time.

Any amount of unearned grant funds that you must return is called an overpayment. The maximum amount of a grant overpayment that you must repay is half of the grant funds you received or were scheduled to receive. You do not have to repay a grant overpayment if the original amount of the overpayment is $50 or less. You must make arrangements with Alfred University or the Department of Education to return the unearned grant funds.

The requirements for Title IV program funds when you withdraw are separate from Alfred University's refund policy. Therefore, you may still owe funds to Alfred University to cover unpaid institutional charges. Alfred University may also charge you for any Title IV program funds that the school was required to return.
If you have questions about your Title IV program funds, you can contact the Alfred University Financial Aid Office (607-871-2150) or call the Federal Student Aid information Center at 1-800-4-FEDAID (1-800-433-3243). TTY users may call 1-800-730-8913. Information is also available on Student Aid on the Web at www.studentaid.ed.gov.

Treatment of Alfred University Aid When a Student Withdraws

When a student withdraws, Alfred University financial aid funds are prorated in the same manner as tuition charges under the University's refund policy. For example, if a student is charged 40% of tuition at the time of withdrawal, the student is eligible for 40% of University aid awarded and 60% of the University aid is returned to the appropriate aid account. University aid is returned to the sources from which they originated, in the following order, up to the net amount disbursed from each source:

1. Loans
2. Grants
3. Scholarship

Once all withdrawal calculations and processes are completed, Alfred University will send students a revised Student Financial Aid Award Notice which shows the final amount for each University aid program.

Appeals/Charges and Refunds

Refunds based on excess credits are made payable to the student and issued automatically after the end of the add/drop period if all payments and financial aid are finalized. Refunds based on Parent Plus Loans are automatically refunded to the Parent unless the parent designates the student as the recipient of any excess payment on the loan application or in writing to the Student Accounts Office. Any remaining credit balance is then refunded to the student.
Original appeals regarding charges or refunds should be made to the office initiating the action. Further appeals must be made to the Vice President for Business and Finance, Carnegie Hall.

Note: For Graduate School, see the Graduate Catalog. For Summer School, see the Summer Programs web page.

Financial Aid

Entering Freshmen

Applicants are requested to complete the Free Application for Federal Student Aid (FAFSA) and the Alfred University Financial Aid Application. Detailed information on financial aid programs, application requirements and procedures, and University aid policy is published annually in the Financial Aid Information and Application brochure. This document is provided to all students upon receipt of the application for admission and is available upon request from the Student Financial Aid Office. This financial aid information is also available on the web at www.alfred.edu. The freshman application priority deadline is March 15th for the fall semester and December 1st for the spring semester.

Transfer Students

Entering transfer students should observe the same application process as entering freshmen. The transfer application priority deadline is May 15th for the fall semester and December 1st for the spring semester.

Returning Students

Returning students should observe the same application process as entering freshmen. Students must apply each year to receive funds. The returning student application priority deadline is March 15th.

Financial Aid Satisfactory Academic Progress Policy for Undergraduate Degree Programs

In compliance with federal and New York State regulations and University policies, Alfred University has established satisfactory academic progress standards for financial aid. Students must meet these standards to be eligible to receive federal, State, or University financial aid payments.

I. Satisfactory Academic Progress (SAP) Requirements for Federal and University Financial Aid Programs

To be eligible to receive financial assistance under any federal or University scholarship, grant, loan, or work program, students must demonstrate minimum qualitative and quantitative academic measurement standards. The qualitative and quantitative standards used to measure satisfactory academic progress are cumulative and encompass all enrollment periods, including periods of enrollment during which the student did not receive federal or University aid.

A. Qualitative Measurement

The qualitative measurement standard is expressed as a minimum cumulative grade point average (CUM/GPA) which must be demonstrated prior to each semester of enrollment. The following chart illustrates the minimum CUM/GPA requirement:

Semester of Attendance	1	2	3	4	5 or more
Minimum CUM/GPA	0	1.0	1.5	1.75	2.0

B. Quantitative Measurement

The quantitative measurement standard has two concepts: a maximum time frame in which the student is expected to finish a degree program; and a comparison of the number of credit hours the student attempted with the number of credit hours the student successfully completed to determine whether the student is progressing at a rate which will allow the student to finish the program within the maximum time frame. This is referred to as the minimum completion ratio.

Maximum Time Frame

The maximum time frame in which the student is expected to finish a baccalaureate degree program is defined as 150% of the published length of the program, according to the Alfred University Catalog, measured in attempted credit hours. For example, the College of Liberal Arts and Sciences requires 124 credit hours to complete a degree. Therefore, the maximum time frame for which a liberal arts student may be eligible for aid is the period during which the student attempts 186 credit hours
(124 X 1.5 = 186).

Minimum Completion Ratio

The percentage of attempted credit hours a student must successfully complete to demonstrate SAP is the minimum completion ratio. For all undergraduate degree programs at Alfred University, this percentage is 67%. The minimum completion ratio is determined by dividing the program credit hours required for graduation by the maximum time frame credit hours.

The application of the completion ratio is cumulative. Therefore, a student must successfully complete 67% of all credit hours attempted to demonstrate SAP for federal and University aid. For example, if a student attempted 60 credit hours during the first four semesters of enrollment, this student would need to demonstrate at least 40 successfully completed credit hours to satisfy the SAP minimum completion ratio requirement (60 X .67 = 40.2).

C. Evaluation Periods and Frequency of Measurement

The review of a student's SAP is done annually at the end of each academic year, after final Spring semester grades are posted by the Registrar. All students are reviewed regardless of the student's enrollment status or number of semesters attended during the academic year.

D. Cumulative Grade Point Average (Cum/Gpa)

The CUM/GPA is the CUM/GPA as determined and recorded by the University Registrar on the student's official Alfred University academic record. Grades earned at other institutions for transfer credits are not considered to determine the student's Alfred University CUM/GPA or SAP CUM/GPA requirements.

E. Attempted Credit Hours

For purposes of SAP, a credit hour is considered attempted unless the student's academic record demonstrates one of the following grade designations for the course credits: CH, AU, or EX. Classes/courses which carry a designation of 0 credit hours are not considered attempted credits. Transfer credits are also considered attempted credits. See G below, "Transfer Credit Hours."

F. Earned Credit Hours

A credit is considered successfully completed and earned if the student's academic record demonstrates a P, or A through D grade for that credit hour. Classes/courses which carry a designation of 0 credit hours are not considered earned credits. Transfer credits are also considered earned credits. See G below, "Transfer Credit Hours."

G. Transfer Credit Hours

Credits transferred into Alfred University are considered as both attempted credit hours and earned credit hours for the SAP quantitative measurement standards, maximum time frame and minimum completion ratio.

H. Failure to Demonstrate Satisfactory Academic Progress

Loss of Aid Eligibility

Students who fail to meet one or more of the SAP standards become ineligible to receive further Federal Title IV and University aid payments at Alfred University.

Right to Appeal

Students determined to be ineligible for Federal Title IV and University aid programs have the right to appeal. Appeals must be made in writing (a letter or email), authored by the student, presented to the director of financial aid within 15 days of the date on the letter notifying the student of the lack of SAP, and supported by appropriate documentation. Appeal decisions are made by the director of financial aid.

All appeals must include an academic plan which, if followed, will ensure the student is able to meet SAP standards within one or two semesters of additional attendance. Academic plans must be approved by the student's college/school dean and identify specific actions and academic performance criteria the student will satisfy during and at the end of each semester in the academic plan.

Students are provided specific, detailed guidance for appeal letters, allowable appeal circumstances, and academic plans when notified of SAP noncompliance.

Financial Aid Probation

If a student's appeal is approved, the student will be placed on financial aid probation for the next semester attended. Students may receive aid payment during probation. At the end of the probation semester, the student must satisfy all SAP standards or their academic plan requirements to be eligible for continued aid payments the following semester.

I. Reinstatement of Aid Eligibility

Students who do not satisfy the SAP requirements may reinstate their aid eligibility by correcting SAP deficiencies without the benefit of Federal or University aid or submitting a successful appeal and satisfying SAP standards after a probation period.

II. New York State Progress Standards

New York State has established academic progress standards for the Tuition Assistance Program (TAP), State scholarships, and other State aid programs. For New York State, the student is subject to three progress standards: program pursuit, satisfactory academic progress, and a C average requirement.

A. Program Pursuit

Program pursuit is defined as receiving a passing or failing grade, in a certain percentage of a full-time course load, in each semester for which a State aid award is received to be eligible for the next semester's payment. The percentage increases from 50% of the minimum full-time course load (12 credit hours) in each semester of study in the first year for which an award is received, to 75% of the minimum full-time course load in each semester of study in the second year for which an award is received, to 100% of the minimum full-time course load in each semester thereafter.

The following chart illustrates the program pursuit requirements for New York State aid. The chart defines the number of credit hours a student must complete during the semester for which a State aid payment was received according to the student's cumulative number of State aid payments received.

Number of State Aid Payments Received	1	2	3	4	5 and above
Minimum Credit Hours Completed	6	6	9	9	12

For program pursuit, a credit hour is considered completed if the student received an A through F, Z, or P grade.

B. Satisfactory Academic Progress (SAP)

The New York State satisfactory academic progress measurement defines the minimum number of earned credits and the minimum CUM/GPA which must be met for each term of study in which a State award is received. The following chart illustrates these standards. A credit is considered successfully completed and earned if the student's academic record demonstrates a P, or A through D grade for that credit hour.

Before being certified for this payment number:	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
A student must have earned at least this many credits:	0	6	15	27	39	51	66	81	96	111
With this Minimum GPA	0	1.5	1.8	1.8	2.0	2.0	2.0	2.0	2.0	2.0

*** Only students enrolled in a five-year baccalaureate program or an approved Education Opportunity Program may receive a fifth academic year of payment.**

C. C Average Requirement

Students who have received the equivalent of four semesters of New York State-funded student financial aid payments must have a minimum CUM/GPA of 2.0 to be eligible for subsequent State aid payments.

D. Evaluation Periods and Frequency of Measurement

New York State SAP and program pursuit standards are measured at the end of each semester for which the student received State aid. The C average requirement must be met for all semesters after receiving four semesters or more of State aid payments.

E. Reinstatement of New York State Aid

Students who have lost good academic standing and payment eligibility under the New York State SAP, program pursuit, or C average requirements may regain eligibility in one of the following ways:

1. Make up the academic deficiencies without the benefit of New York State aid.
2. Be readmitted to the University after an absence of at least one calendar year. This provision of the State aid regulations does not apply to the C average requirement.

3. Transfer to another institution where the student must meet that institution's admission requirements.
4. Appeal for a waiver of the SAP, program pursuit, or C average requirement based on extenuating circumstances. The appeal procedures are the same as outlined in Section I.(H) of this policy statement.

New York State aid regulations state that a student may receive an extenuating circumstance waiver only once for the SAP and program pursuit requirements. An extenuating circumstance waiver of the C average requirement may be granted more than once. Financial aid probation is not permitted for New York State aid programs.

III. Alfred University Academic Scholarship Cumulative Grade Point Average Requirements

In addition to meeting the satisfactory academic progress (SAP) requirements outlined in Section I of this policy statement, students holding University academic scholarships must meet certain GPA requirements to maintain the award. The following list identifies the minimum CUM/GPA required for each University scholarship program:

Scholarship	CUM/GPA Requirement
Presidential Scholarship	3.0
Competition Scholarship	3.0
Dean's Scholarship	2.75
Jonathan Allen Scholarship	2.5
Miller Portfolio Scholarship	2.75 for the freshman year and 3.0 for subsequent years
Art Portfolio Scholarship	2.75 for the freshman year and 3.0 for subsequent years
Phi Theta Kappa Scholarship	3.0

The review of a student's CUM/GPA for scholarships is done annually at the end of each academic year after final spring semester grades are posted by the Registrar. Scholarships lost due to the CUM/GPA requirement may be reinstated for any semester in which the student meets the CUM/GPA requirement prior to the beginning of that semester.

Available Financial Aid Programs

Follow these links for information on AU's Scholarships, Grants, Employment and Other Aid Programs.

Student Life

The Division of Student Affairs helps students meet their personal and academic goals within the caring residential environment at Alfred University. Staff members and programs encourage students to develop, explore and express themselves as individuals and as community members.

Outside the classroom, more than 80 student clubs and organizations offer a multitude of exciting activities for every interest. Concerts, theatre and dance events, comedy clubs and coffeehouses provide quality nightlife. Intercollegiate athletics involve one out of every five students; many students also participate in intramurals.

Our professional staff offers a full range of student development and learning opportunities – from career planning and counseling to health care, residence life and leadership education. As part of the transition into their first year at Alfred University, incoming students take part in a required orientation. They meet fellow students and faculty members and become acquainted with our historic campus and its facilities.

Extra-Curricular Activities

More than seventy-five student-led organizations exist at Alfred University. Organizations offer students a chance to pursue special interests or discover a new one. They also assist in the development of leadership skills, goal setting, and budget management. Many of these organizations are mentioned in this section, but others exist and new groups are always being formed. Contact the Center for Student Involvement at (607) 871-2671 for a complete list of all student organizations.

Student Government

Participation in co-curricular activities benefits Alfred students in many ways. There is no better training for many professions than experience in student government. The present Student Senate has been in existence since 1976 and has been instrumental in initiating changes and improvements.

The Senate meets weekly. Each senator is elected by and represents a particular constituency – i.e., residence hall, campus organizations, or off-campus residents. The Senate president and vice-president are chosen by a campus-wide election.

Among the Senate's major functions are raising and discussing issues of student concern, proposing constructive changes to promote student well-being, and distributing funds to other campus organizations. The Senate elects or recommends student representatives for University and college committees.

Entertainment Opportunities

Whether producing a major concert with national touring performing groups or displaying your own personal talent in front of a packed theater, there is a diverse range of ways to entertain or be entertained at Alfred.

- Student Activities Board – the main provider of entertainment including comedians, bands, and solo performers
- Alfredian Dramatists – a student group that provides various opportunities to perform throughout campus by singing, dancing and acting
- Division of Performing Arts – Opportunities abound for co-curricular involvement in Orchestral, Vocal and Instrumental Music groups, Dance ensembles and Theatrical productions.

Outdoor/Environment Opportunities

- Forest People – Alfred's outdoor recreational club travels far and near for activities including repelling, rafting, hiking, and more.

Media Organizations

- *Fiat Lux* – bi-weekly student newspaper
- AUTV – Student television station broadcasting announcements and occasional student-produced shows
- WALF – 24-hour campus radio station with an eclectic mix of music styles

Alcohol and Other Drug Education

The mission of the Alcohol and Other Drug Education Program is to provide information, activities, services and support to the students, faculty, staff, and administration of Alfred University, to promote substance abuse resistance and to foster healthy lifestyle choices. This education and prevention program features:

- Fun, alcohol-free social activities
- Special events during Alcohol Awareness Week, Spring Break, Holidays, Orientation, and Graduation
- AWARE, BACCHUS and GAMMA Education Groups
- Social Norms Campaigns
- Presentations in residence halls and classrooms
- Formal classes on substance abuse
- A resource center for personal and professional use
- A university-wide advisory committee
- Data collection for AOD use
- Policy review and recommendations
- Referrals for students abusing alcohol and other drugs

Athletics

Athletics are an integral part of campus life. A wide-ranging program of intercollegiate competition, intramural sports, and recreational activities satisfies students' individual athletic aspirations.

Indoor Facilities

McLane Physical Education Center is the hub of athletic activities. It has two basketball courts, a six lane swimming pool, a complete fitness center (with over 60 pieces of equipment designed to promote cardiovascular fitness as well as strength training equipment), two racquetball and squash courts, two volleyball courts, and a comprehensive athletic training room. The main gymnasium in McLane was renamed the Terry S. Galanis Family Arena in December of 2014 after significant upgrades to the facility which included a brand new floor, bleachers and sound system.

The Joyce-Walton Recreation Center (which opened in February 2014) is a 33,000-square-foot addition to McLane Center which includes a 140-meter, raised indoor track; an all-purpose court suitable for basketball, volleyball, badminton, soccer and other open space games; and two locker rooms. It also features a multi-purpose room, three spinning bikes, stair steppers and rowing machines on the upper level.

Outdoor Facilities

Outdoor facilities include Yunevich Stadium (home of the Saxon football, lacrosse, and soccer teams) with a multipurpose artificial surface accommodating intercollegiate sports, intramural activities and recreation; the Harrington Softball Park; six tennis courts; several basketball courts; a portable volleyball and basketball court and a pavilion. All are located near the residence halls.

The Daggett Equestrian Center, just minutes from campus, opened in Fall 2005 featuring indoor and outdoor arenas, 52 stalls, and classrooms. Downhill and cross country skiing areas are located a short distance from campus.

Intercollegiate Athletics

Alfred University sponsors intercollegiate athletics for women in basketball, soccer, cross country, swimming, tennis, track, lacrosse, softball and volleyball. Men's intercollegiate sports include football, cross country, track, basketball, soccer, lacrosse, swimming and diving, and tennis. The equestrian and ski teams are varsity and coeducational. Alfred is a member of the National Collegiate Athletic Association, the Eastern College Athletic Conference and the highly competitive Empire 8 Conference, while skiing competes in United States Collegiate Ski Association (USCSA) and Equestrian in the Intercollegiate Horse Show Association (IHSA). The intercollegiate programs operate under the rules and regulations of NCAA Division III.

Intramurals and Club Sports

All indoor and outdoor facilities are available for AU's intramural programs and for general student use. With a focus on participation in competitive physical play, the program is open to the entire University community (undergraduate and graduate students, faculty, and staff).

This past year intramural offerings included: 3v3 basketball, 5v5 football, 3v3 soccer, 6v6 co-ed soccer, 5v5 basketball and 6v6 co-ed volleyball.

The University also offers club team status in the following sports/activities: men's baseball, cheerleading, co-ed quidditch, co-ed bowling, men's and women's rugby, co-ed badminton, co-ed fencing, co-ed martial arts and co-ed trap and skeet club.

University community members take part in exercise and recreational activities. McLane Center is open daily for swimming, squash, racquetball, handball or fitness training, while the Joyce-Walton Center is open seven days a week, with extended evening hours for those wanting to recreate and stay in shape.

Campus Center

The 60,000 square foot Arthur and Lea Powell Campus Center is one of the finest community-gathering facilities in the country. It features a cafeteria-dining room with panoramic hillside views, a forum/movie theatre, an "open air" food court, a cyber café, a night club, student organization offices, a center for cultural unity , a radio station, television station, meeting rooms, a formal Alumni Lounge, the University bookstore, mail room and TV lounge and student lounge.

Robert R. McComsey Career Development Center
at the Allen Steinheim Museum

The CDC educates Alfred University students to develop life-long career skills utilizing centralized, professional services including career counseling/advising, experiential education, on-campus recruiting, web-based services and special events/workshops. The CDC offers the following services:

- Career counseling, exploration and advising, including career assessment
- Saxon JobLink, our web-based system for job / internship, and resume posting, and interview scheduling
- Computer lab with internet access and a laser printer for student use
- Internships, co-ops and summer jobs in your field of study
- An annual fall Engineering Career Fair, Spring Job Fair, fall Graduate School Fair, and Virtual Career Fair
- Employer-in-Residence program: allows students to connect with successful alumni and representatives from a variety of careers
- Access to alumni networks in a wide range of fields and locations
- On-campus recruiting, interviewing and resume referral
- Frederick W. Gibbs Career Resource Library which houses career information, job and internship postings, credential file service, and graduate school information

Wellness Center

Counseling Services

Located in the north wing of the AU Wellness Center building, near the Saxon Inn, Counseling Services, a component of the Wellness Center and a part of the Student Affairs Division, provides a comprehensive range of counseling, consultation, and educational programs to promote the personal development and success of students. Individual, couple, and group therapy sessions are provided by nationally certified and licensed staff. These are completely confidential in accordance with standards set by the American Counseling Association.

The counseling staff members provide crisis response and are on-call for emergencies when AU is in session. The Wellness Center offers all services at no cost to currently-enrolled undergraduate and graduate students. Appointments for psychiatric consultation are available for a small fee. Appointments for counseling or psychiatric consultation can be arranged by calling 607.871.2300 or by stopping by the office at 19 Park Street.

Health Services

Health Services is located in the south wing of the AU Wellness Center building at 19 Park Street. A team of practitioners provides care for non-emergency problems and preventive health concerns. Services include consultation and treatment for acute problems, laboratory work and specimen collection, gynecological exams, and referral for specialist and hospital services. Emergency care is available after hours through our public safety office and free transportation is provided by the village ambulance to local hospitals.

There is no charge to meet with a provider at Health Services. Minimal charges are made for lab work, injections, and some equipment or medications.

Prescriptions for medications can be filled in Alfred at the Alfred Pharmacy, or phoned in to students' preferred locations.

Other types of specialist services can be arranged through referrals to the local hospitals in Hornell and Wellsville and practitioners in the area. Students maintain the right to choose a health care provider or hospital and must assume all financial obligations for off-campus health care.

Immunization Requirements
Students born after December 31, 1956, must show proof of 2 measles, mumps, and rubella shots after their 1st birthday or written documentation of immunity to measles, mumps, and rubella, as required by New York State Public Health Law 2165. A Tuberculosis screening and completion of Meningitis Vaccination Response form or Meningitis Vaccine are also required. A hold is placed on new students' registration activities until immunization records are received and cleared through Health Services. Students not in compliance will be withdrawn from AU and will not be able to attend classes. Questions regarding this requirement or any other aspects of student Health Services may be directed to the staff at Health Services 607.871.2400.

Health Insurance
Alfred University expects students to carry health insurance. This can be done through various insurers. All student athletes are mandated to provide proof of their health insurance.

Wellness Education

The mission of the Wellness Education program is to promote lifetime healthy lifestyle choices through education, activities, and services to the campus community. Services for students include

- Individual wellness education sessions
- Individual alcohol and drug education sessions
- Student Internship opportunities
- Presentations for classrooms and Residence Halls
- Promotion of healthy lifestyle choices through events and social norm campaigns
- Referrals for students seeking assessment or evaluation for alcohol or substance abuse
- Data collection for needs assessment and program evaluation
- Campus policy review and recommendations

For more information, or to make an appointment for a Wellness Education session, contact the Wellness Center at 607.871.2300.

Beth Robinson Judson Leadership Center

The JLC of Alfred University is the home of the Women's Leadership Center, the Gary Horowitz Leadership Development Program, and the Saxon Sidekicks mentoring program for first-year students. Events include annual conferences, seminars, workshop series, Women of Influence speakers and networking events with alumni. Of particular interest is the Women's Leadership Academy, a selective and academically based experience providing deep training and mentoring over the course of an academic year.

Housing

Alfred University is a residential university. We believe that residence hall living is a key component of a student-centered educational experience in which academic learning is integrated with student development. Each student is personally accountable for maintaining a safe and secure environment in his or her residence hall that promotes a healthy standard of community living.

For these reasons, provisions are made to house all students on campus throughout their undergraduate years. Students are required to live on campus for six consecutive semesters. Once this residency requirement has been met, students are able to apply to live off-campus. To obtain approval to live off-campus, students must watch a presentation about living off-campus and pass a quiz on the content, complete an off-campus housing application, and receive permission to move off campus from the Dean of Students. Some students may be eligible or considered for an exemption if they are: married or a single parent, 23 years of age or older, commuting from their parent's primary home within 60 miles of campus, participating in a co-op or study abroad program, or in need of a medical exemption. For more information, contact the Residence Life office at 607-871-2186.

Meal Plans

All students who live in residence halls are required to participate in a meal plan, except for seniors or residents of Ann’s House, Joel’s House, International House, Hillel, Modern Language House, Honors House, Environmental House, and the Ford Street apartment complex. Our meal plan options are designed to give students maximum control of their meal management in relation to their lifestyle. Meal plans come with a combination of Ade Meals on a weekly basis (for Meal Plan Members Only), Saxon Swipes on a semester basis and Dining Dollars on a semester basis. First Year students have a choice of the King Alfred, Gold or Purple plans. First-year students have a choice of three meal plans; the King Alfred, Gold, and Purple Plans.; Sophomores and Juniors have an additional option of the Black Knight Plan. Dining Dollars are used like cash at any dining location and at selected vending machines. Dining Dollars only come with the purchase of a meal plan, additional Dining Dollars are not for sale. If a meal plan is purchased for the spring semester, fall semester balances carry over to the spring semester. Dining Dollars are valid through Commencement day of each academic year. Meal plans are for individual student use only and are non-transferable.

Ade dining hall offers multiple entrees with unlimited seconds and vegetarian choices at every meal. The Knights Den located on the top floor of the Powell Campus Center and MidKnight Express offer one combo meal in exchange for one meal swipe, referred to as a Saxon Swipe. Saxon Swipes are good for each semester only as they do not roll from one semester to the next. Saxon Swipes can be used for guests. For more information, please see the Dining Services website: alfredavifoodweb.com or contact Dining Services at 607-871-2247.

Fiat Bux

Students can also purchase Fiat Bux, which are similar to dining dollars with more buying power. In addition to dining locations and vending, Fiat Bux can be used to make purchases in the Clay Store, the Dingbat (Design) Store, and for copies in Herrick and Scholes Libraries. To purchase Fiat Bux just bring your University ID Card to Cyber Fresh Café in the Powell Campus Center during regular business hours. Cash, checks and credit cards (MC, Visa, and Discover) are accepted.

Housing Options

With a broad spectrum of architectural and environmental styles available, choices range from traditional residence halls to suites and apartments. Single rooms are available to students on a limited basis.
Each living area selects its own quiet and courtesy hours as an extension of the all-campus quiet hours after the semester begins. Residence halls are coed by floor; i.e., a floor of men, a floor of women; or coed by suite – i.e., one suite of men may be located next to a suite of women; or coed by alternating rooms within corridor-style designated buildings for upper class students. All residence halls are non-smoking.

Housing Staff

Residence hall staff members live in each building and on each floor or section. Resident Directors (RDs) are full-time graduate students. The RD staff is responsible for the entire operation of the buildings. Each floor has a Resident Assistant (RA), an undergraduate student who has proven him/herself able to work well with people and their concerns.

The Director of Residence Life, Associate Director, and Assistant Directors are also available to help students acclimate to their new social and educational environment. The Office of Residence Life, located in Bartlett Hall, is an available resource for student housing concerns. Residence hall living includes increased, independent responsibilities and taking part in activities planned to promote community and learning.

International Programs Office

The Alfred University International Programs Office assists international students with any issues or problems they may encounter while in the United States. They sponsor the International Student Orientation. International students are encouraged to share questions or concerns with fellow students, faculty members, their advisor, or any of the advisory staff that works with international students. The International Programs Office is located in Perlman Hall and can be reached at 607.871.2269.

Hazing Policy

Alfred University believes that any group or organization composed of students, faculty, staff and/or visitors has the responsibility to create an environment within which all activities are pursued in a sound and productive manner. Any group or organization which includes hazing as part of its activities creates a risk of hazardous conditions.

Alfred University defines hazing as “any activity or action which subtly, flagrantly, recklessly, or deliberately demeans, embarrasses, threatens, invites ridicule or draws inappropriate or negative attention to a member, affiliate, or group, and/or an attitude which implies one member/affiliate is superior to another or that membership in the group must be earned through personal services or meaningless activities. Furthermore, this definition includes any action which results in the impairment of academic performance or causes failure to properly fulfill obligations to University-sponsored groups and organizations.”

Alfred University unconditionally opposes any form of hazing. Any violation of this policy should be reported immediately to the Office of the Dean of Students.

Any member or affiliate who is in violation of this policy is subject to suspension, expulsion, or other judicial proceeding, or, if the violator is a group or organization, recision of affiliation with Alfred University.

Furthermore, New York State defines hazing as follows: “A person is guilty of hazing in the first degree when, in the course of another person’s initiation into or affiliation with any organization, he intentionally or recklessly engages in conduct which creates a substantial risk of physical injury to such other person or a third person and thereby causes such injury.” (Penal Law S120.16) Hazing in the second degree (a violation) incorporates a nearly identical definition except that no actual injury to any person needs to be proven. (Penal Law, S120.17)

Cultural Events

Several campus organizations sponsor appearances by visiting artists, speakers and groups. The Student Activities Board (SAB), , and individual academic divisions invite lecturers and performing and visual artists to campus for residencies and one night appearances. Alfred University student groups sponsor a number of popular entertainers in the from coffeehouse performers and comedians , as well as concerts by well-known performers. The Fosdick-Nelson gallery exhibits sculpture, glass, ceramics, paintings, lithographs and photography. Student theater and dance productions, as well as performances by musical ensembles, occur at frequent intervals throughout the year.

The Institute for Cultural Unity is Alfred University’s source of diversity education and multicultural programming. The Institute for Cultural Unity is a resource center that develops self-awareness and respect for others through the sharing of experiences and cultures. Led principally by students, the governing body of the Institute for Cultural Unity is comprised of the following student organizations and their leaders:

- Umoja (AU’s Black Student Union)
- Poder Latino (AU’s Hispanic Culture and Heritage Organization)
- Spectrum (AU’s Lesbian, Gay, Bisexual, Transgender, Queer, Questioning, Intersex and Ally Serving Organization)
- Caribbean Student Association
- International Students and Scholars Organization
- Students Advocating for Gender Equality
- Newman Club (Catholic organization)

Opportunities in Theater, Music and Dance

Theatre, music and dance opportunities are plentiful at AU, either through involvement within the Performing Arts Division or through within classes, concerts, and productions inour many student organizations and productions. All students, regardless of major, can enhance their academic pursuits through involvement in the performing arts, led by highly qualified faculty and motivated student directors, actors musicians and choreographers.

Theatre

- Act, stage manage, design and participate in many other ways in a wide range of faculty directed plays
- Write, produce, direct and perform in student productions
- Become a member of the active Alfredian Dramatists student club

Music
- Sing in the University Chorus or Chamber Singers
- Play in the Symphony Orchestra, Symphonic Band, or Jazz Band
- Join the AU Pep Band
- Form your own music group~~s~~, such as string quartets, brass ensembles and select vocal groups
- Learn to play the carillon, the Chinese Guzheng, piano, or any other instrument

Dance
- Perform in professional guest artist, faculty and student choreography
- Create and perform in alternative indoor and outdoor sites.
- Choreograph and/or perform in Informal Dance Showings
- Collaborate with dynamic artists in a variety of art forms.
- Participate in a variety of dynamic dance clubs**Performance Design and Technology**
- Design sets, costumes, lighting, sound and props for all of the performing arts
- Collaborate and participate in technical aspects of theatre, dance and music productions

Conduct System

University men and women are expected to conform to high standards of adult behavior, both on and off campus. The University Student Life Policies exist to serve as a guide for each student and to ensure the proper atmosphere necessary for the academic and social life of each student. Action will be taken against students whose conduct adversely affects the University community and/or the pursuit of its objectives, or violates state, local or federal law.

The Alfred University Student Conduct System is designed to hold students accountable for their behavior, to protect the University community and property, and to protect the rights of the members of that community to function in an environment conducive to academic pursuits. It is designed to confront individuals with the inappropriateness of their actions in a constructive and educational manner that will foster an understanding of the impact their behavior has had on individuals and the community. (A detailed statement on the conduct system can be found on the Alfred University student web portal at http://my.alfred.edu under “Student Conduct Policies.”

Multiculturalism

All of the clubs under the ALANA (African-, Latino-, Asian-, Native-American) umbrella strive to both educate the campus and provide social support for members.
- Poder Latino – Alfred’s Latino support club sponsors several events including auctions for charity and talent shows for their members
- Umoja – AU’s Black Student Union is best known for its Charity Basketball Game, and Slam Poetry events
- International Students and Scholars Organization – Support and social events for International students
- Caribbean Student Association– Only two years old, but already sponsors incredible events such as an annual Fashion Show and a Beach Party
- Alfred Steppas – High energy performance created by rhythms of foot-stomping, hand-clapping and much, much more

- Spectrum – Support and social programming for our gay, lesbian, and bi-sexual community; supporters welcome

Major Weekends and Events

- Homecoming Weekend – Highlighted by a Saxon football game and great entertainment.
- Hot Dog Day – Now a well-established tradition, Hot Dog Day is a combination of street carnival and springfest, highlighted by an ice cream social, chicken barbecue, craft sale, band party, parade, and many other amusements and festivities, all centering on the consumption of thousands of hot dogs. The funds raised by this community event are turned over to area charities.
- Spring Family Weekend – Highlighted by the Alfred Honors Convocation, which recognizes academic excellence.
- Large Act Concert – SAB's annual gymnasium concert has included Adam Sandler, Alanis Morissette, Bare Naked Ladies, Smashmouth, Vanessa Carlton. Black Eyed Peas,Gym Class Heroes, Everclear and OAR.

Religious Life

The University is non-sectarian. In accordance with its century-and-a-half tradition, it extends a welcome to people of diverse ethnic and religious backgrounds. The University, Village, and surrounding area provide ample opportunities for students to find a religious community. The Melvin H. Bernstein Hillel House and several Protestant campus fellowships offer on campus programming and services. St. Jude's Catholic Campus Center is located within walking distance of campus. Protestant students will receive a warm welcome at any of the numerous churches and religious groups in the Alfred area, including within five minutes of the campus United Methodist, Pentecostal, Union University (nondenominational), Seventh Day Baptist, and Society of Friends. Muslim students can arrange with Muslim faculty for prayer services during Holy seasons, or can attend regular services within an hour's distance of Alfred.

Alumni Association

The Alfred University Alumni Association dates back to 1884 when a group of enthusiastic former students established an organization to "create and maintain activities for the support and development of the University." The Alumni Association is led by the Alumni Council whose members are selected from active alumni volunteers. In 2010, the Council updated the Alumni Association's Constitution and its mission: "The Alfred University Alumni Association actively supports and facilitates the strongest possible sense of community among Alfred University's administration, faculty, student body and alumni." The Alumni Council operates under the direction of an elected President and with the support of the University's Director and Assistant Director of Alumni Engagement.

Alumni are invited to attend regional events, as well as to return to campus for special events, particularly Homecoming and Reunion Weekends.

The Alfred Magazine, mailed to alumni, carries information about these programs, along with campus news, class notes, and alumni profiles. The University also communicates electronically with its alumni through e-news andsocial media.

The AU website, [www.alfred.edu/alumni], offers a vital link for communication among classmates and between the University and alumni. Alumni may register on-line for regional and campus events. The online Alfred Community enhances opportunities to stay in touch by offering a permanent email address.

The Office of Alumni Engagement is located on campus in the University Welcome Center at the Fasano House. Alumni and friends are encouraged to stop in when visiting the Alfred area. Alumni may also stay in touch by calling (607) 871-2144 or by e-mailing: alumni@alfred.edu.

Parents Association

The Parents Association exists to promote and enhance opportunities for parents of Alfred University students to communicate, participate, and establish a sense of community with one another and with the faculty, staff and administrators of Alfred University. All parents of current students are automatically members of the Parents Association. A current parent serves as President of the Association. There are no dues, and all parents are welcome to participate in Association meetings.

As part of the Association, a small group of volunteers serve as the Parents Advisory Board. Their purpose is to provide feedback/suggestions related to AU Parents Programs and help determine future direction; to serve as a resource to prospective and current AU parents in terms of student academic life and life within the University community; to provide valuable input to the AU administration when a parents “point of view” is needed; and to assist the Director of Parents Programs and the President of the Parents Association as needed in planning and development.

The University organizes two weekends a year for parents, one in the fall and one in the spring. These Family Weekends provide opportunities to visit with sons and daughters and to take part in campus activities.

Annual Campus Safety and Fire Report

The Annual Campus Safety and Fire report is available to all members of the campus community and to the public. The report contains University policies related to campus safety including: University Office of Public Safety policies and procedures, policies concerning alcohol and drug use, crime awareness and prevention, the reporting of crimes, and sexual misconduct. The report also includes a three-year summary of statistics of crimes that are reported to have occurred on University property, in off-campus buildings owned or controlled by the University, and on public property within the Village of Alfred. A copy of this report can be obtained from the Student Affairs Office, the Admissions Office, the Human Resources Offices, or by accessing the University web site.

Consumer Complaint Procedure

For all types of complaints concerning colleges and universities in New York State, the first course of action must be to try to resolve the complaint directly with the administration of the college or university involved. The Office of College and University Evaluation will not review a complaint until all grievance procedures at the institution have been followed and all avenues of appeal exhausted and documentation provided that such procedures have been exhausted. Please note: Every New York State college and university is required to establish, publish, and enforce explicit policies related to redress of grievances.

See the "Academics" section of this catalog beginning on p. 42 for policies on grades and grading and the process to petition for a change of grade. A complaint involving discrimination or sexual harassment should be directed to the Title XI Coordinator/EEO Officer at 607.871.2118. A complaint involving consumer fraud or financial aid should be directed to Director of Financial Aid, 607.871.2159.

Please do not send a complaint to the Office of College and University Evaluation until you have read all of the information below. This will assure that you are sending your complaint to the appropriate agency/office. The Office of College and University Evaluation handles only those complaints that concern educational programs or practices of degree-granting institutions subject to the Regulations of the Commissioner of Education, with the exceptions noted below.

- The Office does not handle anonymous complaints.
- A complaint involving discrimination against enrolled students on the part of an institution or faculty, or involving sexual harassment, should be filed with the U.S. Office for Civil Rights, 75 Park Place, New York, NY 10007. Complaints about two-year colleges concerning sexual harassment/discrimination based on race, ethnicity, gender and disabilities may also be reported to the Office of Equity and Access, VATEA Program, 10th Floor, Education Building Addition, Hawk Street, Albany, NY 12234.
- A complaint of consumer fraud on the part of the institution should be directed to the Office of the New York State Attorney General, Justice Building, Empire State Plaza, Albany, NY 12223.
- The Office of College and University Evaluation does not intervene in matters concerning an individual's grades or examination results, as these are the prerogative of the college's faculty.
- The Office does not handle complaints concerning actions that occurred more than five years ago.
- The Office does not intervene in matters that are or have been in litigation.
- For a complaint about state student financial aid matters, contact the Higher Education Services Corporation (HESC) Customer Communications Center at 1-888-NYS-HESC.
- Complainants should be aware that the Office of College and University Evaluation does not conduct a judicial investigation and has no legal authority to require a college or university to comply with a complainant's request.

Complaints not excluded by any of the issues above should be sent to:

New York State Education Department
Office of College and University Evaluation
Education Building
5 North Mezzanine
89 Washington Avenue
Albany, New York 12234

University Academic Program

The University baccalaureate program is designed to be accomplished in eight semesters of 15 weeks each (inclusive of final exams).

The typical academic load of full time students at Alfred University is 16-18 credit hours per semester.

- Most courses meet for 1 (50-minute) hour per week for each semester credit hour, or the equivalent.
- Courses with labs typically meet for 2 to 3 hours per week of class time plus 2 to 3 hours per week of lab time.
- Art studios meet 1.5 to 2 hours per week for each credit hour.

On a weekly basis, students should expect to spend a minimum of two hours outside of class studying and completing assignments for each hour spent in class (three hours per week outside of class for each hour in class for art studios); which is a minimum of 45 hours of total learning time per credit hour for the term. Students taking an online course should, likewise, expect to spend about 45 hours of total learning time per credit hour in a term; the same amount of time as in a traditional, on-campus course.

The Registrar and the Deans review the class schedule each semester and review at least annually courses and programs as published in our catalogs in order to ensure compliance with credit hour requirements.

Enrollment Status
Full-time student: Currently registered for 12 or more semester credit hours.
Part-time student: Currently registered for fewer than 12 semester credit hours.

Student Classification

Class Standing (based on semester credit hours earned)

Freshman	Sophomore	Junior	Senior
0-29	30-59	60-89	90+

Degree Requirements

In order to satisfy the requirements for a Bachelor's Degree a student must:

- Complete all course requirements, including those required for the major, general education, and the minimum number of credits for the degree sought as set forth by the faculty of the college or school in which the student is enrolled, and as described under "major requirements" in this catalog.
  Note: A three semester hour transfer course may be used to satisfy a four semester hour AU requirement in a major or in general education. However, the minimum number of total semester credit hours for the degree must still be earned to complete degree requirements.
- Earn a cumulative grade point average (GPA) of at least 2.00.
- Satisfy the Global Perspective Requirement
  This requirement may be satisfied by:
  1. Taking an approved "GP" course (see p.68)
  2. Participating in an international co-op program or internship
  3. Studying abroad
  4. Going on a course-based faculty-led international study trip
  5. Completing one semester of secondary or post-secondary education outside the United States
- Satisfy the Physical Education requirement.
  This requirement may be satisfied by successfully completing two activities in any one of the items listed below, or in a combination of items:

1. A physical education activity course (PHED 100-level or those specific Dance and Equestrian courses that indicate that they apply to "PE Requirement")
2. Participation in a varsity sport for an entire season (participation in the same varsity sport more than once counts as only one of the two required activities)
3. A lifetime sports proficiency examination (requires both written and physical tests; current fee: $225.00)
4. Students in the College of Liberal Arts and Sciences may count up to eight semester credit hours of physical education activity courses (100-level PHED or EQUS) toward the 124 credit hours needed for the degree. Students in the Inamori School of Engineering, the School of Art and Design, and in the College of Professional Studies may count no credits earned in 100-level PHED or EQUS courses toward the minimum number needed for the degree.

Note**: The PE Requirement is waived for those 25 years of age or older *as of the date of matriculation*. (The date of matriculation is the first day of classes in the term admitted to an AU degree program.)**

- Request legal conferral of degree (apply to graduate) and satisfy financial obligations to the University. Written application for graduation must be made to the Registrar at least 60 days before the expected degree conferral date.
- Earn at least 45 semester credit hours at Alfred University.
- Be in residence at Alfred University at least during the final 30 credit hours earned toward the degree (see policy on Transfer Credit, p. 60).

Alfred University General Education Goals

Alfred University endorses the American Association of Colleges and Universities initiative, "Liberal Education & America's Promise" (LEAP). Our university general education goals are built on this framework. Graduates of Alfred University will:

- acquire knowledge about human cultures, the arts and humanities, and the physical and natural worlds
- frame important questions and evaluate relevant information
- produce, analyze and interpret data quantitatively
- understand the interconnectedness of self, community and planet with an awareness of ethical implications
- communicate proficiently in writing, orally and using interpretive and expressive forms
- contribute effectively on diverse teams
- acquire information and utilize contemporary tools expected of their discipline
- demonstrate the integration of multiple areas of knowledge, diverse perspectives, and relevant skills

These AU general education goals are accomplished through a network of curricula that embrace the University mission and values while preserving the distinctiveness of each program.

- The College of Liberal Arts and Sciences curricula addresses the university general education goals through both a breadth of study and the depth offered in the majors.
- The College of Professional Studies foster general education outcomes through both a strong liberal arts foundation and contemporary, innovative courses that prepare students for professional careers.
- The Inamori School of Engineering embeds university general education goals in its inquiry-based programs to prepare technically proficient and broadly educated engineers and scientists.

- The School of Art and Design incorporates university general education goals throughout its multi-disciplinary curriculum that cultivates creative and scholarly research in art.

The goals are further supported through the university libraries and Student Affairs programming.

Through meeting these common general education goals, all Alfred University students develop social responsibility and the ability to use intellectual, practical and creative skills in problem solving. AU graduates are well-educated, independent thinkers prepared for a rapidly changing world and lives of continuous intellectual and personal growth.

Double Major/Double Degrees
Students earn one baccalaureate degree with two majors ("double major") if the majors are offered in the same College or School (except for BS and BFA in the School of Art and Design; see below). Students must complete the requirements for both majors and all other baccalaureate degree requirements that were in effect when the student was admitted (or last readmitted) to undergraduate study at AU. This includes all University, College/School, and major requirements. There is no total credit hour requirement for a double major beyond the minimum required for the degree program when only one major is completed. One diploma is presented at graduation. Note: A student may not add a second or subsequent major to a degree that has already been awarded.

Students may earn two baccalaureate degrees to be awarded simultaneously ("double degrees") when the two degree programs are offered within the School of Art and Design (B.S. and B.F.A.) or when the two programs are offered by two distinct AU Colleges/Schools. (e.g.: B.A. in the College of Liberal Arts and Sciences and B.F.A. in the School of Art and Design; B.S. degrees offered in the College of Professional Studies and in the Inamori School of Engineering.)

To receive two degrees simultaneously, students must complete all University, College/School, and major requirements in effect for both programs at the time the student was admitted (or last readmitted) to undergraduate study at AU and earn a minimum of 148 semester credit hours. Two diplomas are presented at graduation.

Bachelor of Arts Degree for Those Holding a Professional School Degree
Any person who has completed three or more years at Alfred University, who holds no undergraduate degree, and who has subsequently earned the M.D., D.D.S., D.V.M., J.D., or comparable professional degree from an accredited college or university, will be granted, upon request, an Alfred University Bachelor of Arts degree. Upon receipt at AU of an official transcript from the school that conferred the professional degree and of an Application to Graduate, the B.A. degree will be conferred at the next opportunity (August, December, or May).

Degrees Awarded Posthumously
Alfred University may confer posthumous baccalaureate and graduate degrees upon students who are deceased prior to completion of all degree requirements of the program being pursued.

To be eligible for consideration, the student must have been nearing completion of coursework required for the degree and must have been in good academic standing with a grade point average sufficient to have earned the degree. Recommendation for award of the degree must be made by the faculty in the student's major area, and approved by the Chair or Director, the College or School Dean, and the Provost.

Final approval for awarding of posthumous degrees shall rest with the Board of Trustees, which will act upon the recommendation of the President of Alfred University.

Credits, Grades and Grade Point Average (GPA)

The following grade designations are used at the undergraduate level:

Grade	Grade Points per Semester Hour	Meaning
A	4.00	Exceptional
A-	3.67	
B+	3.33	
B	3.00	Good
B-	2.67	
C+	2.33	
C	2.00	Acceptable
C-	1.67	
D+	1.33	
D	1.00	Poor
F	0.00	Failure
I	0.00	Incomplete
IP	0.00	In Progress (at an interim point in a course that extends, *by design* over multiple terms)
P	0.00	Pass
W	0.00	Withdrawn
AU	0.00	Audit (non-credit)

The grade of I indicates incomplete course work due to circumstances beyond the student's control. The Registrar shall change the grade of I to F if the incomplete is not removed within the succeeding semester, unless the instructor grants an extension of the time period for completing the unfinished work.

Calculating the Grade Point Average (GPA)

Only credits attempted at Alfred University which have received final grades of A through F shall be used to calculate GPA. (The grades I, IP, P, W, and AU are *not* used in calculation of GPA.) The Term GPA is calculated by dividing the total grade points (or "quality points") earned by the "GPA Hours" for a given term. The Overall (or "Cumulative") grade point average is calculated by dividing total grade points earned to date by total GPA hours to date. The credit hours for courses passed (those with grades of P or letter grades of D or above) will be counted as credit earned. Grades of I, IP, W, F and AU (audit) do not earn credit. To calculate a projected GPA if certain grades are earned, see the GPA Calculator on the Registrar web page.

Pass/Fail Grading

1. Undergraduate students may designate up to four semester hours each semester to be taken for a grade of P or F provided they have not been previously enrolled in the course and the course is not a required course in their major program. Grades of D or better will be recorded as P. Advisor approval is required. The periods for selecting and canceling the Pass/Fail option are designated in the Academic Calendar. These additional limitations apply:
   - Students in the College of Liberal Arts and Sciences may not take courses that fulfill major, minor, or General Education requirements on a Pass/Fail basis

- Students in the College of Professional Studies may not take courses that fulfill major requirements, or liberal arts credits for the BA or BS degree, or requirements for the minor, on a Pass/Fail basis
- Students in the Inamori School of Engineering may not use the Pass-Fail grading system for any course presented for graduation credits, except in the following instances: Co-op, off-campus study, and ENGR 160/360 Seminar

2. Certain courses may be designated by the college curriculum committees to be graded only Pass or Fail.

Auditing of Courses
A student may elect to take a course on a non-credit or "audit" basis. The student may also change from credit to audit or vice-versa until the last day to withdraw from the course as designated in the Academic Calendar. An auditor receives a grade of "AU" in the course, and this is recorded on the transcript. Courses audited are charged at 50% of the normal tuition rate.

Any student registering as an auditor in a class must consult the instructor to determine the level of participation the instructor expects of an auditor. If an auditing student fails to meet the expected level of participation, the instructor will notify the Registrar when final grades are submitted, and the Registrar will cancel the student's audit registration in that class.

Repeating of Courses
When a course is repeated, the course credits shall be used only once and the grade points and credits corresponding to the most recent grade earned shall be used in calculating the cumulative GPA. While the original grade is no longer used in the GPA, it remains a part of the record and it appears on the student's transcript. If a course cannot be repeated because it is no longer offered, a course with similar content may, with permission of the Dean, be taken in place of the original and recorded as a repeat.

Grade Changes
All grade changes must be completed prior to the Registrar's certification of graduation. Assigning course grades at Alfred University is the exclusive responsibility of course instructors. Nothing in this policy shall be construed to limit the ability of the Registrar to change grades of incomplete (I) to fail (F) in accordance with the policy on grades of "Incomplete." Nothing in this policy shall be construed as substituting or supplanting rules, regulations, or procedures contained in the policy on Academic Dishonesty.

- A grade may be changed by the instructor of a course to convert an Incomplete or IP to a final grade.
- A grade may be changed by the instructor of a course to correct an error. The Division/Program Chair and appropriate Dean must be notified of all grade changes in writing (stating reason(s) for the change) except for completion of work in courses graded I or IP.
- Once assigned, only the course instructor can change a course grade, except in rare circumstances when the course instructor's supervising Dean may change a grade. (See Appendix B in the Undergraduate Academic Regulations on my.alfred.edu for specific information on the circumstances under which a Dean may change a grade.)

Petition for Change of Grade
Students have one year from the date a final grade is issued to petition for a change of grade. A student who believes a final grade is not correct should first meet with the instructor who assigned the grade. If the matter is not resolved, the student should meet with the Division/Program Chairperson in the academic area offering the course in question. If there is no resolution, the student should arrange a meeting with the Dean, or the Dean's designee, of the College or School offering the course.

If there is still no resolution, the student may appeal the decision of the faculty member to the Ombuds Officer. Should a request for an appeal be made to the Ombuds Officer an appeals committee will be assembled. The appeals committee will be constituted by the Ombuds Officer within 14 semester days. Membership of the appeals committee shall include one student, to come from the University Student Grievance Committee, and two full-time tenured faculty.
If the Student Senate has not appointed members of the Student Grievance Committee, or if those members stand in a conflict of interest with the petitioning student, the Ombuds Officer may select any full-time senior student for this purpose.

The appeals committee should meet as soon as possible after members of the committee have been selected. The appeals committee will review the case and prepare a written recommendation to be forwarded to the Provost. The Provost will make the final decision within seven semester days and officially notify, in writing, the student, the instructor(s) and Dean involved in the case.

The student may bring one other student or employee from Alfred University to the appeals committee hearing. Only members of the university community shall be permitted to attend the hearing. The invited other person shall not have the right to speak or otherwise participate in the hearing. No sound or video recording of the appeal committee hearing shall be permitted. All testimony given at the hearing shall be considered confidential except for communication to appropriate university faculty and administrators.

Transfer of Credit
Undergraduate students must complete at least 45 credit hours in residence at Alfred University. "In residence" means courses offered by Alfred University on campus, at an extension site, or through distance education. Students must complete their final 30 semester credit hours in residence. Students who have met the 45 hour residency requirement and who are approved for study abroad in the second to last semester before graduation are exempt from the requirement to be in residence for the final 30 credit hours, but must be in residence in the final semester. Students who have met the 45 credit hour residency requirement and who need no more than eight semester credit hours to complete degree requirements may petition the Dean for permission to complete the remaining requirements elsewhere.

For credits to be transferred toward the AU degree, final, official transcripts from previous institutions must be received by the Office of the Registrar within one year of admission to AU as a degree-seeking student or within one year of an approved study away program.

When applying for admission to Alfred University, send official transcripts to:

Office of Admissions
Alfred University
One Saxon Drive, Alumni Hall
Alfred, NY 14802

Once admitted to AU, send official transcripts and any other academic records to:

Registrar
Alfred University
One Saxon Drive
Alfred, NY 14802

Transferable Credit

Alfred University accepts transfer credits from those U.S. colleges and universities that are accredited by one of the regional accrediting bodies, such as the Middle States Association of Colleges and Schools. Credits earned at U.S. institutions that are accredited instead by one of the recognized national accrediting organizations, such as the Accrediting Council for Independent Colleges and Schools, will be considered for transfer of credit on a case-by-case basis.

Transfer credits from institutions outside the U.S. are considered on a case-by-case basis after the credential has first been evaluated by a recognized agency specializing in evaluation of international transcripts, such as World Education Services. (Evaluation by an outside agency is not required for transcripts issued by Canadian institutions.) Also considered are transfer credits for military training and education (other than training in military science) as recommended by the American Council on Education.

Only courses comparable to the types of courses offered at Alfred University are considered for transfer. Examples of coursework not acceptable are courses in vocational fields or those considered to be technical training. Mathematics courses below college algebra are not accepted. The coursework must be appropriate and applicable to some component of an AU bachelor’s degree program, including general electives.

In courses graded A-F, only those courses in which the student has earned a “C” or above will be accepted. In courses graded pass/fail or credit/no credit, grades of “pass” and “credit” are accepted.

Grades received in courses taken at other institutions are not included in the calculation of the overall Alfred University GPA, so it is not possible to replace a grade earned at AU with a grade earned in an equivalent course taken elsewhere. Further, if a student repeats at Alfred University a course equivalent to one previously transferred, the grade and credits from the AU course are used in the calculation of GPA and total credit hours, The credit that had been transferred is excluded and no longer counts as credit earned.

Transfer credit evaluations are made under the direction of the Dean of the college in which the student is enrolled or wishes to enroll. The Registrar's Office posts the transfer credit to the student's record.

Once admitted to AU, a student must have the permission of the Dean in advance to take courses at another institution and to transfer this credit back to Alfred University. Petition forms to take courses elsewhere after admission to AU are available in the Student Service Center in Seidlin Hall.

Number of Credits Transferable
The maximum number of semester credit hours transferable toward any Alfred University degree program from all sources combined is 75, to include credit from other institutions, credit as recommended by the American Council on Education, and credit from standardized exams (see below). The 75-credit-hour maximum applies to transfer credit earned both before and after admission to an AU degree program.

Credit by Standardized Exams
To encourage students with outstanding ability and enterprise, Alfred University places special emphasis on advanced placement and other exams that assess college-level learning that occurred outside of the traditional college classroom setting. Through these examination programs, students may earn appropriate credit for courses at any level where college-level learning can be demonstrated. AU recognizes these programs:

- The **Advanced Placement** Program of the College Entrance Examination Board (AP). (For a list of scores accepted and corresponding transfer credit given at AU, see the AP Credit equivalencies chart on p. 71)
- The **International Baccalaureate** Program (IB). Alfred University will grant 30 semester hours of credit (sophomore standing) to students who have earned the International Baccalaureate diploma in high school. Students who have not completed the diploma will be awarded equivalent credit up to two introductory courses for each IB exam, depending on level of the exam and the score achieved. (For a list of scores accepted and corresponding credit awarded, see the IB Equivalencies chart on p. 72.)
- The **College Level Examination Program** of the College Entrance Examination Board (CLEP). Only the CLEP subject exams taken prior to admission are considered for credit toward the degree. (See the CLEP Equivalencies chart on p. 73.) Students who wish to take a CLEP Exam for credit after being admitted to a degree program at AU must receive permission in advance from the Dean of their college or school.
- Other standardized exams where no prescribed policy has been determined (DANTES, ECE) are considered on a case-by-case basis for transfer credit. Exam results are compared with national norms to determine credit and/or advanced placement.

Credits awarded from AP, IB, CLEP or from any other standardized exam program are considered to be transfer credits. They count toward the 75 credit hour limit on total transfer credit, and they do not affect the AU GPA.

Credits from standardized exams are evaluated separately by Alfred University from original score reports only, not from the transcript of another college or university. Students are responsible to make sure official score reports are received in the Office of the Registrar within one year of admission to AU as a degree-seeking student. Scores received after this time cannot be counted as credit toward the degree.

Alfred University Challenge Exams
Currently enrolled degree-seeking students may request a challenge examination for any undergraduate course which has not already been taken at Alfred University. (If any grade other than a “W” has been recorded at AU, the course cannot be challenged.) Students cannot take a challenge exam for any course that is a prerequisite for or a lower-level course for which they have already received credit. The student’s Dean determines if an eligible course is appropriate for completion through a challenge examination.

Credits earned through an AU Challenge Exam are considered to be *institutional* credit, not "transfer credit", so these credits do *not* count toward the 75 credit hour limit on transfer credit. If the exam is passed, the credit from a challenge exam is posted to the transcript with a grade of "CH", indicating the course was successfully challenged. Credits earned by challenge exam do not affect the AU GPA. Petition forms for Challenge Exams are available at the Student Service Center in Seidlin Hall.

Academic Standing

The Scholastic Standards Committee of each college or school will serve as the approving authority for student academic standing. The Committee will be composed of the Dean, as chairperson, faculty representatives, a Student Affairs representative, and the Registrar. Student representatives may be added at the discretion of the college/school.

Definitions

- **Good Standing**: Meeting or exceeding the minimum requirements for satisfactory progress toward the degree.
- **Academic Probation**: Studies at the University may continue, but a probation contract may be required by the Dean and there may be limitations on credit load.
- **Academic Suspension**: Studies at the University are interrupted for at least one full semester. The permission of the Dean of the College/School that suspended the student is required in order for the student to resume studies at AU. The Dean may require that specific conditions be met before permission to return will be considered.

  Potential transfer credit while away from AU may or may not be allowed. Students who do not resume studies at the end of the period of Academic Suspension are withdrawn from the University and must be readmitted to the University in order to resume studies in the future.
- **Academic Dismissal**: Separation from the University due to serious, prolonged academic deficiency as evidenced by consistently low grades and, usually, repeated Academic Probation or Suspension. After a period of at least 2 years an application for readmission to the University may be considered on a case-by-case basis.

Students must maintain the following term and cumulative Grade Point Averages to remain in Good Standing:
In the College of Liberal Arts and Sciences, the College of Professional Studies, and in the Inamori School of Engineering:

The minimum GPA is 2.00 regardless of the number of credits attempted*

In the School of Art and Design:

Number of Credits Attempted*	Minimum GPA
0-35	1.70
36 or more	2.00

***"Credits Attempted" include transfer credits and all credits earned at AU, as well as the credits for withdrawn courses and courses with grades of "In Progress" (IP) or "Incomplete" (I). Only Audited courses are excluded.**

- A student whose term or cumulative GPA drops below the level established, or who is not satisfying requirements towards a degree, will be placed on Academic Probation or may be Academically Suspended or Dismissed.

- A student on Academic Probation who fails to attain the minimum term and cumulative GPA's for a second consecutive semester may be placed on Extended Academic Probation or on Academic Suspension, or may be Dismissed.
- A student with multiple semesters on Academic Probation or Extended Academic Probation, whether or not the semesters are consecutive, may be Academically Suspended or Dismissed.
- Students with a term or cumulative GPA below 1.00 are subject to Academic Suspension or Dismissal regardless of their prior academic standing.
- A student who is eligible for Academic Suspension a second time or who would be on Academic Probation/Extended Academic Probation for a third consecutive semester may be Academically Dismissed. A student eligible for a third Academic Suspension will be Dismissed from the University
- Students may appeal their Suspension or Dismissal through the Dean for presentation to the Scholastic Standards Committee of the College or School that placed academic sanctions on the student.

Academic Honors

Dean's List

A full-time degree-seeking student in good academic standing who earns at least a 3.5 grade point average for a Fall or Spring semester with 12 or more GPA hours, no letter grade below C-, and no grade of Incomplete (I) is placed on the Dean's List in his or her school or college for that semester. Notation of the award is made on the student's official transcript.

Graduation Honors

Honors in the Field of Specialization

Although specific requirements are determined by the faculty in the academic area offering the major, general requirements for honors candidates have been adopted by the faculty.

Candidates for this honor shall have:

- attained a cumulative GPA of 3.30 in the courses of their field of specialization
- earned at least two semester hours of credit in independent study (may be waived by the major area faculty)
- passed an oral examination in the major and allied fields, conducted by a committee selected by the major faculty

Overall Honors

Sometimes called "Latin Honors", three grades of honors are awarded to graduating seniors based on their cumulative scholarship attainment as evaluated upon completion of all requirements for the bachelor's degree. In order to be eligible for these honors a senior must have earned a minimum of sixty credit hours at Alfred University ("Passed Hours") with at least fifty "GPA Hours."

Summa cum laude, or highest honors - GPA of 3.90 and no grade below B
Magna cum laude, or high honors - GPA of 3.70 and no grade below C
Cum laude, or honors - GPA of 3.30

Alfred University Scholar

Students in the University Honors Program who earn at least a 3.20 cumulative GPA, successfully complete four Honors seminars, and write and defend an Honors Thesis, graduate with the designation "Alfred University Scholar". (See below for more information on the Honors Program.)

Top Undergraduate Honors
The highest ranked graduating student in each undergraduate college or school will be selected by the Registrar using the following guidelines:

- a minimum of 60 “GPA Hours”
- grades received in all courses transferred to AU will be included in the calculation of a student’s “honors GPA” for this purpose only
- double degree students may be honored for their work in either college or school

The top undergraduate students are seated on the Commencement platform and are recognized during the ceremony.

Prizes and Awards
In addition to the academic honors formally attained for outstanding scholarship, a number of prizes and awards are sponsored by individuals and organizations. These special and commemorative awards are presented annually during Honors Convocation.

Honor Societies
The following are University Honor Societies in various disciplines:

Alpha Iota Delta – Decision Sciences
Beta Gamma Sigma – Accredited Business Schools
Delta Mu Delta – Business Admin.
Keramos – Ceramic Engineering
Mu Kappa Tau – Marketing
Omicron Delta Upsilon – Economics
Pacioli Society – Accounting
Phi Alpha Theta – History
Phi Beta Kappa – Liberal Arts
Phi Kappa Phi – University-wide
Phi Sigma Iota – International Languages
Pi Gamma Mu – Social Sciences
Pi Sigma Alpha – Political Science
Psi Chi – Psychology
Sigma Xi – Scientific Research
Tau Beta Pi – Engineering

University Honors Program

The Alfred University Honors Program is designed to enrich the lives of exceptional students. More than 150 "Alfred University Scholars" represent all colleges and schools within the University.

Honors seminars are the heart of the program. These informal classes, with an enrollment limit of 15, meet one evening each week throughout the semester. The discussion/debate is usually lively, because the seminars are chosen by the students themselves. Over a two-year period 25-30 seminars are offered, on topics as diverse as A Beginner's Guide to World Domination, T'ai Chi: A Way of Life, Wiseguys, Whackos and Whiners, Soundtrack to Rebellion: Metal, Punk, and Hardcore, Drinking Up: The History and Science of Alcohol, Invest Like Buffett, or Mysteries of the Brain.

The other academic component of Honors is the senior thesis. Theses come in all shapes and sizes, but the common thread is a chance to work closely with three faculty mentors on a project of substance. Theses are bound and become part of Herrick Memorial Library's permanent collection

Anyone with an outstanding high school record and a broad range of intellectual interests may apply. For more information, check out the Honors link on the Alfred University website or write to Dr. Gordon Atlas, Honors Program, Alfred University, One Saxon Drive, Alfred, NY, 14802, or email atlas@alfred.edu.

The Center for Academic Success

The Center for Academic Success (CAS) is dedicated to helping students at Alfred University get the support they need to be academically successful. CAS services assist students at all levels in meeting the ever-changing demands of the educational environment. In addition to providing academic support to any student, CAS also provides services and coordinates academic accommodations for students on campus who identify as having a disability.

Academic Support Services

Supplemental Instruction

Supplemental Instruction (SI) is an internationally recognized academic support program that consists of regularly scheduled, peer-led study sessions for traditionally difficult courses. SI sessions are facilitated by SI Leaders, undergraduate students who have previously taken the course and demonstrated academic competency in the subject area. Each SI Leader attends every class meeting, consults regularly with the instructor, and facilitates at least three 50-minute sessions per week using collaborative learning methods. Students are invited to attend as many SI sessions as they like!

Tutoring Services

Drop-in peer tutoring is available for many courses offered at Alfred University. Individually scheduled peer tutoring is also available for other courses upon request. Students interested in tutoring are encouraged to stop by CAS to meet with a staff member to discuss their learning needs, review various campus resources, and arrange the appropriate level of tutoring services.

Writing Center

The Writing Center provides free writing assistance to all Alfred University students, faculty, and staff. Student tutors represent a wide range of academic disciplines and are trained to deal with all kinds of writing tasks. Tutors can assist writers with discovering ideas, organizing information, revising a final draft, or preparing technical documents.

Disability Services

CAS coordinates academic accommodations, provides support services, consultation, and advocacy for students with learning, physical, and/or psychological disabilities. Services are intended to maximize independence and encourage the integration of students with disabilities into all areas of college life.

Assurance of equal educational opportunities rests upon legal foundations established by federal law, specifically Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. By federal law, a person with a disability is a person who:

- Has a physical or mental impairment
- Has a record of such impairment; or
- Is regarded as having such an impairment that it substantially limits one or more major life activities such as self-care, walking, seeing, hearing, speaking, breathing, or learning.

In order to determine whether an individual is entitled to protections and services under the law, CAS requires documentation that verifies that the individual has a disability.

Recent documentation provided by a properly credentialed professional should include a diagnostic statement identifying the disability, the diagnostic methodology used, as well as a description of the current functional limitations and how they can be accommodated. This allows CAS staff to appropriately determine eligibility and reasonable accommodations.

Website: http://my.alfred.edu/index.cfm/fuseaction/cas.home.cfm
Mailing Address:
Center for Academic Success
Herrick Library
Alfred University
1 Saxon Drive
Alfred NY 14802
Phone: 607.871.2148
Email: CAS@alfred.edu

Registration, Scheduling, and Attendance

Each student is assigned a faculty advisor who helps plan a course of study and who is available throughout the year. Students should also feel free to consult any faculty or staff member who might be able to help. Students are primarily responsible for their own academic progress, but all members of the faculty and administration are prepared to assist. Students must have their schedule or study plan for the following semester approved by their advisor(s) in order to register for classes. The written approval of the student's Dean is required to register for more than 18 credit hours in a semester (20 for School of Engineering).

Adding and Dropping Courses
A course may be added or dropped during the periods indicated in the Academic Calendar without penalty. Dropped courses do not appear on the student's transcript.

Withdrawing from a Course
A student may withdraw from a course and receive the grade of “W” with the signature of the instructor and the approval of the student's advisor during the period designated by the Academic Calendar.

Attendance
Regular class attendance is expected of all students. Under the “First Class Attendance Rule”, a student in a closed course who does not attend the first class meeting or communicate with the instructor or the Registrar's Office by the close of the day of the first class may be dropped from the course.

Leave of Absence/Withdrawal and Readmission

Taking a Leave of Absence
Alfred University recognizes that there are good reasons why a student may want or need to temporarily interrupt his or her education. Therefore, the University has established a leave of absence policy that assures students of the right to continue their education following a specified leave period.

- A student must make a written request for a leave of absence to the Dean.
- The request must include the reason(s) for the leave and the length of time the student plans to be away. Leaves are generally granted for one or two semesters. A leave of absence will not usually be granted for a semester in progress.

- Before granting the leave the Dean will consult with the Student Affairs Office. Students on judicial probation will normally not be granted a leave.
- Once a leave is granted the Dean will notify other interested University officials of the decision and the expected date of return.
- There are circumstances (for example, a felony conviction) under which a student's leave, and eligibility to return to the University, may be canceled.
- A student who is granted a leave of absence to deal with medical and/or psychological problems must submit a clinical evaluation to the Student Affairs Office and be approved to return from leave by the Dean of Students.
- A student who does not return from Leave of Absence when scheduled to do so will be administratively withdrawn from the University.

Withdrawal and Readmission

A student who finds it necessary to withdraw from the University during the academic year or at the end of any semester, must contact Student Affairs to initiate official withdrawal. Students who withdraw officially are eligible for a refund of the enrollment deposit.

Undergraduate students admitted to the University are expected to continue to register for classes at AU and to pursue their degree. Those admitted to *full time* study must enroll each Fall and Spring Semester. Students admitted to *part time* study must enroll at least once in any 12-month period. Unless on an approved leave of absence, those who do not enroll on a regular basis as specified are administratively withdrawn from the University. Students withdrawn under this provision forfeit their enrollment deposit.

A student who has withdrawn from school or who has been withdrawn, suspended, or dismissed for any reason may be granted the opportunity to return. Application for readmission must be in writing to the Director of Admission. These applications must be submitted by August 1 for Fall Semester readmission or by December 1 for Spring Semester readmission.

A readmitted student must complete the degree requirements of the University catalog in effect at the time of readmission or, at the student’s choosing, the requirements of a later catalog.

Grades for Students Leaving School during the Semester

A student who formally leaves school during a semester by Leave of Absence or by Withdrawal will be given “W” grades in registered courses providing the deadline to withdraw from each course, as published in the Academic Calendar, has not passed. If the last day to withdraw from courses has passed, the instructor will record a final (non-W) letter grade. In case of extenuating circumstances the student’s Dean may permit “W” grades to be recorded after the deadline has passed.

ALFRED UNIVERSITY CODE OF HONOR

We, the students of Alfred University, will maintain an academic and social environment which is distinguished by honesty, integrity, understanding, and respect. Every student is expected to uphold these ideals and confront anyone who does not. Keeping these ideals in mind, we, the students, aspire to live, interact and learn from one another in ways that ensure both personal freedom and community standards.

Student Senate Committee on Academic Affairs – April 2, 1997

Academic Dishonesty (Unethical Practices)

Definition

Unethical conduct or academic dishonesty is defined as any action that enables students to receive credit for work that is not their own. Such conduct will not be tolerated in any form. Academic dishonesty can occur both in and outside the classroom, studio, or lab. This might involve venues as varied as student publications, art exhibits, and public presentations.

In the context of tests, quizzes, examinations, or other in-class work, dishonest practices include but are not limited to:

- Marking an answer sheet in a way designed to deceive the person correcting it.
- Possession of unauthorized material that could be used during a quiz, test, or examination for the purposes of cheating.
- The unauthorized use of books or notes during a quiz, test, or examination.
- The hiding or positioning of notes or other tools for the purposes of cheating on a quiz, test, or examination.
- Unauthorized possession or knowledge of any examination prior to its administration.
- Looking at someone else's quiz, test, or examination without the express permission of the instructor.
- Any form of unauthorized communication during a quiz, test, or examination. This includes use of any electronic communication devices without the consent of the instructor. Such devices include--but are not limited to--cellular phones, Bluetooth, computer internet, recording devices, and PDA, CD and MP3 players.

In the context of writing assignments, research projects, lab reports, and other academic work completed outside the classroom, dishonest practices, commonly referred to as plagiarism, include but are not limited to:

- Lack of adequate and appropriate citation of all sources used.
- The appropriation of another’s ideas, analysis, or actual words without necessary and adequate source citations, either deliberately or inadvertently.
- The copying, purchase, or other appropriation of another person’s academic work with the intention of passing it off as one’s own original production.
- The creation of a document by more than one student that is then submitted to the instructor as the original creation of only one student, without the express permission of the instructor.
- Submitting the same piece of work to more than one instructor without the express permission of *all* instructors involved.

Guidelines for Avoiding Dishonest Behavior

The following guidelines are included to assist students in avoiding dishonest behavior in their academic work, particularly in writing assignments, research projects, and lab reports.

a) Students’ written work should reflect their own personal preparation for the assignment, such as reading books and articles, performing research on the internet and in electronic databases, and taking notes in class and during the research process.
b) Students should avoid using the actual words of the authors of their sources whenever possible, opting instead to demonstrate an understanding of the authors’ ideas by rewriting them in their own words.
c) All ideas and analyses that are derived from other authors must be attributed to those authors in the form of appropriate source citations, even when their own words are not used. Source citations usually take the form of footnotes, endnotes, or parenthetical citations in addition to a formal bibliography and/or

works cited page at the end of the writing assignment. The format for these source citations depends on the conventions of each academic discipline: consult your instructor as to the appropriate form to use.

d) When the use of an author's specific text is unavoidable or necessary, that material must be identified as a direct quotation and must either be surrounded by quotation marks or formatted as a block quotation. Appropriate source citations must follow all quotations, as per the instructions above.
e) Circumstances when direct quotation is necessary or desirable include: when the wording of the text is essential to the student's own analysis; when the text exemplifies the author's particular perspective; when quoting the text is a more efficient way of presenting the author's ideas than a more elaborate and lengthy paraphrase would be. It should be noted that lengthy quotations and/or their overuse is neither desirable nor appropriate in most instances and should be avoided. Additionally, over-reliance on lengthy quotations can be considered a form of plagiarism.
f) Some instructors find collaborative assignments useful. Students may be allowed to collaborate in shared assignments only with the specific permission of the instructor. In those circumstances the limits to the collaboration will be established by the instructor and students should be aware that they are responsible for maintaining the appropriate limits to that collaboration.

Procedures

First Offense

If academic dishonesty is suspected, the following procedures should be followed:

a) Before a formal charge of academic dishonesty is made, the instructor is strongly encouraged to have his or her department chair or, if that department chair is deemed inappropriate or impractical, another colleague or administrator, review the alleged infraction.
b) Within seven semester days after the infraction is observed or verified, the instructor shall advise the student orally, if possible, and by email that the student has (or may have) committed an act of academic dishonesty. This will allow simple misunderstandings and misinterpretations to be resolved. A semester day is defined as a day when the university is in session and classes/exams are held.
c) If the instructor remains convinced that an offense has occurred, a written statement of the offense will be sent to the student by email and also by regular mail. The statement will include whatever penalty the instructor considers appropriate. For offenses categorized as Tier One (see below), a copy will be sent to the instructor's dean, the student's dean, and the Provost. This letter should include a reference to this section of these regulations to inform students of their rights and the procedures to be followed if an appeal is needed.
d) The penalties assessed may range from non-grade penalties to failure in the course.
e) Infractions shall be categorized as Tier One (major) or Tier Two (other).
   Tier One infractions shall be reported to the student's dean and the provost. A second Tier One infraction will result in dismissal from the university. Tier One offenses include (but are not limited to) the following: plagiarism, submission of a commercially-derived term or research paper or report or art-presentation, use of a research paper or report prepared by another person without the instructor's permission, producing a research paper or report for another student without the instructor's permission, cheating on an examination or quiz, aiding and abetting academic dishonesty, falsification of grades or records, unauthorized viewing or altering of academic or administrative records, gaining an unauthorized or unfair advantage on

academic assignments (including preventing other students from fair access to academic materials), buying or selling assignments or examinations.

Tier Two infractions are generally considered less serious than Tier One offenses. They need not be reported to the Provost and the dean(s). Examples of Tier Two infractions include attendance-related dishonesty or submission of assignments to two or more classes without the instructor's permission. If an instructor is uncertain about categorizing an infraction as Tier One or Tier Two, he/she shall make a determination in consultation with a department chair or, if the chair is a party to the case or is otherwise unavailable, the dean or assistant dean of the college.

f) The academic dean of the student's college should advise the student of appeal procedures that are available.

Following a Charge of Academic Dishonesty

a) A student charged with an unethical practice may accept the judgment and penalty assessed by the instructor.
b) A student charged with an unethical practice may appeal in writing directly to the instructor who assessed the penalty within fourteen (14) semester days after the instructor sends email and written notification of the offense and penalty to the student. The fourteen semester-day period is not dependent on proof that the student has read the instructor's email or written notification.
c) If the penalty is modified to one acceptable to both student and instructor, the appropriate academic deans and the Provost will be notified of the change.
d) If the instructor will not modify the penalty, the student may present the case to the Ombuds Officer
e) In the event the matter is not resolved in a manner satisfactory to all parties through the Ombuds Officer's review, the Ombuds Officer may at his/her own initiative, or shall at the student's request, refer the matter to an appeals committee. A student request for appeals committee consideration of the matter must be made to the Ombuds Officer within fourteen (14) semester days after the Ombuds Officer notifies the student orally, by email, or in writing, that the Ombuds Officer has been unable to resolve the matter.
g) The appeals committee will be constituted by the Ombuds Officer within 14 semester days. Membership of the appeals committee shall include one student, to come from the University Student Grievance Committee, and two full-time and/or tenured faculty. If the Student Senate has not appointed members of the Student Grievance Committee, or if those members stand in a conflict of interest with the student accused of the infraction, the Ombuds Officer may select any full-time senior student for this purpose. The appeals committee should meet as soon as possible after members of the committee have been selected. The appeals committee will review the case and prepare a written recommendation, to be forwarded to the student, the instructor(s) involved in the case, the student's academic dean, and the provost within seven semester days once the appeal committee has come to a recommendation.
h) The instructor, the appropriate departmental/divisional head (if he/she is not a party to the case), and the instructor's dean (if he/she is not a party to the case) will consider the recommendation and notify the student, the student's Academic Dean, and the Provost of their final decision.
i) The student may bring one other student or employee from Alfred University to the appeals committee hearing, but no person not a member of the university community shall be permitted to attend the hearing. The invited other person shall not have the right to speak or otherwise participate in the hearing. No sound or video recording of the appeal committee hearing shall be permitted.

j) If the student is subject to more than one charge of academic dishonesty in a single class and the student requests an appeal committee hearing, all charges shall be considered together in a single hearing.
k) All testimony given at the hearing shall be considered confidential except for communication to appropriate university faculty and administrators.
l) If the appeals committee judges that the student is not guilty of academic dishonesty and the instructor who made the initial charge accepts the recommendation of the committee, all written records pertaining to the matter will be destroyed.

Second Offense
Notification and appeal procedures regarding second infractions are identical to those for an initial infraction.
a) A student found guilty of a second major infraction will be dismissed from the university within fourteen (14) semester days, unless the student appeals the charge.
b) In unusual cases, the Provost has the right to dismiss a student who has committed more than one minor infraction from the university, to be determined by the Provost in consultation with the appropriate dean(s).
c) If the instructor chooses not to drop the charge and the student wishes to appeal the second offense, the Provost will transmit the appeal to the Ombuds Officer for an appropriate appeals committee review and recommendation for action to the Provost. If the review and recommendation confirms that the second offense is a major infraction and that the instructor's action is warranted, the student will be dismissed from the University immediately.
d) In the case of a senior who plans to graduate at the end of the semester in which the second offense occurs, the appeals committee review should be conducted as soon as practical. If the date of the commencement ceremony makes the appeals committee meeting impractical, then the Provost, together with the student's dean, shall have the authority to dismiss the student prior to the commencement ceremony.

Notification
Regarding all cases that fall under the purview "Second Offense", the Provost will notify the instructor(s) and student of a final decision.

When more than one college is involved (for instance, if a student from one college is charged with an infraction by an instructor in another college), the Provost shall inform all appropriate deans or program directors of the events and penalties.

Records
All reports and documents pertaining to each case, including faculty charges, student appeals, and appeal-committee records, along with written responses from the Provost's Office, will be filed with the Vice-President of Student Affairs. Where practical, electronic copies of this information shall be sent to the Provost.

All such information is subject to regulations regarding disposal of records and release of information mandated by Alfred University and/or found in the Family Educational Rights and Privacy Act (FERPA), or as mandated by any other controlling legal authority.

Allen Term (Winterterm) and Summer Term

Allen Term is a 5-week session between the end of Fall Semester in mid-December and the start of Spring Semester in mid-January. Online courses and travel and other types of off-campus courses are offered during Allen Term.

Summer School is offered in one 12-week session, two six-week sessions, and short-term, intensive sessions of three or four weeks. Summer School offers a variety of courses at the undergraduate and graduate level. Summer Term at AU includes on-campus courses as well as online and hybrid courses that combine online learning with some on-campus classes.

Allen Term and Summer School are appropriate for people who:

- want to accelerate undergraduate studies
- are interested in graduate work
- need to make up a course or complete certain requirements
- wish to expand knowledge or skills in a variety of fields

Students enroll in courses for which they are qualified by experience or previous preparation. (Some advanced courses, however, may not be taken unless prerequisite requirements have been fulfilled.) Regular attendance is expected.

Students enrolled in another institution who plan to attend Allen Term or Summer School at Alfred University should consult an official at their home school in advance to be sure the courses are appropriate to their degree programs.

For additional information contact the Student Service Center, Alfred University, One Saxon Drive, Alfred, New York 14802. (607-871-2123, or email registrar@alfred.edu).

Special Academic Programs

Study Abroad

Alfred University encourages students to consider opportunities for studying abroad. There are many programs and options available. Approved programs can be found at: http://www.alfred.edu/studyabroad

Planning your Semester Abroad

Participation in a study abroad program of a semester's duration is supported for all majors. With planning, students who are Language or Comparative Cultures majors have been abroad for longer periods, spanning an academic year or two semesters.

No time is too early to start planning. We recommend the following steps to success:

1. Start conversations early with both your academic advisor and the Office of International Programs.
2. Note application deadlines – generally you will need to submit a complete application for study abroad early in the term before you wish to be abroad (if you want to go abroad in the fall, your application will be due in early spring and vice versa). It is good practice to speak with the Office of International Programs approximately a year before you wish to go, as deadlines can be as early as September 1st for Spring Term programs and February 1st for Fall term programs.

3. Keep your grades up! All programs have minimum eligibility requirements, including GPA, class standing or course prerequisites.
4. Stay out of trouble. Student conduct is a factor is the study abroad application and approval process.
5. Stay informed and on top of your AU finances. Being knowledgeable about your financial aid package (if applicable) and understanding AU billing will make choosing the right program easier.
6. Consider language studies. Though not necessary to study abroad (many countries have English as an official language), knowing a second language opens up your options.

Study Abroad Academic Policies

Courses and Course Load

- Study abroad may not be in the intended last semester of enrollment.
- While abroad, students must carry a full-time load of coursework; this cannot be less than the equivalent of 12 credit hours for semester-long study abroad programs.
- Participation in an off-campus study abroad program precludes simultaneous registration for AU coursework (independent study, internships, etc.). The off-campus study program must report all credit earned for the semester abroad.
- Students who remain registered for regular classes (non-OCST) on-campus in Alfred on the first day of the term here are charged AU tuition for those classes.
- A Study Abroad Course Approval form (available in the Office of International Programs and in the Student Service Center) must be filled out and approved by the faculty advisor, the Director of the Office of International Programs, and the Dean. This form lists all the courses to be taken abroad and their AU equivalents.
- Credit earned by the student on approved programs must transfer as credit towards graduation and may fulfill major/minor requirements subject to the approval of the Dean of the College/School.
- In order for the credits to be transferred to AU, the student must obtain a grade equivalent to “C” or better in any course.
- Grades earned on a study abroad program are not calculated in the Alfred University GPA.

Required Pre-departure Class

All students going abroad for a semester or longer are required to enroll in OCST 301, the study abroad preparation and review class. This class is designed to give students important academic and administrative information and to prepare them for adjustments they will have to make while living in other cultures and attending universities abroad. It is a B-block class (meets only in the second half of a semester) and students should take it the semester before they are planning on studying abroad.

Alfred Research Grants for Undergraduate Students

Students in all colleges may apply for ARGUS funding to support a research project during the fall, spring, and/or summer. Students author their own proposals to explore a research question that they can address via creative enterprise, laboratory research, etc. All proposals are to be developed in consultation with a sponsoring faculty member and are reviewed by faculty volunteers. If funded, a student may receive up to $750 for a semester of work. ARGUS funds can be used for supplies and materials not readily available but essential to the work or to partially offset travel costs to present project results (though successful grants should not be entirely seeking travel funds).

At the end of the academic year, students are expected to present their work at the annual Undergraduate Research Forum in the academic year they receive funding. For more information, students should visit the ARGUS homepage on my.alfred.edu.

Cross-Registration at Area Schools

To provide students with the opportunity to explore an area of interest not otherwise available, Alfred University participates in a cross-registration program with more than 15 area colleges and universities through the Rochester Area Colleges (RAC) consortium. The list of participating RAC members includes nearby Alfred State College. Cross-registration under this program is available in Fall and Spring Semesters to full-time degree-seeking undergraduate students.

The course to be taken must be one that is not available at AU and it must be applicable to some component of the AU degree program. Faculty advisor approval is required.

Students should be aware that the various member schools operate on differing academic calendars. The registration deadlines and all other academic polices of the school offering the course apply. There is no additional tuition charge for RAC cross-registration, but any lab, materials, or other special fees must be paid.

Credits earned under this program are considered to be transfer credits. They count toward the 75 credit hour limit on transfer credit, and the grades received in cross-registered courses do not affect the AU grade point average (GPA). For more information or to obtain a RAC cross-registration form, contact the Student Service Center in Seidlin Hall.

Special Program for Area High School Students

Qualified high school juniors and seniors from Allegany, Cattaraugus, Chautauqua, Chemung and Steuben counties are eligible to take up to two 100- and 200-level courses (up to eight semester hours) per term during Fall or Spring semesters for a fee of $100 per course. Eligibility begins with the start of the junior year and ends with high school graduation. The approval of the student’s guidance teacher or principal is required.

Entrance into a particular course depends upon available openings in the course. Students register in person at the Student Service Center up to two-weeks before the first day of the semester. High school students who take AU courses through this program are not guaranteed acceptance into any Alfred University degree program at a later date.

Physical Education

The Physical Education program offers a wide variety of activity and theory courses, all of which are coeducational. Emphasis is placed on meeting individual needs. The program presents a broad range of beginning-level courses to help students develop skills in activities and seasonal sports that will carry over into later life. While skill and conditioning are important aspects of the courses, knowledge of rules, equipment, technique and strategy is stressed.

University Libraries

Herrick Memorial Library

Herrick Memorial Library is committed to providing curriculum-centered collections, personal service, and state-of-the-art access to information.

Built in 1957 and renovated in 2007, it provides space for group study, supported by appropriate technologies, in its learning commons. There is space for reflection and/or discussion in its lounge, where new journals, books and newspapers can be enjoyed with a cup of coffee. During the academic year the library is open 108 hours a week, with extended hours during final exam week. An all-night study room is available for use after the library closes, providing study space and a computer lab 24/7. The library also has four meeting rooms which can be reserved by members of the Alfred University community. Group study rooms and quiet, individual workspaces are also available, accommodating a wide variety of study preferences.

There are 40 computer workstations throughout the building and an additional 15 laptops which can be checked out for use in the library. Wireless access is available throughout the building.

Herrick Memorial Library's website [http://herrick.alfred.edu] provides round-the-clock access to the library catalog, electronic reserves, electronic journals and books, specialized databases, and other resources selected by our librarians to support student and faculty research. Herrick provides access to over 100,000 periodical titles and over 500,000 e-books. Its collection also contains recreational collections of books, movies and music.

Herrick also offers interlibrary loan and document delivery services, which provides access to materials from other libraries. Professional research support is available, enabling library users to make the most of their research efforts. Research questions can be submitted to "Ask a Question" on the library's website at any time.

Herrick's librarians are committed to supporting the University's educational mission and to promoting information literacy skills. It is the Library's goal to teach students how to locate, evaluate, and effectively use information. This is accomplished through course-related and individualized instruction as well as by providing research guides for specific subject areas.

Special Collections and the University Archives, offers its collections and services in a secure, climate-controlled area. The area features an ornately decorated conference room with seventeenth century English oak paneling. The Archives provides primary source materials which document the history of the University, works closely with faculty to integrate the collections into the classroom, and actively digitizes material to expand access to the collections online.

Scholes Library

The Samuel R. Scholes Library of Ceramics, established in 1947, is a special library providing academic support for the University's programs in art and engineering.

The Scholes Library collections are internationally recognized as a resource for information on the art, science, technology, and history of ceramics and glass. The library also has outstanding holdings in the areas of advanced materials, photography, art history, contemporary art, electronic media, graphic design, glass art, and sculpture. Resources include an extensive and specialized collection of books, media, and journal titles in print and electronic formats.

Our Visual Resources collection includes thousands of digital images and 170,000 slides. Scholes Library is fully engaged in image digitization efforts that support and enhance classroom instruction.

During the academic year the library is open over 90 hours per week, with extended hours during final examination periods. Professional reference assistance is available during most open hours. In addition to providing assistance at the Reference Desk, the librarians offer instruction sessions tailored to the needs of art and engineering students, as well as one-on-one consultation appointments.

Scholes Library's physical facilities are designed to provide outstanding information services. Our facilities include group study rooms, graduate carrels, faculty studies, and meeting spaces. Patrons may make use of the computers and printers in our information commons, as well as those in our design-oriented Mac Lab. We also have several instruction and presentation spaces, specifically designed for lectures or creative collaboration.

Scholes Library also provides a home for special collections in art and science and the college archives. The Special Collections Room houses rare and unique materials, including a collection of artists' books and original theses and dissertations by graduates of the New York State College of Ceramics at Alfred University. The College Archives preserve historical documents and photographs relating to the history of the College. Under the supervision of a trained archivist, this facility serves as a resource for scholars researching the history of American ceramic art and science as well as the rich history of the college and its notable faculty.

Patrons can access quick links to the online catalog, many specialized indexes, and full-text article and image databases 24/7 via the library's web page [http://scholes.alfred.edu]. Both of the Alfred University Libraries are full participants in the SUNYConnect System. SUNYConnect links libraries across the State University of New York to form a single multi-campus "virtual library," greatly expanding access to print and electronic resources for all Alfred University students.

Technology Resources

The goal of Alfred ITS is to provide communication tools and infrastructure that facilitate learning and prepare students for an information-based workplace; enabling them to seek, organize, analyze, and apply information and associated technologies appropriately.

In support of these goals, ITS provides a 500 Mbps connection to the Internet with a gigabit wired network, and a wireless network in all academic, residential, and administrative buildings. The University also maintains a secure, on-campus, climate-controlled data center backed up by an emergency power source.

The University uses a variety of approaches in making computers available to students. General and specialized computing labs are located throughout the campus. All ITS-maintained campus computer labs are on an aggressive 3-year replacement cycle. Lab computers are loaded with Microsoft Office Professional. Specialized software such as SPSS, Adobe Creative Suite, Final Cut Express, Maple, Mathematica, SolidWorks, ArcGis, Minitab and others are available in select labs.

The University's two libraries make their catalogs and a wide variety of electronic databases and information resources available through their Web Pages. Students, faculty, and staff can access research resources from any place with Internet access at any time of day or night.

Students may borrow laptops (PC or MAC) through ITS Equipment Lending in Perlman hall. This program enables students with short-term computing needs to borrow a laptop for use anywhere on or off campus. ITS Equipment Lending also offers audiovisual equipment for short-term use in class projects. Equipment includes: computer projectors, digital still, and video cameras, digital audio recorders, and other equipment that facilitates media production.

Alfred University provides a wide range of Web communication resources, including Blackboard learning management system, Alfred Today, and the student Web portal. These tools support our students' academic, extracurricular, and social activities. Increasingly, these resources are being tailored for use on mobile devices and smart phones.
Students register for classes on-line through BannerWeb. To name just a few of the features that Banner provides, students can review their grades, check their student accounts, and print off their class schedules.

The AU Information Technology Helpdesk provides service-oriented support for campus technology needs to all students, faculty and staff.

The Graduate School

Graduate programs are offered in keeping with educational demands and with the potential of certain departments in the University to make distinctive contributions at an advanced level.

Degree programs offered are: Master of Arts, Certificate of Advanced Study, and Doctor of Psychology in School Psychology; Master of Business Administration in Accounting and in Business Administration; Master of Science in Education/Certificate of Advanced Study in Counseling and in Mental Health Counseling; Master of Science in Education – Literacy Teacher; Master of Fine Arts in Ceramic Art, Sculpture/Dimensional Studies, or Electronic Integrated Arts; Master of Public Administration; Master of Science in Biomaterials Engineering, Ceramic Engineering, Electrical Engineering, Glass Science, Materials Science and Engineering, or Mechanical Engineering; Doctor of Philosophy in Ceramics, Glass Science, or Materials Science and Engineering.

Graduate degree requirements and descriptions of graduate courses and programs are found in the Graduate School catalog available from the Graduate School Office, One Saxon Drive, Alfred University, Alfred, NY 14802. Telephone (607) 871-2115 or 800-541-9229. This information is also available on the web at www.alfred.edu/gradschool.

Graduation Rate

The graduation rate tracks the progress of students who began their studies as full-time, first-time degree-seeking students to determine if they earn a degree within 150% of "normal time" for completing the program in which they are enrolled.

In the Fall Semester of 2009, 465 full-time, first-time degree-seeking undergraduate students enrolled at AU. After 6 years (as of August 31, 2015), 279 of these students (60%) had graduated from Alfred University. Additional information on AU's graduation and retention rates can be found on College Navigator.

Course Numbering System

Courses offered at Alfred University are numbered as follows:

001–099 Courses of a remedial nature that do not carry credit toward any University degree.

100–199 Courses without prerequisites primarily for undergraduate students in their first year of study.

200–299 Courses with or without prerequisites primarily for undergraduate students in their first or second year of study.

300–399 Courses usually having prerequisites and offered primarily for undergraduate students in their third or fourth year of study.

400–499 Advanced courses primarily for undergraduate students in their fourth year of study.

500–599 Courses primarily for graduate students. With permission of the instructor, undergraduate seniors in good standing may enroll in these courses for undergraduate or graduate credit. (May count for graduate credit only if not required to complete the undergraduate degree.)

600–699 Advanced graduate courses open only to graduate students.

A few designated courses at the 400-level may be taken for graduate credit only by students who have been formally admitted to the Graduate School prior to the registration; permission of the advisor is required.

Religious Beliefs and Class Attendance

No person shall be expelled from or refused admission as a student to an institution of higher education for being unable, because of religious beliefs, to attend classes or to participate in any examination, study or work requirements on a particular day or days

- Any student who is unable, because of religious beliefs, to attend classes on a particular day or days shall, because of such absence, be excused from any examination or any study or work requirements
- It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make equivalent opportunities available to any student absent from school because of religious beliefs, to make up any examination, study, or work requirements which might have been missed because of such absence. No fees of any kind shall be charged for making such equivalent opportunity available
- If classes, examinations, study or work requirements are held after 4:00 p.m. on Friday, or on Saturday, similar or makeup classes, examinations, study or work requirements shall be made available on other days, where it is possible and practicable to do so, and no special fees shall be charged for these.

In carrying out the provisions of this section, it shall be the duty of the faculty and of the administrative officials to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of availing him/herself of the provisions in this section. Any student who is aggrieved by the alleged failure of any faculty or administrative official to comply in good faith with these provisions shall be entitled to maintain an action or proceedings in the supreme court of the county to enforce his/her rights under this section.

Student Rights under the Family Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act of 1974, as Amended (FERPA) affords Alfred University students certain rights with respect to their education records. These rights are:

1. The right to inspect and review their education records within 45 days of the day the University receives a request for access. Students should submit to the registrar, dean, division chair, or other appropriate official, written requests that identify the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of those education records believed by the student to be inaccurate or misleading. Students should write to the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is believed to be inaccurate or misleading. If the University official responsible for the record decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. In the same notification, the University will also advise the student of procedures for a hearing. Insofar as possible, the services of the University Ombudsperson and the members of the Ombudsperson's Student Grievance Committee will be used in these instances.

3. The right to consent to disclosures of personally identifiable information contained in their education records, except to the extent that FERPA authorizes disclosure without consent. Disclosure without consent may be made as follows:
   - to school officials with legitimate educational interest. A school official is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including Security and Health Center personnel); a person or company with whom the University has contracted (such as an attorney, auditor, or a collection agent and, specifically, the National Student Clearinghouse and, for those students purchasing health insurance through the University, Academic Risk Management); a person serving on the Board of Trustees; or a student serving on an official University committee charged with a task that involves review of education records, or assisting another school official in performing his or her tasks. A school official has legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.
   - to parents of dependent students.
   - in connection with financial aid.
   - to Federal State, and local authorities in connection with an audit or evaluation of compliance with education programs.
   - to organizations conducting studies for or on behalf of educational institutions.
   - to comply with a judicial order or subpoena. (In most cases, the University must make reasonable effort to notify a student in advance of compliance.)
   - in connection with a health or safety emergency.
   - to an alleged victim of a crime of violence, the University may release the results of a related judicial hearing. If the charges involve sex offenses (forcible and non-forcible), the student bringing the charges as well as the student charged will be informed of related judicial hearing results.
   - to the student.

- to the public, at the discretion of the University, those portions of education records defined as "Directory Information." Note, however, that students may request that the University withhold Directory Information.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Alfred University to comply with the requirements of FERPA. The name and address of the office that administers FERPA are:

Family Policy Compliance Office
U.S. Department of Education
600 Independence Avenue, SW
Washington, DC 20202-4605

Courses that Satisfy the Global Perspective (GP) Requirement

In addition to the courses listed here, the Global Awareness Committee may approve some "special topics" courses offered in a given term to apply to the GP requirement, depending on the topic covered. These courses will be designated "GP" in the Class Schedule for that term.

Anthropology

ANTH 110	Cultural Anthropology
ANTH 303	Health and Culture
ANTH 304	Language and Culture
ANTH/BIOL/GLBS 305	Belize and the Caribbean
ANTH 312	Violence and Culture

Art History

ARTH 121	Wild Spirits and Divine Kings
ARTH 122	Arts of the Pacific Isles
ARTH 124	Native American Arts: Spirited Materials/Technologies
ARTH 301	African Art I
ARTH 302	African Art II
ARTH 304	Global Arts: Contemporary Asia
ARTH 354	Recent Sculptural Practices
ARTH 363	Ceramics & Cultural Identity: Global Trad/Innovations
ARTH/WGST 382	Women/Art/History
ARTH 466	Histories of Photography in the Non-Western World

Business

BUSI 457	International Business

Communication Studies

COMM/GLBS 221	Pop Culture Goes Global
COMM/GLBS 315	Understanding Global Media and Cultural Change

Economics

ECON 412	International Economics

Engineering

ENGR 208	Energy in the World
ENGR 215	International Solar Energy Projects

English

ENGL 226	The Holocaust and Literature
ENGL/WGST 481	International Women Writers

Environmental Studies

ENVS 101	Environmental Studies I - Natural Science
ENVS 102	Environmental Studies I - Social Science
ENVS 105	Atmosphere, Humans, Ecosystems
ENVS 210	Ecology of the Bahamas
ENVS 245	Spirituality and the Environment

Finance

FIN 458	International Financial Management

French

FREN/GLBS 210	Global Perspectives:Paris
FREN 410	French Film Criticism
FREN 485	Internship in French

Global Studies

GLBS 101	Introduction to Global Studies
GLBS/ANTH/SOCI 495	Global Issues Seminar

German

GRMN 316	German History and Culture
GRMN 485	Internship in German

History

HIST 107	The World in the 20th Century
HIST 111	Modern Western History
HIST 321	The History of Fascism
HIST 322	Churchill, Stalin, Roosevelt, Hitler
HIST 326	The Modern Middle East and North Africa
HIST 327	Propaganda: Persuasion, Art and War
HIST 383	The Nazi Holocaust
HIST 387	Modern France, 1815-Present

Marketing

MKTG 489	International Marketing

Music

MUSC 211	World Music

Political Science

POLS 251	European Politics
POLS 253	Dictatorship and Democracy
POLS 271	World Politics
POLS 273	Terrorism and International Security
POLS 282	Latin American Politics

Religious Studies

RLGS 105	Introduction to Religions of the World
RLGS 165	Asian Religions
RLGS 252	Judaism and Islam
RLGS 374	Myth, Yoga, and Philosophy of India

Sociology

SOCI 343	Race and Ethnicity

Spanish

SPAN 210	Pilgrims and Tourists Santiago
SPAN/GLBS 212	Buenos Aires: Literature and the Arts
SPAN/GLBS/WGST 215	Framing Gender: Latin American Film
SPAN 312	Peninsular Culture and Literature II: 19th -20th Century
SPAN 316	Latin American Culture and Literature II
SPAN 485	Internship in Spanish

Theatre

THEA 210	The Performing Arts: A Global Perspective

Advanced Placement (AP) Examination Equivalencies

AP Examination	Credit-Granting Score	Credit Granted	Equivalent AU Course/Area
Art History	4 or 5	4	ARTH 130 and ARTH 140
Biology	4 or 5	4	BIOL 150
Calculus AB	4 or 5	4	MATH 151
Calculus BC	4 or 5	8	MATH 151 and MATH 152
Chemistry Chemistry	4 5	4 8	CHEM 105 CHEM 105 and CHEM 106
Computer Science A	3, 4, or 5	4	CSCI 156
Computer Science AB Computer Science AB	3 4 or 5	4 8	CSCI 156 CSCI 156 and CSCI 157
Economics Macro	4 or 5	3	ECON 202
Economics Micro	4 or 5	4	ECON 201
English Language and Composition	4 5	4 6	ENGL 101 ENGL 101 + 2 Cr Elective
English Literature and Composition	4 5	4 6	ENGL 101 ENGL 101 + 2 Cr Elective
Environmental Science	4 or 5	4	ENVS 101
French Literature	4 or 5	4	FREN 102
French Language	3 or 4 5	4 4	FREN 102 FREN 202
German Language	3 or 4 5	4 4	GRMN 102 GRMN 202
Comparative Gov't & Pol	4 or 5	4	POLS 110
U.S. Gov't & Politics	4 or 5	4	POLS 110
World History	4 5	4 8	General Ed (Area D) General Ed (Area D)+4 Cr Eltv
U.S. History	4 5	4 8	HIST 211 HIST 211 and HIST 212
European History	4 5	4 8	HIST 110 HIST 110 and HIST 111
Human Geography	4 or 5	4	General Ed (Area E-Soc/Anth)
Italian	4, or 5	4	ITAL 102
Latin Literature	4, or 5	4	LATN 102
Music Theory	4 or 5	4	MUSC 120
Physics B	4 5	4 8	PHYS 111 PHYS 111 and PHYS 112
Physics C: Mechanics	4 or 5	4	PHYS 125
Physics C: Elec & Magnet	4 or 5	4	PHYS 126
Psychology	4 or 5	4	PSYC 101
Spanish Language	3 4 5	4 4 4	SPAN 102 SPAN 201 SPAN 202
Spanish Literature	4 or 5	4	SPAN 102
Statistics	4 or 5	3	BUSI 113
Studio Art – Drawing	4 or 5	4	ART 111
Studio Art – 2D/3D (General)	4 or 5	4	General Ed (Area C)

International Baccalaureate (IB) Equivalencies

Alfred University grants 30 semester hours of credit (sophomore standing) to students who have earned the IB diploma in high school. Scores of 4 or better on the higher-level (HL) exams and scores of 5 or better on the subsidiary level (SL) exams are considered for equivalent course credit. When necessary, liberal arts general elective credits are awarded to reach a total of 30 credits.

Students who have not completed the IB diploma are awarded equivalent course credit for up to two introductory courses for each higher level exam (HL) in which a grade of 5 or better was earned. Equivalent credit for one introductory course is awarded for each subsidiary level examination (SL) in which a grade of 6 or better was earned.

IB Examination (level)	**Score**	**Equivalent AU Course/Credit**		
				(CLAS Gen Ed category)
Higher Level Exams: (4 or 5)				
Economics (HL)	4*-5	ECON 201	4 Cr.	(E2)
English A (HL)	4*-5	ENGL 101	4 Cr	(01)
Languages (HL)	4*-5	(Lang) 101	4 Cr	(02)
Visual Arts (HL)	4*-5	ART 100	4 Cr	(C)
History of Americas (HL)	4*-5	HIST 211	4 Cr	(D)
History of Europe (HL)	4*-5	HIST 107	4 Cr	(D)
Biology (HL)	4*	BIOL 100	4 Cr	(F1, F-I)
Biology (HL)	5	BIOL 150	4 Cr	(F2, F-I)
Chemistry (HL)	4*-5	CHEM 103	4 Cr	(F1, F-I
Mathematics (HL)	4*-5	MATH 101	4 Cr	(03)
Physics (HL)	4*-5	PHYS 111	4 Cr	(F1, F-I)
Theatre (HL)	4*-5	THEA 110	4 Cr	(C)
Theory of Knowledge	B or A	PHIL 101	4 Cr	(B)
***a 4 is considered for equivalent credit on HL exams only for students who have earned the IB Diploma**				
Higher Level Exams: (6 or 7)				
Economics (HL)	6-7	ECON 201, 202	7 Cr	(4 Cr. E2)
English A (HL)	6-7	ENGL 101, 102	8 Cr	(01)
Languages (HL)	6-7	(Lang) 101, 102	8 Cr	(02)
Visual Arts (HL)	6-7	ART 100	8 Cr	(C)
History of Americas (HL)	6-7	HIST 211, 212	8 Cr	(D)
History of Europe (HL)	6-7	HIST 107, 200	8 Cr	(D)
Biology (HL)	6-7	BIOL 150	4 Cr	(F2, F-I)
Chemistry (HL)	6 7	CHEM 105 CHEM 105, 106	4 Cr 8 Cr	(F1, F-I) (F1, F-I)
Mathematics (HL)	6-7	MATH 101, 115	8 Cr	(03)
Physics (HL)	6-7	PHYS 111, 112	8 Cr	(F1, F-I)
Theatre (HL)	6-7	THEA 110, 200	8 Cr.	(4 Cr. C)

IB Examination (level)	Score	Equivalent AU Course/Credit		
				(CLAS Gen Ed category)
Subsidiary Level Exams:		*Students Earning the IB Diploma*		
Economics (SL)	5-7	ECON 201	4 Cr.	(E2)
English A (SL)	5-7	ENGL 101	4 Cr	(01)
Languages (SL)	5-7	(Lang) 101	4 Cr	(02)
Visual Arts (SL)	5-7	ART 100	4 Cr	(C)
History of Americas (SL)	5-7	HIST 211	4 Cr	(D)
History of Europe (SL)	5-7	HIST 107	4 Cr	(D)
Biology (SL)	5-7	BIOL 100	4 Cr	(F1, F-I)
Chemistry (SL)	5-7	CHEM 103	4 Cr	(F1, F-I)
Mathematics (SL)	5-7	MATH 101	4 Cr	(03)
Mathematical Studies (SL)	5-7	MATH 101	4 Cr	(03)
Physics (SL)	5-7	PHYS 111	4 Cr	(F1, F-I)
Theatre (SL)	5-7	THEA 110	4 Cr	(C)
Subsidiary Level Exams:		*Certificate or Non-Diploma* *(no credit for a score of 5 on SL Exams)*		
Economics (SL)	6-7	ECON 201	4 Cr.	(E2)
English A (SL)	6-7	ENGL 101	4 Cr	(01)
Languages (SL)	6-7	(Lang) 101	4 Cr	(02)
Visual Arts (SL)	6-7	ART 100	4 Cr	(C)
History of Americas (SL)	6-7	HIST 211	4 Cr	(D)
Biology (SL)	6-7	BIOL 100	4 Cr	(F1, F-I)
History of Europe (SL)	6-7	HIST 107	4 Cr	(D)
Chemistry (SL)	6-7	CHEM 103	4 Cr	(F1, F-I)
Mathematics (SL)	6-7	MATH 101	4 Cr	(03)
Mathematical Studies (SL)	6-7	MATH 101	4 Cr	(03)
Physics (SL)	6-7	PHYS 111	4 Cr	(F1, F-I)
Theatre (SL)	6-7	THEA 110	4 Cr	(C)

NOTE: The maximum number of credits to be awarded is 30. When necessary, 2 credits of liberal arts general elective are awarded to students who completed the IB Diploma to reach 30-credits.

College Level Examination Program (CLEP) Equivalencies

Only CLEP subject exams taken prior to admission to AU are considered for credit toward the degree.

CLEP Examination	Credit-Granting Score	Credit Granted	Equivalent AU Course/Area
Composition and Literature:			
American Literature	50*	4	ENGL 240
Analyzing and Interpreting Literature	50*	4	General Elective
Freshman College Composition	50*	4	ENGL 101
English Literature	50*	4	ENGL 219
English Composition	n/a	none	none
Humanities	n/a	none	none
*** Credit is granted only with an acceptable locally-graded essay**			

CLEP Examination	Credit-Granting Score	Credit Granted	Equivalent AU Course/Area
Science and Mathematics			
College Algebra	50	3	MATH 115
Algebra-Trigonometry	50	3	MATH 118
Biology	50	4	Scientific Knowledge (F-II)
Chemistry	50	4	Scientific Knowledge (F-II)
Calculus with Elementary Functions	50	3	MATH 151
Trigonometry	50	3	General Elective
College Mathematics	50	4	MATH 101
Natural Science	n/a	none	none
Foreign Languages			
French	50-61	4	FREN 101
	62+	8	FREN 101/FREN 102
German	50-62	4	GRMN 101
	63+	8	GRMN 101/GRMN 102
Spanish	50-65	4	SPAN 101
	66+	8	SPAN 101/SPAN 102
History & Social Sciences			
American Government	50	3	POLS 110
Educational Psychology	50	3	General Elective
Human Growth and Development	50	3	General Elective
Macroeconomics, Princ of	50	3	ECON 202
Microeconomics, Princ of	50	3	ECON 201
Psychology, Introductory	50	3	PSYC 101
Sociology, Introductory	50	3	SOCI 110
U.S. History I	50	3	HIST 211
U.S. History II	50	3	HIST 212
Western Civilization I	50	3	Historical Studies (D)
Western Civilization II	50	3	Historical Studies (D)
Social Sciences & History	n/a	none	none
Business			
Accounting, Principles of	50	3	ACCT 211
Business Law, Intro	50	3	LAW 241
Information Sys/ Computer Apps	50	3	MIS 101
Management, Principles of	50	3	MGMT 328
Marketing, Principles of	50	3	MKTG 221

College of Liberal Arts and Sciences

Our Mission

The College of Liberal Arts and Sciences (CLAS) at Alfred University fosters students' intellectual, creative, and personal development. Our curriculum builds upon the University's history of inclusiveness, commitment to global awareness, and enduring ties to the community. Through a breadth of programs and the depth offered in the majors, students explore and engage with the world, think critically about it, act creatively within it, reflect on their experiences, and share the knowledge they acquire with others. We educate life-long learners.

The Bachelor's Degree

The undergraduate curriculum in Alfred University's College of Liberal Arts and Sciences emphasizes those areas of study which form the basis for any truly liberal education. We use the term "liberal" here in its original sense, that of freeing the mind to explore various fields of interest.

Our curriculum provides students with opportunities to deepen their knowledge and develop skills so that they may better:

- explore human cultures, and the physical and natural world;
- communicate as readers, writers, speakers, listeners, and artists;
- respond to problems and/or opportunities creatively;
- practice personal and social awareness through engagement with local and global communities;
- and apply knowledge and skills across general and specialized studies.

We believe that liberally educated citizens can best perform complex intellectual tasks, tasks which have technical, moral, and political consequences. Our goal is to give our students the constructive skills to accomplish those tasks. These skills include conceptual analysis, disciplined writing, and a creative approach to problem solving. We put specialized knowledge and inquiry into values within living contexts, encouraging our students to meet real demands in real situations. We prepare our students not only for multiple careers, but for graduate and professional schools and for leadership in the world.

Our requirements for the bachelor's degree combine breadth of study in a range of subjects and disciplines, represented by the General Education Program, with specialization in a major field of study. The College offers 26 majors and numerous minors. In addition, students may take courses and complete minors in other colleges within the University, as long as prerequisites for these courses and minors are met.

Graduation Requirements

To qualify for a Bachelor of Arts (B.A.) or Bachelor of Science (B.S.), students must complete the following:

- a minimum of 124 credit hours with a cumulative grade point average of at least 2.00, of which at least 90 credit hours must be liberal arts course work (as defined by New York State Department of Education) for the B.A., and at least 60 liberal arts credit hours for the B.S.
- the requirements for the CLAS General Education Program (see below)
- the First-Year Experience (FYE) or Transfer Seminar requirement
- the requirements for a CLAS approved major
- the University Global Perspective requirement
- the University Physical Education requirement

- at least 45 credit hours in residence at Alfred University
- the final 30 credit hours in residence (for exceptions see AU policy on “Transfer of Credit”)

Transfer Credits

The following criteria apply to the evaluation of transfer records:

- Decisions about whether a transfer course satisfies a specific General Education requirement are made by the Dean, in consultation with the academic program with oversight for that particular General Education area.
- Decisions about whether a transfer course satisfies a major or minor requirement are made by the Chair or Director of the specific academic program, in consultation with the faculty of that program.
- A three credit hour course will satisfy a four credit hour General Education requirement; however, only 3 credits will be applied in transfer credit.
- See the AU policy on “Transfer of Credit” for more detailed information.

Advising

Our CLAS faculty members are dedicated to working with students to help them reach their individual goals, not only inside the classroom, but also through research, short-term study abroad experiences, and advising. The College of Liberal Arts & Sciences believes that high quality academic advising is essential to the well-being of both the College and its students.

Upon matriculation, each student is assigned a faculty advisor. If the student has expressed an interest in a particular major at matriculation, the student will be assigned to an advisor within that major. If the student has not expressed a major interest at matriculation, he or she will begin with an advisor who will help the student to explore majors, and assigned to an advisor in the major area once the major has been formally declared. Faculty advisors are available not only to assist in choosing courses and majors, but also to help students develop a well-rounded plan to reach individual personal and professional goals.

Good advising is a collaboration. Students are ultimately responsible for making their own decisions and for meeting all requirements. Advisors encourage self-reliance, assist students in exploring opportunities at AU and beyond, and connect students to a community of resources at Alfred University.

General Education Requirements for All Students

The General Education Program, required of all students in the College of Liberal Arts and Sciences, is designed to help students hone their fundamental academic skills and expand their intellectual breadth. In addition it creates common points of reference for students pursuing different majors. The program ensures that students have the tools they will need for advanced study and exposes them to different ways of thinking about their world. This curriculum allows students to develop the kind of intellectual flexibility they will need for meeting future challenges.

The program has two main features: (1) it emphasizes the importance of each student demonstrating basic competencies early in the college program, either through course work that teaches these competencies or through performance on standardized tests; this is an important part of the curriculum since it provides tools essential for successful work in advanced courses, as well as promoting skills that are valuable after graduation.

(2) It requires each student to have exposure to at least six areas of knowledge; this is intended to provide a broad foundation both for more advanced study and for a lasting intellectual engagement with scholarly and cultural issues.

The General Education Program is divided into two parts: Basic Competencies and Areas of Knowledge. Students are expected to complete the Basic Competencies during the first two years of study.

Students are encouraged, although not required, to complete the Areas of Knowledge during their first two years, as this provides an opportunity for intellectual exploration as students consider which academic area they would like to focus on for their major. These requirements are normally satisfied through course work; some may be met through proficiency examinations (which carry no academic credit).

Basic Competencies

The CLAS Basic Competencies requirements are in the areas of Written Communication, Quantitative Reasoning, and Foreign Languages. The ability to write well, communicate in another language, and use quantitative reasoning to problem solve are important skills greatly valued in today's world. Most students continue to hone their skills in writing, quantitative reasoning, and languages beyond the basic General Education requirements through intermediate and advanced level courses offered in the College. "Attribute" codes in the online course system (Banner) help students search for and identify appropriate courses that fill these specific area requirements.

I. Written Communication (Attribute 01)

Each student must demonstrate writing competency through the successful completion of ENGL 102 or an equivalent (as approved by the English Division faculty). Depending on college entrance exam scores, students are placed in the appropriate level writing course. Normally students enroll in ENGL 101 and 102 in their first year in the College.

Students with the following scores must take both ENGL 101 and ENGL 102:

SAT Writing	499 or lower
SAT Verbal	539 or lower
ACT English	25 or lower

Students with the following scores should take ENGL 102:

SAT Writing	500-699
SAT Verbal	540-739
ACT English	26-29

Students with the following scores are exempted from ENGL 101 and 102, having demonstrated sufficient college level writing competency:

SAT Writing	700 or higher
SAT Verbal	740 or higher
ACT English	30 or higher

II. Foreign Language (Attribute 02)

Each student in the College of Liberal Arts and Sciences must successfully demonstrate competence in a language other than English equivalent to the second semester of the first year of a foreign language at the college level.

Students are expected to begin undertaking language study no later than their sophomore year and continue each subsequent semester with the language until the requirement is fulfilled. Students may also demonstrate this proficiency through a language placement exam or a challenge exam, arranged through the Division of Modern Languages, although successful completion of the Language Placement Exam does not confer academic credit.

Language placement exams, offered every semester, help to determine the appropriate language course and level for students. The Placement Exam is a tool to be used by students together with their advisor and the appropriate professor(s) in the Division of Modern Languages to identify the best course corresponding to an individual student's skills. Even if you plan to wait to take a language course in your sophomore year, it is highly recommended that you take the Placement Exam during the first week of your first semester to avoid loss of language knowledge from high school.

If a student is continuing a language taken for more than two years in high school, or is a native speaker of Spanish, French, or German, he or she must take the Language Placement Exam. Students do not need to take the Language Placement Exam if they plan to study a language they have not previously studied. Students who want to demonstrate proficiency in a language not offered at Alfred should consult with the Chair of the Division of Modern Languages, and can find more information at http://las.alfred.edu/modern-languages/language-placement-exam.cfm.

To be considered for membership in Phi Beta Kappa students must have, among other qualifications, demonstrated intermediate proficiency in a foreign language through 200-level coursework or scoring 80% on the Language Placement Exam.

The Division of Modern Languages does not accept courses taken online for transfer credit in fulfillment of the General Education Foreign Language Competency. The position of the Division of Modern Languages regarding courses taken online is based upon the National Standards for Language Learning as delineated by the American Council on the Teaching of Foreign Languages (ACTFL). In exceptional circumstances, the Division of Modern Languages may choose to review this policy on a case by case basis.

III. Quantitative Reasoning (Attribute 03)

Students must demonstrate basic competency in quantitative reasoning. The Quantitative Reasoning requirement is fulfilled by one of the following:

- A score of 630 or higher on the SAT Math
- A score of 28 or higher on the ACT Math
- A score of 4 or higher on the Advanced Placement Exam in either Calculus AB or Calculus BC
- The successful completion of an AU designated Quantitative Reasoning (QR) course. The following courses are currently designated as QR courses; the list is updated annually and posted on the Alfred University website.

BIOL 226	Biostatistics
BUSI 113	Business Statistics
ENVS 205	Environmental Data Analysis
MATH 101	Communicating with Numbers
MATH 104	Quantitative Methods for Business
MATH 151	Calculus I
PHIL 282	Introduction to Logic

POLS/SOCI 230	Introduction to Data Analysis and Statistics
PSYC 220	Psychological Methods and Statistics
SCIE 127	Doing Science

Areas of Knowledge

General Education requirements for different Areas of Knowledge (A-F) provide students with an introduction to different ways of thinking, knowing, and seeing, laying the foundation for a lifetime of inquiry and learning. While many courses are offered in these different academic disciplines, only certain courses in the CLAS curriculum are designated as fulfilling the General Education requirement.

Degree Requirement (Attribute) Code	**Academic Field**
A	Literature (4 credits required)
B	Philosophy or Religious Studies (4 credits required)
C	The Arts (4 credits required)
D	Historical Studies (4 credits required)
E	Social Sciences (8 credits; 4 credits each from two of the following categories): • Psychology (E1) • Political Science or Economics (E2) • Sociology or Anthropology (E3)
F	Natural Sciences (8 credits; at least 2 credits from F-I) • Scientific Inquiry (F-I) • Scientific Knowledge (F-II) • Science and Society (F-III)

First -Year Experience Program (FYE)

The College's First-Year Experience program is designed to foster intellectual engagement so that students are able to succeed academically and find a meaningful role for themselves both in the Liberal Arts & Sciences community and as citizens of the world. Each FYE course is taught by a faculty member dedicated to the success of first-year students. Along with a peer leader associated with the course, each FYE faculty member helps new students engage with the Alfred community and transition to college-level learning.

The goals of the FYE program are to:

- Help students produce high-quality college-level work and develop a positive work ethic.
- Encourage students to form "learning communities" in which students share responsibilities and support one another in their academic endeavors.
- Provide first-year students with the opportunity to participate in a small, seminar-style class in which concentrated attention can be paid to each student and close working relationships between students and instructors can develop.
- Encourage students to become fully integrated into the University community by introducing students to and encouraging participation in a wide variety of extracurricular activities.

The FYE program also provides a foundation for the General Education curriculum. To that end, all FYE courses, successfully completed, fulfill one of the General Education or University requirements.

Transfer Student Program

The CLAS Transfer Student Program is designed to help new transfers make the transition to Alfred University.

Students will take the Transfer Seminar (CLAS 101) during their first semester at Alfred. As the cornerstone of the Transfer Student Program, the seminar provides an opportunity for students to get to know the intellectual community they have joined, while introducing them to campus resources that will help them succeed at Alfred. Throughout the seminar, students will further develop core skills that lead to academic and professional accomplishment. The Transfer Student Program also facilitates mentoring relationships among the transfer students and their faculty and peers.

Majors

In addition to the General Education Program, all CLAS students must fulfill the requirements for a major to qualify for a bachelor's degree.

A major provides students with an opportunity to delve deeply into the study of a particular subject, developing expertise and critical thinking through sustained and advanced work. At least half of a student's course work toward the major must be completed at Alfred University. Transfer credits toward the major are approved by the appropriate Chair or Director, in consultation with program faculty.

Selecting a Major

Students are expected to declare their major(s) by the end of the sophomore year. We advise students to explore various options and become familiar with the requirements for a particular major before filing a major declaration. Students should also discuss their interests and objectives with their academic advisor before declaring a major.

In most cases, students have done some previous course work in the discipline before declaring the major. Faculty members are great resources for discussing possible majors. Students may even choose to pursue double majors within the College of Liberal Arts and Sciences, or double degrees in two of the colleges or schools at Alfred University. However, students interested in pursuing only one major in one of Alfred University's other colleges or schools will need to formally transfer to that college or school.

Some majors require specific sequencing of courses and careful planning, with some prerequisite courses strongly recommended for the first year. Students preparing for secondary school teaching in an area related to their major should consult with an Education advisor as well as their major advisor to plan their course of study combining major requirements and education courses.

All courses required for a major must be completed with grades of "C" or better. The following majors are offered by the College of Liberal Arts and Sciences:

Biology	General Science	Mathematics
Chemistry	Geology	Math with Actuarial Science
Communication Studies	Gerontology	Philosophy
Comparative Cultures	Global Studies	Physics
Criminal Justice Studies	History	Political Science
English	Interdepartmental Major	Psychology
Environmental Studies	Interdisciplinary Art	Sociology
Foreign Language and Culture Studies	Interdisciplinary Art with Art Education	Spanish
		Theatre

The requirements and other information for each of these majors begin on p. 84.

Individually Structured Major (ISM)

The Individually Structured Major offers students the opportunity to structure an independent, interdisciplinary major in cases where the student's plan of study cannot be accommodated by one or more of the existing majors within the College of Liberal Arts and Sciences. This major is open to highly motivated, self-directed students with a minimum 3.0 grade point average. All courses to be counted in the major must have a grade of C or better.

For students willing to put the time, thought, and effort into creating an ISM, the process and learning experience can be rewarding, especially as students work closely with a team of faculty advisors. The capstone to the ISM is a Baccalaureate Project undertaken in the senior year, which allows students to integrate or exemplify elements of their program in meaningful, creative, and productive ways. Students pursuing the ISM receive a Bachelor of Arts upon completion of their Alfred University degree requirements.

Each Individually Structured Major requires a formal program proposal, designed by the student in consultation with a Faculty Advisory Board chosen by the student. Students interested in initiating the application process for an ISM should meet with the Assistant Dean of the College of Liberal Arts and Sciences no later than mid-semester of their sophomore year, as the application involves several steps and requires research and time. Complete applications must be received no later than the end of the sophomore year. Proposals are then reviewed by the ISM Faculty Steering Committee and the Dean and must be approved by the beginning of the student’s junior year.

Some of the academic programs designed by students under the auspices of the Individually Structured Major include Art: Museum Studies and Entrepreneurship; Ecological Psychology; Historic Preservation; Integrated Emergency and Disaster Relief Operations; Media Politics; Sustainable Agriculture; and Violence and Conflict Studies.

Interdepartmental Major

The Interdepartmental Major offers students flexibility in arranging a program to suit their individual interests, aspirations, and abilities.

The program is especially appropriate for a student with definite academic objectives which do not fit into other regular programs, or when a student’s objectives can be met through a broad, general course of studies. Students selecting this program need to work closely with their faculty advisors to be sure their appropriate professional and career goals are met.

In addition to the other College degree requirements, students in this major select an additional 40 credit hours from those disciplines covered by the General Education Program’s Areas of Knowledge (see p. 76), including at least four credit hours from each of the six areas. In selecting this total of 40 credit hours, students are not limited to the 100 - 200 level courses. The courses for the major need not carry the General Education attribute for that Area of Knowledge. Students are also required to complete 24 credit hours of academic course work at the 300 level or above. All courses to be counted in the major must have a grade of C or better.

Minors

Students are strongly encouraged to declare one or more minors to supplement the major field. A minor allows students the opportunity to broaden their educational experience and may enrich career possibilities. In addition to minors offered by the College of Liberal Arts and Sciences (listed below), many CLAS students pursue minors offered by Alfred University's other colleges and schools. The minors in business, education, and art history, in particular, complement a number of CLAS programs.

Minors normally range from 14-24 credit hours. As with the major, all courses used to complete a minor must have grades of "C" or better and at least half of the requirements should be completed at Alfred University. The appropriate division Chair should be consulted about matters regarding transfer credits for the minor. Students will also work with an advisor in the minor area in addition to the major advisor.

Arts Management
Astronomy
Biological Anthropology
Biology
Chemistry
Communication Studies
Computer Science
Criminal Justice Studies
Cultural Anthropology
Dance
English
Environmental Studies
Equestrian Studies
French
Geology
Gerontology
Global Studies
History
Interdisciplinary Art
Literature
Mathematics
Music
Performance Design and Technology
Philosophy
Physics
Planetary Science
Political Science
Psychology
Public Law
Religious Studies
Science Policy
Sociology
Spanish
Theatre
Women's and Gender Studies
Writing

The requirements and other information for each of these minors begin on p. 84.

Pre-Professional Advising

Art Therapy
Education
Law
Business
Health Professions

Alfred University provides pre-professional advising for students who wish to prepare for the study of art therapy; law; or health professions, including medicine, dentistry, veterinary medicine, and other allied-health programs. Preparation for these graduate professional programs usually involves taking particular, prerequisite courses while an undergraduate. Students may choose to major in anything they wish while taking the prerequisites for these professional programs.

Students with interests in these professional programs should discuss their intentions with their academic advisor and attend workshops and advising hours offered by the faculty advisors for these pre-professional tracks. Depending on the pre-professional track chosen, students may need to start on relevant course work in their first or second year. It takes careful planning to see that both major and pre-professional requirements are completed on schedule. Students interested in pursuing graduate programs in one of the many healthcare fields should consider declaring a Pre-health Sciences Concentration.

Concentration in Pre-health Sciences

The Pre-health Sciences concentration provides students with the core science courses that are a prerequisite for application to most health-related graduate professional programs. Students interested in professions in medicine, dentistry, veterinary medicine, pharmacy, optometry and other allied health fields may want to pursue this concentration in conjunction with their major. The Pre-health Sciences Concentration, with its breadth of courses in the sciences, provides a solid foundation for advanced courses in the sciences as well as basic science preparation for health professions graduate programs.

While the Pre-health Sciences concentration meets the core science requirements expected for admission to most health-related professional schools, be aware that requirements vary among professional schools and there can be additional requirements (e.g., advanced level courses, minimum grade point average, courses in the humanities or social sciences, internships in the field, etc.).
Students are advised to familiarize themselves with these additional requirements, many of which can be fulfilled at Alfred University within the context of an undergraduate degree program.

Visit the Alfred University Pre-health webpage (www.alfred.edu/academics/pre-health/), attend a Pre-health Professions Workshop, and talk with your advisor to take advantage of the multiple resources at AU to assist with preparation for entry into a health-related professional program.

To have this concentration recognized on the final transcript, a minimum grade point average of 3.0 in the courses that satisfy the concentration is required. (Many medical and veterinary schools expect a GPA of 3.5 or higher.)

Required Courses:

MATH151		
or MATH 152	Calculus I or Calculus II	4
One Statistics Course or a second Math Course beyond Precalculus		4
Suggested courses: BIOL226-Biostatistics, POLS/SOCI 230-Introduction to Data Analysis and Statistics, PSYC 220-Psychological Methods and Statistics, ENVS 205-Environmental Data Analysis, MATH 152-Calculus II, MATH 381-Mathematical Statistics		
PHYS 111	Introductory General Physics I	
or PHYS 125	Physics I	4
PHYS112	Introductory General Physics II	
or PHYS 126	Physics II	4
(note: some health professional schools require a calculus-based physics course [PHYS125/126], so choose physics courses accordingly)		
BIOL201	Biology I	4
BIOL202	Biology II	4
or		
BIOL 150	Biological Foundations	4
BIOL 211	Cell Biology	4
BIOL 212	Genetics	
or BIOL 213	Structure and Function of Organisms	4
CHEM105	General Chemistry I	4
CHEM106	General Chemistry II	4
CHEM315	Organic Chemistry I	4
CHEM316	Organic Chemistry II	4
Total Credit Hours Required		**40-44**

Pre-professional Advising in Business

Students interested in business may take courses or pursue a minor offered by Alfred University's School of Business in the College of Professional Studies. Completion of the minor allows students in the College of Liberal Arts & Sciences, who have successfully completed appropriate business courses while undergraduates, to be eligible to enter Alfred University's Masters in Business Administration (MBA) and complete requirements for that degree within one year of receiving the bachelor's degree. For more information about this option, contact the School of Business or the CLAS Dean's Office.

Pre-professional Advising in Education

Students who have an interest in becoming teachers in PreK-12 schools have several options at Alfred University that will help prepare them for this goal. A major in Early Childhood/Childhood Education is offered through the College of Professional Studies. Students interested in teaching middle school or high school normally choose a major in the field they want to teach (e.g., History, Math, Spanish, Art), while simultaneously completing a minor in Education. For those who want to teach art, we recommend the major in Interdisciplinary Art with Art Education offered by the College of Liberal Arts & Sciences. As the combination of coursework to prepare for teacher certification requires careful planning and particular course-sequencing, leading to a semester of practice teaching, students should meet with an Education faculty advisor early on to review options, requirements, and planning relevant to achieving their goals to become a teacher.

Major and Minor Requirements

Anthropology

The Anthropology minors in Biological Anthropology and Cultural Anthropology attract students who want to explore cultural diversity across the globe and through time. These minors are designed to complement student course work in related disciplines or in interdisciplinary programs. Anthropology courses emphasize the application of the anthropological perspective in understanding present-day social issues.

The minor in Biological Anthropology anchors humans in the natural world by emphasizing our evolutionary and genetic past as well as our relationships with other primates. Courses on human health, animal behavior, and comparative anatomy, as well as ecological and environmental perspectives on humans in Belize and southern Africa are among the varied dimensions of this broad minor.

Requirements for the Biological Anthropology minor

I. Core Courses (8 credit hours)

ANTH 120	Human Origins	4
BIOL 130	Introduction to Human Genetics	4

II. Electives (12 credit hours)

ANTH 303	Health & Culture*	4
ANTH/BIOL 305	Belize and the Caribbean	2
BIOL 315	Genetics and Evolution of Populations*	4
BIOL 348	Animal Behavior*	4

BIOL 375	Comparative Vertebrate Biology*	4
BIOL 330	Neuropsychology	4
PSYC 351	Human Sexuality	4
SOCI 235	Socialization*	4
Total credit hours		**20**

***these courses have prerequisites; see course descriptions**

The minor in Cultural Anthropology grounds students in the broad perspectives, subject matter, and methods of the discipline. It gives students the option of core course work in two of the main fields of anthropology (cultural and physical) or allows students to focus more on cultural and linguistic anthropology, and related topics in two additional elective courses. The anthropological view on cultures, both large and small, modern and traditional, emphasizes comparative, holistic, historical, and multidisciplinary frames of analysis. Advanced study of a language and study abroad are always encouraged to add depth to these minors.

Requirements for the Cultural Anthropology minor

I. Core Courses (8 credit hours)

ANTH 110	Cultural Anthropology	4
ANTH 120	Human Origins	4
or ANTH 304	Language and Culture*	

II. Electives (8 credit hours)

ANTH 200/300	Special Topics	1-4
ANTH 302	The Nacirema	4
ANTH 303	Health and Culture*	4
ANTH 305	Belize and the Caribbean	2
ANTH 311	Nip, Tuck, Perm, Pierce, Tattoo, Embalm	2
ANTH 312	Violence and Culture*	4
ANTH 400	Special Problems in Anthropology*	1-4
ANTH 450	Independent Study	1-4
ANTH 470	Field Work*	2-4
ANTH 495	Global Issues Seminar*	4
ARTH 200/300/400	Special Topics	1-4
ARTH 304	Global Arts: Contemporary Asia	4
ARTH 305	Arts of India	4
RLGS 200/300	Special Topics	1-4
RLGS 307	Myth, Ritual, and the Creative Process	4
Total credit hours		**16**

***these courses have prerequisites; see course descriptions**

Arts Management

The Arts Management Minor provides an interdisciplinary approach to the business of art and management of arts organizations. Students have the opportunity to learn and explore the theoretical content and practical skills that engage arts professionals managing individual businesses, serving community arts organizations, and managing not-for-profit arts organizations in the visual, performing, and literary arts. The Arts Management minor is jointly offered by the School of Business in the College of Professional Studies, the School of Art and Design, and the College of Liberal Arts and Sciences and is open to all AU students. (See p. 136 for the Arts Management minor requirements.)

Astronomy

Students may take a variety of courses to become acquainted with modern astronomical thought and observational technique. One may prepare for graduate study in astronomy or astrophysics by completing a Physics major and electing additional Astronomy courses in the Astrophysics Concentration.

The John L. Stull Observatory is an unusually well-equipped facility devoted exclusively to the instruction of undergraduate students. Its six domes house a 9 inch refractor, reflectors of 16 (two of them), 20 and 32 inch apertures (one 16 inch and the 32 inch instruments are computer controlled), two solar telescopes and two commercial 8 inch telescopes. An adjoining classroom building houses a darkroom and auxiliary equipment including a set of CCD electronic cameras and a network of computers for displaying these images.

Requirements for the minor

ASTR 107	Elementary Astronomy Laboratory	2
ASTR 302*	Planetary Science	2
ASTR 303*	Stellar Astronomy	3
ASTR 304*	Galactic Astronomy and Cosmology	4
ASTR 307	Observational Astronomy	2
Total credit hours		**13**

***Note: These courses have prerequisites. See course descriptions.**

Biology

The study of life is in an exceptionally exciting phase, with new discoveries and innovative technologies pushing the boundaries of what we know about ourselves and the living world around us. Biology graduates today need to be able to move into a diverse array of careers, from health related professions such as medicine, dentistry and veterinary, to post graduate study in a range of areas from biotechnology to ecology, to employment opportunities such as teaching or biological research. We train our students to have a strong, broad foundation in the discipline while providing numerous opportunities for students to develop specialized expertise along with the technical and research skills needed to be competitive applicants when they leave Alfred University. Along with a diverse education in the liberal arts, our curriculum facilitates double and co-majors with other disciplines and serves as solid foundation for many career choices.

For instance, students interested in the intersection of biology and materials engineering may minor in Biomaterials Science in the Inamori School of Engineering. Many biology majors also earn minors or majors in Chemistry. Those with interest in global and human ecology may participate in the interdisciplinary Environmental Studies Program. Students in other disciplines can complete a minor in Biology or in Biological Anthropology, and our biology majors may have minors in a diverse range of STEM and non-STEM fields.

We have a strong learner-centered focus throughout our curriculum. Students are engaged in course objectives through lectures, laboratory, fieldwork, activities, discussions, and seminars. Our core courses are designed to allow students to develop the technical and research skills needed so that they may participate as research collaborators in our BIOL 400 Research Topics courses.

These Research Topics courses have enrollments limited to 6-8 students, and are designed around investigative questions in the areas of animal behavior, biochemistry, cell biology, microbiology and plant biology, with each student focusing on related but independent research questions. Students enrolled in these courses have the opportunity to present research findings at regional and national meetings, or to participate in manuscript preparation. We especially encourage our students to be involved in undergraduate research projects and to seek summer and semester internship and study abroad experiences.

Requirements for the major

Each student completes a core of courses and selects a prescribed number of elective courses related to his/her personal and career interests. Additional courses in chemistry, mathematics, and physics are required or recommended. All courses taken as part of the Biology major must be passed with a grade of C or better.

Summary of Requirements for the Biology Major:

Foundation and Core Courses	26
Specialization Courses	12
Related Courses	11-16
Total Credit Hours	**49-54**

Foundation and Core:
Take all courses

BIOL 150	Biological Foundations	4
BIOL 211	Cell Biology	4
BIOL 212	Principles of Genetics	4
BIOL 213	Structure and Function of Organisms	4
BIOL 226	Biostatistics	4
BIOL 314	Community and Systems Biology	4
BIOL 390	Junior Seminar	1
BIOL 490	Biology Research Seminar	1

Specialization:
Take 12 credit hours. Recommend completion of one research intensive course.

BIOL 106	Field Botany*	4
BIOL 300	Topics in Biology	4
BIOL 302	General Microbiology	4
BIOL 307	Anatomy & Physiology: Nerves, Muscles, Bones	4
BIOL 308	Anatomy & Physiology: Viscera	4
BIOL 315	Genetics and Evolution of Populations	4
BIOL 322	Botany	4
BIOL 346	Animal Nutrition	4
BIOL 348	Animal Behavior	4
BIOL 354	Ecology	4
BIOL 357	Conservation Biology	4
BIOL 375	Comparative Vertebrate Anatomy	4
BIOL 376	Animal Physiology	4
BIOL 402	Immunology	4
BIOL 420	Biochemistry: Proteins and Metabolism	4

***BIOL 106 for major credit upon completion of special requirements**

Research Intensive Electives

BIOL 400	Research Topics	4-5
BIOL 425	Physiological Plant Ecology	4

Related Courses:
Tale all courses; additional courses in math and physics are strongly recommended.

CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
CHEM 310	Basic Organic Chemistry	
or 315/316	Organic Chemistry I and II	3-8

Requirements for the Biology minor

A total of 24 credits is required for the Biology minor.
Take one of the following BIOL courses:

BIOL 150 Biological Foundations	4
CHEM 105 General Chemistry I	4

Plus at least 16 additional credits of BIOL courses (excluding BIOL 226, 390, 450, 485, and 490), selected in consultation with a Biology advisor.

Total credit hours	**24**

Requirements for the Biological Anthropology minor

The interdisciplinary minor in Biological Anthropology requires foundation courses in Biology and Anthropology. The minor is intended to complement a major in another discipline. (See “Anthropology” section, above, for the list of required courses.)

Preparation for Middle/Adolescent Education

Future science teachers complete the Biology major (49-54 credits), and should consult with faculty advisors in Biology and Education to select appropriate courses in biology and related disciplines.

Chemistry

Chemistry attempts to identify and rationalize the transformations and structure of matter, the ways matter and light interact, and the physical properties of all substances. Essentially, chemists seek to relate macroscopic observable properties to the nature of matter on an atomic and molecular scale.

Chemistry is a broad field and knowledge of chemistry is essential not only to the student of disciplines such as biology, environmental studies, engineering, ceramics, medicine, and forensics, to name a few, but also to the person who wishes to be liberally educated. With many scientifically-based issues facing today’s society, some knowledge of chemistry is essential.

The division offers a core major and an American Chemical Society (ACS) approved degree. The core major provides a unique experience that links fundamental knowledge in the classroom with hands-on exploration in the laboratory, and integrates interdisciplinary exercises with a variety of methods for sharing results. We value independent research experiences for our students on and off campus and strive to offer a variety of interesting and timely topics courses for all students on campus.

Students with a chemistry degree from Alfred University graduate with a firm background for entry into the job market as a chemist, for advanced study in the discipline, for advanced study in a related discipline or a foundation for various professional schools such as medicine, dentistry, veterinary medicine, law or library science. The ACS approved degree requires the core major plus six additional semester credit hours.

A minor in chemistry is also offered and integrates well with several majors on campus. The minor not only provides breadth of knowledge, but also permits the student to tailor his/her studies to complement a major in other fields. For example, a biology major might emphasize organic chemistry whereas a person in ceramic science might focus on physical, inorganic or analytical chemistry.

Requirements for the major

CHEM 105/106	General Chemistry	8
CHEM 315/316	Organic Chemistry	8
CHEM 321	Introduction to Analytical Chemistry	4
CHEM 343/346*	Physical Chemistry I and II	7
CHEM 345	Physical Chemistry Laboratory	1
CHEM 372	Inorganic Chemistry	3
CHEM 374	Inorganic Chemistry Laboratory	1
CHEM 423	Instrumental Analysis	3
CHEM 461	Advanced Chemistry Laboratory	2
CHEM 490 **	Chemistry Seminar	0
Total credit hours		**38**

***Ceramic Engineering and Materials Science majors who also major in Chemistry may take CEMS 214, 235 and 344 for equivalent content.**
****Enrollment in three semesters of chemistry seminar is required for all majors.**

Requirements for the ACS approved major

Above, plus six additional credit hours. These six credits must include BIOL 420 (Biochemistry: Proteins and Metabolism) and at least two credit hours from CHEM 400, CHEM 414, CHEM 450, CHEM 457, CHEM 462, CHEM 485, CHEM 495, CEMS 334, CEMS 342, CEMS 344, CEMS 349, and CEMS 434. These two credits must also include at least 24 clock hours of laboratory time.

Related Study Required for the Major

MATH 151/152	Calculus I and II	8
PHYS 111 or 125	Physics I	4
PHYS 112 or 126	Physics II	4

For those students who wish to earn the ACS certified degree, BIOL 202 (4 credits) is also required as a prerequisite for BIOL 420.

Requirements for the Chemistry minor

CHEM 105/106	General Chemistry	8

Plus at least 12 additional credits from the following:
CHEM 310 (may not be credited if passing grade in CHEM 315), CHEM 313, CHEM 315, CHEM 316, CHEM 321, CHEM 343*, CHEM 345, CHEM 346*, CHEM 370, CHEM 372, CHEM 374, CHEM 423*, CHEM/BIOL 420, and CHEM/BIOL 422

Total credit hours **20**

***Ceramic Engineering and Materials Science majors who minor in Chemistry may substitute CEMS 235 for CHEM 343; both CEMS 214 and CEMS 344 for CHEM 346; and both CEMS 347 and CEMS 349 for CHEM 423. No more than 8 credit hours total may be taken outside of the Chemistry Division.**

Communication Studies

We use communication to craft ideas, connect ourselves with others, and to create personal identities and shared cultures. The methods and practices involved in communicative processes are gleaned from a long interdisciplinary tradition that values diversity in both knowledge and practice. The mission of the Communication Studies program at AU is to help students prepare for their futures by providing a foundation that teaches them to construct, evaluate, and distribute messages within and for an increasingly interconnected and globalized society.

The core courses examine elements of the process of communication in a program which is grounded in the humanistic tradition and contemporary social science. This plan of study is designed not only for students planning to pursue careers as leaders in fields such as public relations, journalism, and advertising, but also for those who wish to acquire an awareness of general communication principles applicable to many careers. Moreover, since many Communication Studies courses investigate the impact of communication upon society, the major also provides a solid foundation for graduate study in Communication and related disciplines including Law, Business, and the Social Sciences.

As a supplement to their classroom work, students are encouraged to work with the University's FM stereo radio station, WALF, the student newspaper, *Fiat Lux*, or the campus television station, AUTV, as well as complete an internship.

Requirements for the major

All students must complete a 24 credit hour core consisting of the following courses:

COMM 101	Introduction to Communication Studies	4
COMM 110	Mass Media and American Life	4
COMM 205	Introductory Newswriting and Reporting	4
COMM 301	Broadcasters, Advertisers, and Audiences	4
COMM 309	Persuasion: Reception and Responsibility	4
COMM 410	Communication Ethics	4

Additional Requirements

Take 20 credit hours of elective courses in Communication, Social Sciences (such as Psychology or Political Science), Business (such as Management or Marketing), and Humanities (such as English), chosen in consultation with an advisor. At least 12 of these elective hours must be at the 300-400 level.

Total credit hours **44**

Requirements for the minor in Communication Studies

COMM 101	Introduction to Communication Studies	4
COMM 110	Mass Media and American Life	4
COMM 205	Introductory Newswriting and Reporting	4
COMM 301	Broadcasters, Advertisers, and Audiences	4
COMM 309	Persuasion: Reception and Responsibility	4
COMM 410	Communication Ethics	4

Total credit hours **24**

Comparative Cultures

The Comparative Cultures major attracts students who want to better understand themselves and the world around them. The major makes it possible for students to gain an appreciation of cultural pluralism by studying various cultures and elements of culture while acquiring the tools of analysis and interpretation. Students achieve an understanding of the general nature of human culture and religion as well as more specific knowledge of particular societies and/or religious traditions. The major emphasizes the analytical methodologies of the complementary disciplines of Cultural Anthropology and Religious Studies, fostering the cross-cultural and/or comparative study of such aspects of culture as myth, social organization, adaptive strategies, gender relations, kinship and descent, religious ritual, oral poetry, and visual and performing arts.

The curriculum includes core components (which should be completed early), elective courses and advanced study of a foreign language. It culminates in a major fieldwork project. Students are strongly encouraged to study for one or two semesters in a foreign culture.

Requirements for Comparative Cultures Major

I. Core (16 credit hours)

ANTH 110	Cultural Anthropology	4
ANTH 304	Language and Culture*	4
GLBS 495	Global Issues Seminar*	4
RLGS 105	Introduction to World Religions	4

II. Elective Courses (22 credit hours)

These courses are in the areas of Anthropology, Religious Studies and Art History of non-Eurocentric traditions. 16 credits must be 300-400 level. Up to 8 credits from other disciplines may be substituted (with advisor's approval).

ANTH 200/300	Special Topics	1-4
ANTH 302	The Nacirema	4
ANTH 303	Health and Culture*	4
ANTH 305	Belize and the Caribbean	2
ANTH 311	Nip, Tuck, Perm, Pierce, Tattoo, Embalm	2
ANTH 312	Violence and Culture*	4
ANTH 400	Special Problems in Anthropology	1-4
ANTH 450	Independent Study	1-4
ANTH 470	Fieldwork	2-4
ARTH 200/300/400	Special Topics*	1-4
ARTH 123	Art of China	4
ARTH 126	Arts of Asia: Ancient to Modern	2
ARTH 141	20th Century Art	2
ARTH 304	Global Arts: Contemporary Asia	4
ARTH 305	Arts of India	4
RLGS 200/300	Special Topics	1-4
RLGS 307	Myth, Ritual, and the Creative Process	4
RLGS 359	History of Chinese Thought	4
RLGS 369	Buddhism*	4

III. Language Study (up to 12 credit hours)

Minimum requirement is proficiency equal to university study through the second year.

Total credit hours 38-50

***these courses have prerequisites; see course descriptions**

Criminal Justice Studies

The interdisciplinary Criminal Justice Studies major attracts students who want to study the criminal justice system and key criminal justice actors, processes, and institutions. Courses in the major examine such topics as criminal behavior, social and governmental efforts at control, and practices developed to rehabilitate offenders. In general, students learn the application of social science findings in an effort to evaluate and analyze contemporary criminal justice issues. Courses in the major draw on a number of different disciplines in the social sciences, including Sociology and Political Science. The major also provides for practical experience through coursework that encourages students to apply classroom knowledge to actual situations in the field.

Requirements for Criminal Justice Studies major

I. Core courses (24 credit hours)

CRIM 340	Concepts of Penology*	4
CRIM 351	Seminar in Criminal Behavior*	4
POLS 232	Judicial Processes	2
POLS 417	American Civil Liberties	2
PSYC 342	Abnormal Psychology	4
SOCI 245	Crime and Society	4
SOCI 344	Sociology of Deviance	4

II. Electives (20 credit hours)

ANTH 312	Violence and Culture*	4
CRIM 322	Juvenile Justice*	2
CRIM 332	Focusing on Police*	2
CRIM 400	Special Topics in Criminal Justice	2-4
CRIM 450	Independent Study	1-4
CRIM 470	Field Work in Criminal Justice	4
ENVS 220	Introduction to Geographic Information Systems	4
PHIL 281	Ethics	4
POLS/SOCI 230	Introduction to Data Analysis and Statistics	4
POLS 242	Approaches to Law	4
POLS 273	Terrorism and International Security	4
POLS 313	State and Local Politics	4
POLS 316	American Constitutional Law and Politics*	4
POLS 355	Public Policy	4
PSYC 282	Social Psychology*	4
SOCI 235	Socialization*	4
SOCI 242	Social Problems*	4
SOCI 253	Social Welfare Institutions	4
SOCI 343	Race and Ethnicity	4
SOCI 431	Research Design and Strategies*	4
SPAN 301	Advanced Conversation and Composition	4

III. Institutes

In addition to completing the foregoing courses, the Criminal Justice Studies major is required to attend at least two institutes. These are normally offered once a year for a day to a day and a half. They deal with specific issues facing professionals in the criminal justice area.

Total credit hours **44**

Note: Students may find that knowledge of Spanish is useful in the criminal justice field.
***these courses have prerequisites; see course descriptions**

Requirements for Criminal Justice Studies minor

I. Core Courses (22 credit hours)

CRIM 340	Concepts in Penology*	4

POLS 110	American Politics	4
POLS 232	Judicial Process	2
SOCI 110	Introduction to Sociology	4
SOCI 245	Crime and Society	4
SOCI 344	Sociology of Deviance	4
Total credit hours		**22**

***these courses have prerequisites; see course descriptions**

Dance

Alfred University's Division of Performing Arts Dance Department offers students a rich and rewarding experience in the art of dance and dance making . It is open to students of all levels, regardless of experience or past training who want to include a dance practice in their academic experience. The Program encourages cross-disciplinary work in collaboration with visual art, sound design, music, performance art, and theatre – drawing from strengths unique and specific to Alfred University.

Those students who want to pursue deeper studies in dance can minor in dance. The dance minor is a composition based program that develops artistry in creating site specific performance, contemporary dance, and dance theater.
Students can take classes in composition, improvisation, site specific composition, site specific performance, contemporary dance, jazz, dance history, repertory, and contact improvisation, as well as special topics classes.

The Marlin and Ginger Miller Dance Residency Program brings nationally acclaimed dance companies, choreographers, and artists to AU, offering phenomenal opportunities for students to work and learn with artists of the highest caliber.

Beyond the classroom, AU has a thriving student dance culture with a variety of dance clubs. Auditions for all productions and performance groups are open to all students, regardless of academic major or experience.

Requirements for the Dance minor:

Core Courses		
DANC 120	Fundamentals of Dance	2
DANC 222	Modern I	2
DANC 230	Improvisation/Composition I	3
DANC 211	Dance History	4
DANC 270	Alfred University Dance Theatre (taken twice)	4
DANC 330	Improvisation/Composition II	3
or DANC 331	Site Specific Composition (can be an elective)	

Electives in Dance (select 6 credit hours)		
DANC 200	Special Topics	1-4
DANC 221/321	Ballet I and II	2
DANC 223/323	Jazz Dance I and II	2
DANC 224	Contact Improvisation	2
DANC 322	Modern Dance II	2
DANC 340	New and Existing Repertory	3
DANC 370	Choreography Practicum	2
DANC 450	Independent Study	1-4
Total credit hours		**24**

Note: If DANC 120 is waived because of an equivalent background in dance, the minor requires 22 credit hours.

English

The study of English fosters critical thought and imaginative insight. It also heightens an awareness and appreciation of the power, beauty, and passion of the written word. Class discussions increase students' opportunity, in Thoreau's words, to "live deliberately."

The mission of the Division of English is to offer instruction in the western canon and non-canonical and world literatures, integrating these studies with creative writing courses in poetry, fiction, nonfiction and playwriting. The Division of English is dedicated to the teaching of analysis, critical reflection and creative thought, problem solving, and communication within the context of a liberal arts education in order to meet the complex needs of a diverse university community.

We encourage students to recognize the intellectual, social, and historical contexts of human experience, demonstrating how we might question and articulate the values, ideologies, and assumptions inherent in any human enterprise. We are also committed to teaching all university students the analytic writing skills they need in order to articulate a cultural literacy in an ever-shrinking, diverse world.

The major serves both the student who regards the study of English as a vital component of a liberal arts education and the future critic and writer.

English majors graduate to pursue careers in teaching, writing, advertising, public relations, publishing, college administration, business, and related fields, or they go on to graduate schools in literature, writing, communications, journalism, library science, law, and business.

English majors are encouraged to assume responsibility for the direction of their education by developing a course of study based on their goals. From the numerous courses offered (see listings in the back of catalog), a total of 44 semester hours in English is required.

Requirements for the English Major

One 200-level literature class ("A" Area of Knowledge)		4
ENGL 325	Survey of British Literature I	3
ENGL 326	Survey of British Literature II	3
ENGL 327	Survey of American Literature	4
ENGL 328	The Language of Literary Art	4
26 credits of 400-level coursework in writing and literature		26
Total Credit Hours		**44**

Note: ENGL 450-Independent Study does not count toward the major. ENGL 496-English Honors Thesis may be counted toward the major. Also, the Division of English strongly recommends that English majors complete the intermediate level of a foreign language. Students may count one literature course (300-level or above) taken in a foreign language towards the English major.

Minors

The English Division offers minors in English, Literature, and Writing. For students wishing to complete more than one minor offered by the English Division, each minor must have at least 12 unique credits.

Requirements for a minor in English:

Any 200-level writing or literature course in English	4
ENGL 325/326 Surveys of British Literature I & II	
or ENGL 327 Survey of American Literature	
or ENGL328 Language of Literary Art	4-6

10-12 credits of 400-level writing and/or literature coursework in English	10-12
Total Credit Hours	**20**

Note: ENGL 450-Independent Study does not count toward the minor in English.

Requirements for a minor in Literature:

One 200-level literature class ("A" Area of Knowledge)	4
ENGL 325/326 Surveys of British Literature I & II	
or ENGL 327 Survey of American Literature	4-6
10-12 credits of 400-level coursework in literature	10-12
Total Credit Hours	**20**

Note: ENGL 450-Independent Study does not count toward the minor in Literature.

Requirements for a minor in Writing:

One 200-level creative writing class	4
ENGL 328 The Language of Literary Art	4
12 credits selected from 400-level writing courses	12
Total Credit Hours	**20**

Note: ENGL 450-Independent Study does not count toward the minor in Writing.

Environmental Studies

Since technological advances in our society have been accompanied by many life-threatening effects upon our physical surroundings, it has become a good citizen's responsibility to understand major environmental concepts. Some of us will pursue careers on behalf of the environment, trying to determine our species' suitable place within it.

The Environmental Studies major offers a multidisciplinary background and encourages looking at environmental problems from several points of view. Environmental projects and field experiences augment classroom learning. Students have the option of choosing an Environmental Studies major with either a natural science, social science, or environmental science emphasis. Environmental Studies majors strongly interested in environmental careers or graduate training are encouraged to also complete requirements for a major or minor in a traditional academic discipline. Many of the same courses will meet the requirements of both majors.

The primary missions of the Environmental Studies Program at Alfred University are to educate our students and to engage in research that furthers our understanding of the natural environment. These two activities are mutually supportive.

Our approach toward teaching and research is to integrate the several disciplines in the natural and social sciences and humanities that make up the field. We practice the team approach taken in modern environmental problem solving in both teaching and research. Our students learn to tackle environmental problems as a team of experts, each contributing his/her own specialty to the group effort.

We use contemporary methods of "learning by doing" and team-teaching to provide our students with a multi-faceted, practical foundation that they can build on with advanced study or work experience. We strive to provide the latest technologies for our students, and orient our curriculum in such a way as to give them experience using contemporary procedures, approaches, techniques, and instruments. We expect our students to graduate with a good understanding of theoretical aspects of our field and the ability to apply that understanding to practical situations.

Our goal is to prepare students for rigorous graduate programs and/or to be successful in a competitive job market.

Our faculty engage in scholarly activities that lead to a better understanding of the environment and the effects that humans have on the environment. We often work on research projects in teams and expect our students to be involved in research with us whenever possible, depending on the nature of specific research projects.

When appropriate, we use our expertise to benefit the local community and undertake research projects with our students that will have a positive impact on the local environment.

Requirements for the major – Natural Science Emphasis

A. Core requirements

ENVS 101	Environmental Studies I – Natural Science	4
ENVS 102	Environmental Studies II – Social Science	4
ENVS 205	Environmental Data Analysis	4
ENVS 206	Fieldcraft-Outdoor Proficiency	4
ENVS 220	Introduction to GIS	4
ENVS 240	Environmental Research Procedures I	3
ENVS 241	Environmental Research Procedures II	3
ENVS 360	Junior Seminar	1
ENVS 415	Natural Resource Management	3
ENVS 440	Environmental Research Planning	2
ENVS 490	Senior Seminar	2
ENVS 499	Senior Year Project	2-4
POLS 214	Politics and Environment	2

B. Breadth requirements

One course from among the following:

BIOL 150	Biological Foundations	4
CHEM 105	General Chemistry I	4
GEOL 101	This Dynamic Earth	4
PHYS 111	Introductory General Physics I	4
or PHYS 125	Physics I	4

Two courses from among the following:

ANTH 110	Cultural Anthropology	4
ANTH 310	Cultural Anthropology and Disease	4
ECON 201	Principles of Microeconomics	4
ECON 312	Environmental Economics	3
ENGL 293	Writers Gone Wild: Literature and the Environment	4
ENVS 201	Environmentalism	2
ENVS 204	Environmental History	2
ENVS 245	Spirituality and the Environment	2-4
HIST 308	Americans and Their Environment	4
PHIL 281	Ethics	4
POLS 345	International Environmental Politics	4
POLS 411	Bureaucracy	4

C. Natural Science emphasis electives

Three courses (at least 11 credits) from among those listed, with no more than two 100-level courses.

BIOL 322	Botany	4
BIOL 354	Ecology	4
BIOL 356	Aquatic Ecology	4
CHEM 106	General Chemistry II	4

CHEM 310	Basic Organic Chemistry	3
or CHEM 315	Organic Chemistry I	4
CHEM 316	Organic Chemistry II	4
CHEM 321	Introduction to Analytical Chemistry	4
ENVS 300	Special Topics	1-4
ENVS 330	Ornithology	4
ENVS 320	Advanced GIS Applications	4
ENVS 351	Environmental Biogeochemistry	4
ENVS 357	Conservation Biology	4
GEOL 201	Surficial Geology	4
GEOL 301	Structural Geology	4
GEOL 307	Stratigraphy and Sedimentation	4
GEOL 464	Hydrogeology	4
PHYS 112	Introductory General Physics II	4
or PHYS 126	Physics II	4

Requirements for the major – Social Science Emphasis

A. Core requirements

ENVS 101	Environmental Studies I – Natural Science	4
ENVS 102	Environmental Studies II – Social Science	4
ENVS 205	Environmental Data Analysis	4
or POLS/SOCI 230	Introductory Data Analysis and Statistics	4
or PSYC 220	Psychological Methods & Statistics	4
or BUSI 113	Business Statistics	4
ENVS 206	Fieldcraft – Outdoor Proficiency	4
ENVS 220	Introduction to GIS	4
ENVS 240	Environmental Research Procedures I	3
ENVS 241	Environmental Research Procedures II	3
ENVS 360	Junior Seminar	1
ENVS 440	Environmental Research Planning	2
ENVS 490	Senior Seminar	2
ENVS 499	Senior Year Project	2
ENVS 415	Natural Resources Management	3
POLS 214	Politics and Environment	2

B. Breadth requirements

One course from among the following:

BIOL 150	Biological Foundations	4
CHEM 105	General Chemistry I	4
GEOL 101	This Dynamic Earth	4
PHYS 111	Introductory General Physics I	4
or PHYS 125	Physics I	4

C. Social Science emphasis electives

16 credits from among the following:

ANTH 110	Cultural Anthropology	4
ANTH 310	Cultural Anthropology and Disease	4
ECON 201	Principles of Microeconomics	4
ECON 202	Principles of Macroeconomics	3
ECON 312	Environmental Economics	3
ENGL 293	Writers Gone Wild: Literature and the Environment	4
ENVS 201	Environmentalism	2
ENVS 204	Environmental History	2
ENVS 245	Spirituality and the Environment	2-4
ENVS 320	Advanced GIS Applications	4
HIST 308	Americans and Their Environment	4
PHIL 281	Ethics	4

POLS 313	State and Local Politics	4
POLS 411	Bureaucracy	4
PSYC 282	Social Psychology	4

Requirements for the major – Environmental Science Track

A. Core requirements

ENVS 101	Environmental Studies I – Natural Science	4
ENVS 102	Environmental Studies II – Social Science	4
ENVS 205	Environmental Data Analysis	4
ENVS 206	Fieldcraft – Outdoor Proficiency	4
ENVS 220	Introduction to GIS	4
ENVS 240	Environmental Research Procedures I	3
ENVS 241	Environmental Research Procedures II	3
ENVS 360	Junior Seminar	1
ENVS 440	Environmental Research Planning	2
ENVS 490	Senior Seminar	2
ENVS 499	Senior Year Project	2
MATH 151	Calculus I	4

B. Breadth requirements

Four courses from the following:

BIOL 150	Biological Foundations	4
CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
GEOL 101	This Dynamic Earth	4
MATH 152	Calculus II	4
PHYS 111	Introductory General Physics I	4
or PHYS 125	Physics I	4
PHYS 112	Introductory General Physics II	4
or PHYS 126	Physics II	4

C. Depth requirements

Three Courses (totaling at least 11 credit hours) from the following:

BIOL 322	Botany	4
BIOL 354	Ecology	4
BIOL 356	Aquatic Ecology	4
CHEM 310	Basic Organic Chemistry	3
or CHEM 315	Organic Chemistry	4
CHEM 321	Introduction to Analytical Chemistry	4
ENVS 300	Special Topics	1-4
ENVS 330	Ornithology	4
ENVS 357	Conservation Biology	4
ENVS 320	Advanced GIS Applications	4
ENVS 351	Environmental Biogeochemistry	4
GEOL 201	Surficial Geology	4
GEOL 464	Hydrogeology	4

Requirements for the Environmental Studies minor

ENVS 101	Environmental Studies I – Natural Science	4
ENVS 102	Environmental Studies II – Social Science	4
ENVS 240	Environmental Research Procedures I	3
ENVS 241	Environmental Research Procedures II	3

Plus, 8 credits of electives, selected by the student and minor advisor, chosen from the lists of natural science and social science electives (see above) and integrated to meet the student's objectives in environmental study.

Total credit hours **22**

Note: Nearby Alfred State College offers a number of applied courses in a variety of environmental areas. With permission, selections from among these offerings may be taken for transfer credit at Alfred University. Advisors can assist in such course selections; in some cases these may substitute for courses listed above.

General Science

Requirements for the major

Students must complete the breadth and depth requirements:

I. Breadth

BIOL 150	Biological Foundations	4
And take one of the following:		4
BIOL 207	Introduction to Anatomy and Physiology I	
BIOL 211	Cell Biology	
BIOL 322	Botany	
BIOL 354	Ecology	
CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
ENVS 101	Environmental Studies I - Natural Science	4
MATH 151	Calculus I	4
MATH 152	Calculus II	4
Take two of the following:		
GEOL 101	This Dynamic Earth	4
GEOL 104	Earth and Life Through Time	4
GEOL 201	Surficial Geology	4

Take one of the following sequences of courses:

PHYS 111/112	Introductory General Physics I and II (4 credits each)	8
or		
PHYS125/126	Physics I and II (4 credits each)	8

II. Depth

A minimum of 10 credits at the 300 level or above from the one of the disciplines represented above. (not to include BIOL 322 or BIOL 354)

Total Credit Hours **44**

Geology

Studying geology helps students to gain an appreciation for their planet, its history, and the processes which operate within it. Students may select courses for enjoyment, choose courses in conjunction with other studies, or take courses in preparation for careers in geology. The major provides a background useful for employment or further studies in geology or a related field such as environmental studies, physical geography, planning, engineering, law or business. A geology major includes an introductory level course; required courses in structural geology, surficial geology, mineralogy and petrology; advanced studies; and field experience.

The Geology Program's mission is to provide students in all geoscience courses (major or non-major) with an appreciation and understanding of the earth's physical environment (geosphere, hydrosphere, atmosphere) and the interconnectedness between these systems. Because there are many aspects of the earth and its history that cannot be directly observed, part of our mission is to instill in our students an

understanding of how the present models explaining the structure, composition, and history of the earth were derived.

Students in geology courses will gain basic knowledge and skills that will allow them to pursue professions in a variety of areas of geoscience, including teaching, graduate school, industry, government, and private consulting.

Requirements for the major

Choose one introductory course from:		4
GEOL 101	This Dynamic Earth	
GEOL 103	Earthquakes and Volcanoes	
GEOL 104	Earth and Life Through Time	
GEOL 106	Elementary Oceanography	
and take the following four courses:		
GEOL 201	Surficial Geology	4
GEOL 301	Structural Geology	4
GEOL 302	Mineralogy and Petrology	4
GEOL 464	Hydrogeology	
or ENVS 351	Environmental Biogeochemistry	4
Total Credit Hours		**20**

General Geology Track:

In addition to the above 20 credit hours required for all tracks, take:

ENVS 205	Environmental Data Analysis	4
GEOL 206	Fieldcraft–Outdoor Proficiency	4
ENVS 220	Introduction to Geographic Information Systems	4
and 8 credits selected from the following:		
ENVS 320	Advanced GIS Applications	4
ENVS 351	Environmental Biogeochemistry (if not used above)	4
GEOL 307	Stratigraphy and Sedimentation	4
GEOL 408	Tectonics	4
GEOL 414	Geophysics	4
GEOL 464	Hydrogeology (if not used above)	4
Total Credit Hours for General Track Geology Major		**40**

Planetary Science Track

In addition to the above 20 credit hours required for all tracks, take:

ASTR 302	Planetary Science	2
CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
MATH 151	Calculus I	4
MATH 152	Calculus II	4
and 8 credits selected from the following:		
CEMS 235	Thermodynamics of Materials	4
CEMS 251	Mechanics of Materials	3
CHEM 343	Physical Chemistry I	3
CHEM 346	Physical Chemistry II	3
GEOL 408	Tectonics	4
GEOL 414	Geophysics	4
GEOL 464	Hydrogeology (if not used above)	4
Total Credit Hours for Planetary Science Track Geology Major		**46**

Earth Science Education Track

In addition to the above 20 credit hours required for all tracks, take:

MATH 102	Mathematics for Early Childhood/Childhood Teachers	4

GEOL 206	Fieldcraft–Outdoor Proficiency	4
and 8 credits selected from the following:		
ASTR 103	Introductory Astronomy	4
ASTR 107	Elementary Astronomy Lab	2
ENVS 220	Introduction to Geographic Information Systems	4
ENVS 320	Advanced GIS Applications	4
ENVS 351	Environmental Biogeochemistry (if not used above)	4
GEOL 307	Stratigraphy and Sedimentation	4
GEOL 408	Tectonics	4
GEOL 414	Geophysics	4
GEOL 464	Hydrogeology (if not used above)	4
SCIE 110	Weather Elements	2
Total Credit Hours for Earth Science Education Track Geology Major		**36**

***Other field activities may be used to fulfill this requirement. Arrangements should be made prior to the end of the junior year.**

Requirements for the minor in Geology

A Geology minor may be obtained by completing (with grades of “C” or better), one 100-level geology course and 16 credit hours of upper level geology courses. These may include CEMS 214 or CEMS 215. Total credit hours required: 20.

Gerontology

Our nation is “graying” at an alarming rate. In 2014, seniors aged 65+ comprised about 14.5% of the U.S. population, estimated to be around 46.2million people. By 2050, this number will jump to about 21% or 87 million individuals, so that 1 out of every 5 Americans will be 65 years old or older!

As these generations retire, there will be an increased demand for professionals in a wide variety of fields who understand issues related to the aging process. Service for the aging is already one of the fastest growing job markets.

Gerontology is the study of aging, including the biological, psychological, and sociological aspects of the aging process. It includes the study of changes in adults as they age, the ways that society changes with an aging population, and the ways we apply this information to programs and policies for older adults.

The Gerontology major at AU will help provide you with the skills and background needed in today’s job market. In our program, you will study aging from the psychological, sociological, biological, and political perspectives, and learn about current “hot” topics facing our country, such Social Security, Retirement, community programsand the impact of an aging population on our medical and legal systems. Our multiple community connections will provide you with opportunities to gain hands-on experience through supervised internships.

Requirements for the major

Complete all of the following:

GERO 118	Introduction to Adult Development and Aging	4
BIOL 119	Physiology of Aging	4
PSYC 210	Communication and Counseling Skills	2
PSYC 371	The Psychology of Death and Dying	4
GERO 429	Cognition and Aging	2
GERO 485	Gerontology Internship	4
SOCI 348	Sociology of Families	4

Select one course from each of the following three groups:

PSYC 220	Psychological Methods and Statistics	4
SOCI 230	Intro to Data Analysis and Statistics	4
SOCI 253	Social Welfare Institutions	4
POLS 355	Public Policy	4
PSYC 322	Health Psychology	2-4
GERO 300	Special Topics in Gerontology	2-4
GERO 450	Independent Study	2-4
GERO 497	Senior Seminar in Gerontology	2
SOCI 470	Field Work	2-4
Total credit hours		**36**

Requirements for the minor in Gerontology

Complete all of the following:

GERO 118	Introduction to Adult Development and Aging	4
GERO 429	Cognition and Aging	2
GERO 485	Gerontology Internship	4

Complete one course from each of the following four groups:

BIOL 119	Physiology of Aging	4
PSYC 322	Health Psychology	2-4
PSYC 210	Communication and Counseling Skills	2
PSYC 371	The Psychology of Death and Dying	4
GERO 300	Special Topics in Gerontology	2-4
GERO 497	Senior Seminar in Gerontology	2
SOCI 253	Social Welfare Institutions	4
SOCI 348	Sociology of Families	4
POLS 355	Public Policy	4
PSYC 450	Independent Study	2-4
Total credit hours		**20**

Global Studies

The interdisciplinary Global Studies major fosters international awareness of the variety, complexity, and interconnectedness of modern populations ranging from ethnic groups to nation-states by exposing students to diverse disciplinary perspectives and encouraging international study abroad experience. The major includes a required Introduction to Global Studies, a broad selection of core courses in contemporary global issues across the curriculum, advanced study in foreign language and a capstone global issues seminar emphasizing original research based on study abroad experience. Students have a choice of three tracks: General Global Studies; International Relations; or International Business.

Requirements for Global Studies major

I. Foundation Courses (Required)

Modern Languages: second year competency (*up to 8 hours*)

Study Abroad: one or two semesters recommended

OCST 301	Study Abroad Preparation and Review	2
ANTH 110	Cultural Anthropology	4
ECON 201	Principles of Microeconomics	4
or ECON 202	Principles of Macroeconomics	3
GLBS 101	Introduction to Global Studies	4
GLBS 495	Global Issues Seminar*	4
HIST 107	The World in the 20th Century	4
POLS 271	World Politics	4

II. Tracks and Electives

Complete one of three tracks:

1. General Global Studies Track: Choose 16 elective credits from at least two of the Categories 1-6, including at least 2 courses at the 300 or 400 level.

2. International Relations Track: Choose 16 elective credits from the Categories 1, 2, 3, and 4, including at least 2 courses at the 300 or 400 level.

3. International Business Track: Choose 15 elective credits from Category 3, including at least 2 courses at the 300 or 400 level.

Categories of Electives

1. History

HIST 111	Modern Western History	4
HIST 151	The Rise and Fall of Iberia, 1450-1950	4
HIST 300	Topics in History *(upon approval by Director)*	1-4
HIST 301	America in War during the 20th Century	4
HIST 302	The Vietnam War	4
HIST 316	Twentieth-Century Europe	4
HIST 321	The History of Fascism	4
HIST 322	Churchill, Stalin, Roosevelt, Hitler	2
HIST/GLBS 323	The History of Stuff	4
HIST 325	Imperialism in Africa and Asia	4
HIST 326	The Modern Middle East and North Africa	4
HIST 327	Propaganda: Persuasion, Art and War	4
HIST/PHIL 328	Visions of Modernity: Art, Politics and Ideas	4
HIST 371	American Diplomacy, 1763-1898	2
HIST 372	America as a World Power, 1898-Present	4
HIST 383	The Nazi Holocaust	2
HIST 387	Modern France	4

2. Political Science

POLS 251	European Politics	4
POLS 253	Dictatorship and Democracy	4
POLS 273	Terrorism and International Security	4
POLS 282	Latin American Politics	4
POLS 200/300/400	Special Topics (upon approval)	1-4

3. Economics and Business

ECON 201	Principles of Microeconomics	4
ECON 202	Principles of Macroeconomics	3
FIN 458	International Financial Management*	3
BUSI 457	International Business*	3
MKTG 489	International Marketing*	3
ECON/BUSI/ FIN 200/300/400	Special Topics (upon approval)	3

4. Cultural Anthropology/Interdisciplinary Studies

ANTH 303	Health and Culture*	4
ANTH 304	Language and Culture*	4
ANTH 312	Violence and Culture*	4
ANTH 470	Field Work*	2-4
ANTH 200/300/400	Special Topics in Anthropology	1-4

FREN 210	Global Perspective: Paris	2
FREN 313	French-Speaking Africa	4
FREN 316	Contemporary French Culture*	4
GRMN 316	German History and Culture*	4
SPAN 210	Pilgrims and Tourists Santiago	4
SPAN 212	Buenos Aires: Literature and the Arts	2
WGST200/300/400	Topics in Women's and Gender Studies (upon approval)	1-4
5. Art/Literature/Communications		
ARTH 121	Wild Spirits and Divine Kings	2
ARTH 123	Art of China	2
ARTH 124	Native American Arts: Spirited Materials and Tech.	2
ARTH 300-400	Topics in Art History (upon approval)	2-4
ARTH 301	African Art I	4
ARTH 302	African Art II	4
ARTH 363	Ceramics and Cultural Identity: Global Traditions & Innovations	4
COMM 300/400	Topics in Communication	1-4
ENGL 251	World Literature I	4
ENGL 252	Contemporary World Literature	4
FREN 310	Reading French Texts*	4
FREN 312	French Literature II*	4
IART 300	Studio Topics in Interdisciplinary Art	1-4
IART 300	Special Topics in Interdisciplinary Art	1-4
MUSC 211	World Music	4
SPAN 312	Peninsular Culture and Literature II: 19th - 20th Century	4
SPAN 316	Latin American Culture and Literature II	4
SPAN 400	Topics in Hispanic Literature	1-4
THEA 210	The Performing Arts: A Global Perspective	4
6. Philosophy and Religion		
RLGS 105	Introduction to World Religions	4
RLGS 252	Judaism and Islam	4
RLGS 265	Asian Religions	4
Total credit hours		**48-50**

***these courses have prerequisites; see course descriptions**

Requirements for Global Studies minor

I. Foundation Courses (required)

Modern Languages: second year competency required

Study Abroad: at least one semester recommended

GLBS 101	Intro to Global Studies	4

II. Electives

After consultation with the Global Studies advisor/program director, choose 2 of these Global Studies core courses:

ANTH 110	Cultural Anthropology	4
HIST 107	The World in the 20th Century	4
POLS 271	World Politics	4

Eight additional credits at the 300 or 400 level from the Global Studies electives

Total credit hours **20**

History

"Bunk," Henry Ford called history. "A pack of tricks we play on the dead," said the French writer Voltaire. And yet we all know that a society understands what it is and what it wants to be based on an understanding of what it has been. Our history shapes our identity.

Alfred University's history program offers a thorough grounding in not only American society, but European and some non-Western societies as well. It covers eras of war and peace, and reform and revolution. It approaches the past by analyzing political, cultural, social, intellectual and military developments.

The program addresses the needs of both the student who regards historical study as a vital component of a general liberal arts education and the student who plans to become a professional historian. Recent graduates have gone into law, business, teaching, government service, professional sports, and advertising. We open doors for our history majors.

Requirements for the major

From the numerous courses offered (see listing and course descriptions on p. 225) a total of 34 credit hours in history is required. Of these hours, 26 must be drawn from the 300 or 400 level, and the student must complete eight hours in American and 8 hours in non-American history at the 300 or 400 level.

Total credit hours **34**

Requirements for the minor

The minor in history requires completion of two General Education history courses, plus 12 credits of history at the 300 or 400 level.

Total credit hours **20**

Interdisciplinary Art

The major in Interdisciplinary Art offers two degree programs:

- B.A. in Interdisciplinary Art
- B.S. in Interdisciplinary Art with Art Education

These liberal arts degrees combine studio work in the arts with studies in art history, art theory, and cultural criticism. The programs draw faculty from the College of Liberal Arts & Sciences, the School of Art & Design and the Education Division in the College of Professional Studies.

Interdisciplinary Art majors develop technical and conceptual skills in the visual arts through studio work, while also learning how philosophical and historical perspectives can deepen and enrich the process and purposes of artmaking. There is no portfolio requirement for admission to the Interdisciplinary Art programs.

The student who wishes to prepare for a career in art therapy or in art education should consult an Advisor in the Interdisciplinary Art program for a proper selection of degree path and course selection.

Recent Interdisciplinary Art graduates have opened their own studios, are working in museums, galleries, and design firms, are teaching art in secondary schools, and have entered graduate programs in the areas of art, art therapy, curatorial practice, and conservation.

B.A. in Interdisciplinary Art

The B.A. in Interdisciplinary Art offers three concentrations. Student select from: the Visual Arts Concentration, the Art History and Theory Concentration, and the Performing Arts/Design Concentration. This degree typically takes eight semesters to complete.

Degree Summary

General Education Requirements	24-34
Major Requirements	61-62
Electives	24-43
Physical Education	0-4
Total degree credit hours	**124**

In addition to major requirements, students complete the College of Liberal Arts and Sciences General Education Requirements (see pp. 76-77) as well as university requirements in physical education and global perspective (see p. 42).

Requirements for the major:

Core requirements

IART 101-104	Interdisciplinary Art I-IV	16
PHIL 283	Philosophy of the Arts I	4
ARTH 100-level	Art History	6
IART 460	Interdisciplinary Art Seminar	4
Total core requirements		**30**

In addition to the core requirements, students must complete one of the three concentrations below:

I Visual Arts Concentration

Visual studio electives (12 must be 300 level)	24
Theory elective	4
Art History elective	4

II Art History and Theory Concentration

Art History electives	16
Theory electives	8
Additional Art History/Theory electives	8
or 8 studio credits, with permission of advisor	

III Performing Arts/Design Concentration

1. Studio Electives in THEA, DANC, MUSC, ART*	24
2. Theory Elective*	7-8
Total credit hours for the Major	**61-62**

*Studio and Theory Elective: Should be chosen in consultation with the advisor to form a unified curriculum in Performance. In Music, only 100 level courses count toward requirement.

Requirements for the Interdisciplinary Art minor

The Interdisciplinary Art minor consists of 20 credit hours. Students must complete the 8-credit core and one 12-credit concentration.

Core:

IART 101	Interdisciplinary Art I	4
IART 102	Interdisciplinary Art II	4

Visual Arts Concentration:

IART 103	Interdisciplinary Art III*	4
IART 104	Interdisciplinary Art IV*	4
Art History		
or PHIL 283	Philosophy of the Arts	4

***with permission of advisor, other art studios may be substituted**

Performing Arts/Design Concentration

IART 103	Interdisciplinary Art III*	4
IART 104	Interdisciplinary Art IV*	4

Art History		
or DANC 211	Dance History	
or PHIL 283	Philosophy of the Arts	4

***with permission of advisor, courses in Lighting/Costume/Scenic Design, Directing/Acting/Improv Theatre, Dance or Music may be substituted.**

Art Theory/History Concentration

Courses in Art Theory and/or Art History	12
Total credit hours	**20**

B.S. in Interdisciplinary Art with Art Education

This degree is intended for students who wish to pursue Visual Arts (PreK-12) teaching certification. The program combines a major in Interdisciplinary Art with a minor in Education. The requirements of this degree program meet the New York State Education Department for certification.

Students complete one semester of student teaching following completion of the academic requirements. Typically, this degree takes nine semesters to complete.

Degree Summary

General Education Requirements	24-34
Major Requirements	62
Minor Requirements	33
Physical Education	0-4
Total degree credit hours	**129-133**

In addition to major and minor requirements, students complete the College of Liberal Arts and Sciences General Education Requirements (see pp. 76-77) as well as university requirements in physical educat?on and global perspective (see p. 42).

Requirements in the Interdisciplinary Art Major

IART 101-104	Interdisciplinary Art I-IV	16
PHIL 283	Philosophy of the Arts I	4
ARTH 100-level	Art History	6
IART 460	Interdisciplinary Art Seminar	4
Visual studio electives (12 must be 300 level)		24
Theory elective		4
Art History elective		4
Total major credit hours		**62**

Requirements in the Education Minor

EDUC 230	Psychological Foundations of Education	3
EDUC 231	Social Foundations of Education	3
EDUC 345	Education Fieldwork	3
EDUC 405	Literacy in the Content Area	
or EDUC 413	Using Literature in Intermediate/Adolescent Classrooms	3
EDUC 460	Seminar: Teaching & Profess Develop in Visual Arts	3
EDUC 463	Student Teaching-Art Education	12
EDUC 491	Methods and Curriculum in Art Education	3
SPED 456	Human Development: Exceptionality	3
Total minor credit hours		**33**

Mathematics and Computer Science

The mathematics and computer science program serves a variety of purposes:

- maintaining a vigorous and flexible program for mathematics and actuarial science majors
- providing the necessary mathematical foundations for engineering and science students
- offering an introduction to modern quantitative methods for students of management, economics, and the social sciences
- enhancing other disciplines through minors in mathematics and computer science

The mathematics majors give students a sound foundation in modern mathematics and its applications. The majors are quite flexible, allowing for emphasis on pure or applied mathematics. In recent years mathematics majors have found excellent placement in a number of fields, including actuarial science, computer applications and Ph.D. study.

Requirements for the Bachelor of Arts major in Mathematics

MATH 151	Calculus I	4
MATH 152	Calculus II	4
MATH 253	Calculus III	4
MATH 271	Differential Equations	3
MATH 281	Foundations of Higher Mathematics	4
MATH 371	Linear Algebra	4
MATH 481	Modern Algebra	4
MATH 491	Advanced Calculus	4
plus 6 credit hours in mathematics courses numbered above 240		
Total credit hours		**37**

Most students follow one of these three options:

Business Option

The Business Option is for students preparing for a mathematics-oriented career in the business world. This option emphasizes statistical and decision-making techniques. Students are encouraged to take various business courses as electives, along with the following mathematics courses:

MATH 351	Introduction to Operations Research	4
MATH 381	Mathematical Statistics	4

Scientific Option

The Scientific Option emphasizes the application of mathematics to the physical sciences. Interested students are advised to take science courses, such as physics, as electives, as well as the following mathematics courses:

MATH 381	Mathematical Statistics	4
MATH 401	Advanced Engineering Mathematics	4

Middle Childhood/Adolescence Education Option

This option is for students who plan a middle school or high school teaching career. In addition to the required Education program, students must take:

MATH 381	Mathematical Statistics	4
MATH 461	Geometry	4

Requirements for the Bachelor of Science major in Mathematics

CSCI 156	Computer Science I	4
MATH 151	Calculus I	4
MATH 152	Calculus II	4
MATH 253	Calculus III	4

MATH 271	Differential Equations	3
MATH 281	Foundations of Higher Mathematics	4
MATH 371	Linear Algebra	4
MATH 381	Mathematical Statistics	4
MATH 481	Modern Algebra	4
MATH 491	Advanced Calculus	4

plus 11 credit hours in mathematics courses numbered above 300;
plus 8 credit hours of natural and computer science courses different from those used to satisfy degree, major, and general education requirements

Total credit hours **58**

Requirements for the major in Mathematics with Actuarial Science

The B.S. degree in Mathematics with Actuarial Science prepares students to for the first two actuarial exams while also preparing them to enter a professional working environment. In addition to passing the actuarial exams, the Society of Actuaries also requires actuaries the completion of approved coursework in three areas: economics, corporate finance, and applied statistical methods.
Those requirements are satisfied through the coursework in this major, the specific courses that satisfy the requirements are listed on the Society of Actuaries webpage.

Take these courses:

ACCT 211	Financial Accounting	3
ACCT 212	Managerial Accounting	3
CSCI 156	Computer Science I	4
ECON 201	Principles of Microeconomics	4
ECON 202	Principles of Macroeconomics	3
FIN 205	Student Managed Investment Fund	1
FIN 206	Student Managed Investment Fund Lab	1
FIN 348	Managerial Finance	3
MATH 151	Calculus I	4
MATH 152	Calculus II	4
MATH 253	Calculus III	4
MATH 271	Differential Equations	3
MATH 281	Foundations of Higher Mathematics	4
MATH 351	Introduction to Operations Research	4
MATH 371	Linear Algebra	4
MATH 381	Mathematical Statistics	4
MATH 382	Actuarial Exam Preparation	1
MATH 391	Statistical Methods	3
MATH 481	Modern Algebra	4
MATH 491	Advanced Calculus	4

Total credit hours **65**

Requirements for the Mathematics minor

The minor in mathematics requires 22 credit hours of mathematics courses numbered 151 and above. It must include MATH 151, 152, and 253. At most two credits of independent study may be applied toward the mathematics minor. Courses should be selected in consultation with the mathematics minor advisor.

Total credit hours **22**

Requirements for the Computer Science minor

The minor in Computer Science requires 5 courses:

CSCI 156	Computer Science I	4
CSCI 157	Computer Science II	4
CSCI 205	Introduction to MySQL Programming	4

CSCI 331	LAMP Server Administration	4
RNEW 303	Software Engineering	4
Total credit hours		**20**

Modern Languages

An increasing number of careers demand proficiency in a second language. More students are choosing to study modern languages for professional enhancement every year. Others select foreign language study to broaden their intellectual horizons, to enjoy the literature of other countries and times, or to be able to travel with greater independence. Students in the College of Liberal Arts and Sciences are required to successfully complete the second semester of the first year of a foreign language or pass the placement exam. Students who plan to seek certification as foreign language teachers should consult the chair of the Education Division.

The Modern Languages Division offers majors in Foreign Language and Culture Studies (concentration in French) and in Spanish as well as minors in French and Spanish.

Foreign Language and Culture Studies with a Concentration in French

Foreign Language and Culture Studies with a concentration in French is an interdisciplinary major that requires 16 credits of upper-level French courses, an intermediate level in a second foreign language, and selection of courses in related fields such as French and Francophone history, art history, global studies or linguistics.

Requirements for the major

Students must take at least 20 credits taught in French. At least 20 credits for the major must be taken on the Alfred University campus.

Core course		
FREN 302	Advanced French Grammar and Composition I	
Major level French courses		
(FREN 202 or above or prior-approval by advisor)		16
Second Foreign Language		
(Minimum of 8 credits at the 200-level or above)		8
Elective courses in related fields		12
Total Credit Hours		**40**

Note: All courses taken abroad or in affiliated fields (e.g. history, art history, or linguistics) must be pre-approved by the major advisor. Additional courses in French or another foreign language may count as electives.

Students majoring in Foreign Language and Culture Studies are encouraged to pursue some independent study and to spend at least a semester in a French language Study Abroad program.

Spanish

The Modern Languages Program offers a Spanish major giving students a proficiency in speaking, listening, reading, and writing. Through a core or requirements, Spanish majors acquire basic knowledge in three areas: Hispanic language, culture, and literature. Beyond this core, students are offered a series of elective courses allowing them to expand their knowledge in all three of the areas or to specialize in one.

Majors in Spanish decide to use their language proficiency in business, government service, teaching, or community services. Study abroad is strongly recommended for both majors and minors. The Study Abroad Office on campus will help students find a suitable program.

Requirements for the major in Spanish

(Prerequisites: SPAN 101, 102, 201, 202 or equivalent)

Required Courses

SPAN 301	Advanced Conversation and Composition	4
SPAN 311	Peninsular Culture and Literature I	4
SPAN 312	Peninsular Culture and Literature II	4
SPAN 315	Latin American Culture and Literature I	4
SPAN 316	Latin American Culture and Literature II	4
SPAN 360	Literary Theory Seminar	4

Elective Courses (choose 12 credit hours):

SPAN 400	Topics in Hispanic Literature	4
SPAN 402	Readings in Modern Latin American Literature	4
SPAN 404	Latinos/as in the United States	4
SPAN 450	Independent Study	1-4
Total credit hours		**36**

Plus, Spanish majors must complete a capstone exam given by the division.

It is expected that Spanish majors will pursue some independent study. Although not strictly required.

Requirements for the minor in French

(Prerequisites: FREN 101, 102, 201, 202 or equivalent)
Students wishing to minor in French take one required course:

FREN 302	Advanced French Grammar and Composition I	4
They then select a minimum of 16 credit hours of 300-400 level French		16
Total credit hours		**20**

Requirements for the minor in Spanish

(Prerequisites: SPAN 101, 102, 201, or equivalent)

SPAN 301	Advanced Conversation and Composition	4
SPAN 311	Peninsular Culture and Literature I	4
or SPAN 312	Peninsular Culture and Literature II	
SPAN 315	Latin American Culture and Literature I	4
or SPAN 316	Latin American Culture and Literature II	
SPAN 360	Literary Theory Seminar	4
Choose 4 credit hours from:		4
LING 120	Introduction to Linguistics	
SPAN 202	Spanish IV	
Or any of the Elective Courses listed above (SPAN 400, 402, 404, or 450)		
Total credit hours		**20**

Music

Through the Division of Performing Arts Music Department, all AU students have many opportunities for musical study and performance, regardless of degree, major, or minor. In addition to introductory music theory and appreciation, students can

take classes in piano and voice or study privately in voice or a variety of instruments including carillon. Students have unlimited access to fine pianos and practice rooms. String, woodwind and brass instruments are available for a modest rental fee.

Students can choose to participate in a variety of vocal and instrumental ensembles, both large and small. Most ensembles are open to all students. Select groups require auditions. Students also may choose to participate in smaller chamber groups.

The Division of Performing Arts offers a Music Minor.

Requirements for the Music minor

MUSC 110	Music Appreciation	4
MUSC 120	Music Theory I	4
MUSC 130	Class Piano I	2
MUSC 131	Class Piano II	2
MUSC 271-279	Music Ensembles	4
MUSC 101-108; 301-308	Private Lessons (on primary instrument or voice)	4

Note: Technique classes such as Beginning Voice, MUSC 132, may be substituted for one semester of private lesson.

Select 4 credit hours from:

MUSC 200	Special Topics	2-4
MUSC 211	World Music	4
MUSC 212	American Music	4
MUSC 213	Introduction to Jazz	2
MUSC 214	Reel Music in America	4
MUSC 220	Music Theory II	4
Total credit hours		**24**

Philosophy

The philosophy program gives students the opportunity to think deeply and systematically about fundamental issues having to do with knowledge, values, human nature, and culture. Some of these relate to foundational questions in various disciplines—for instance: Does the scientific view of the world mean that free will is an illusion? Could a computer be conscious? What makes a work of art meaningful? What is justice? Other questions arise in the course of everyday experience and concern the way we live—our ethics, our choices, our relationships, and our work.

Philosophy students will become acquainted with the history of ideas, with classical and contemporary philosophical debates, and with methods of philosophical analysis. A student who graduates with a major in philosophy will be knowledgeable about the history of Western thought, have some acquaintance with non-Western thinking, be skilled in the analysis of arguments and texts, and be able to understand contemporary issues in their broader historical, intellectual, and cultural contexts. Since philosophical questions often overlap with questions in other fields of learning, philosophy students are encouraged to take interdisciplinary work.

Philosophy majors can pursue careers in any field requiring well-developed analytical and communication skills, including government, business and service professions. Philosophy is also excellent preparation for further studies in graduate and professional schools. Our recent graduates are pursuing careers in medicine, law, philosophy, teaching, politics and policy, and performance art.

Requirements for the major

Students choose one of two tracks:

General Philosophy Track

Required Courses: 12 credits

PHIL 282	Introduction to Logic	4
Choose 8 credits from the following courses:		8
PHIL 311	Greek Philosophy	
PHIL 312	Modern Philosophy	
PHIL 313	19th Century Philosophy	
PHIL 314	20th Century Philosophy	
or topics courses with substantial history of philosophy content chosen with major advisor.		
Elective Courses: 20 credits (12 credits must be above 300-level)		
PHIL	Philosophy Electives	
Total credit hours		**32**

Philosophy of Religions Track

Required Courses: 12 credits

PHIL 281	Ethics	
or PHIL 382	Philosophy of Religion	4
Choose 8 credits from the following courses:		8
PHIL 311	Greek Philosophy	
PHIL 312	Modern Philosophy	
PHIL 313	19th Century Philosophy	
PHIL 314	20th Century Philosophy	
or topics courses with substantial history of philosophy content chosen with major advisor.		
Elective Courses: 24 credits		
PHIL	Philosophy Electives *(4 cr. must be 300-400 level)*	8
RLGS	Religious Studies Electives *(8 cr. must be 300-400 level)*	16
Total credit hours		**36**

Requirements for the minor

The philosophy minor consists of 20 credits in philosophy. A minimum of 12 credit hours must be at the 300 level or above. With permission of the minor advisor, a student may substitute up to 4 credits of the 20 from a related discipline.

Physics

The physics major is for students who enjoy investigating the world around them by applying quantitative methods and fundamental physical principles.

Appropriate preparation includes, if possible, high school physics and four years of high school mathematics. The major is an intensive and individualized program in both theoretical and experimental physics, designed to give each student sound preparation for continuing exploration of pure or applied physics in either industry or graduate school.

To ensure maximum flexibility in meeting student goals, four concentrations have been devised, well-suited to the mix of experiences available at Alfred University. All four make use of the core of courses outlined below but differ in the course choices in the physics electives portion of the major.

While allowing students to concentrate in one area of physics, this plan makes it easier for them to complete a major in physics while also majoring in one of several engineering curricula.

Concentrations are as follows:
General Physics – The concentration that allows maximum breadth in students' physics preparation.
Astrophysics – This concentration makes use of the University's considerable astronomy resources through the Stull Observatory and our astronomy minor.
Solid State Physics – A concentration taking advantage of the materials-related offerings of the Inamori School of Engineering in the NYS College of Ceramics. Students interested in earning two degrees: a BA in Physics and a BS in Materials Science and Engineering will find this option most attractive. (See special requirements for "Double Degrees on p. 44.)
Mechanical Systems – This concentration includes the offerings in fluid mechanics, thermodynamics, heat transfer, and vibrating systems of AU's Mechanical Engineering program. It is particularly appropriate for students seeking two degrees: a BA in physics and a BS in Mechanical Engineering. (See special requirements for "Double Degrees on p. 44.)

In addition to these concentrations, we encourage students interested in other physics-related disciplines to discuss the possibilities of combining those interests with our major program.

Core Requirements for the major

First and Second Years:

PHYS 125	Physics I	4
PHYS 126	Physics II	4
PHYS 325	Elementary Optics	2
PHYS 326	Elementary Modern Physics	2

Third and Fourth years:

PHYS 341	Advanced Physics Laboratory	2
PHYS 401	Quantum Physics	4
PHYS 421	Statistical and Thermal Physics	4
PHYS 423	Advanced Mechanics	4
PHYS 424	Advanced Electricity and Magnetism	4

Plus a minimum of eight credit hours from one of the four concentrations:

General Physics concentration – 8 credits from among:
Any of the courses outlined in the other concentrations, with no more than four credits from any one concentration.

Astrophysics concentration – 8 credits from among:

ASTR 302	Planetary Science	2
ASTR 303	Stellar Astronomy	3
ASTR 304	Galactic Astronomy and Cosmology	4
ASTR 307	Observational Astronomy	2

Solid State Physics concentration – 8 credits from among:

CEMS 344	Properties II: Electrical, Magnetic, and Optical	4
CEMS 347	Spectroscopy	2
CEMS 349	X-ray Characterization	2
CEMS 501	Solid State Physics*	3

***seniors in good standing may, with permission of instructor, take a 500-level graduate course**

Mechanical Systems concentration – 8 credits from among:

MECH 321	Thermodynamics II	3
MECH 324	Fluid Mechanics I	3
MECH 415	Mechanical Vibrations I	3
MECH 424	Fluid Mechanics II	3
Total credit hours		**38**

Requirements for the minor in Physics

Physics courses: PHYS 125 Physics I, PHYS 126 Physics II, PHYS 325 Elementary Optics, PHYS 326 Elementary Modern Physics and 8 hours of 300 and/or 400 level courses in physics (4 hours may be taken in astronomy).

Note: Since 300 and 400 level physics courses are only offered in alternate years, careful scheduling is necessary. PHYS 125, 126, 325 and 326 should be completed by the end of the sophomore year.

Planetary Science

The minor in Planetary Science is offered by the Division of Environmental Studies/Geology and the Division of Physics/Astronomy. A student will have met the requirements for the minor after completing ASTR 302 and 12 credit hours of electives chosen from the courses below with a grade of C or better in each course. At least six credit hours must be 200-level or above.

ASTR 302*	Planetary Science	2
Select 12 credit hours from the following		
ASTR 103	Introductory Astronomy	4
ASTR 107	Elementary Astronomy Lab	2
ASTR 307	Observational Astronomy	2
GEOL 101	This Dynamic Earth	4
GEOL 110	Lunar Geology	2
GEOL 201	Surficial Geology	4
GEOL 210	The Geology of Venus	2
GEOL 408	Tectonics	4
Total Credit Hours		**14**

Political Science

The Political Science major attracts students who want to achieve a better understanding of the political environments that shape human interaction. Majors are introduced to the dynamics of politics both domestically and globally. Along with an understanding of political processes, they acquire a theoretical background for the study of political dynamics and the basic quantitative and qualitative tools for analyzing them. In addition to helping students prepare for graduate study, the major helps to prepare students for the world of work in government service, legal study, business, journalism, or teaching.

Requirements for Political Science Major

I. Core Courses

POLS 110	American Politics	4
POLS 230	Intro to Data Analysis and Statistics	4
POLS 271	World Politics	4

II. Elective Courses

At least one course from each of the following three groups:

American Politics:

POLS 313	State and Local Politics	4
POLS 318	The Presidency*	4
POLS 331	Parties and Elections	4
POLS 411	Bureaucracy*	4
Political Thought:		
POLS 120	Great Issues in Politics	4
POLS 340	Classical Political Theory	4
POLS 341	Modern Political Theory	4
POLS 346	American Political Thought*	4
Comparative and International Politics:		
POLS 251	European Politics	4
POLS 253	Dictatorship and Democracy	4
POLS 282	Latin American Politics	4
Twelve additional credit hours in Political Science		
Total credit hours		**36**

***these courses have prerequisites; see course descriptions**

Political Science Major – Education Track

Students seeking to major in Political Science in preparation for a career in middle/adolescent education (grades 7-12) can combine a Political Science Education Track academic major with a minor in Education. The requirements for a Political Science Education Track major are listed below.

Requirements for Political Science Major—Education Track

I. Core Courses		
POLS 110	American Politics	4
POLS 230	Introduction to Data Analysis and Statistics	4
POLS 271	World Politics	4
II. Elective Courses		
At least one course from each of the following two groups:		
American Politics:		
POLS 313	State and Local Politics	4
POLS 318	The Presidency*	4
POLS 331	Parties and Elections	4
POLS 411	Bureaucracy*	4
Political Thought:		
POLS 120	Great Issues in Politics	4
POLS 340	Classical Political Theory	4
POLS 341	Modern Political Theory	4
POLS 346	American Political Thought*	4
Eight additional credit hours in Political Science		
III. Two courses in related social sciences and geography		
ECON 201	Principles of Microeconomics	4
GEOL 101	This Dynamic Earth	4
IV. Four Courses in History		
HIST 110	The Making of Europe	4
HIST 111	Modern Western History	4
HIST 211	American History I	4
HIST 212	American History II	4
Total credit hours		**52**

***these courses have prerequisites; see course descriptions**

Requirements for the minor in Political Science

POLS 110	American Politics	4
POLS 120	Great Issues in Politics	
or POLS 271	World Politics	4

Plus twelve additional hours in Political Science		
Total credit hours		**20**

Requirements for the minor in Public Law

POLS 110	American Politics	4
POLS 232	Judicial Processes	2
POLS 316	American Constitutional Law and Politics*	4
POLS 417	American Civil Liberties*	2
plus one course from the following:		
POLS 242	Approaches to Law	4
POLS 313	State and Local Politics	4
SOCI 245	Crime and Society*	4
Total credit hours		**16**

***these courses have prerequisites; see course descriptions**

Psychology

The Psychology Program exposes students to the current theories and research in the field, emphasizing the importance of the scientific approach to the study of human behavior and mental states. The curriculum fosters communication skills and critical, scientific thinking about psychological issues. Students in the Psychology program have the opportunity to gain applied experience through supervised counseling skills training, directed research, independent study, and internships. Students in the program will be prepared for graduate education or entry into occupations which utilize knowledge of human behavior, such as counseling, education, law, medicine, and business.

Students who decide to major in Psychology will have comprehensive exposure to the discipline as well as the option to gain additional knowledge and skills related to specific areas of psychology. There are four program options for Psychology majors:

The *General Psychology Option* encourages breadth of study and allows flexibility in course selection that provides a general knowledge of human behavior and psychological functioning that is useful in many types of careers.

The *Clinical/Counseling Psychology Option* is for students who wish to have a career in the human services. This option offers basic counseling and clinical theory, supervised applied skills training and internship experience and prepares students for employment with various agencies or for graduate study in any of the clinical or counseling fields.

The *Experimental Psychology Option* emphasizes the scientific aspects of psychology, including theory, research methodology, statistical and laboratory skills. This option prepares students for Ph.D. study, and/or careers in primary or applied research (e.g., government or industrial research labs).

The *Child Psychology Option* is for students interested in the social and cognitive development of children from infancy through adolescence. The program includes a supervised experience working with children, either conducting research or applying counseling skills. This option prepares students for graduate study or employment in child-related fields.

Requirements for the major
Option 1: General Psychology

Required courses:

PSYC 101	Introduction to Psychology	4
PSYC 220	Psychological Methods and Statistics	4
PSYC 230	Psychological Research and Design 1	2
PSYC 330	Neuropsychology	4
PSYC 497	Senior Seminar	2
One course from the following:		
PSYC 251	Principles of Learning and Behavior Modification	4
PSYC 311	Sensation and Perception	4
PSYC 332	Cognitive Processes	4
Two courses from the following (limit – one Developmental course):		
PSYC 118	Introduction to Adult Development and Aging	4
PSYC 261	Cognitive Development	4
PSYC 262	Social Development	4
PSYC 282	Social Psychology	4
PSYC 341	Theories of Personality	4
plus electives in Psychology to equal a total of 38 credit hours		
Total credit hours		**38**

Option 2: Clinical/Counseling Psychology

Required courses:

PSYC 101	Introduction to Psychology	4
PSYC 210	Communication and Counseling Skills	2
PSYC 220	Psychological Methods and Statistics	4
PSYC 230	Psychological Research and Design 1	2
PSYC 330	Neuropsychology	4
PSYC 341	Theories of Personality	4
PSYC 342	Abnormal Psychology	4
PSYC 491	Clinical Procedures	4
PSYC 492	Clinical Practicum	4
PSYC 497	Senior Seminar	2
One course from the following:		
PSYC 118	Introduction to Adult Development and Aging	4
PSYC 261	Cognitive Development	4
PSYC 262	Social Development	4
One course from the following:		
PSYC 251	Principles of Learning and Behavior Modification	4
PSYC 311	Sensation and Perception	4
PSYC 332	Cognitive Processes	4
Total credit hours		**42**

Option 3: Scientific Experimental Psychology

Required Courses:

PSYC 101	Introduction to Psychology	4
PSYC 220	Psychological Methods and Statistics	4
PSYC 230	Psychological Research and Design 1	2
PSYC 330	Neuropsychology	4
PSYC 411	Psychological Research and Design II	4
PSYC 497	Senior Seminar	2
Two courses from the following:		
PSYC 251	Principles of Learning and Behavior Modification	4
PSYC 311	Sensation and Perception	4
PSYC 332	Cognitive Processes	4
Two courses from the following (limited to one Developmental course)		
PSYC 118	Introduction to Adult Development and Aging	4

PSYC 261	Cognitive Development	4
PSYC 262	Social Development	4
PSYC 282	Social Psychology	4
PSYC 341	Theories of Personality	4
Six credit hours from the following:		
PSYC 352	Research Techniques	2-4
PSYC 450	Independent Study	2-6
Total credit hours		**42**

Option 4: Child Psychology

Required Courses:

PSYC 101	Introduction to Psychology	4
PSYC 220	Psychological Methods and Statistics	4
PSYC 230	Psychological Research and Design 1	2
PSYC 261	Cognitive Development	4
PSYC 262	Social Development	4
PSYC 320	Parenting Seminar	2
PSYC 330	Neuropsychology	4
PSYC 497	Senior Seminar	2
One course from the following:		
PSYC 282	Social Psychology	4
PSYC 341	Theories of Personality	4
One course from the following:		
PSYC 251	Principles of Learning and Behavior Modification	4
PSYC 311	Sensation and Perception	4
PSYC 332	Cognitive Processes	4
One course from the following:		
PSYC 471	Child Psychopathology	3
PSYC 472	Child Interventions	3
Four credits from the following:		
PSYC 485	Practicum	2-4
PSYC 492	Clinical Practicum (at an appropriate site)	4
Total credit hours		**41**

Requirements for the minor in Psychology

Required Core:

PSYC 101	Introduction to Psychology	4
PSYC 220	Psychological Methods and Statistics	4
Content Group I (one course)		
PSYC 251	Principles of Learning & Behavior Modification	4
PSYC 311	Sensation and Perception	4
PSYC 330	Neuropsychology	4
PSYC 332	Cognitive Processes	4
Content Group II (one course)		
PSYC 118	Introduction to Adult Development and Aging	4
PSYC 261	Cognitive Development	4
PSYC 262	Social Development	4
PSYC 282	Social Psychology	4
PSYC 341	Theories of Personality	4
PSYC 342	Abnormal Psychology	4
Electives in Psychology (eight credits required)		
Total credit hours		**24***

***Note: eight hours must be at the 300 or 400 level**

Religious Studies

The Religious Studies minor helps students to gain new intellectual perspectives on their own religions and those of other people. It encourages students to see what the world's great religions have in common and how they differ. Courses explore both Asian traditions (Hinduism, Buddhism, Jainism, Sikhism, Confucianism, Taoism, and Shinto) and Western monotheistic traditions (Judaism, Christianity, Islam). We explore the many ways that human beings have asked and answered some of the Big Questions such as: What is the nature of Ultimate Reality? Why do we experience suffering and death? How should we live in this life? What is our ultimate purpose?

The study of religions is inherently interdisciplinary. We consider the great religious stories of each tradition as well as important teachings, texts, teachers, ethics, rituals, and other practices. We examine related material objects including art, architecture, music, food, clothing, and body modification. We explore the emotional dimensions of religious experience, the social functions of religion, historical developments, and debates within each tradition and between traditions.

Because religious beliefs, rituals and values bear upon all aspects of human life, the study of religion complements majors in many areas, such as literature, history, philosophy, the arts, education, and the social sciences. The study of religion also contributes a great deal to careers in the humanities and social sciences, and also enhances career opportunities in such areas as education, journalism, communications, international affairs, business, social work, counseling, the health professions, and, of course, the religious professions.

Requirements for the minor in Religious Studies

The minor consists of 20 credit hours in Religious Studies coursework. Students may substitute up to four elective credit hours in Philosophy, History, Anthropology, English, Psychology, or Sociology courses related to Religious Studies in content or methodology. Substitutions must be approved by the advisor.

Science Policy

The minor in Science Policy provides a policy component for students majoring in engineering or science. This is especially important today given the role government plays in terms of both supporting and regulating business. Science policy minors must be majors in either an engineering field or in chemistry, biology, physics, or environmental studies.

Required courses for Science Policy minor:

POLS 110	American Politics	4
POLS 355	Public Policy	4
POLS 411	Bureaucracy	4
	Experiential Capstone Project*	2-4
Total Credit Hours		**14-16**

***To be determined under advisement**

Sociology

The Sociology major attracts students who want to better understand themselves, others, and the social, cultural, political, and economic environments within which social interaction occurs. The sociological method makes possible the systematic comparison of data from various types of groups, societies, cultures, and social institutions. Sociology majors take coursework in both theory and methods, allowing them to formulate generalizations about the nature and causes of human social behavior. Majors also participate, when feasible, in experiential learning opportunities.

In addition to helping students prepare for graduate study, the major helps prepare students for careers in such areas as social work, law, public health, business, and social research.

Requirements for Sociology major

I. Core Courses (16 credit hours)		
SOCI 110	Introduction to Sociology	4
or ANTH 110	Cultural Anthropology	
SOCI 230	Introduction to Data Analysis and Statistics	4
SOCI 420	Social Theory: A Survey*	4
SOCI 431	Research Design and Strategies*	4
II. Elective Courses(20 credit hours)		
SOCI 200	Special Topics	1-4
SOCI 235	Socialization*	4
SOCI 236	Cults, Sects, and the Main Line*	4
SOCI 242	Social Problems*	4
SOCI 245	Crime and Society*	4
SOCI/WGST 253	Social Welfare Institutions	4
SOCI 343	Race and Ethnicity	4
SOCI 344	Sociology of Deviance*	4
SOCI/WGST 346	Sociology of Sex and Gender*	4
SOCI/POLS 347	Contemporary America	4
SOCI/WGST 348	Sociology of Families*	4
SOCI 400	Special Topics*	1-4
SOCI 450	Independent Study	1-4
SOCI 470	Application of Sociology Field Work*	2-4
SOCI/GLBS 495	Global Issues Seminar*	4
ANTH 302	The Nacirema	4
ANTH 303	Health and Culture*	4
ANTH 304	Language and Culture*	4
ANTH 312	Violence and Culture*	4
Total credit hours		**36**

***these courses have prerequisites; see course descriptions**

Requirements for the minor in Sociology

SOCI 110	Introduction to Sociology	4
SOCI 420	Social Theory: A Survey*	4
SOCI 431	Research Design and Strategies*	4
Eight additional credit hours		
Total credit hours		**20**

***these courses have prerequisites; see course descriptions**

Theatre

The Theatre major at Alfred University, housed in The Division of Performing Arts, provides students with inspired and balanced accomplishments in theatre, anchored in well-rounded knowledge acquired through courses and production experiences. Our goal is to educate the "whole theatre artist" by producing high quality work that focuses on close collaboration among directors, designers, stage managers, crews, and actors. With courses and productions open to all students, theatre at Alfred promotes the development of skills and interdisciplinary knowledge. In addition, particularly for majors and minors, , the Alfred University Theatre experience integrates theory with the practical development of skills, techniques, and creative expression. Students acquire in-depth understanding of theatre's many components and how they work together.
Areas of concentration include acting, design, directing, costume/set construction, scenic painting, technical theatre, stage management and arts administration. Theatre students actively participate in classes and events in music, dance and the visual arts.

The Theatre Department is an active member of the Kennedy Center American College Theatre Festival and the United State Institute of Theatre Technology which provides students with opportunities to be involved with theatre at a national and international level. We aim to provide students with a solid foundation in order to succeed in graduate school or as professionals and to be life-long artists, technicians and learners.

Requirements for the Theatre major

Core Requirements: (29-31 credits)

THEA 110	Introduction to Theatre	4
THEA/PDAT 120	Technical Theatre	
or THEA/PDAT 220	Design Fundamentals for Stage, Dance and Film	4
THEA 212	From Page to Stage: Script Analysis	4
THEA 240	Acting I	4
THEA 311	Theatre History: Art, Politics and Society I	4
THEA 312	Theatre History: Art, Politics and Society II	4
THEA 430	Directing I	3
THEA 431	Directing II	3
or THEA 495	Senior Project	2-4

Electives in Theatre: (12 credits)

Choose 12 credits from the range of courses below to shape your area of interest as a theatre major**.**

PDAT 221	Costume Construction	3
THEA/PDAT 222	Stage Makeup	2
THEA/PDAT 320	Scene Design	3
THEA/PDAT 321	Lighting Design	3
THEA/PDAT 322	Stage Costume Design	3
THEA/PDAT 470	Advanced Projects in Theatrical Design and Technology	1-4
THEA 200/300/400	Special Topics	1-4
THEA/ENGL 205	The Play's the Thing! Playwriting	4
THEA/MUSC 210	The Performing Arts: A Global Perspective	4
THEA 230	Stage Management Fundamentals	2
THEA 242/342	Performance Workshop Lab	4
THEA/PDAT 270	Play Production	1-4
THEA 340	Acting II	3
THEA 350	Independent Study	1-4
THEA/PDAT 370	Advanced Play Production	1-4

THEA/PDAT 385	Internship	2-4
THEA 431	Directing II	3
THEA 440	Acting III	3
THEA 490	Senior Seminar	1
THEA 495	Senior Project	2-4

Related Fields: (6 Credits)

ART 111	Beginning Drawing	4
ART 121	Beginning Sculpture	4
ART 133	Beginning Black and White Photography	4
ARTH 100-level	(Introductory Art History)	2
DANC 120	Fundamentals of Dance	2
DANC-technique	(DANC 221, 222, 223, 321, 322, 323)	2
DANC 230, 330	Improvisation/Composition I, II	3
DANC 270	Alfred University Dance Theatre	2
DANC 211	Dance History	4
ENGL 225	Shakespeare in Cinema	2 or 4
ENGL 411	Shakespeare's Comedies and Histories	4
ENGL 412	Shakespeare's Tragedies	4
MUSC 100-108	Private Lessons	1
MUSC 110	Music Appreciation	4
MUSC 120	Music Theory I	4
MUSC 130-139	Voice, Piano, Strings Classes	2
MUSC 270-279	Music Ensembles	2
MUSC 301-308	Private Lessons, Advanced	2
PHIL 283	Philosophy of the Arts I	4
RLGS 307	Myth, Ritual and the Creative Process	4
RLGS 308	Artists, Shamans and Cosmology	4

(other courses may be considered; must be approved by the Division Chair)

Total credit hours required for major 47-49

A Theatre minor is also available for those students who wish to major in another field, yet pursue their passion and development as theatre artists.

Requirements for the Theatre minor

Core requirements (15-16 credit hours)

THEA 110	Introduction to Theatre	
or THEA 210	The Performing Arts-A Global Perspective	4
THEA 212	From Page to Stage: Script Analysis	4
THEA 270/370	Play Production	4

Choose one of the following:

THEA 311	Theatre History I	4
THEA 312	Theatre History II	4
THEA 430	Directing I	3

Additional requirements (11 credit hours)

Choose one of the following:

PDAT 120	Technical Theatre	4
PDAT 220	Principles of Theatrical and Performance Design	3
PDAT 221	Costume Construction	4
THEA 240	Acting I	4
THEA 230	Stage Management Fundamentals	2
THEA 242	Performance Lab	4

Choose one of the following: (some courses may have prerequisites)

THEA 311	Theatre History I	4
THEA 312	Theatre History II	4
PDAT 320	Scene Design	3

PDAT 321	Lighting Design	3
PDAT 322	Costume Design	3
THEA 340	Acting II	3
THEA 430	Directing I	3
THEA 431	Directing II	3
PDAT 470	Advanced Projects in Theatrical Design and Technology	3-4

Choose additional theatre courses to satisfy minimum credit hours required

Total credit hours required for minor (minimum) 26

Requirements for the Performance Design and Technology minor

The Division of Performing Arts offers a minor in Performance Design/Tech for students who wish to major in another field, yet pursue their interests in performance design and production.

This program explores and supports artistic and production endeavors throughout the Division of Performing Arts and other outlets within the University.

Foundation Requirements (14 to 16 credit hours)

PDAT/THEA 120	Technical Theatre	
or PDAT/THEA 221	Costume Construction	3-4
PDAT/THEA 220	Design Fundamentals for Stage, Dance and Film	4
PDAT 270	Play Production	2
	One Performance Class	2
	(Studio Dance course, Music Ensemble, participation in Performing Arts or IART-produced performance)	
	One History Class	3-4
	(Theatre, Dance, Art (IART) History class)	

Design/Tech Additional Requirements

Choose 2-4 credit hours from the following:

PDAT 200	Special Topics	1-4
THEA 212	From Page to Stage: Script Analysis	4
PDAT/THEA 222	Stage Makeup	2

Choose 3 credit hours from the following:

PDAT/THEA 320	Scene Design	3
PDAT/THEA 321	Lighting Design	3
PDAT 322	Stage Costume Design	3
PDAT 370	Advanced Play Production	1-4

Capstone:

Choose 3 credit hours from the following:

PDAT 385	Internship	2-4
PDAT/THEA 470	Advanced Projects in Theatrical Design and Technology	1-4
PDAT 495	Senior Project	2-4

Total Credit Hours required for the minor (Minimum) 22

Women’s and Gender Studies

The interdisciplinary Women's and Gender Studies Minor examines scholarship relating to women and gender, women's contributions to societies around the world, and how gender relates to global socio-political contexts and cultural production.

The objectives of the minor are to provide a theoretical and practical structure within which to study women’s and gender issues; to promote an understanding of the

historical and biosocial contexts that shape our awareness of gender; and to encourage independent reading about and study of women's and gender issues.

The course of study for the minor supports and complements study in a variety of majors offered at Alfred University. All program courses can be used as electives in the minor and many count toward a major in other disciplines. Participating faculty are drawn from across the University.

Requirements for the minor

Required Core

WGST 101	Women in Society	4
WGST 450	Independent Study	2

Elective Courses

Choose 12 or more credits from at least two groups (I, II, III, IV).

I: Humanities		
WGST 215	Framing Gender: Latin American Film	4
WGST 216	Cuba Close Up: Film since the Revolution	4
WGST 254	Women Writers	2 or 4
WGST 256	Multicultural American Literature	4
WGST 324	Queer American History	4
WGST 412	Gender and American Film	4
WGST 465	Gender, Race, Class and Media	4
WGST 481	International Women Writers	4
II: Social Sciences		
WGST 246	Sex and the Body Politic	4
WGST 253	Social Welfare Institutions	4
WGST 305	Gender and Organizations	3
WGST 320	Parenting Seminar	2
WGST 346	Sociology of Sex and Gender	4
WGST 348	Sociology of Families	4
WGST 351	Human Sexuality	4
WGST 372	Psychology of Gender	4
III: Fine and Performing Arts		
WGST 211	Women in Theatre, Society & Politics	4
WGST 382	Women/Art/History	4
IV: Women's Studies		
WGST 201	Gender and Leadership	2
WGST 475	Women's Leadership Academy Practicum	2

Special Topics courses in Women's and Gender Studies (WGST 200, 300, 400) also count as electives toward the minor. Recent topics include Queer Hollywood, Toni Morrison, Women in Music, and Modern European History.

New York State College of Ceramics

The College

The New York State College of Ceramics at Alfred University was established April 11, 1900 as The New York State School of Clay-working and Ceramics at Alfred University. When legislation was enacted creating the State University of New York (1948), the College became one of what are now five statutory units of the SUNY enterprise, with the Ceramics College continuing to be operated by Alfred University on behalf of the SUNY Board of Trustees. As a state-supported unit of Alfred University, students, faculty and staff gain the benefits of both a high quality, small university environment and a high quality, public higher education system. Students benefit from a state-supported tuition rate.

Programs and Schools

The College of Ceramics is comprised of: the School of Art and Design, four programs within the Kazuo Inamori School of Engineering (Ceramic Engineering, Glass Engineering Science, Materials Science and Engineering, and Biomaterials Engineering), and the S.R. Scholes Library. Two additional engineering programs (renewable energy and mechanical engineering) are part of the Inamori School of Engineering, but are not state-supported; they are non-statutory programs.

The College's academic programs lead to the B.S. degree in engineering programs with various options; the B.F.A. with numerous concentrations in art and design and the B.S. in Art History and Theory; the M.S. in the engineering areas; the M.F.A. in three art and design areas; and the Ph.D. in Ceramics, Glass Science, and Materials Science and Engineering. Specific degree requirements for undergraduate degree programs are outlined on the following pages.

Additional Resources:

Institute for Electronic Arts
New York State Center for Advanced Ceramic Technology
Paul Vickers Gardner Glass Center
Schein-Joseph International Museum of Ceramic Art
S.R. Scholes Library

Buildings and Equipment

The Ceramics College occupies a number of buildings on the Alfred University campus, including Charles Harder Hall, the McGee Pavilion, Binns-Merrill Hall, the Hall of Glass Science and Engineering, McMahon Engineering Building, Scholes Library and the McLane Health & Wellness Center Annex.

Harder Hall contains many of the studios and labs for the School of Art and Design and art history lecture and seminar spaces. The building's central courtyard surrounds an impressive kiln room, containing both gas- and electric-fired kilns; the ceramic studios and glaze labs are in close proximity. Gallery space is available for faculty and student shows, as well as for a wide range of special exhibitions.

The statutory portion of the Inamori School of Engineering is housed mainly in the three-story John F. McMahon Engineering Building, which provides approximately 56,000 square feet of space for laboratories, classrooms and offices. Students are able to gain invaluable hands-on experience with high-tech and traditional processing and characterization equipment, starting in the freshman year with engineering communications and processing courses. The programs in renewable energy and mechanical engineering are housed in the Engineering Lab Building, which includes engineering laboratories as well as office space.

Binns-Merrill Hall houses activities and faculty from art and engineering, including laboratories for processing and testing ceramic and glass products, X-ray and microscopy, research and development, as well as lecture and seminar rooms. Drawing, neon, hot glass and sculpture studios, and administrative offices are also located in Binns-Merrill. The Hall of Glass Science & Engineering houses laboratories and faculty offices supporting the glass engineering program.

The Scholes Library is a significant resource in the areas of engineering and art; its print and non-print resources are more fully described on p. 76. The Schein-Joseph International Museum of Ceramic Art at Alfred is housed in temporary quarters on campus as plans proceed for a new building, now in the design stage.

The School of Art and Design

The New York State College of Ceramics

The School of Art and Design offers three Professional Degree Programs:

The Bachelor of Fine Arts (BFA)
The Bachelor of Science in Art History and Theory (BS)
The Master of Fine Arts (MFA) in three Areas:

- Ceramic Art
- Electronic Integrated Art
- Sculpture/Dimensional Studies

The Bachelor of Fine Arts (BFA)

The BFA degree provides opportunities for undergraduate students to study ceramic art, drawing, painting, photography, graphic design, print media, video, sonic art, interactive media, or glass and sculpture within an open curriculum. This 4-year professional program develops a significant commitment to studio practice and fosters the conceptual and technical skills necessary to pursue a career in the arts.

BFA students take elective and academic credit from the College of Liberal Arts and Sciences and the College of Professional Studies. There are numerous options for art students who want to pursue academic minors such as arts management, art education with teacher certification, environmental studies, performing arts, and philosophy, to name a few.

Foundations

Foundations is a first year course predicated on generating a rigorous studio practice through comprehensive teaching philosophy that engages a broad range of questions, extending across and beyond artistic disciplines. Individual students bring their own experiences and skills into a community of peers.

During the course of this year, Foundations emphasizes posing questions, creative problem solving, and the synthesis of expanding individual creative solutions in order to make connections between a range of media and ideas. Emphasizing experimentation, group projects and individual aspiration, the Foundations program is a portal to a creative education.

During the fall semester students work with faculty teams from a variety of disciplines and perspectives to tackle vital topics in the education of an artist from form and color to building and drawing to performance and kinetics. The spring semester begins to sharpen conceptual and technical skills through smaller workshops. Throughout the year, all Foundations students meet collectively once a week on Wednesday mornings for films, discussions, group projects, performances, and Visiting Artists' talks.

In addition to the Foundations studio courses in the first year, students complete 6 credits of art history by taking three 2-credit courses in non-western art, ancient to baroque art, and modern to contemporary art. First year students also fulfill academic requirements in writing and humanities.

Sophomore Year

The sophomore curriculum is designed to enhance and further develop the studio experience of the Foundations year through the introduction to specific studio areas, all of which support the "high tech, high touch" vision of the school. The curriculum encourages study of studio disciplines represented across each of four Divisions - Ceramic Art; Expanded Media; Painting, Drawing and Photography; and Sculpture/Dimensional Studies.

Sophomores learn fundamental skills necessary in the development of an artistic practice. These include an awareness and ability to understand, use and integrate processes, tools, materials, and vocabularies. Through inquiry based in research, synthesis, and the use of drawing (one semester is required at the sophomore or junior level) each student learns strategies to realize their ideas. During this year students choose four studios, one from each division, or opt to take four studios in three divisions. This allows those who want to focus in a specific division, to do so, while allowing others, a more varied studio experience. Both options are meant to prepare students for the challenges of the junior and senior curriculum.

The sophomore art history requirement, Issues and Debates in Contemporary Art, provides a stimulating and integrated context to the studio experience. Students also extend the breath of their academic experience by choosing elective courses from other schools and colleges at Alfred University.

Junior Year
Students entering the junior year have the latitude and ability to define their interests and creative goals. Students naturally become more focused, integrating conceptual and technical skills while developing a personal vision in their art making. At the junior level, academic and elective course work fosters interest in cross-disciplinary practice and undergraduate research possibilities.

The junior year is also the time for students to take advantage of study abroad opportunities. The School of Art & Design has several exchange programs including agreements with the University for the Creative Arts at Farnham, England, Edinburgh College of Art in Scotland, Fachhochschule Koblenz University of Applied Sciences in Germany, the Central Academy of Fine Art in Beijing, China, and the University of Sydney and the University of New South Wales in Australia. The Drawing, Painting and Photography Division offers a summer program through the Santa Reparata International School of Art in Florence, Italy.

Senior Year
Seniors work semi-independently in their own studio spaces, and are required to meet weekly with two faculty advisors (instructors) to discuss their work, research and process. Additionally, seniors participate in seminars, visiting artists programs, group critiques, discussions and exhibitions. Defining their own direction, seniors develop and produce a consistent body of work, which draws on their individual experiences, acquired skills and personal vision. The culmination of the BFA degree is the senior thesis exhibition. During the final two weeks of the academic year, the School of Art and Design is transformed into quality exhibition space where graduating seniors display their thesis work. The opening celebration of Senior Shows includes families and numerous guests from throughout Western New York State. Following the openings, students come back into their exhibition spaces for final reviews and faculty critiques. The momentum gained during the senior year prepares graduates to enter the workforce as highly motivated artists and designers, and as accomplished technicians.

BFA Degree Requirements
Students who enroll in the School of Art and Design must complete the requirements listed below to receive the BFA degree:

Studio	72
Academic Requirement *	25
Art History	17

Electives	14
Senior Project	0
Total degree credit hours	**128**

Students must also complete:
The University Global Perspective requirement (see p. 42; p. 68)
The University Physical Education requirement (see p. 42)

The University Global Perspective required credits could be taken within the required academic and/or Art History requirements. If a student completes the University Physical Education Requirement by taking two activity courses, the total number of credits to graduate to 132.
Note: additional PE activity credits (100-level PHED, EQUS) may not be used toward any degree requirements

***Academic Requirement (25 credit hours)**
This requirement is met by completing the 4 credits of Writing and 8 credits of Humanities plus enough additional academic courses to reach the minimum of 25 credits. This requirement is outlined below under the headings Writing, Humanities and Academic Requirements.

Writing Requirement (4 credit hours)
Each student must successfully complete one semester of college writing (ENGL101 or ENGL 102). Students will be placed in the appropriate level course depending upon their scores on college entrance exams. (See p.77 for placement scores.)

Humanities Requirement (8 credit hours)
At least one 4-credit course must be taken from among the 100 or 200 level offerings from (area B, Philosophy or Religious Studies or area D, Historical Studies.) The second course may be taken from either the Humanities or Liberal Arts courses.

Humanities (area B or D)

HIST 107	The World in the 20th Century (D) (GP)
HIST 110	The Making of Europe (D)
HIST 111	Modern Western History (D) (GP)
HIST 120	The Ancient Mediterranean (D)
HIST 121	Medieval Cultures (D)
HIST 151	The Rise and Fall of Iberia, 1450-1950 (D)
HIST 211	American History I (D)
HIST 212	American History II (D)
PHIL 101	Introduction to Philosophy (B)
PHIL 201	Existentialism (B)
PHIL 281	Ethics (B)
PHIL 283	Philosophy of the Arts I (B)
RLGS 105	Introduction to World Religions (B) (GP)
RLGS 240	Religion in American (B)
RLGS 251	Who wrote the Bible? (B)
RLGS 252	Judaism and Islam (B) (GP)
RLGS 254	Birth of the Christian Tradition (B)
RLGS 165	Asian Religions (B) (GP)

Liberal Arts (may include area A, Literature.)

ANTH 110	Cultural Anthropology
COMM 110	Mass Media and American Life
COMM 220	Understanding Popular Culture and Media

DANC 211	Dance History
ENGL 211	The Short Story (A)
ENGL 212	The Novel (A)
ENGL 213	Introduction to Poetry (A)
ENGL 214	Introduction to Drama (A)
ENGL 216	20th Century Poetry (A)
ENGL 219	British Literature(s) (A)
ENGL 220	Special Topics in Literature (A)
ENGL 221	Tales of King Arthur (A)
ENGL 225	Shakespeare in Cinema (A)
ENGL 226	The Holocaust and Literature (A)
ENGL 240	American Literature(s) (A)
ENGL 243	Lunatic, Lovers, and Poets: Southern Storytellers (A)
ENGL 251	World Literature I (A)
ENGL 252	Contemporary World Literature (A)
ENGL/WGST 254	Women Writers (A)
ENGL/WGST 256	Multicultural American Literature (A)
ENGL 275	Fiction into Film (A)
ENGL 278	The Middle Ages in Literature and Film (A)
ENGL 281	Literature and Science (A)
ENGL 292	Tales of Terror (A)
ENGL 293	Writers Gone Wild: Literature and the Environment (A)
GLBS 101	Introduction to Global Studies
HIST 223	Survey of German History
MUSC 211	Global Music
POLS 110	American Politics
POLS 271	World Politics
SOCI 110	Introduction to Sociology
THEA 110	Introduction to Theatre
THEA 210	The Performing Arts: A Global Perspective (GP)
THEA 311	Theatre: History, Art, Politics and Society I
THEA 312	Theatre: History, Art, Politics and Society II
WGST 101	Women in Society
WGST 254	Women Writers (A) (GP)

Academic Electives (13 or more credit hours)

Courses from the following areas count toward this requirement:

- Courses offered by the College of Liberal Arts and Sciences except private music lessons (MUSC 101-108 or 301-308)
- All courses offered by the College of Professional Studies
- All courses offered by the Inamori School of Engineering
- Art History courses beyond the 17-credit hour requirement
- Honors Seminars

Note: 100-level PHED and EQUS courses do NOT count as Academic Electives

Typical Program

First Year

ART 101	Foundations I **	8
ART 102	Foundations II**	8
ARTH 100-level	Art History (three 2-credit classes)	6
ENGL 101 or 102	Writing I or II	4
Humanities	100 or 200 level	4

Sophomore Year		
ART 200-level	Sophomore Studios**	16
ART 282/23/84	Required Drawing (sophomore or junior year)	4
ARTH 211	Issues and Debates in Contemporary Art	3
	Academic, Art History, or Elective 8-13	
Junior Year		
ART 300-level	Junior Studios**	16
	Art History, Academic, or Elective	16
	Physical Education Activity Course	2
Senior Year		
ART 401	Senior Studio**	16-24
ART 499	Senior Show	0
	Art History, Academic, or Elective	10
	Physical Education Activity Course	2

****Studio courses are assessed a fee for special materials. This fee may vary from $10.00 to $135.00 per credit hour.**

BFA Degree with Art Education Minor* Requirements

Students who enroll in the School of Art and Design must complete the requirements listed below to receive the BFA degree.

*The Art Education Minor is offered to BFA students through the Division of Education in the College of Professional Studies. The BFA requirements are adjusted as indicated below to account for the Art Ed Minor and Teaching Certification requirements:

Studio	68
Art History	17
Liberal Arts Core	19
Education Core	31
Senior Project	0
Total degree credit hours	**135**

Students must also complete:
The University Global Perspective requirement (see p. 42; p. 66)
The University Physical Education requirement (see p. 42)

The University Global Perspective required credits could be taken within the required academic and/or Art History requirements. If a student completes the University Physical Education Requirement by taking two activity courses, the total number of credits to graduate to 139.
Note: additional PE activity credits (100-level PHED, EQUS) may not be used toward any degree requirements

Academic Requirements and Electives
For BFA students completing the Minor in Art Education, the Academic Requirements and Electives consists of the Liberal Arts Core and the Education Core required of the Minor and to satisfy New York State Education Department guidelines for Teacher Certification. (See the Division of Education description of the Art Education Minor on p. 165.)

Liberal Arts Core (19 credit hours)

SCIE 117	Integrated Science	4
or SCIE 127	Doing Science	
ENGL 101 or 102	Writing I or II	4
EDUC 230	Psychological Foundations of Education	3

Humanities (area B or D) (take one from the following list) 4

HIST 107	The World in the 20th Century (D) (GP)
HIST 110	The Making of Europe (D)
HIST 111	Modern Western History (D) (GP)
HIST 120	The Ancient Mediterranean (D)
HIST 121	Medieval Cultures (D)
HIST 151	The Rise and Fall of Iberia, 1450-1950 (D)
HIST 211	American History I (D)
HIST 212	American History II (D)
PHIL 101	Introduction to Philosophy (B)
PHIL 201	Existentialism (B)
PHIL 281	Ethics (B)
PHIL 283	Philosophy of the Arts I (B)
RLGS 105	Introduction to World Religions (B) (GP)
RLGS 240	Religion in American (B)
RLGS 251	Who wrote the Bible? (B)
RLGS 252	Judaism and Islam (B) (GP)
RLGS 254	Birth of the Christian Tradition (B)
RLGS 165	Asian Religions (B) (GP)

Foreign Language (take one from the following list) 4

CHIN 101	Chinese I
FREN 101	French I
GRMN 101	German I
SPAN 101	Spanish I
ITAL 101	Italian I

Education Core (31 credit hours)

EDUC 231	Social Foundations of Education	3
EDUC 345	Education Fieldwork	4
EDUC 413	Using Literature in Intermediate & Adolescent Classrooms	3
or EDUC 405	Literacy in Content Area	
EDUC 463	Student Teaching-Art Education	12
EDUC 464	Seminar in Teaching and Professional Development	3
EDUC 491	Methods and Curriculum in Art Education	3
SPED 456	Special Education	3

Typical Program

(Typical 4.5 year, 9-semester program)

First Year

ART 101	Foundations I *	8
ART 102	Foundations II**	8
ARTH 100-level	Art History (three 2-credit classes)	6
ENGL 101 or 102	Writing I or II	4
Humanities	100 or 200 level	4

Sophomore Year		
ART 200-level	Sophomore Studios**	16
ART 282/83/84	Required Drawing (sophomore or junior year)	4
ARTH 211	Issues and Debates in Contemporary Art (fall only)	3
EDUC 230	Psychological Foundations of Education	3
EDUC 231	Social Foundations of Education	3
	Physical Education	2
Junior Year		
ART 300-level	Junior Studios**	16
ARTH	Art History, upper level	4
EDUC 405	Literacy in the Content Area **or**	
EDUC 413	Using Literature in Intermediate & Adolescent Classrooms	3
SPED 456	Human Development: Exceptionality	3
SCIE 117	Integrated Science	4
or SCIE 127	Doing Science	
	Physical Education Activity Course	2
Senior Year		
ART 401	Senior Studio**	16
ART 499	Senior Show	0
ARTH	Art History, upper level	4
EDUC 345	Education Fieldwork	3
EDUC 491	Methods and Curriculum in Art Education	3
	Foreign Language	4
	Physical Education Activity Course	2
Ninth Semester		
EDUC 463	Student Teaching-Art Education	12
EDUC 464	Seminar in Teaching and Professional Development	3

****Studio courses are assessed a fee for special materials. This fee may vary from $10.00 to $135.00 per credit hour.**

The Bachelor of Science Degree in Art History and Theory (BS)

The BS degree in Art History and Theory is a professional degree program based on a curriculum historically developed in conjunction with studio BFA and MFA programs. It is designed to instill an understanding of artistic developments in the Western and global historical contexts, to provide students with the critical and theoretical tools necessary for functioning as art professionals, and to prepare them for the pursuit of graduate studies in the field. In accordance with this mission, the program intends to educate art historians and theorists whose knowledge of the visual arts is grounded in substantial studio experience as well as extensive academic learning and research. Therefore, the BS in Art History relies on a combination of fundamental theoretical and applied research in art. The faculty of the School and the Division of Art History believe in the necessity of anchoring historical and theoretical knowledge with material practice. Consequently, admission to the program requires the submission and review of a portfolio that will assure the candidate's ability to withstand the rigors of both academic and studio education.

Art History and Theory majors are required to earn a minimum grade of B- for the 300 and 400 level courses in Art History needed to fulfill the required core credits toward the degree major.

BS Degree Requirements:

Art/Design History and Supportive Courses: 42 credit hours		
ARTH 120-129	Foundations in Art History (Non-Western)	2
ARTH 130-139	Foundations in Art History (Ancient-Baroque)	2
ARTH 140-149	Foundations in Art History (Modern Contemporary)	2
ARTH 211	Issues and Debates in Contemporary Art	3
PHIL 283	Philosophy of the Arts I	4
ARTH 300-level	4 Junior Art History Courses: Non-Western, Ancient to Baroque, Modern to Contemporary	16
ARTH 400-level	2 Senior Level Art History Courses	8
ARTH 460	Art Historiography and Methodology	3
ARTH 499	B.S. Thesis in Art History and Theory	2
Studio: 24 credit hours		
ART 101 &102	Foundations	16
ART 200 level	Two Sophomore-level studios	8
General Studies: 16 credit hours		
ENGL 101 &102	Writing I & II	8
Humanities (as defined under the BFA requirements)		8
Electives: 40 credit hours		
Foreign Language (especially French or German)		16
Academic courses (as defined under the BFA requirements, above)		16
Additional Electives (selected under advisement)		8
Total credit hours for the BS in Art History and Theory		**122**

Students must also complete:
The University Global Perspective requirement (see p. 42; p. 66)
The University Physical Education requirement (see p. 42)

The University Global Perspective required credits could be taken within the required academic and/or Art History requirements. If a student completes the University Physical Education Requirement by taking two activity courses, the total number of credits to graduate to 126.
Note: additional PE activity credits (100-level PHED, EQUS) may not be used toward any degree requirements

Typical Program

First Year		
ARTH 100-level	Art History (three 2-credit classes)	6
ART 101 and 102	Foundations**	16
ENGL 101	Writing I	4
ENGL 102	Writing II	4
Humanities	100 or 200 level	4
Sophomore Year		
ARTH 211	Issues and Debates	3
ARTH 300-level	Upper Level Art History	4
Foreign Language		4
Humanities	100 or 200 level	4
Sophomore Studio** or Electives		8
PHIL 283	Philosophy of the Arts I	4
PHED		2
Junior Year		
Upper Level Art History		12
Foreign Language		8
Studio** or Electives		12

Senior Year

Upper Level Art History		8
ARTH 460	Art Historiography and Methodology	3
ARTH 499	B.S. Thesis in Art History and Theory	2
Electives		16
Physical Education Activity Course		2

****Studio courses are assessed a fee for special materials. This fee may vary from $10.00 to $135.00 per credit hour.**

Minors Offered by the School of Art and Design

Minor in Art History

This minor provides a broad base of knowledge about art as it relates to history and culture, exposes students to a variety of theoretical and methodological issues and helps them develop critical and analytical skills that can be applied to art making.

The art history minor is available to BFA students who have successfully completed Art History Foundation required courses (ARTH 100-level requirement and ARTH 211). Sixteen additional credits in art history at the 300 and 400 level are required to complete the minor. The Art History minor is also available to students in other colleges/schools at the University with the permission of the Division Chair.

Arts Management Minor

The Arts Management Minor provides an interdisciplinary approach to the business of art and management of arts organizations. Students have the opportunity to learn and explore the theoretical content and practical skills that engage arts professionals managing individual businesses, serving community arts organizations, and managing not-for-profit arts organizations in the visual, performing, and literary arts. The Arts Management minor is jointly offered by the School of Business in the College of Professional Studies, the School of Art and Design, and the College of Liberal Arts and Sciences and is open to all AU students. Students have one advisor from the business area and one from the arts content area.

Requirements for the Arts Management Minor

ACCT 211	Financial Accounting	3
BUSI 485	Internship (specific to Arts Management)	4
ECON 201	Principles of Microeconomics	4
MKTG 221	Marketing Principles and Management	3
Choose one additional business course from the following:		3
BUSI 201	Family Business Management	
BUSI 439	Entrepreneurship in the 21st Century	
Choose three arts course, at least one from each Section (A and B, below)		8-12
Total credit hours		**25-29**

Section A- History and Theory

ARTH	Art History (any course)	2-4
DANC 211	Dance History	4
ENGL 241	Survey of American Literature	4
IART 460	Interdisciplinary Art Seminar	4
MUSC 110	Music Appreciation	4
MUSC 211	World Music	4
PHIL 283	Philosophy of the Arts I	4
PHIL 300	Topics in Philosophy (consult with advisor)	1-4

THEA 110	Introduction to Theatre	4
THEA 210	The Performing Arts: A Global Perspective	4
THEA 311	Theatre: History, Art, Politics and Society I	4
THEA 200/300/400	Special Topics in Theatre (consult with advisor)	1-4

Section B-Applied and Studio Skills Courses

ART 111	Beginning Drawing	4
ART 121	Beginning Sculpture	4
ART 133	Basic Black and White Photography	4
ART 151	Introduction to Ceramics	4
ART 288	Visual Communications I	4
ART 389	Exhibition Design (open only to Art and Design students)	2
DANC	Dance (any course)	1-4
ENGL 200	Special Topics in Writing	2-4
ENGL 202	Fiction Workshop	4
ENGL 205	The Play's the Thing! - Playwriting	4
ENGL 206	Poetry Workshop	4
ENGL 472	Dramatis Personae	4
ENGL 473	Auto/Biographical Acts: Studies in Creative Nonfiction	4
ENGL 474	Writing the Short Story	4
ENGL 475	Writing Formal Poetry	4
ENGL 476	Writing the Long Poem or Poetic Sequence	4
IART	Interdisciplinary Art (any course)	1-4
THEA 120	Technical Theatre	4
THEA 220	Principles of Theatrical and Performance Design	4
THEA 230	Stage Management Fundamentals	4
THEA 240	Acting I	4
THEA 270	Play Production	1-4
THEA 200/300/400	Special Topics (consult with advisor)	1-4

The Graduate Program

Three Master of Fine Arts programs are offered at the School of Art and Design: Ceramic Art, Electronic Integrated Arts and Sculpture/Dimensional Studies. All MFA students receive an assistantship. Entry into these programs is highly competitive. Those interested in learning more about the individual programs should contact the School directly at (607) 871-2442 or e-mail burns@alfred.edu. Application materials may be obtained from the Graduate Admissions Office, Alfred University, One Saxon Drive, Alfred, NY 14802-1205.

Kazuo Inamori School of Engineering

Biomaterials Engineering (BME)
Ceramic Engineering (CE)
Glass Engineering Science (GES)
Materials Science & Engineering (MSE)
Mechanical Engineering (ME)
Renewable Energy Engineering (RNEW)

The mission of the Kazuo Inamori School of Engineering is to provide academically challenging, inquiry-based programs to prepare technically proficient and broadly educated engineers and scientists at the bachelor, master, and doctoral levels. We offer these programs in a student-centered environment with a strong commitment to the personal, professional, and ethical development of our students.
We engage in research to provide a foundation for our educational programs, to advance the frontiers of knowledge, and to support economic growth.

The School of Engineering offers six Bachelor of Science, six Master of Science and three Ph.D. degrees. The Bachelor of Science (BS) degree programs in Ceramic Engineering (CE), Glass Engineering Science (GES), Materials Science and Engineering (MSE), and Mechanical Engineering (ME) are accredited by the Accreditation Board for Engineering and Technology (ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone (410) 347-7700. The Biomaterials Engineering (BME) and Renewable Energy Engineering (RNEW) degree programs are recent additions to the School and are not yet accredited; however, it is expected that the programs will seek ABET accreditation during the next regular review cycle.

Upon graduating with a BS degree in CE, GES, MSE, and ME, students are eligible to take the Fundamentals of Engineering (FE) examination, the next step towards registration as a Professional Engineer. Having passed the FE examination, the remaining two steps are: 1) four years of relevant post-baccalaureate experience and 2) passing the Professional Engineering (Principles and Practices) examination.

All Inamori School of Engineering faculty members have doctoral degrees, and all are engaged in teaching and research. With sponsorship from corporate entities, government agencies and philanthropic organizations, research expenditures average ~$5M annually. Faculty members often bring recent research results or examples from industry into their classroom teaching. Undergraduate students have opportunities to participate in research programs in the School and/or to participate in co-operative education or internship programs that have developed from faculty contacts with industry.

School of Engineering General Graduation Requirements

Credit Hour and GPA Requirement

To receive a Bachelor of Science degree from the School of Engineering, students must complete at least 128 credit hours and fulfill the requirements of the major, which may involve completing more than 128 credit hours. Students must achieve a GPA of at least 2.0 in major engineering courses in addition to a cumulative GPA of at least 2.0 required by Alfred University. No more than seven credits of D or D+ in core engineering courses taken at Alfred University may be applied for graduation in any program in the School of Engineering for students entering the University Fall 2014 and thereafter. Accumulation of excess D or D+ grades constitutes “low grades in critical prerequisite courses” per the Academic Standing requirements in the AU Catalog.

Written Communication Requirement
Students must complete ENGR 110, Technical Communication. To enroll in ENGR 110, students must successfully complete ENGL 101, or an equivalent course, or achieve specified scores on standardized tests. (See p. 77 for SAT/ACT score ranges.) Credits earned by successfully completing ENGL 101 or an equivalent course do not count towards the degree credit requirements.

Humanities/Social Science/Arts Requirement
All majors within the School of Engineering require at least 16 credits in humanities, social science and the arts. Students must complete at least three courses in three different areas designated by the following attribute codes: Literature (A), Philosophy or Religious Studies (B), The Arts (C), Historical Studies (D), Social Sciences (E), and Foreign Language (II). The on-line course system (Banner) provides information about which courses fulfill these area requirements. Additional courses in the five discipline areas (with or without a letter designation) may be used to meet the 16 credit requirement, but no more than 4 credits of coursework in discipline area C (The Arts) will count towards the requirement. Courses that meet Quantitative Reasoning (III) do not count towards the Humanities/Social Science/Arts requirement.

Seminar Requirement
Students must enroll in and successfully pass ENGR 360 Undergraduate Seminar (or ENGR 160 Freshman Seminar, as appropriate) each semester they are enrolled fulltime in one of the School of Engineering degree programs.

Engineering Major Requirements

Biomaterials Engineering (BME)
Advanced materials are needed for biomedical applications. Implantable devices like pacemakers, defibrillators, and artificial joints must be biocompatible while carrying out complex chemical, mechanical, and electrical functions. Sensors used in medical diagnostics must recognize pathogens while ignoring a multitude of closely related molecules. The goal of the Biomaterials Engineering curriculum at Alfred University is to train next-generation biomaterials engineers to understand the basic principles of structure and function for both living and nonliving materials and to use these concepts to create materials for biomedical applications. The curriculum is a unique fusion of materials engineering/science and molecular cell biology that puts students ahead of the curve in areas such as bioengineering, biotechnology, and nanotechnology. In addition to opening the door to countless technical careers, it also provides outstanding preparation for alternative careers such as medical school, law school, or the MBA.

BME Program Objectives
It is expected that, during the first few years after graduation:
1) Graduates will be qualified for careers in the medical device industry alongside related, and general, materials fields. Graduates will occupy positions with high technical skill requirements and managerial responsibility.
2) Graduates will be prepared to continue their educational endeavors in both technical and non-technical fields including graduate studies in Biomedical Engineering, Tissue Engineering, Medical Devices, general materials and other science and engineering majors; MBA programs, medical and veterinary schools, law school or short course/workshops applicable to growth within a chosen technical field.
3) Graduates will be prepared to lead in the development of their professions including society activities, scholarly publications and student recruiting and mentoring.

BME Degree Requirements and Curriculum
In addition to Alfred University's physical education requirement and global perspective requirement and the School of Engineering general requirements, the requirements for the Bachelor of Science in Biomaterials Engineering are:

BIOL 150	Biological Foundations	4
BIOL 211	Biochemistry and Cell Biology	4
BIOL 402	Immunology	4
CEMS 214	Structure and Properties of Materials	3
CEMS 215	Microscopy and Microstructural Characterization	3
CEMS 216	Bonding and Structure of Materials	3
CEMS 235	Thermodynamics of Materials	4
CEMS 251	Mechanics of Materials	3
CEMS 334	Introduction to Polymers	3
CEMS 336	Physical Metallurgy I	3
CEMS 347	Spectroscopy	2
CEMS 349	X-ray Characterization	2
CEMS 368	Introduction to Bioengineering	3
CEMS 465	Biocompatibility	4
CEMS 466	Skeletal Tissue (or BIOL 307 Anatomy and Physiology)	3
CEMS 468	Biomedical Materials	3
CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
CHEM 310	Basic Organic Chemistry	3
ENGR 101	Introduction to Engineering	2
ENGR 102	Computer Aided Design	2
ENGR 104	Computer Aided Engineering	2
ENGR 110	Technical Communication	4
ENGR 11x	Exploration Labs (select 2, 1 credit each)	2
ENGR 305	Engineering Statistics (or BIOL 226)	3
ENGR 306	Engineering Economics	2
ENGR 395	Engineering Design	2
ENGR 480	Senior Capstone Project	4
MATH 151	Calculus I	4
MATH 152	Calculus II	4
MATH 253	Calculus III	4
MATH 271	Differential Equations	3
PHYS 125	Physics I	4
	Biology Electives	4
	Technical Electives	6
	Humanities, Social Science and Arts electives	16
Total Credit Hours		**130**

Ceramic Engineering (CE)
Ceramics are materials of basic living, of advanced technology, and of extreme environments. You encounter traditional ceramics every day of your life- dinnerware, bathroom fixtures, floor and wall tiles, and cement and brick structures.

You also encounter advanced ceramics every day, but often hidden from view- components in electronic devices (computers, iPods, cellular phones), sensors in automobiles, igniters in appliances. Finally, ceramics are often used in manufacturing other materials and products- refractories that contain molten metals, filters for molten materials, insulators for furnaces, cutting tools, abrasives, and wear-resistant components.

In a nutshell, ceramics are some of the oldest and some of the newest materials we use. The field is small, but highly diverse, growing, and wide open for bright people with imagination. Many issues that impact energy conservation, recycling, and other environmental concerns can only be solved by the use of ceramics, including some that haven't been invented yet.

Ceramic engineering graduates have many career paths to choose from. Many become process engineers, ensuring that manufacturing operations run smoothly and developing improvements that enhance production efficiency and save energy. Others work in technical sales, explaining materials and products, and working with customers to achieve the best match between needs and products. Some are engaged in developing new materials and processes, or in testing materials and components. Of course, some choose to continue their education, achieving a Masters or Ph.D., and then going into research and/or teaching. Many ceramic engineering graduates, regardless of their initial path, achieve management positions (supervisors, plant managers, directors of research, etc.), and many end up owning their own companies.

CE Program Objectives

The objectives of the Ceramic Engineering program are as follows:

1) Graduates of our Ceramic Engineering program function as engineers in the field of ceramics or materials science, serving the ceramic and related industries and academia, with the tools necessary to sustain a long and productive career in the field.
2) Graduates of our Ceramic Engineering program are innovators in the field of ceramic engineering, and related materials fields, and bring their background and hands-on experience to problem solving and the development of efficient and sustainable manufacturing practices.
3) Graduates of our Ceramic Engineering program appropriately treat, evaluate, and interpret data generated in manufacturing processes (such as process control and loss data) or from experimental results, through statistical analysis, data presentation, etc., for the purposes of understanding trends, making predictions, and communicating effectively in the workplace.
4) Graduates of our Ceramic Engineering program bring expertise and management skills to their careers in industry or academia and relate science and technology to a wide range of technical fields, for the improvement of the quality of life.

CE Degree Requirements and Curriculum

In addition to Alfred University's physical education requirement and global perspective requirement and the School of Engineering general requirements, the requirements for the Bachelor of Science in Ceramic Engineering are:

CEMS 203	Introduction to Ceramic Powder Processing	3
CEMS 214	Structure and Properties of Materials	3
CEMS 215	Microscopy and Microstructural Characterization	3
CEMS 216	Bonding and Structure of Materials	3
CEMS 235	Thermodynamics of Materials	4
CEMS 237	Thermal Processes in Materials	4
CEMS 251	Mechanics of Materials	3
CEMS 314	Ceramic Processing Principles	3
CEMS 317	Sintering	3
CEMS 322	Introduction to Glass Science	3
CEMS 342	Thermal and Mechanical Properties	4
CEMS 344	Properties II: Electrical, Magnetic, and Optical	4

CEMS 347	Spectroscopy	2
CEMS 349	X-ray Characterization	2
CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
ENGR 101	Introduction to Engineering	2
ENGR 102	Computer Aided Design	2
ENGR 104	Computer Aided Engineering	2
ENGR 110	Technical Communication	4
ENGR 11x	Exploration Labs (select 2, 1 credit each)	2
ENGR 220	Circuit Theory I	4
ENGR 305	Engineering Statistics	3
ENGR 306	Engineering Economics	2
ENGR 395	Engineering Design	2
ENGR 480	Senior Capstone Project	4
MATH 151	Calculus I	4
MATH 152	Calculus II	4
MATH 253	Calculus III	4
MATH 271	Differential Equations	3
PHYS 125	Physics I	4
PHYS 126	Physics II	4
	Ceramic Electives	6
	Technical Electives	9
	Humanities, Social Science and Arts electives	16
Total Credit Hours		**133**

Glass Engineering Science (GES)

Glasses have been used for thousands of years--in drinking glasses, storage bottles, prized decorative objects, and jewelry. Glasses have these same uses today, but glasses are truly high-technology materials used in optical applications, as sophisticated windows that control light and heat, and in fiber optics that make high-speed, high-capacity voice and data communications possible. Glasses are essential components of many medical devices, such as X-ray tubes, endoscopes, and lasers. Advanced testing is being done on using small glass spheres that are injected into the bloodstream to carry radiation or chemotherapy agents directly to the liver to attack cancer in the liver.

Most glass products are made from abundant raw materials, such as sand and soda, and glasses are recyclable. In fact, in some countries, glass containers are made using over 90% recycled glass. There are numerous opportunities for new applications for glass, the development of new glasses, and further efficiencies in glass manufacturing. You can't imagine life today without glass, and that will be even more the case in the future.

Glass Engineering Science graduates are highly sought after by the glass industry and by companies that use glasses in processes or products. The Glass Engineering Science program is unique. There simply isn't another program like it in the United States. Graduates can oversee glass production, work on developing new processes and products, test glass products, or work in technical sales. Many choose to continue their education, obtaining a Masters or Ph.D., preparing them for research or teaching at a college or university. With time, and the time may be very short, many will become managers or owners of their own companies.

GES Program Objectives

The program objectives of the Glass Engineering Science Program are as follows:

1) Graduates of the Glass Engineering Science Program will be Materials Engineers with a specialized knowledge of the vitreous state, its science, engineering, and manufacture, and will be employed either in the public or private sector or will be pursuing an advanced degree.
2) Graduates of the Glass Engineering Science Program will be diverse individuals who both understand the principles and can undertake the practice of engineering materials, particularly glass, to meet the needs of the population.
3) Graduates of the Glass Engineering Science Program will be able to operate as effective engineers or managers in both glass and other related industries or academia, as scientists, engineers and teachers, continuously learning as they do so.

GES Degree Requirements and Curriculum

In addition to Alfred University's physical education requirement and global perspective requirement and the School of Engineering general requirements, the requirements for the Bachelor of Science in Glass Engineering Science are:

CEMS 214	Structure and Properties of Materials	3
CEMS 215	Microscopy and Microstructural Characterization	3
CEMS 216	Bonding and Structure of Materials	3
CEMS 235	Thermodynamics of Materials	4
CEMS 237	Thermal Processes in Materials	4
CEMS 251	Mechanics of Materials	3
CEMS 322	Introduction to Glass Science	3
CEMS 324	Mass Transport in Glasses and Melts	3
CEMS 325	Glass Laboratory	2
CEMS 328	Industrial Glass and Glass-Ceramics	3
CEMS 342	Thermal and Mechanical Properties	4
CEMS 344	Properties II: Electrical, Magnetic, and Optical	4
CEMS 347	Spectroscopy	2
CEMS 349	X-ray Characterization	2
CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
ENGR 101	Introduction to Engineering	2
ENGR 102	Computer Aided Design	2
ENGR 104	Computer Aided Engineering	2
ENGR 110	Technical Communication	4
ENGR 11x	Exploration Labs (select 2, 1 credit each)	2
ENGR 220	Circuit Theory I	4
ENGR 305	Engineering Statistics	3
ENGR 306	Engineering Economics	2
ENGR 395	Engineering Design	2
ENGR 480	Senior Capstone Project	4
MATH 151	Calculus I	4
MATH 152	Calculus II	4
MATH 253	Calculus III	4
MATH 271	Differential Equations	3
PHYS 125	Physics I	4
PHYS 126	Physics II	4
	Technical Electives	15
	Humanities, Social Science and Arts electives	16
Total Credit Hours		**132**

Materials Science and Engineering (MSE)
Advanced materials are critical to nearly every modern technology (electronics, transportation systems, and medical devices). They also play an important role in the solutions to energy and environmental problems we face today. Materials Science and Engineering (MSE) is the broad interdisciplinary field that uses the principles of chemistry, physics, engineering, and biology to develop the improved materials. With an increased focus on nanotechnology, the field is advancing rapidly and will be at the heart of new technologies that we haven't even envisioned.

A materials engineer may specialize in a specific material class (ceramics, metals, polymers) or a specific area of materials science (electrical properties, mechanical properties, processing, testing, etc.), but should possess a broad background in materials science and engineering. Increased emphasis on cost, weight, and size reduction, while still improving product performance, creates challenges for monolithic materials, and opportunities for composites and other new materials. Miniaturization of components frequently is limited by the interactions of dissimilar materials at a microscopic scale. A materials engineer must be able to optimize the overall performance of complex systems involving several materials. In many industries, several materials may be competing for the same market (e.g., polymer composites versus metallic aircraft structures, and ceramic versus metallic engine components). In these applications, a materials engineer must be able to make an unbiased decision in selecting the best material (or combination of materials), which requires a fundamental understanding of the properties and performance of each of the competing materials.

The broad technical base of the Materials Science and Engineering degree prepares graduates for employment in a wide range of industries, including electronics, automotive, and aerospace, as well as for graduate school in engineering and science. Graduates of this program are particularly well suited to work for smaller companies that need materials engineers with a broad background, rather than people specialized in particular fields. Many companies involved in manufacturing require engineers with this broad materials background who can specify materials selection, oversee production, or maintain quality control.

MSE Program Objectives
Graduates of AU's Materials Science and Engineering Program will:

1) Be employed in materials-related industries and will continue to move into positions with both increased technical skill requirements and increased managerial responsibilities.
2) Be engaged in continuing their education and lifelong learning in both technical and non-technical fields including graduate studies in Materials Science and Engineering, and other science and engineering majors; MBA programs; medical school; law school; or short course/workshops applicable to growth within a chosen technical field.
3) Become leaders in the development of their professions including professional society activities, conference presentations, scholarly publications, and student recruiting and mentoring.

MSE Degree Requirements and Curriculum
In addition to Alfred University's physical education requirement and global perspective requirement and the School of Engineering general requirements, the requirements for the Bachelor of Science in Materials Science and Engineering are:

CEMS 214	Structure and Properties of Materials	3
CEMS 215	Microscopy and Microstructural Characterization	3

CEMS 216	Bonding and Structure of Materials	3
CEMS 235	Thermodynamics of Materials	4
CEMS 237	Thermal Processes in Materials	4
CEMS 251	Mechanics of Materials	3
CEMS 314	Ceramic Processing Principles	3
CEMS 322	Introduction to Glass Science	3
CEMS 334	Introduction to Polymers	3
CEMS 336	Physical Metallurgy I	3
CEMS 342	Thermal and Mechanical Properties	4
CEMS 344	Properties II: Electrical, Magnetic, and Optical	4
CEMS 446	Composite Design and Fabrication	3
CEMS 347	Spectroscopy	2
CEMS 349	X-ray Characterization	2
CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
ENGR 101	Introduction to Engineering	2
ENGR 102	Computer Aided Design	2
ENGR 104	Computer Aided Engineering	2
ENGR 110	Technical Communication	4
ENGR 11x	Exploration Labs (select 2, 1 credit each)	2
ENGR 220	Circuit Theory I	4
ENGR 305	Engineering Statistics	3
ENGR 306	Engineering Economics	2
ENGR 395	Engineering Design	2
ENGR 480	Senior Capstone Project	4
MATH 151	Calculus I	4
MATH 152	Calculus II	4
MATH 253	Calculus III	4
MATH 271	Differential Equations	3
PHYS 125	Physics I	4
PHYS 126	Physics II	4
	Technical Electives	12
	Humanities, Social Science and Arts electives	16
Total Credit Hours		**133**

Mechanical Engineering (ME)

Mechanical engineers are often called the 'general practitioners' of engineering because of the broad scope of their education and the diversity of their professional opportunities. The characteristics commonly shared by mechanical engineers are individuality, creativity and flexibility. Due to its breadth, Mechanical Engineering is generally linked to the economy as a whole; job prospects are relatively immune to isolated economic events.

Mechanical Engineering is an ideal education for professional entrance into industry, for development of one's own company, or for a variety of opportunities in educational institutions and government agencies. A bachelor's degree in Mechanical Engineering frequently precedes the study of law, business or medicine, as well as graduate engineering studies. Because the undergraduate training is broad, as well as comprehensive, the mechanical engineer is in demand in practically every type of manufacturing, research and government organization. He/she may be employed in the automotive, aerospace, electrical, chemical, solar, petroleum, plastics, or metal-processing industries. The work may involve one or several of the following: research and development, design and testing of equipment and systems, supervision of production, sales engineering, plant engineering, and administration.

Some mechanical engineers work in areas not usually considered to require engineering expertise. For example, biomechanical engineers work with physicians to investigate the mechanics of the body and to design instruments and devices for medical purposes. Other mechanical engineers work closely with trainers and athletes, to design sports equipment. Certainly, the professional mechanical engineer has influenced most products and systems we deal with on a regular basis.

Some examples of mechanical engineering applications include:

- Applied Mechanics. Engineers apply mechanics principles to the study, design, and development of systems and components that transmit specified motion, forces, and power that withstand the stresses, strain, fatigue, shock, and vibration within the system itself.
- Controls. With the advent of the microprocessor, on-line data processing and control are incorporated into a variety of manufacturing and processing systems.
- Design. Design engineers combine a working knowledge of materials and components with the complexities and economics of assembling these components into products and systems.
- Engines and Power Plants. Engineers work with reciprocating and rotating engines utilizing gas combustion or steam pressure to generate power that is transmitted through shaft motion.
- Energy. Engineers make use of solar, wind, geothermal, nuclear and fossil-fuel sources to generate power.
- Fluids. Utilizing the various properties of fluids such as density, viscosity, and compressibility, engineers develop applications with these fluids for new hydraulic control or power transmission devices.
- Lubrication. Engineers try to inhibit the wear on moving parts by choosing or developing a lubricating method that minimizes friction and energy dissipation.
- Heating, Ventilating, and Air-Conditioning (HVAC). HVAC engineers must understand heat transfer, thermodynamics, and control theory to develop energy-efficient systems that control temperature and air quality.
- Materials. Mechanical engineers select, develop, and apply materials for bearings, brakes, clutches, gears, chains, screws, bolts, lubrication, insulation, heat transfer, and so on.
- Pressure Vessels and Piping. Containment structures for solids, liquids and gases are developed to withstand temperatures and pressures, which may vary dynamically.
- Transportation and Aerospace. Engineers in this specialty are engaged in the production or study of the motion of automobiles, trains, ships, planes, missiles, satellites, and rockets. Among their many responsibilities, they may develop improved gasoline or diesel engines, improve automobile power train transmission characteristics, modify the configuration of aircraft structures, or improve solid propellant rocket engines.

ME Program Objectives

The objectives of the Mechanical Engineering program are as follows:

1) A few years after graduation, our graduates will be working in a wide range of industries as mechanical engineers who solve fundamental problems, and effectively communicate their work.

2) A few years after graduation, some of our graduates will be working collaboratively in multidisciplinary teams, and move into positions of increased technical skill requirements and managerial responsibilities.

3) A few years after graduation, some of our graduates will be pursuing or will have completed advanced degrees in science and engineering, MBA programs, or law school.

4) A few years after graduation, some of our graduates will be active participants in their profession, including society activities, scholarly publications, and student mentoring.

ME Degree Requirements and Curriculum
In addition to Alfred University's physical education requirement and global perspective requirement and the School of Engineering general requirements, the requirements for the Bachelor of Science in Mechanical Engineering are:

CEMS 214	Structure and Properties of Materials	3
CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
ENGR 101	Introduction to Engineering	2
ENGR 102	Computer Aided Design	2
ENGR 104	Computer Aided Engineering	2
ENGR 110	Technical Communication	4
ENGR 11x	Exploration Labs (select 2, 1 credit each)	2
ENGR 220	Circuit Theory I	4
ENGR 305	Engineering Statistics	3
ENGR 306	Engineering Economics	2
ENGR 395	Engineering Design	2
ENGR 490	Senior Capstone Project	4
MATH 151	Calculus I	4
MATH 152	Calculus II	4
MATH 253	Calculus III	4
MATH 271	Differential Equations	3
MATH 371	Linear Algebra	4
MECH 211	Statics	3
MECH 212	Dynamics	3
MECH 241	Mechanics of Materials I	3
MECH 320	Thermodynamics I	3
MECH 321	Thermodynamics II	3
MECH 324	Fluid Mechanics I	3
MECH 326	Heat Transfer	3
MECH 327	Thermal Sciences Laboratory	2
MECH 343	Mechanics of Materials Laboratory	2
MECH 362	Kinematics and Dynamics of Machinery	3
MECH 364	Machine Design I	3
MECH 366	Manufacturing	3
MECH 417	Introduction to Finite Element Analysis	3
PHYS 125	Physics I	4
PHYS 126	Physics II	4
	Mechanical Electives	6
	Technical Elective	6
	Humanities, Social Science and Arts electives	16
Total Credit Hours		**131**

Renewable Energy Engineering (RNEW)
Renewable energy systems is a high growth industry with a need for highly trained engineers who can improve the efficiency of current technologies as well as develop new ways to produce clean and affordable energy.

The Renewable Energy Engineering Program at Alfred University is dedicated to the study and practice of energy systems for a sustainable environment.

Our mission is to produce the next generation of engineers and scientists who will develop and perfect renewable energy systems, improve energy efficiency, and advance science and engineering to create a more sustainable future for our planet.

The RNEW program at AU integrates aspects of electrical and mechanical engineering with business in a systems-level approach as it relates to the generation, delivery and consumption of energy from renewable sources. Graduates of our program will work in the energy service industries which specialize in renewable systems. They will work in industry as professionals trained in government regulations. They will assist corporations in improving transmission and grid integration, power markets, utility operation and planning methods, and product management.

RNEW Program Objectives

The objectives of the Renewable Energy Engineering Program are to produce engineers who

1) Advance in a multidisciplinary career within the context of renewable energy in industry, or in advanced postgraduate studies, or in a related field.
2) Actively engage in teams that solve problems with independent thinking with a drive towards excellence in their job/study performance.
3) Adopt the engineering method with their lifelong learning skills and an understanding of complex social issues where renewable energy systems play a key role.

RNEW Degree Requirements and Curriculum

In addition to Alfred University's physical education requirement and global perspective requirement and the School of Engineering general requirements, the requirements for the Bachelor of Science in Renewable Energy Engineering are:

CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
ENGR 101	Introduction to Engineering	2
ENGR 102	Computer Aided Design	2
ENGR 104	Computer Aided Engineering	2
ENGR 110	Technical Communication	4
ENGR 11x	Exploration Labs (select 2, 1 credit each)	2
ENGR 220	Circuit Theory I	4
ENGR 305	Engineering Statistics	3
ENGR 306	Engineering Economics	2
ENGR 395	Engineering Design	2
ENGR 490	Senior Capstone Project	4
MATH 151	Calculus I	4
MATH 152	Calculus II	4
MATH 253	Calculus III	4
MATH 271	Differential Equations	3
MECH 212	Dynamics	3
MECH 320	Thermodynamics I	3
MECH 324	Fluid Mechanics I	3
MECH 326	Heat Transfer	3
MECH 354	Mechatronics	4
MECH 422	Control Systems	3
MECH 435	Industrial Controls	3
PHYS 125	Physics I	4
PHYS 126	Physics II	4
RNEW 201	Intro to Renewable Energy	3

RNEW 255	Power Systems and Economics	3
RNEW 303	Software Engineering	4
RNEW 310	Fuel Cell Principles and Techniques	3
RNEW 320	Circuit Theory II	4
RNEW 322	Signals and Systems	3
RNEW 431	Wind Energy Systems	3
RNEW 432	Solar Energy Systems	3
RNEW 468	Electric Machinery	3
	Technical Elective	6
	Humanities, Social Science and Arts electives	16
Total Credit Hours		**130**

Undecided Engineering

Alfred University offers a first-year undecided option for engineering students who want a little more time to select a major. All of the engineering majors, except Biomaterials Engineering, share a common curriculum in the first semester, which includes Calculus I, General Chemistry I, Introduction to Engineering, Computer-aided Design, and an elective. In the second semester, undecided students enroll in Calculus II, General Chemistry II, General Physics I, Computer-aided Engineering, and two Engineering Exploration laboratories. By providing hands-on experiences related to different engineering majors, the Engineering Exploration labs are designed to help students select an engineering major.

Minors in the School of Engineering

School of Engineering minors are available to all students pursuing an undergraduate degree at Alfred University, but they are generally intended for students majoring in engineering, math, and the physical sciences. Students must meet the prerequisites for the specified courses. An average of “C” or better must be attained in courses submitted for the minor. Some minors have restrictions which prevent them from being taken by certain engineering minors, i.e. the Materials Science minor is not available to students majoring in Biomaterials Engineering, Ceramic Engineering or Glass Engineering Science.

Requirements for the Biomaterials Minor

BIOL 211	Biochemistry and Cell Biology	4
CEMS 214	Materials Structure and Properties	3
CEMS 368	Introduction to Bioengineering	3
CEMS 468	Biomedical Materials (or CEMS 465 Biocompatibility)	3
CHEM 310	Basic Organic Chemistry (or CHEM 315)	3
Plus 2 courses from the following list:		
BIOL 302	General Microbiology	4
BIOL 307	Anatomy and Physiology: Nerves, Muscles and Skelton	4
BIOL 308	Anatomy and Physiology: Viscera	4
BIOL 375	Comparative Vertebrate Anatomy	4
BIOL 376	Animal Physiology	4
BIOL 402	Immunology	4
BIOL 420	Biochemistry: Proteins and Metabolism	4
BIOL 422	Biochemistry: Nucleic Acids	4
CEMS 466	Skeletal Tissue	3
Minimum total credit hours:		**23**

Requirements for the Glass Science Minor

CEMS 322	Introduction to Glass Science	3
CEMS 325	Glass Laboratory	2
CEMS 328	Industrial Glass and Glass-Ceramics	3

Plus at least 6 credits from the following list:

CEMS 324	Mass Transport in Glasses and Melts	3
CEMS 420	Optical Glasses	3
CEMS 450*	Independent Study (in Glass)	1-3
ENGR 480	Senior Capstone Project (in Glass)	4
COOP 385*	Co-op Program (in Glass)	3
Minimum total credit hours:		**14**

Requirements for the Materials Science Minor

CEMS 214	Structure and Properties of Materials	3
CEMS 216	Materials Structure and Bonding	3
CEMS 235	Thermodynamics of Materials (or CHEM 343 or MECH 320, 3 credits)	4
Plus at least 6 credits from the following list:		
CEMS 203	Introduction to Ceramic Powder Processing	3
CEMS 237	Thermal Processes in Materials	4
CEMS 3xx	Any regularly scheduled CEMS course at 300-level *except* CEMS 302	
CEMS 4xx	Any regularly scheduled CEMS course at 400-level *except* special topics and independent study	
Minimum total credit hours:		**15**

Note: The Materials Science Minor is not available to students majoring in Biomaterials Engineering, Ceramic Engineering, or Glass Engineering Science.

Requirements for the Mechanical Engineering Minor

MECH 211	Statics	3
MECH 212	Dynamics	3
MECH 241	Mechanics of Materials I	3
MECH 320	Thermodynamics I	3
MECH 324	Fluid Mechanics I	3
MECH 326	Heat Transfer	3
	Choice of 300 or 400-level MECH course	3
Minimum total credit hours:		**21**

Requirements for the Renewable Energy Engineering Minor

RNEW 201	Sources of Renewable Energy	3
MECH 324	Fluid Mechanics	3
MECH 326	Heat Transfer	3
Plus at least 6 credits from the following list:		
CEMS 352	Electroceramics	3
RNEW 310	Fuel Cells Principles and Techniques	3
RNEW 431	Wind Energy	3
RNEW 432	Solar Energy Systems	3
Minimum total credit hours:		**15**

Minors in Other Areas of Study

Minors in nearly every other area of study at the University are open to students in the School. Minors in business, mathematics, chemistry, physics, and science policy are very compatible with the degree programs, since some upper-level courses in these areas can be used as technical electives. A minor in Business is facilitated by allowing two courses required for the Business minor, MKTG 221 and MGMT 328, to count as technical electives in CE, GES, and MSE. The Business minor can be used as the foundation for an MBA (see the section on MBA and Law Programs.)

Special Programs/Options/Opportunities

Cooperative Education (Co-op) and Internships

Undergraduate students have the opportunity to gain experience in a real engineering, research or manufacturing project at a company or national laboratory. Students in the co-op program commonly work during one of their junior year semesters during which they receive 3 academic credits; the sponsor pays a salary and some expenses.

Co-op work sites for students in our program are extensive and are distributed from Maine to California in companies big and small. Quality work experience is considered to be extremely valuable by employers hiring graduates for permanent positions. Over 70% of our students participate in a co-op or an internship (summer employment) in an engineering environment before graduating.

Study Abroad

Knowledge of a foreign language and culture is considered quite valuable by employers operating in a global economy. The University maintains direct exchanges with several partner universities which enable students to live and study outside the United Sates without impeding progress towards the degree. Engineering exchange partners include Ecole Nationale Superieure de Ceramique Industrielle (ENSCI) Limoges, France; University of Erlangen-Nurnberg, Erlangen-Nurnberg, Germany; University of Sheffield, Sheffield, England; and Universitat Jaume I, Castellon, Spain. For more information about study abroad and other international programs, please visit the International Programs website at www.alfred.abroadoffice.net.

Preparation for the Health Professions

An engineering education provides a strong background for continued study in the health professions. Interested students must choose electives wisely and maintain a high grade point average. Students must take biology (BIOL 201 and 202) and organic chemistry (CHEM 315 and 316). An upper-level course in biology is recommended.

Medical schools are interested in students who are aware of current medical trends in our society and who have strong written, oral, and interpersonal skills. Students need to be able to articulate the origin of their interest in medicine and to demonstrate that interest through volunteer/internship experiences in health care facilities/settings.

Interested students wanting more information about academic preparation and the application and admissions processes should consult with the Chair of the University Health Professions Advisory Committee.

Participation in Research

The School has more than $5 million of sponsored research annually. This research has a positive impact on the undergraduate programs in many ways, including providing state-of-the-art equipment, generating new knowledge that gets discussed in classes, and maintaining contacts with industry. Also, many senior thesis projects are done in cooperation with companies or government laboratories. Opportunities for part-time work on funded research projects in the School are numerous. Many undergraduate students are hired for summer research positions in the School, and there are also opportunities for part-time work during the academic year.

Engineering/MBA Program

Students in any of the School of Engineering's undergraduate degree programs who complete the minor in Business Administration also will have completed the foundation courses for the MBA program at Alfred University. These students can obtain an MBA at Alfred in one year of graduate study.

Engineering/Law

Engineering graduates are well prepared for the study of law, including patent law. Students who have an interest in engineering/law should discuss this option with their advisor as early as possible in their program.

College of Professional Studies

The College

The College of Professional Studies (CPS) at Alfred University offers leading bachelors and graduate programs designed to prepare students with the knowledge, skills, and applied experiences to be successful for today's complex world. The College houses undergraduate programs of excellence preparing students for careers and leadership roles in business, education, and health and human performance practice settings. Graduate programs in the College of Professional Studies provide Alfred students with the opportunity to continue professional studies in our advanced degree in business, education, and mental health fields.

With a strong foundation in liberal arts, CPS students learn about global issues, humanities and sciences, while beginning to explore the roles and knowledge bases within their profession. Practica and labs help students to affirm their interest in the major; while hands-on experiences in client-based classroom projects, field experiences and internships provide opportunities to hone real-world analytic and decision-making skills. Students are encouraged to explore options for minors that will cultivate their interests and provide unique professional preparation for the world of work or continued graduate studies.

The members of the CPS faculty are dedicated to the development of students as individuals and professionals. Most faculty members have significant professional and career experiences, which are combined with their passion for teaching to help guide students in their educational paths. They get to know students in and out of the classroom, as academic and club advisors, research sponsors and collaborators, and career mentors.

Mission Statement

The College of Professional Studies prepares individuals for successful professional careers. Through contemporary and innovative educational opportunities, we inspire future critical thinkers, lifelong learners, and leaders in diverse settings.

Vision

College of Professional Studies will be an innovator in the delivery of the highest quality academic and professional education, preparing our students for career success and leadership.

The School of Business

- The Bachelor of Science degree is offered in four major areas: Accounting, Business Administration, Finance, and Marketing
- Minors are available in Accounting, Arts Management, Business Administration, Economics, Equine Business Management, Family Business and Entrepreneurship, Finance, International Business, Marketing, and Sports Management.
- The Master of Business Administration degree is offered through the Graduate School.

The Division of Education

- The Bachelor of Science degree is offered with a major in Early Childhood/Childhood Education.
- Minors are available in Art Education, Business Education, and Middle Childhood/Adolescence Education. These minors are paired with a major in the primary teaching area.
- The Master of Science in Education degree is offered through the Graduate School.

Programs in Health and Human Performance

- The Bachelor of Science degree is offered with in two majors: Athletic Training and Health Fitness Management
- A minor is available in Exercise Science

The Division of School Psychology and Counseling

- Offers graduate programs at both the Master's and Doctoral levels. See the current Alfred University Graduate Catalog for a complete description of these programs.

Accreditation

Programs within the College of Professional Studies meet the highest standards set by the accrediting bodies for each profession. School of Business programs are accredited by the Association to Advance Collegiate Schools of Business (AACSB); the programs in education are accredited by the Teacher Education Accreditation Council (TEAC); the Athletic Training program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAATE).

General Education Requirements

The general education requirements within the College of Professional Studies provide students with the knowledge and skills that fulfill the Alfred University mission to "prepare well-educated, independent thinkers ready for lives of continuous intellectual and person growth." This journey of learning begins with a first semester seminar course, which introduces students to the profession they are intending to study and to the resources available at Alfred University for academic and personal success. Students must also complete written communication and quantitative reasoning courses which insure competency in these basic skill areas. Through the general education requirements students are exposed to a variety of ideas and gain intellectual breadth by completing at least one course each from three key areas within the liberal arts and sciences curriculum (humanities, natural sciences, and social sciences). Additional liberal arts credits are fulfilled by student choices in the areas of humanities, natural sciences and mathematics, and social sciences.

First Semester Seminar

Students take a one-credit seminar or "Perspectives" course which provides an opportunity to learn about their profession and campus services and supports. Projects and teamwork provide opportunities to begin to develop relationships with faculty and classmates from their programs.

Written Communication

Each student must successfully complete two semesters of college writing. Students may be exempt from these courses based on strong college entrance exam scores, or Advanced Placement or International Baccalaureate courses completed in their high school programs.

Quantitative Reasoning

Each student must complete at least four credits of quantitative reasoning. This area includes the ability to understand and evaluate arguments framed in quantitative or numerical terms; to analyze subject matter using quantitative techniques; to construct and evaluate quantitative arguments of one's own; and to make reasoned judgments about the kinds of questions that can be effectively addressed through quantitative methods.

Each of the undergraduate program areas has selected specific courses (e.g. statistics or math for educators), which fulfill this requirement while meeting curriculum needs,

Humanities

Each student must complete at least four credits in the area of humanities. This area introduces students to people we have never met, places we have never visited, and ideas that have never crossed our minds. By showing how others have lived and thought about life, the humanities provides students with the ability to analyze texts and ideas that are contemporary and historical, personal and communal, and imaginative and reflective. Courses in modern languages, literature, history, religion, philosophy, and arts/music/theater history and theory will fulfill humanities requirements.

Natural Sciences

Each student must complete at least four credits in the area of natural science. This area introduces techniques of observation and experimentation, the relation of data to hypotheses, and the practice of scientific reasoning. This work provides a model for relating concrete empirical information to abstract models, stimulating multidimensional and creative habits of thought. The education and health and human performance degree programs have specific course listings for this requirement.

Social Sciences

Each student must complete at least four credits in the area of social science. This area engages students in theory as well as empirical exploration and analysis of human transactions. They address the mental and behavioral activities of individuals, groups, organizations, institutions, and nations. Social science disciplines seek generalizable interpretations and explanations of human interaction. Courses in communications, psychology, political science, anthropology, sociology, criminal justice, and global studies, are among those fulfilling social science requirements.

List of Approved Courses

The College of Professional Studies general education program requires standard written communication courses (ENGL 101 and 102 or equivalent) completed by students in every college major. First Semester Seminars (ATHT 105; BUSI 105; or EDUC 105) are specifically designed for each program area.

The entry-level liberal arts courses best suited for remaining general education requirements are 100 and 200 level courses. Please note that a minimum of 4 credits is required in each of the humanities, natural sciences, and social sciences categories. Students who transfer equivalent 3-credit courses from other institutions will be considered to have fulfilled the general education requirements for these areas of study.

In addition to the general education requirements, all students must complete additional liberal arts elective courses to complete degree requirements for the Bachelor of Science (60 liberal arts credits). The courses approved to fulfill CPS general education and liberal arts requirements are designated with CPS attributes of Written Communication (CLAS/UNIV), Quantitative Reasoning (CPS), Humanities (CPS), Natural Science (CPS), and Social Sciences (CPS).

Students in some majors (athletic training, early childhood/childhood education) will find that most of their degree requirements (120 credits) are met through completion of the courses required for the major, general education requirements and liberal arts electives. Other students (business majors) will find that they have flexibility to add unclassified electives (e.g. studio arts courses, career and personal development courses) to meet the 120 credit requirement. Many minors have liberal arts courses as part of their requirements; these courses can also be counted towards fulfillment of liberal arts electives.

Major and Minor Requirements

The School of Business

Mission Statement

The School of Business advances Alfred University's mission and goals in providing intellectual leadership through teaching, research and service. We provide active-learning driven educational programs in business management to interdisciplinary undergraduate and graduate students who value an intimate, interactive, student-centered learning environment. We develop our students into ethical business leaders who can think critically and communicate effectively in both domestic and global arenas. Our faculty conducts discipline based, applied and instructional research that bridge the gap between business theory and practice.

In support of this mission the undergraduate learning goals are:
1. Leadership - Our graduates will understand the situational context of leadership. They will be able to initiate collaboration with team members in identifying and achieving common objectives.
2. Ethical Professional Behavior - Our graduates will understand the need for ethical practices in business.
3. International Business Environment - Our graduates will have an awareness and understanding of the legal, political, social, economic, and cultural environments facing international business.
4. Critical Thinking - Our graduates will be able to gather and analyze relevant information to identify problems and opportunities and to achieve creative and effective results.
5. Professional Communication - Our graduates will be effective communicators. They will be able to exchange and interpret verbal, written, and expressive messages.
6. Knowledge of Business Functions - Our graduates will understand and apply core business functions:

- Management
- Accounting
- Economics
- Marketing
- Management information systems (MIS)
- Finance
- Quantitative methods
- Global business/International business environment
- Legal environment of business

Accreditation

The undergraduate business program at AU is professionally accredited by AACSB International - The Association to Advance Collegiate Schools of Business. AACSB is a not-for-profit corporation of educational institutions, corporations and other organizations devoted to the promotion and improvement of higher education in business administration and management.

Of the approximately 1200 institutions of higher learning in the United States which offer business degrees, about one third are accredited by AACSB-International. The AACSB accreditation is recognized as a mark of quality, which is highly valued by prospective employers and the nation's leading graduate school programs offering the MBA or advance business graduate degrees.

Clubs and Honor Societies

The School of Business has a variety of organizations to enrich student experience. These include the Financial Management Association, American Marketing Association, Enactus (Entrepreneurial Action Society), and the Institute of Management Accountants. In addition, the School has a Student-managed Investment Fund (SMIF) which allows students to participate in managing an active portfolio while gaining academic credit.

The School also sponsors national honor societies that recognize superior academic achievement by business students. Alfred University sponsors chapters in Alpha Iota Delta National Honor Society in Decision Sciences, Beta Gamma Sigma (exclusively for AACSB accredited schools), Delta Mu Delta Honor Society in Business Administration, Financial Management Association in Finance, Mu Kappa Tau in Marketing, the Pacioli Honor Society in Accounting, and the Omicron Delta Epsilon Honor Society in Economics.

Career Success

Recent Alfred University graduates have attained positions in major international, national, and regional accounting firms (PricewaterhouseCoopers, KPMG, Ernst & Young, Crowe Horwath, The Bonadio Group), in the financial services industry (Travelers, Bank of America, Dun and Bradstreet, Commercial Metals Company, General Electric Commercial Finance, Merrill Lynch), in the information services arena (Hewitt Associates), in marketing-oriented companies (3S Enterprises, Integrated Organics), in technology oriented firms (Citadel Communications, CyberSource, IBM Global Services, Yumani), and in the Armed Services. A number of recent graduates also chose to pursue graduate or professional degrees at schools such as Albany Law School, Alfred University, Long Island University, Pace University, Purdue University, Rochester Institute of Technology, Schiller International University, University of Buffalo School of Law and University of Scranton.

Majors Offered in the School of Business

School of Business students can obtain a Bachelor of Science degree with a major in Accounting, Business Administration, Finance or Marketing. The majors in the School of Business provide options within a professional education program grounded in the liberal arts which prepares our students for post-graduation objectives ranging from immediate entry into the job market to graduate school. Alfred University's program emphasizes leadership development and active "hands-on" learning. All students complete a Field Experience requirement in consultation with their advisor. AU's environment provides an opportunity for leadership development with a mix of curricular and co-curricular activities which provide students with opportunities to attain distinction.

Students who complete any of the business majors and are accepted into the Master's of Business Administration Program at Alfred can complete the MBA degree within one year of full-time study (31 graduate credits).

The **Business Administration** major prepares students for professional careers in areas such as accounting, business economics, family business, finance, management, marketing, management information systems, international business and entrepreneurship. Each business administration student chooses a faculty advisor who not only helps him or her explore career options but also recommends courses to be taken over the sophomore, junior and senior years. The Business Administration major provides a high degree of flexibility. In consultation with a faculty advisor, a student is encouraged to explore career options, including graduate school, and to select business and non-business electives that provide a professional focus.

The **Accounting** major prepares students to become professional accountants. Those students interested in public accounting are encouraged to pursue the license to become a Certified Public Accountant (CPA); those interested in corporate or governmental accounting are encouraged to seek designation as a Certified Management Accountant (CMA). All students are urged to augment their accounting curriculum with a minor or coursework in those areas which are in great demand in accounting, such as finance or economics. Accounting graduates can apply for the MBA- Accounting specialization, which leads to fulfillment of the 150 credits required by New York State for the CPA exam.

The **Marketing** major provides students with applied experiences in new product development, market research and service learning. Marketing majors also take a required course in graphic design, where they are introduced to this creative process, and the importance of design in the professional practice of marketing. Many students enrich their classroom experiences through participation in the vibrant AU student chapter of the American Marketing Association.

The **Finance** major emphasizes fundamental accounting, economics, and finance concepts and theories, and provides applied practice to promote well-informed financial decision-making. The major prepares students for careers in business and industry as financial analysts and managers, and provides an excellent background for graduate programs in finance or management. Other students enter the consulting or legal professions, or develop careers in the various occupations related to investment activity or financial institutions. Students in the University's finance program are actively sought by corporate recruiters who know the students have been well prepared for the world of contemporary finance.

The School also offers **minors** in Accounting, Arts Management, Business Administration, Economics, Equine Business Management, Family Business and Entrepreneurship, Finance, International Business, Marketing, and Sports Management. School of Business students may minor in fields within or outside of the School of Business. The Business Pre-MBA minor is open to students outside of the School of Business and provides the foundation coursework needed to complete an MBA in one year of full-time study.

The general education requirements for School of Business undergraduate students are shared by all students in the College of Professional Studies, and are detailed in the college requirements section of the catalogue.

The Bachelor's of Science business degree is composed of business professional core courses shared by all majors; business courses specific to each major; business electives to total 48 credits in business; arts and sciences and general education core courses specified for business, and liberal arts electives to reach a minimum of 60 credits of liberal arts courses (as required for all B.S. degrees). Depending on the major, students take additional electives to reach the total of 120 credit hours (which can include acceptable transfer credit) required for graduation. Students are also required to:

- Complete a minimum of 30 credit hours in upper-division business courses.
- Maintain at least a 2.0 grade point average overall ("C") and 2.0 combined GPA in business and advanced economics courses.
- Satisfy the University's Physical Education requirement (credits not included in the 120 credits for graduation).
- Satisfy the University's Global Perspective requirement.

Business Professional Core Requirements

ACCT 211	Financial Accounting	3
ACCT 212	Managerial Accounting	3
BUSI 105	Business Perspectives	1
BUSI 106	Contemporary Business	3
BUSI 457	International Business	3
or FIN 458	International Financial Management	
or ECON 412	International Economics	
or MKTG 489	International Marketing	3
BUSI 499	Business Policy	3
FIN 348	Managerial Finance	3
LAW 241	The Legal Environment of Business	3
MGMT 328	Management and Organizational Behavior	3
MGMT 484	Operations Management	3
MIS 101	Computers and Society	3
MIS 390	Introduction to Management Information Systems	3
MKTG 221	Marketing Principles and Management	3

Additional Requirements:

Students are required to complete a Field Experience option selected from the following choices:

- Approved Internship (BUSI 485)
- Advanced courses with Active Learning Component (designated as Field Experience – CPS Business School)

Arts and Sciences Core

Quantitative Methods		
BUSI 113	Business Statistics	3
BUSI 213	Research Methods for Business	3
MATH 104[1]	Quantitative Methods for Business	4
Communications		
ENGL 101	Writing I	4
ENGL 102	Writing II[2]	4
Economics		
ECON 201	Principles of Microeconomics	4
ECON 202	Principles of Macroeconomics	3
Social Sciences (minimum)		3-4
Natural Sciences (minimum)		3-4
Humanities (minimum)		3-4

1. MATH 151-Calculus I can substitute for MATH 104

2. Writing requirements are specified in the Catalog under General Education Requirements for Liberal Arts and Sciences, Basic Competencies, Written Communication.

Business Administration Major
Students opting for this major must take the courses listed above in the Business Professional core, plus one upper-level course in economics and business elective courses, to total a minimum of 48 credit hours in business. Students are encouraged to focus their business interests through selection of minors offered by the School of Business, as well as minors within the College of Liberal Arts and Sciences. The Arts and Sciences Core courses, general education requirements and arts and sciences electives to total a minimum of 60 credit hours, must also be completed.

Accounting Major
Given that course requirements for taking the CPA examination are set by state law, the Accounting major's curriculum is tightly structured. They must take all the courses listed in the Business Professional Core, Arts and Sciences Core and general education, arts and sciences electives to total a minimum of 60 credit hours, plus all accounting courses listed below:

ACCT 361	Intermediate Accounting I	3
ACCT 362	Intermediate Accounting II	3
ACCT 371	Personal Income Tax	3
ACCT 372	Cost Accounting	3
ACCT 441	Auditing Theory and Practice	3
ACCT 462	Advanced Accounting	3
ACCT 471	Corporate Taxation	3
FIN 300+	one additional upper-level Finance course	3
LAW 442	Commercial Law	3

Accounting majors must receive a grade of "C" or better in all accounting courses (those with ACCT course prefixes).

Students who wish to continue into the MBA-Accounting Program at Alfred University must complete a graduate application and all required MBA application materials.

Finance Major
Students who wish to major in Finance must complete the Business Professional Core and the Arts and Sciences Core, general education requirements, arts and sciences electives to total a minimum of 60 credit hours, and the following Finance requirements:

ACCT 361	Intermediate Accounting I	3
ECON 331	Money and Banking	3
FIN 205	Student Managed Investment Fund	1
FIN 206	Student Managed Investment Fund Lab	1
FIN 310	Introduction to Financial Planning	3
FIN 460	Seminar in Finance	3
FIN 454	Security Analysis	3
FIN 455	Business Financial Decisions	3
FIN 458	International Financial Management	3
Plus, choose one of the following:		
FIN/ECON 445	Managerial Economics	3
FIN 453	Financial Markets and Institutions	3

Marketing Major
Students who wish to major in Marketing must complete the Business Professional Core and the Arts and Sciences Core, arts and sciences electives to total a minimum of 60 credit hours, and the following Marketing requirements:

MKTG 310	Graphic Design in Marketing	3
MKTG 452	Marketing Research	3
MKTG 479	Consumer Behavior	3
MKTG 486	Promotion Strategy	3
MKTG 499	Strategic Marketing Management	3

Plus, choose 3 credit hours from the following:

MKTG 453	Marketing Practicum	3
MKTG 460	Seminar in Marketing	3
MKTG 482	Sales Management	3
MKTG 489	International Marketing	3

Minors in the School of Business
The School of Business has developed minors in Accounting, Arts Management, Business Administration, Economics, Family Business and Entrepreneurship, Finance, International Business, Equine Business Management, Marketing, and Sports Management. Students completing any of these minors must complete at least half of their course work for the minor at Alfred University. A grade point average of a “C” (2.0) or better must be attained in courses submitted for completion of the minor.

Accounting
Non-Accounting majors can pursue a minor in accounting. The Accounting Minor Program provides students with a background in financial and managerial accounting, taxation and financial statements analysis. The minor also provides preparation for graduate programs in accounting, business and law.

Accounting Minor Requirements

ACCT 211	Financial Accounting	3
ACCT 212	Managerial Accounting	3
ACCT 361	Intermediate Accounting I	3
BUSI 113	Business Statistics (or equivalent)	3
ECON 201	Principles of Microeconomics	4
ECON 202	Principles of Macroeconomics	3
MATH 104[1]	Quantitative Methods for Business	4
Plus two courses from among the following:		
ACCT 362	Intermediate Accounting II	3
ACCT 371	Personal Income Tax	3
ACCT 372	Cost Accounting	3
ACCT 462	Advanced Accounting	3
ACCT 471	Advanced Taxation	3
Total credit hours		**32**

1. MATH 151-Calculus I can substitute for MATH 104

Arts Management Minor

The Arts Management Minor provides an interdisciplinary approach to the business of art and management of arts organizations. Students have the opportunity to learn and explore the theoretical content and practical skills that engage arts professionals managing individual businesses, serving community arts organizations, and managing not-for-profit arts organizations in the visual, performing, and literary arts. The Arts Management curriculum provides a combination of historical, theoretical, and practical learning experiences in the arts and business, including an internship focused on arts management. This minor is open to all AU students.

Coursework for the minor is designed to provide students who are not majoring in an arts field with exposure to art history and theory, as well as applied art and studio skills. Students who do not have a business background learn fundamental skills in business and entrepreneurship.

Arts Management Minor Requirements:

ACCT 211	Financial Accounting	3
BUSI 485	Internship (specific to Arts Management)	2-4
ECON 201	Principles of Microeconomics	4
MKTG 221	Marketing Principles and Management	3
Choose one additional business course from the following:		3
BUSI 301	Family Business Management	
BUSI 439	Entrepreneurship in the 21st Century	
Choose three arts course, at least one from each Section (A and B, below)		8-12
Total credit hours		**25-29**

Arts Section A- History and Theory

ARTH	Art History (any course)	2-4
DANC 211	Dance History	4
ENGL 200/325/326/327	Literature Survey Courses	4
IART 460	Interdisciplinary Art Seminar	4
MUSC 110	Music Appreciation	4
MUSC 211	World Music	4
PHIL 283	Philosophy of the Arts I	4
PHIL 300	Topics in Philosophy (consult with advisor)	1-4
THEA 110	Introduction to Theatre	4
THEA 210	The Performing Arts: A Global Perspective	4
THEA 311	Theatre: History, Art, Politics and Society I	4
THEA 200/300/400	Special Topics in Theatre (consult with advisor)	1-4

Section B-Applied and Studio Skills Courses

ART 111	Beginning Drawing	4
ART 121	Beginning Sculpture	4
ART 133	Basic Black and White Photography	4
ART 151	Introduction to Ceramics	4
ART 288	Visual Communications I	4
ART 389	Exhibition Design (open only to Art and Design students)	2
DANC	any Dance course	1-4
ENGL 200	Special Topics in Writing	2-4
ENGL 202	Fiction Workshop	4
ENGL 204	The Art of the Personal Essay	4
ENGL/THEA 205	The Play's the Thing! - Playwriting	4
ENGL 206	Poetry Workshop	4
ENGL 328	The Language of Literary Art	4
ENGL 460	Special Topics in Writing	4

ENGL 472	Dramatis Personae	4
ENGL 473	Auto/Biographical Acts: Studies in Creative Nonfiction	4
ENGL 474	Writing the Short Story	4
ENGL 475	Writing Formal Poetry	4
ENGL 476	Writing the Long Poem or Poetic Sequence	4
IART	Interdisciplinary Art (any course)	1-4
PDAT 120	Technical Theatre	4
PDAT 220	Principals of Theatrical and Performance Design	4
THEA 230	Stage Management Fundamentals	4
THEA 240	Acting I	4
PDAT/THEA 270	Play Production	1-4
THEA200/300/400	Special Topics (consult with advisor)	1-4

Business Administration Minor/Pre-MBA Program

The School of Business offers a 4 + 1 minor for non-School of Business students. By completing the appropriate foundation courses at the undergraduate level, a student may successfully complete the requirements for a Master's in Business Administration (MBA) at Alfred University in one year after receiving his or her undergraduate degree. A grade point average of a C (2.0) or better must be attained in the courses for completion of minor. Students completing the minor are thus eligible to complete the 31 credit hour MBA at Alfred University. The 4 + 1 Program does not guarantee admission to the MBA Program, as students must apply for admission and submit all required application materials.

Business Administration Minor Requirements:

ACCT 211	Financial Accounting	3
ACCT 212	Managerial Accounting	3
BUSI 113*	Business Statistics	3
ECON 201**	Principles of Microeconomics	4**
ECON 202	Principles of Macroeconomics	3
FIN 348	Managerial Finance	3
MGMT 328	Management and Organizational Behavior	3
MGMT 484***	Operations Management	3
MKTG 221	Marketing Principles and Management	3
Total credit hours		**28****

***ENGR 305 or POLS/SOCI 230 or PSYC 220 may be substituted for BUSI 113**
****ENGR 206 may be substituted for ECON 201. This substitution will result in 27 credits for the minor.**
*****CEMS 484 may be substituted for MGMT 484**

Economics

Economics provides an excellent background for work in the fields of banking, finance, and other areas where an understanding of economics is required. The balanced coordination of economics and business administration courses is also appropriate for entry into a variety of civil service positions with the federal, state, and local government or entry into graduate school.

Economics Minor Requirements

ECON 201	Principles of Microeconomics	4
ECON 202	Principles of Macroeconomics	3
ECON 460	Seminar in Economics	3
ECON 300+	Upper-level Economics Course	3
ECON 300+	Upper-level Economics Course	3
Total credit hours		**16**

Equine Business Management

Students interested in the management of an equine business or working in the equine industry will benefit from this collaborative minor between Equestrian Studies and the School of Business.

Equine Business Management Minor Requirements

ACCT 211	Financial Accounting	3
BUSI 439	Entrepreneurship in the 21st Century	3
EQUS 215	Equine Business Management	4
MKTG 221	Marketing Principles and Management	3
MKTG 482	Sales Management	3

Plus a minimum of six (6) credit hours from among the following courses

EQUS 200	Topics (approval depending on course content)	2-4
EQUS 205	Introduction to Equine Science	4
EQUS 216	Horse Show Management	2
EQUS 218	Judging Horse Shows	4
EQUS 223	Hunter and Jumping Course Design	2
Total credit hours		**22**

Family Business and Entrepreneurship

Students interested in the management of a Family Business or in developing the skills needed for success as an entrepreneur can minor in this area of business studies. Students will build upon foundation business skills with additional courses in legal and financial planning which are integral to the small business owner and entrepreneur. In addition to these courses, students are required to complete an internship in a family or small business setting.

Family Business and Entrepreneurship Minor Requirements

ACCT 211	Financial Accounting	3
BUSI 301	Family Business Management	3
BUSI 439	Entrepreneurship in the 21st Century	3
BUSI 485	Internship	2-4
ECON 201	Principles of Microeconomics	4
LAW 241	The Legal Environment of Business	3
MKTG 221	Marketing Principles and Management	3
Plus three (3) credit hours from among the following courses:		
ACCT 371	Personal Income Tax	3
BUSI 460	Seminar (Topics) in Business	3
FIN 310	Introduction to Financial Planning	3
LAW 442	Commercial Law	3
Total credit hours		**24-26**

Finance

Non-Finance majors can pursue a minor in finance. The minor provides the opportunity for students to cultivate the critical thinking skills and develop the ability to apply financial analysis to a wide range of business finance issues.

Finance Minor Requirements

ACCT 211	Financial Accounting	3
ACCT 212	Managerial Accounting	3
ECON 201	Principles of Microeconomics	4
ECON 202	Principles of Macroeconomics	3
FIN 348	Managerial Finance	3
FIN 310	Introduction to Financial Planning	3

FIN 458	International Financial Management	3
FIN 454	Security Analysis	
Plus six (6) credit hours from among the following courses:		
FIN 205	Student Managed Investment Fund (SMIF)	1
FIN 206	Student Managed Investment Fund Lab (SMIF lab)	1
FIN 306	Advanced SMIF Lab	2
FIN 453	Financial Markets and Institutions	3
FIN 455	Business Financial Decisions	3
FIN 460	Seminar in Finance	3
Total credit hours		**28**

International Business Minor

International Business is a current high-demand program of study based on the globalization of business. Students complete at least two semesters of a modern language, gain an understanding of global cultures, and build a foundation in all areas of international business. Students are encouraged to participate in an international study experience.

International Business Minor Requirements

(Language)	Two Semesters of one Modern Language	8
GLBS 101	Intro to Global Studies and Intercultural Communication	4
Plus, Complete 4 of the following 5 Options:		9-12
BUSI 457	International Business	3
ECON 412	International Economics	3
FIN 458	International Financial Management	3
MKTG 489	International Marketing	3

International Experience (select one):

- Business-related faculty-led travel course abroad (3 credit hours)
- Internship Abroad (minimum 3 credit hours)
- One full semester of study abroad

Total Credit Hours **21-24**

Marketing

Non-Marketing majors can pursue a minor in marketing. The Marketing minor is recommended for business and non-business students who want to consider sales, advertising, and marketing careers, or want to complement their major area of study.

Marketing Minor

BUSI 113*	Business Statistics	3
ECON 201	Principles of Microeconomics	4
MKTG 221	Marketing Principles and Management	3
MKTG 479	Consumer Behavior	3
Plus six credit hours from among the following courses:		
MKTG 310	Graphic Design in Marketing	3
MKTG 452	Marketing Research	3
MKTG 453	Marketing Practicum	3
MKTG 460	Seminar in Marketing	3
MKTG 482	Sales Management	3
MKTG 486	Promotion Strategy	3
MKTG 489	International Marketing	3
MKTG 499	Strategic Marketing Management	3
Total credit hours		**19**

*** ENGR 305 or POLS/SOCI 230, or PSYC 220, or Math 241 may be substituted for BUSI 113**

Sports Management Minor

The Sports Management Minor draws from various academic areas to provide students with an exposure to the business of sport. Students combine foundation skills in business administration with knowledge and skills required to manage sports operations. An internship in a sports facility provides a culminating professional experience for the minor.

Required Courses:

ATHT 232	Introduction to Sports Management	3
ATHT 242	Sports, Society, and Ethics	3
ATHT 432	Organization and Administration of Athletics	2
BUSI 485	Internship (in a sports-related business)	2-4
COMM 302	Public Relations Principles	4
LAW 241	The Legal Environment of Business	3
MGMT 328	Management and Organizational Behavior	3
MKTG 221	Marketing Principles and Management	3
Total Credit Hours		**23-25**

The Division of Education

A career in education can be immensely rewarding, offering the dedicated professional many opportunities to make a lifelong, positive impact on the lives of children and young people. Alfred University has a long tradition of preparing candidates of excellence for positions teaching in public and private schools in our region, and across the world.

Housed in the Division of Education is a major in Early Childhood/Childhood Education and minors in Adolescent, Visual Arts, and Business Education. Students enrolled in these programs receive an integrated blend of professional course work and field-based opportunities, and fulfill requirements for Initial Certification in New York State. Various Adolescent content certifications (Grades 7-12) are available including Biology, Chemistry, Earth Science, English, Mathematics, Physics, Social Studies, and Spanish with an option to add Middle Childhood (Grades 5-9) certification with additional coursework and field experiences. (Refer to the Graduate School Catalog for information on graduate programs offered by the Division of Education.)

Education Major: Early Childhood/Childhood Education

Students who major in Early Childhood/Childhood Education receive an integrated blend of professional education methods coursework and field based opportunities in area schools that enables them to apply theory to classroom situations. These field-based experiences expose students to a diversity of educational environments. Students completing the program meet the academic requirements of the New York State Education Department for certification in Early Childhood (Birth - 2nd grade) and Childhood Education (1st - 6th grade).

The Early Childhood/Childhood Education major requires coursework in the arts and sciences that is rich in breadth and depth, and fulfills requirements in basic competencies and areas of knowledge in the following subjects: artistic expression, communication, information retrieval, humanities, language other than English, written analysis and expression, concepts in history and social sciences, and scientific and mathematical processes.

Academic Area of Concentration (or Second Major)
Students majoring in Early Childhood/Childhood Education must complete 30 credit hours in an academic area of concentration or fulfill the requirements of a second major. In either case, students select an academic area that is aligned with the current New York State Learning Standards. Possible concentration areas include Biology, Chemistry, English, Environmental Studies, Geology, History, Mathematics, Natural Science (Biology, Chemistry, Environmental Studies, Geology and Physics), Physics, Political Science, Psychology, Sociology, and Spanish. Coursework in the academic area of concentration must represent breadth (100-200 level courses) and depth (300-400 level courses) in the content area.

Prerequisite Courses

EDUC 105	Perspectives in Education
EDUC 230	Psychological Foundations of Education
EDUC 231	Social Foundations of Education
SPED 456	Human Development: Exceptionality
MATH 102	Mathematics for K-6 Teachers

Continuing Enrollment Requirements for Education Majors
Students may establish their major in Education upon admission to the College of Professional Studies. At the beginning of their junior (3rd) year, students are reviewed for continued enrollment in the Early Childhood/Childhood Education Major. At this time, students must have declared Education as their major, met with their Education advisor to ensure that all prerequisites have been met, earned an overall 2.75 GPA, and achieved a 3.0 GPA in each of the prerequisite education courses (EDUC 230 and EDUC 231). Students must also successfully complete a Progress Interview with Education faculty members before being allowed to proceed in the major.

The Education portion of the program starts in the spring semester of the students' junior year, and includes field-based coursework in early childhood/childhood curriculum, orientation, methods of teaching literacy, and integrated methodology of social studies, math, science and technology. The required concurrent field experience in two extended placements take place in area schools and is designed as an opportunity to blend theory with experiential application.

The following fall semester students are placed in area schools for two student teaching experiences. Concurrent coursework in advanced literacy methodology, and classroom assessment and evaluation strategies during this semester are designed to assist students with instructional planning and to incorporate and to align instruction, curriculum, and assessment with the New York State Learning Standards.

Students will need transportation to area school districts for both field placements (spring semester) and student teaching (fall semester) placements. Students must earn a grade of C or higher in all Education and Special Education courses, as well as in all content core courses required for teacher certification.

Core Courses
Spring Semester - Junior Year

EDUC 374	Integrated Methods: Soc Studies/Science/Math/Computer	6
EDUC 375	Early Childhood/Childhood Practicum	3
EDUC 471	Methods of Teaching Literacy	6
EDUC 474	Orientation to the Early Childhood/Childhood Classroom	3

Fall Semester - Senior Year

EDUC 461	Student Teaching	12
EDUC 472	Competency Skills in Teaching Literacy	3
EDUC 473	Assessment in the Early Childhood/Childhood Classroom	3

Education Minors:

Adolescence Education (grades 7-12)
with option to add Middle Childhood (grades 5-9)
Special Subjects: Visual Arts or Business and Marketing (pre K - 12th grade)

Students completing these programs meet the academic requirements of the New York State Education Department for Initial certification.

Students who minor in Education receive an integrated blend of professional education methods coursework and field based opportunities in area schools that enable them to apply theory to classroom situations. These field-based experiences expose students to a diversity of educational environments.

Students who wish to minor in Education must complete coursework in the arts and sciences that is rich in breadth and depth and fulfill requirements in basic competencies and areas of knowledge in the following subjects:
artistic expression, communication, information retrieval, humanities, language other than English, written analysis and expression, concepts in history and social sciences, and scientific and mathematical processes.

Preparation for a teaching certification in Adolescence combines an academic major in a particular field, such as English or Biology, with an Adolescence minor in the Division of Education. Adolescence Education subjects include Biology, Chemistry, Earth Science, English, Mathematics, Physics, Social Studies, and Spanish; students must be enrolled in the College of Liberal Arts and Sciences in one of these majors.

All students completing the program will receive Initial certification in Adolescence Education (7-12). It is possible to receive an additional certification to teach Middle Childhood Education by completing additional coursework and field experiences.

Students seeking certification in Visual Arts must be enrolled in the BFA program in the School of Art and Design or the Interdisciplinary Art program in the College of Liberal Arts and Sciences and minor in Education. Those seeking certification in Business and Marketing must be enrolled in a business major in the College of Professional Studies.

A student preparing to teach in one of these areas should meet with an advisor in the Division of Education to integrate the education course requirements while planning a program of major studies.

Prerequisite Courses

EDUC 230	Psychological Foundations of Education
EDUC 231	Social Foundations of Education

Continuing Enrollment for Education Minors

In year 1, students are encouraged to declare their minor in Education and complete the prerequisite courses (EDUC 230 and EDUC 231). The semester prior to taking the appropriate Methods course (EDUC 489 or 491), students are reviewed for continued enrollment in the Education Minor. At this time, students must have declared Education as their minor and met with their Education advisor to ensure

that all prerequisites have been met, that they have an overall 2.75 GPA, and have achieved a 3.0 GPA in each of the prerequisite education courses (EDUC 230 and EDUC 231). Students must also successfully complete a Progress Interview with Education faculty members before being allowed to proceed in the minor.

Course Requirements

- Completion of Basic Competencies and Areas of Knowledge required for Liberal Arts and Sciences.
- Completion of appropriate academic major in the College of Professional Studies, College of Liberal Arts and Sciences, or School of Art and Design.

Adolescent and Business Education Specific Pedagogical Core

EDUC 345	Education Fieldwork	3
EDUC 405	Literacy in the Content Areas	3
EDUC 413	Using Literature in Intermediate/Adolescent Classrooms	3
EDUC 460	Seminar in Teaching and Professional Development	3
EDUC 462	Student Teaching for Middle/Adolescent Certification	12
EDUC 489	Current Teaching Methods: Middle Childhood/ Adolescence Subjects	3
SPED 456	Human Exceptionality	3

Plus specific general education core courses required for each New York State teacher certification.

Middle Childhood Certificate

Those Adolescent education students who wish to earn an additional certification in Middle Childhood must also complete EDUC 488 - Current Teaching Methods: Middle Childhood Subjects as well as additional fieldwork and student teaching hours in Middle Childhood placements.

Visual Arts Specific Pedagogical Core

EDUC 345	Education Fieldwork	3
EDUC 405	Literacy in the Content Areas	3
or EDUC 413	Using Literature in Intermediate/Adolescent Classrooms	3
EDUC 464	Seminar: Teaching & Profess Develop in Visual Arts	3
EDUC 463	Student Teaching-Art Education	12
EDUC 491	Methods and Curriculum in Art Education	3
SPED 456	Human Exceptionality	3

Plus specific general education core courses required for New York State teacher certification.

Additional Program Requirements for All programs leading to New York State Teacher Certification

Examinations:

**Academic Literacy Skills Test (ALST):*
Must be passed prior to Progress Interview

**Content Specialty Test (CST):*
The appropriate Content Specialty Test(s) for the appropriate developmental level(s) and certification area(s) must be passed prior to Progress Interview

**Educating All Students (EAS):*
Must be passed prior to student teaching

**Teacher Performance Assessment (edTPA):*
Completed during the student teaching semester; must be passed before a student will be recommended for certification

New York State Mandated Workshops:
All students must complete state required workshops in Child Abuse Identification and Reporting, School Violence Prevention and Intervention, and Training in Harassment, Bullying, Cyberbullying, and Discrimination in Schools: Prevention and Intervention (Dignity for All Students).

Fingerprinting/Background Check:
Program candidates applying for Initial (first) certification must complete a fingerprinting/background check. Fingerprinting information can be obtained from the Division of Education office.

Programs in Health and Human Performance

Students interested in careers in the growing fields of health, wellness, and athletics have choices at Alfred University. The College of Professional Studies offers Bachelor of Science degrees in Athletic Training and Health and Fitness Management and minors in Exercise Science and Sports Management (jointly offered by the School of Business). These programs provide interested students with the opportunity for concentrated study and clinical work experiences, preparing them for careers within the health and wellness professions. Students who desire careers in healthcare fields such as chiropractic, physical therapy, or physician's assistant, can work with their advisors to complete prerequisites for these graduate programs.

Athletic Training Program

The Athletic Training Program (ATP) is based on a Bachelor of Science degree in Athletic Training, plus fulfillment of all requirements for the Athletic Training Board of Certification (BOC) exam. Upon passing the BOC exam, the student will attain the qualification of a Certified Athletic Trainer.

Mission and Goals
The mission of the Athletic Training Program (ATP) at Alfred University is to provide the student with knowledge, standards, behavior models, code of ethics, and skills needed as an Athletic Trainer. The professional program is based on a solid foundation in allied health care arena, with a strong emphasis in the professional domains as outlined by the role delineation study

Goals of the ATP Program are as Follows:
1. Provide a quality, up-to-date educational curriculum.
2. Provide leadership and service to the university community through continuing education.
3. Promote self-directed learning and critical thinking as desirable professional behavior.
4. Encourage participation in the National Athletic Trainers' Association, New York State Athletic Trainers' Association, Eastern Athletic Trainers' Association, and other professional organizations, that will further enhance the students' educational opportunities.
5. Provide the educational means of developing knowledge in Cognitive, Affective and Psychomotor domains and Clinical Proficiencies.

Accreditation
Alfred University's Athletic Training Program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). The program has been placed on Probation as of February 19, 2016 by the CAATE, 6850 Austin Center Blvd., Suite 100, Austin, TX 78731-3101. The action was taken as the three-year aggregate average of first-time passing scores on the BOC exam has fallen below 70%. Removal of probationary status by CAATE will occur once the three-year aggregate first-time pass rate meets or exceeds the CAATE standard of 70%.

Program Acceptance Process
Students who are admitted to the Athletic Training major through the admissions application to Alfred University as first year students must successfully complete first year program requirements for full acceptance into the Athletic Training program. During the first year students enroll in the Athletic Training Basic Program (ATBP), complete a Technical Standards for Admission form, OSHA and HIPAA training, and a minimum of 50 clinical hours observing in the athletic training room under direct supervision of a certified staff athletic trainer. Upon successful completion of these program components, student can apply for full acceptance into the Athletic Training Program.

The directed observation period is comprised of two semesters. The emphasis in clinical directed observation is on the orientation and development of knowledge of the respective roles of Athletic Training personnel, and limited performance and/or direct application of technical skills and knowledge. Students are given an opportunity to observe athletic trainers working in these domains:

- Injury/Illness Prevention and Wellness Protection
- Clinical Evaluation and Diagnosis
- Immediate and Emergency Care
- Treatment and Rehabilitation
- Organization and Professional Health and Well-being

Near the end of the mandatory directed observation period, the prospective athletic training student may apply for acceptance into the Athletic Training Program (ATP). Application to the ATP level consists of submission of a résumé, immunization records, proof of a physical examination from a physician, intent to enroll, three letters of recommendation, transcripts, and evidence of successful completion of all requirements of the ATBP. Interviews with the program faculty are also required. In order to be considered for acceptance into the ATP the student must:

- have a cumulative grade-point average of 2.75 with a grade-point average of 3.00 or better in the courses included within the ATBP
- provide proof of current American Red Cross First Aid, CPR and AED For the Professional Rescuer certifications or certification as an Emergency Medical Technician.
- provide proof of Hepatitis-B vaccination or declination statement
- provide proof of physical examination by a physician
- complete an Athletic Training Program Technical Standards for Admission form
- complete an Athletic Training Program Application
- submit three (3) letters of recommendation
- undergo a formal interview with AU ATP faculty
- completion of 50 verified hours of supervised clinical experience and observation at Alfred University or approved affiliate

- active member of the Alfred University Athletic Training Club
- maintain student membership in the National Athletic Trainers' Association
- completion of required program forms as outlined on the ATP application checklist

Alfred University and the Division of Athletic Training are committed to the highest principles of academic and personal integrity concerning the application and admissions process of the Athletic Training Program. Therefore, an athletic training student may be given provisional acceptance or denied altogether based upon any of the following grounds:

- a cumulative grade-point average lower than 2.75
- a cumulative ATBP grade-point average lower than 3.0 or a grade below a "C" in any of the ATBP courses
- incomplete application (missing one or any of the following: letter of application, résumé, letters of recommendation, transcripts
- failure to complete basic athletic training competencies
- lack of a minimum of 50 hours of accepted verified clinical experience
- failure to provide adequate proof of first aid/CPR/AED certification
- failure to provide proof of Hepatitis-B vaccination or declination statement
- failure to complete required program application forms
- Complete and successfully pass the entrance examination.

Entrance Examination Policy
All students applying for acceptance into the Alfred University Athletic Training program will be required to take the entrance examination. The examination will evaluate students' knowledge of basic entry level skills taught in ATHT 103, 105, 110, & 111. Students will be required to pass the examination with minimum score of 75%. Students failing to meet the required 75% will be allowed one additional attempt. The scores will not be used as the only criterion for acceptance into the program, but will provide additional information to the selection committee.

Provisional Admission
Special circumstances may arise where a student may be accepted provisionally to the Alfred University Athletic Training Program, based on one of the conditions listed above. This category of acceptance is only utilized when students are extremely close to meeting a specific admission criterion. Athletic training students accepted on a provisional status will be notified in writing. In this instance, students will be given very clear objective criteria, which must be satisfied for full acceptance. The student-specific set of goals/criteria must be met during the succeeding semester in order to maintain their position in the Athletic Training Program. During this time, the student must demonstrate continued progress toward the goal and eventual achievement. If the criterion is not met within the allotted time, the athletic training student will be downgraded to non-accepted status. This student must then re-apply to the program for re-acceptance.

Second-Chance Provision
A student not accepted into the Alfred University ATP may reapply. This opportunity is intended for those who failed to gain admission on their first attempt. The student must formally submit a request to exercise the second chance provision. This request must be submitted no more than one (1) month after receipt of the denial notification. If not submitted in due time, the student waives the right to second chance provision and must reapply by means of the Athletic Training Program Admission policy.

The second chance provision consists of one additional semester for the student to demonstrate that he or she is capable of meeting the entrance requirements. The exact requirements to be met will be outlined in the letter of denial. Students will then submit a letter detailing how the deficiencies have been successfully addressed since denial of admission, have a follow-up interview with the Division of Athletic Training faculty/staff and submit two additional support letters of recommendation.

Appeals Process

Students not accepted into the ATP have the right to appeal to the Division of Athletic Training Program Director. It is anticipated that admission to the program by this route will be rare except in extenuating circumstances. A letter of appeal must be submitted no later than one (1) month following denial. It must detail the grounds for appeal. The letter will be reviewed by the Athletic Training Appeals Committee (comprised of the Program Director, full-time Division of Athletic Training faculty/staff and the Dean of the College of Professional Studies) and ruled upon. The Division of Athletic Training faculty/staff reserves the right to determine the propriety of grounds for appeal based on the facts presented on a case-to-case basis.

A letter regarding the decision of the appeals committee will then be mailed to the student no later than two (2) months following the original denial/non-admission letter. The decision of the Appeals Committee is *final*.

Student Transfer Policy

Freshman or sophomore athletic training students applying for transfer to Alfred University from another institution having prior athletic training clinical experience must also complete the aforementioned criteria for acceptance (ATBP prerequisites including 50 supervised clinical experience hours). If a student transfers with prior athletic training clinical experience, she/he may petition to have the 100 hour directed observation requirement prorated, accordingly. The candidate must submit a letter of recommendation documenting his/her clinical experience hours from his/her former supervising certified athletic trainer. Once completing the prerequisite courses, the student may apply (following the application process outlined) for admission into the Athletic Training Program (ATP). These prerequisite courses must be taken at Alfred University; therefore, credit for these courses may not transfer from another institution. All transfer students will be evaluated on an individual basis for admittance to the ATBP.

Athletic training students who have completed their second year of athletic training courses or beyond at another institution and are applying for admission to Alfred University will not be considered for transfer into the ATP. The Alfred University Athletic Training Program currently does not allow juniors or seniors to transfer into the ATP.

Academic Requirements

Once a student is formally accepted into the ATP, he/she must adhere to the following guidelines and policies:

- Students must maintain admission requirements in order to remain in the program. Failure to maintain the published requirements will result in the student being placed on Athletic Training Program Probation.
- If placed on AT Program Probation, the student will have one semester to correct deficiencies. If she/he fails to correct deficiencies, the student will be suspended from the program.

- During suspension from the ATP, the student will not be permitted to pursue additional athletic training classes or accumulate additional clinical hours unless given written permission from the Division of Athletic Training Program Director.

Curriculum Requirements for BS in Athletic Training

Students complete the Basic Program and the Athletic Training Program (below), the College of Professional Studies General Education Program, the University Physical Education and Global Perspective Requirements, and enough electives to reach at least 124 credit hours.

AT Basic Program Course Requirements (ATBP):

ATHT 103	Prevention and Care of Athletic Injuries	4
ATHT 103L	Laboratory – Prevention and Care of Athletic Injuries	0
ATHT 104	Introduction to Clinical Experience	1
ATHT 105	Perspectives on Athletic Training	1
ATHT 110	Medical Sciences	2
ATHT 111	Emergency Medicine in Athletic Training	3
ATHT 111L	Laboratory – Emergency Medicine in Athletic Training	0
ATHT 205	Structural Kinesiology	3
ATHT 205L	Laboratory – Structural Kinesiology	0
ATHT 210	Advanced Athletic Training	3
Total credit hours		**17**

Athletic Training Continuing Program Requirements:

ATHT 190	Principles of Strength Training and Reconditioning	2
ATHT 201	Clinical Experience in Athletic Training I	1
ATHT 202	Clinical Experience in Athletic Training II	1
ATHT 215	Personal Health and Wellness	2
ATHT 222	Nutrition for Human Performance and Exercise	2
ATHT 265	Therapeutic Applications I	3
ATHT 265L	Laboratory – Therapeutic Applications I	0
ATHT 276	Therapeutic Applications II	3
ATHT 276L	Laboratory – Therapeutic Applications II	0
ATHT 301	Clinical Experience in Athletic Training III	1
ATHT 302	Clinical Experience in Athletic Training IV	1
ATHT 310	Orthopedic Procedures	2
ATHT 334	Physical Evaluation of the Lower Extremity	3
ATHT 334L	Laboratory –Physical Evaluation of the Lower Extremity	0
ATHT 348	Physical Evaluation of the Upper Extremity	3
ATHT 348L	Laboratory – Physical Evaluation of the Upper Extremity	0
ATHT 392	Biomechanics	2
ATHT 393	Physiology of Exercise	3
ATHT 401	Clinical Experience in Athletic Training V	1
ATHT 403	Medical Aspect of Athletic Training	1
ATHT 420	Pharmacology	2
ATHT 432	Organization and Administration of Athletics	2
ATHT 459	Research Design in Athletic Training I	2
ATHT 469	Research Design in Athletic Training II	1
ATHT 485	Clinical Internship in Athletic Training	4
ATHT 490	Senior Seminar in Athletic Training	1
ATHT 495	Current Topics in Athletic Training	2
BIOL 207	Human Anatomy & Physiology/Lab I	4
BIOL 208	Human Anatomy & Physiology/Lab II	4
BIOL 150	Biological Foundations	4

CHEM 105	General Chemistry I	4
COMM 101	Introduction to Communication Studies	4
or COMM 210	Interpersonal Communication	
or COMM 302	Public Relations Principles	
or COMM 409	Organizational Communication	
PSYC 101	Introduction to Psychology	4
PSYC 220	Psychological Statistics and Methods	4
or POLS 230	Introduction to Data Analysis and Statistics	
or SOCI 230	Introduction to Data Analysis and Statistics	
PSYC 322	Health Psychology	2-4
PSYC 330	Neuropsychology	4
Total credit hours		**78-80**

Athletic Training Hours Requirements
Upon successful completion of the ATBP, the athletic training student must complete an additional minimum 900 verified clinical experience hours while occupying a place in the ATP. The Division of Athletic Training faculty/staff assigns clinical hours according to individual class schedules. Attendance is mandatory for all assigned clinical experiences. Athletic training students are required to obtain a minimum of 50 to 200 hours depending on the level of the clinical experience course enrolled each semester.

Preceptor Assignments
While enrolled in Clinical Experiences I-V the athletic training student will be assigned to a Clinical Preceptor. Each preceptor is responsible for a specific athletic team or clinical patient load. The athletic training student is responsible for attending all scheduled practices and home competitions and other assigned clinical times as mandated by the individual preceptor.

Each student will be given the opportunity to obtain hours within the parameters of upper extremity, lower extremity, general medical and equipment intensive environments that also encompass varying patient genders and ages.

Absences from Assigned Duties
An *Absence from Clinical Assignment* form must be completed by any athletic training student a minimum of three (3) days before a missed practice or competition. The form will be reviewed by the appropriate preceptor and returned within 24 hours with a verdict. If the absence is excused, the athletic training student is responsible for finding a qualified athletic training student replacement and notifying the appropriate preceptor. If an absence is unexcused, the athletic training student will be subject to the disciplinary policy outlined in the Athletic Training Student Handbook. Students must also remain active when obtaining clinical hours. A minimum of 5 clinical hours per-week are required for successful completion of the enrolled Clinical Experience course.

Athletic Training Student Evaluations
Athletic training students will be evaluated twofold each semester (mid-term and end-of-semester) by their respective preceptor. Self-evaluations will also be completed at this time. The preceptor will also complete individual evaluations in each of the six Clinical Experience courses.

Athletic training students enrolled in ATHT 485-Clinical Internship in Athletic Training, will be evaluated by the Clinical Instructor Supervisor or assigned Clinical Preceptor at each site where clinical experience hours are obtained.

Likewise, athletic training students will be given the opportunity to evaluate both their preceptor and Clinical Instructor Supervisor. The evaluation process is utilized to assess the progress of each student's didactic knowledge and application of both educational competencies and clinical proficiencies. The Clinical Education Coordinator of the Athletic Training Program reviews all evaluations with each student and preceptor.

Senior Comprehensive Examination Policy
As part of an ongoing effort by the Alfred University Athletic Training Program (AU ATP) to ensure students are prepared to take the BOC, Inc. examination at the end of their senior year, the AU ATP has created a senior comprehensive examination. The examination is designed to evaluate the student's knowledge of entry level athletic training skill and knowledge. The examination will be used to assist the AU ATP in determining a candidate's readiness for certification. With current mandates set forth by the Commission on Accreditation of Athletic Training Education, the AU ATEP will be required to document and demonstrate a 70% first time pass rate on the BOC, Inc. examination. As a result, only qualified and prepared students will be endorsed for this examination prior to graduation.

The senior comprehensive exam will consist of both a 200 question written test and a practical examination on all Athletic Training courses and clinical experiences taken within the AUATP. Students will have two opportunities to pass the senior comprehensive exam. Failure to pass this exam on the second attempt will disqualify students from being endorsed by the Program Director to take the BOC, Inc. exam prior to graduation.

Students must receive scores of 75% or better on the written and practical exam separately before they can be endorsed by the Program Director and therefore, eligible to take the BOC, Inc. examination. The grades for the written and practical exam will be calculated into the student's grade for ATHT 490 Senior Seminar in Athletic Training.

Sophomore and Junior Review:
At the end of the each semester of the sophomore and junior year, students will be evaluated through either clinical experience evaluations, academic review or comprehensive examination. . Students not meeting the requirements set by the program will be placed on probation. The comprehensive examination will be offered at the end of the year will be a portion of the grade for either ATHT 202 or ATHT 302. Students must obtain a score of 75% or better in order to successfully pass the enrolled clinical experience course.

Additional Program Costs:
There are costs associated with being enrolled in the ATP that are in addition to typical university costs such as tuition, room, board, and books. Typical fees associated with the ATP include but are not limited to: lab fees, personal liability insurance, immunization maintenance, apparel to adhere to dress code(s), student membership fees for the National Athletic Trainers Association during sophomore, junior and senior years in the program, and travel to and from off-campus clinical assignments and internships. A specific breakdown of additional program costs can be found on the Division's homepage.

Professional Organization Membership
Athletic training students are required to enroll in the National Athletic Trainers' Association (NATA) and the New York State Athletic Trainers' Association (NYSATA) by the end of the sophomore year. Only students who have been members for at least one year are eligible to be considered for scholarships offered by these organizations. All ATP students are encouraged to join the NATA and NYSATA. Membership applications are available from the Athletic Training Program Director.

Health Fitness Management (HFMT)

The Bachelor of Science (B.S.) in Health Fitness Management combines health studies with biology and science foundations and business concepts. The program includes a field experience and internship sequence, which provides the opportunity for guided clinical practice working with client populations in real world settings. The coursework and field experiences are designed so that graduates of the Health Fitness Management program will have fulfilled educational requirements for certifications from the National Strength and Conditioning Association (NSCA), the American College of Sports Medicine (ACSM), and the National Academy of Sports Medicine (NASM). Students graduating as health and fitness managers may pursue careers in corporate wellness, public and private fitness and wellness, or special population fitness and wellness. Students will also be prepared for a variety of health-related graduate studies, ranging from Physical Therapy to Exercise Science.

Mission and Goals

The mission of the Health Fitness Management major at Alfred University is to provide the student with knowledge, standards, behavior models, code of ethics, and skills needed as a fitness and wellness professional. Combining health and sciences studies with a basic business background, students will be prepared for careers in a variety of health or fitness settings.

Goals of the Program include:
1. Provide a quality, up-to-date educational curriculum.
2. Provide leadership and service to the university community through continuing education.
3. Promote self-directed learning and critical thinking as desirable professional behavior.
4. Exploration of a variety of health, fitness, and wellness settings to allow students the opportunity to determine specific career goals

Curriculum Requirements

Students must complete the coursework requirements for the B.S. in Health Fitness Management, all College of Professional Studies General Education requirements, and the Alfred University requirements for Physical Education and Global Perspective Requirements, plus enough electives to reach at least 120 credit hours.

Business Foundations Courses		**15 credits**
ACCT 211	Financial Accounting	3
MKTG 221	Marketing Principles	3
LAW 241	Legal Environment of Business	3
MGMT 328	Management and Organizational Behavior	3
ECON 420	Healthcare Economics and Reimbursement	3

Athletic Training Foundations Courses		**28 credits**
ATHT 105	Perspectives in Athletic Training	1
ATHT 110	Medical Sciences	2
ATHT 111	Emergency Medicine in Athletic Training	3
ATHT 190	Principles of Strength and Conditioning	2
ATHT 205	Structural Kinesiology	3
ATHT 215	Personal Health and Wellness	2
ATHT 222	Nutrition for Human Performance	2
ATHT 242	Sports, Society, and Ethics	3
ATHT 392	Biomechanics	2
ATHT 393	Physiology of Exercise	3
ATHT 432	Organization & Administration of Athletics	2
ATHT 459	Research Methods I	2
ATHT 469	Research Methods II	1

Health and Fitness Management Courses		**17 credits**
HFMT 305	Field Experience	1
HFMT 405	Program Design & Implementation Lab	3
HFMT 420	Health Assessment of Special Populations	3
HFMT 410	Exercise Prescription and Lab	3
HFMT 485	Health Fitness Management Internship	3
HFMT 490	Senior Seminar in Health Fitness Management	2
HFMT 495	Health Promotion Program Design	2

General Education Courses		**23 credits**
BUSI 113	Business Statistics (Quantitative Skills)	3
COMM 101	Intro to Communications (Social Sciences)	4
ENGL 101	Writing I (Communication Skills)	4
ENGL 102	Writing II (Communication Skills)	4
BIOL 150	Biological Foundations (Natural Sciences)	4
Humanities Elective		4

Required Liberal Arts and Sciences Courses		**22-24 credits**
BIOL 119	Physiology of Aging	4
BIOL 207	Intro to Anatomy & Physiology I	4
BIOL 208	Intro to Anatomy & Physiology II	4
GERO 108	Introduction to Adult Aging and Development	4
PSYC 101	Intro to Psychology	4
PSYC 322	Health Psychology	2-4
Liberal and Science Additional Electives		4-6

Additional Open Electives	**10 minimum**

Clinical Experiences

Health and fitness management students learn about practice settings and strong skills in working with clients in applied settings through a sequence of clinical experiences. Evaluation of student competencies in applied settings assures that students have integrated key skills and are ready for clinical practice. Students will be evaluated at clinical experience sites during HFMT 305: Field Experience and HFMT 485: Health Fitness Management Internship by their site supervisors. This evaluation will consist of quantitative and qualitative measures identifying a student's abilities, knowledge, and professional skills in each clinical setting. The scores of these evaluations will contribute to the grades for their respective classes, and will become part of their professional portfolio.

Additional Program Costs:

There are costs associated with being enrolled in the HFMT Program that are in addition to typical university costs such as tuition, room, board, and books. Typical fees associated with HFM may include but are not limited to: lab fees, personal liability insurance, immunization maintenance, apparel to adhere to dress code(s), student membership fees for the professional organizations (NSCA, ACSM, NASM, etc.), and travel to and from off-campus clinical assignments and internships.

Health and Human Performance Minors

Students from any curriculum area at Alfred University are permitted to enroll in the minors. These minors allow students to combine interests in a variety of study areas, while maintaining a focus on fitness and wellness.

Requirements for the Sports Management minor

(see School of Business section, p. 166)

Requirements for the Exercise Science minor

The minor provides students with the ability to address the growing concerns of society about injury prevention, wellness, fitness, and rehabilitation. Additionally, it is designed to prepare students to become certified Strength and Conditioning Specialists recognized by the National Strength and Conditioning Association.

Required Courses:

ATHT 103	Prevention and Care of Athletic Injuries	4
ATHT 103	Laboratory – Prevention and Care of Athletic Training	0
ATHT 111	Emergency Medicine in Athletic Training	3
ATHT 111	Laboratory – Emergency Medicine in Athletic Training	0
ATHT 190	Principles of Strength and Reconditioning	2
ATHT 205	Structural Kinesiology	3
ATHT 205	Laboratory – Structural Kinesiology	0
ATHT 215	Personal Health and Wellness	2
ATHT 222	Nutrition for Human Performance and Exercise	2
ATHT 393	Physiology of Exercise	3
BIOL 207	Introduction to Anatomy and Physiology I	4
BIOL 208	Introduction to Anatomy and Physiology II	4
Total Credit Hours		**27**

List of Approved Courses for General Education Program

These courses have been determined to meet the general education requirements and liberal arts electives requirements for the College of Professional Studies. Please note that some courses may not be offered each semester; the course schedule must be consulted to determine availability of specific courses.

First Year Seminar
ATHT 105, BUSI 105 or EDUC 105

Written Communication
ENGL 101, 102

Quantitative Reasoning
BIOL 226
BUSI 113, 261
ENVS 205
MATH 101, 102, 104, 107, 151
MIS 101,
POLS/SOCI 230
PSYC 220

Humanities
ARTH – all 300-level courses
CHIN 101, 102, 201, 202
COMM 205, 321, 404, 405, 412
DANC 211
ENGL 202, 204, 205, 206, 211, 212, 213, 214, 215, 216, 219, 221, 225, 226, 233, 240, 243, 251, 252, 254, 256, 275, 277, 278, 281, 290, 292, 293, 328, 400, 407, 408, 410, 411, 412, 413, 414, 415, 422, 431, 432, 433, 434, 442, 445, 459, 472, 473, 474, 475, 476, 481
FREN 101, 102, 201, 202, 210, 301, 302, 310, 311, 312, 313, 316, 360, 410, 420
GLBS 212
GRMN 101,102
HIST 107, 110, 111, 120, 121, 151, 200, 300, 211, 212, 301, 302, 303, 306, 307, 308, 309, 312, 315, 316, 318, 319, 320, 321, 322, 324, 325, 326, 327, 328, 359, 365, 371, 372, 375, 376, 377, 383, 387, 388, 421
IART 120
ITAL 101, 102
LATN 101, 102
MUSC 110, 120, 211, 212, 213, 214, 220
PHIL 101, 201, 281, 282, 283, 309, 310, 311, 312, 315, 321, 328, 340, 341, 359, 382, 383, 388, 400
POLS 340, 341
PSYC 309
RLGS 105, 165, 240, 251, 252, 254, 300, 307, 308, 319, 359, 369, 374
SPAN 101, 102, 201, 202, 210, 212, 301, 311, 312, 315, 316, 360
THEA 110, 205, 210, 212, 220, 311, 312
WGST 254, 256, 324, 382, 408, 412, 481

Natural Sciences
ASTR 103, 107, 302, 303, 304, 307
ATHT 205, 222, 392
BIOL 106, 119, 130, 140, 150, 207, 208, 230
CHEM 105,106, 310, 315,316, 321, 343, 345, 346, 372, 374, 420, 422,423, 457, 461

ENVS 101, 105, 120, 210, 351, 357
GEOL 101, 103, 104, 106, 109, 110, 201210, 220, 301, 302, 307, 408, 414, 464
GLBS 105
PHYS 111, 112, 125, 126, 325, 326, 341, 401, 402, 421, 423, 424
SCIE 110, 111, 115, 117, 127

Social Sciences
ANTH 110, 120, 302, 303, 304, 305, 309, 312, 320, 495
BIOL 305
COMM 101, 110, 210, 220, 221, 237, 301, 302, 306, 309, 311, 315, 401, 409, 410, 411, 465
CRIM 322, 332, 340, 351
CSCI 220, 320
ECON 201, 202, 312, 331, 412, 445, 462
ENVS 102, 201, 204, 205, 220, 240, 241, 245, 312, 320, 415
GERO 118, 429
GLBS 101, 221, 305, 315, 323, 495
HIST 323
POLS 110, 120, 214, 220, 232, 236, 237, 238, 242, 246, 251, 253, 271, 273, 282, 313, 316, 318, 331, 346, 347, 355, 411, 417, 431
PSYC 101, 118, 210, 230, 251, 261, 262, 282, 302, 311, 320, 322, 330, 332, 341, 342, 351, 371, 372, 389, 411, 429, 471, 472
SOCI 110, 235, 236, 237, 242, 245, 253, 343, 344, 346, 347, 348, 349, 420, 431, 495
WGST 101, 246, 253, 320, 346, 348, 372, 465

Note: This is a list of all approved courses that may be offered. The list of courses to be offered in a particular semester or summer term appears in the Class Schedule for that term on AU BannerWeb: (https://banweb.alfred.edu).

University Courses

COOP 385 - Cooperative Education 3 hours. Students are employed off-campus in a position directly related to their academic and career goals. Off-campus arrangements are handled by the Career Development Center. May be repeated one time for credit, but not usually in two consecutive semesters. Prerequisite: Junior standing.

OCST 301 - Study Abroad Preparation and Review 2 hours. Students acquaint themselves with the country and culture they will be visiting through readings related to their country, online monitoring of newspapers in the host country, and weekly discussions. Students are expected to be able to address a current world issue through the lens of their host country. Cross-cultural simulations are used to facilitate discussions of issues related to ethnocentrism and stages of cultural adjustment. During the class, and while they are abroad, students keep an online, weekly reflective journal. Health and safety issues are addressed as well as the details related to a trip abroad, such as passports and visas. A wrap-up class follows during the returning semester. Offered in the second-half of each semester (B-Block).

UNIV 100 - Special Topics 0-4 hours.

UNIV 101 - The Alfred Leadership Experience 2 hours. The Social Change Model provides the guiding force and foundation for this skill-based course in leadership development. The goal is to develop each student's capacity to serve and work together toward positive change within institutions and communities. Students further apply these concepts to the creation of positive change within diverse groups. Class work is interactive and reflective, cultivating a personal and creative expression of leadership for each student.

UNIV 102 - Career and Professional Success 1 hour. In this course students develop and hone their job search skills. This includes creating and implementing a job search plan, resume and cover letter development, professional etiquette and business protocol, company research, effective networking, "dressing for success," interviewing and salary negotiation, and transitioning from college to the world of work. Students have an opportunity to connect both formally and informally with employers, alumni, and students through dinners, networking receptions, career events, and panel discussions.

UNIV 107 - Wilderness Immersion and Leadership Discovery 2 hours. This leadership development and service learning course takes place entirely outdoors with a focus on problem solving, teamwork, and leadership skills facilitated through experiential elements such as friction fire building, survival and rescue, wilderness first aid, shelter construction, and more.

UNIV 110 - Drawn to Diversity 2 hours. The D2D program uses the CRAFT Model (Contact, Research, Action, Feedback, and Teaching) to produce Community Based-Art, which strives to strengthen a community by providing a creative outlet for all voices to be respectfully shared.

UNIV 115 - Concepts of Service Learning 3 hours. This course combines weekly class meetings with weekly service hours spent in the local community in an exploration of what it means to be engaged in service learning as a way of accomplishing and demonstrating civic engagement. Each student selects a service project to satisfy the main requirement of at least 4 hours of service work per week. The class meets together 1 hour per week to discuss assigned readings and each other's reflections, written and oral. Service projects vary from term to term.

UNIV 200 - Special Topics 1-4 hours.

UNIV 205 - Living Well 2 hours. Students learn evidence-based interventions to improve their wellness. Students discover how to view wellness in a holistic way; focus is on the mind-body connection.

UNIV 400 - Special Topics 1-4 hours.

UNIV 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

Physical Education

Activity Courses

Note: All 100-level PHED courses and some Equestrian and Dance courses can be applied to the University Physical Education requirement.

PHED 100 - Special Topics 2 hours. Offerings vary year to year depending on the availability of faculty with expertise in the particular lifetime sport activity. Typical offerings might be Cross Country Skiing, Orienteering/ Snowmobiling, Cycling. (PE requirement)

PHED 101 - Cross Training 2 hours. Combined weight training exercises and cardiovascular activities designed to improve strength. flexibility, cardiorespiratory fitness, and body composition. (PE Requirement)

PHED 103 - Cardiovascular Fitness 2 hours. An exposure to a variety of aerobic activities with emphasis on improved cardiovascular fitness and knowledge of scientific principles needed to attain an improved level of cardiovascular fitness. (PE Requirement)

PHED 105 - Beginning Badminton 2 hours. Emphasis on the effective use of the racquet, court coverage and position play, strategy, rules, and historical background. Opportunity for regular student participation in singles and doubles games. Class tournaments arranged. (PE Requirement)

PHED 108 - Introduction to Yoga 2 hours. Derived from the Sanskrit word yuj, "yoga" means "union". To practice yoga is to reunite body, mind, and spirit. This course will focus on the first of the Three Stages of Kripalu Yoga practice. Stage One introduces yoga postures (asanas) and breathing techniques (pranayama). Special attention will be given to safety, alignment, and the coordination of breath and movement. The only prerequisite is a commitment to develop a daily practice. (PE Requirement)

PHED 110 - Downhill Skiing 2 hours. Downhill skiing class for beginner to advanced skiers. Instruction is provided by Swain Ski Resort Instructors. Students are grouped according to ability level for lessons. A fee is assessed to cover the cost of skiing and transportation to/from the Swain Ski Resort. (PE Requirement)

PHED 112 - Beginning Golf 2 hours. Basic fundamentals of swing, grip and putting introduced. Opportunity for practical application indoors followed by several experiences at a golf course. Rules and etiquette of the game fully covered. (PE Requirement)

PHED 113 - Snowboarding 2 hours. Snowboarding class for beginner to advanced snowboarders. Instruction is provided by Swain Ski Resort Instructors. Students are grouped according to ability level for lessons. $180.00-$200.00 fee to cover costs. (PE Requirement)

PHED 115 - Total Fitness 2 hours. Through lecture and participation in a specific and progressive exercise program, students experience what total fitness is, why it is important to establish life-long skills, and how to safely and effectively increase their levels of fitness. (PE Requirement)

PHED 118 - Weight Training 2 hours. A scientific look at several types of weight training programs and selection of one, based on individual needs, to be used throughout the semester. (PE Requirement)

PHED 125 - Karate 2 hours. Physical conditioning and discipline through experiencing offensive and defensive karate techniques. Students become familiar with common self-defense maneuvers and are introduced to the Kata (formal exercises of martial arts). Included are martial arts history, tradition and etiquette. (PE Requirement)

PHED 129 - Beginning/Intermediate Swimming 2 hours. An exposure to the basic strokes with emphasis on achieving confidence in the water. Opportunity to perfect strokes and increase endurance. (PE Requirement)

PHED 130 - Advanced Swimming 2 hours. Advanced strokes and swimming skills are presented along with some racing and diving techniques. Prerequisite: PHED 129 or permission of instructor. (PE Requirement)

PHED 131 - Lifeguard Training 2 hours. An American Red Cross course providing the necessary minimum skills and knowledge individuals need to qualify and serve as a non-surf lifeguard. Not intended to be a complete lifeguard training program. Prerequisite: PHED 130 or passing qualifying test. (PE Requirement)

PHED 133 - Basic Tennis 2 hours. Group presentation of basic strokes, simple strategy and rules, provides beginners with early opportunities for singles and doubles play. Students are screened by instructor to determine beginner's status. (PE Requirement)

Reserve Officers Training Corps Military Science Program

Courses offered at St. Bonaventure University - available to AU students through cross-registration. Contact the AU Registrar's Office for additional information.

MS 101 - Foundations of Officership 2 hours. The purpose of this semester is to introduce cadets to fundamental components of service as an officer in the United States Army. These initial lessons form the building blocks of progressive lessons in values, fitness, leadership, and officership. Additionally, the semester addresses "life skills" including fitness, communications theory and practice (written and oral), and interpersonal relationships. (Fall)

MS 102 - Basic Leadership 2 hours. This course builds upon the fundamentals introduced in the previous semester by focusing on leadership theory and decision-making. "Life skills" lessons in this semester include: problem solving, critical thinking, leadership theory, followership, group interaction, goal setting and feedback mechanisms. (Spring)

MS 201 - Individual Leadership Studies 2 hours. Building upon the fundamentals introduced in the first year, this instruction delves into several aspects of communication and leadership theory. The use of practical exercise is significantly increased and cadets are increasingly required to apply communications and leadership concepts. Virtually the entire semester teaches critical "life skills." The relevance of these life skills to future success in the Army is emphasized throughout the course. (Fall)

MS 202 - Leadership and Teamwork 2 hours. The final semester of the Basic Course focuses principally on officership, providing an extensive examination of the unique purpose, roles, and obligations of commissioned officers. It includes a detailed look at the origin of our institutional values and their practical application in decision-making and leadership. (Spring)

MS 301 - Leadership and Problem Solving 2 hours. The MSL 300 level curriculum is intended to build leadership competencies and facilitate the cadet's initial demonstration of individual leadership potential at LDAC, while also preparing cadets for their future responsibilities as officers. The 300 level instruction uses small unit infantry tactics as the context for the development and assessment of leadership. While a measure of technical and tactical understanding of small unit operations is necessary, the focus of instruction is on the leadership competencies. (Fall)

MS 302 - Leadership and Ethics 2 hours. (Course and Lab) The final semester of the third year continues focusing on doctrinal leadership and tactical operations at the small-unit level. This critical semester synthesizes the various components of training, leadership, and team building. The MS 302 curriculum complements progression through the cadet's campus evaluation process and in the culminating event of the MSL III year in the field training environment of the Leaders Development Assessment Course (LDAC). (Spring)

MS 401 - Leadership and Management 2 hours. This semester of the Advanced Course concentrates on leadership, management, and ethics, and begins the final transition from cadet to lieutenant. The course focuses cadets, early in the year, on attaining knowledge and proficiency in several critical areas they will need to operate effectively as Army officers. (Fall)

MS 402 - Officership 2 hours. The final semester focuses on completing the transition from cadet to lieutenant. The course starts with a foundation in the legal aspects of decision-making and leadership. Following modules reinforce the organization of the Army and introduce how the Army organizes for operations from the tactical to strategic level. The Capstone Exercise requires the cadets, both individually and collectively, to apply their knowledge to solve problems and confront situations commonly faced by junior officers. (Spring)

College of Liberal Arts and Sciences

Anthropology

ANTH 110 - Cultural Anthropology 4 hours. This introductory course surveys the human condition in anthropological perspective. Emphasis is on the nature of culture, sociocultural evolution, human ecology, theoretical strategies, kinship, descent, gender, language, and belief systems. (E3) (GP)

ANTH 120 - Human Origins 4 hours. An introduction to physical anthropology surveying evolutionary theory as applied to humans. Special emphasis on non-human primates, fossil man (hominid evolution) and the diversity of modern human populations. (E3)

ANTH 200 - Special Topics 1-4 hours. An open course varying in content from year to year which allows concentration in specialized areas.

ANTH 300 - Special Topics 1-4 hours. An open course varying in content from year to year which allows concentration in specialized areas.

ANTH 302 - The Nacirema 4 hours. American culture and society in cross-cultural perspective. This course emphasizes themes observed by international visitors and by anthropologists in cross-national studies. ANTH 110 recommended as a prerequisite.

ANTH 303 - Health and Culture 4 hours. An examination of the interaction of culture and biology in the broad realm of physical and mental health and illness. Topics include non-Western healers and healing practices, theories of disease and healing, cultural psychiatry, and epidemiology. Prerequisite: ANTH 110. (GP)

ANTH 304 - Language and Culture 4 hours. An introduction to anthropological linguistics emphasizing the origin, nature and evolution of human language; the Sapir-Whorf hypothesis, sociolinguistics (especially the linguistic aspects of gender and class), and nonverbal behavior. Prerequisite: ANTH 110. Recommended: 200-level foreign language course. (GP)

ANTH 311 - Nip, Tuck, Perm, Pierce, Tattoo, Embalm: Adventures with Embodied Culture 2 hours. People the world over modify their bodies in prescribed ways. This course examines the body from head to toe in far-flung cultures, but especially in the U.S., asking, “How”? “Why? and “What does it mean”? (Cross-listed as GLBS 311)

ANTH 312 - Violence and Culture 4 hours. Investigates violence in traditional and modern societies. Topics include ritualized violence, gender, the sociocultural construction and reinforcement of violent behavior in the United States, and programs aiming to reduce levels of violence. Prerequisite: ANTH 110 or SOCI 110 and junior or senior standing. (GP)

ANTH 400 - Special Problems in Anthropology 1-4 hours. An open course varying in content from year to year which allows concentration on such specialized areas as gender and society, anthropological theory and methods, native cultures of North America, demography, and the like. Prerequisites: SOCI 110 or ANTH 110 and junior or senior standing or permission of instructor. (Sufficient demand)

ANTH 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

ANTH 470 - Field Work 2-4 hours. Supervised on-site field work on an approved topic. Prerequisites: ANTH 110, junior or senior standing, and permission of instructor.

ANTH 495 - Global Issues Seminar 4 hours. This integrative capstone course allows seniors to study a variety of global issues in-depth and to present the results of their own particular global experiences and studies. Topics examined will vary from year to year. The seminar may be focused on a central theme or on a variety of issues, depending upon the students' international interests and the instructor's discretion. Prerequisites: GLBS 101; Study Abroad; senior standing. (Cross-listed as GLBS 495 and SOCI 495) (GP)

Astronomy

ASTR 103 - Introductory Astronomy 4 hours. This course is a general survey of astronomy including our solar system, the nature of stars, the structure of galaxies, and cosmology, including the nature of Dark Matter and Dark Energy. (F2) (F-II)

ASTR 107 - Elementary Astronomy Lab 2 hours. Observation, supplemented by discussion of topics such as types of telescopes and auxiliary equipment, use of the Observatory, celestial coordinates and the use of reference materials, astronomical photography. (F1) (F-I)

ASTR 200 - Special Topics in Astronomy 1-4 hours. Topics vary from year to year. (Sufficient demand)

ASTR 302 - Planetary Science 2 hours. A quantitative and comparative study of the planets, moons and small bodies of the Solar System, this course includes the physics of the interiors, surfaces, and atmospheres of the terrestrial planets/moons, and of the atmospheres and rings of the Jovian planets. Also includes the physics of planetary formation and the latest findings of probes currently exploring the Solar System. Prerequisite: One year of college level physics. (Sufficient demand)

ASTR 303 - Stellar Astronomy 3 hours. Part of an astronomy sequence recommended for students in the physical sciences and area science teachers. Emphasis on the observational and theoretical basis for understanding stellar structure and evolution, beginning with the Sun. Prerequisite: One year of college level physics and MATH 151. (Sufficient demand)

ASTR 304 - Galactic Astronomy and Cosmology 4 hours. Part of an astronomy sequence recommended for students in the physical sciences and area science teachers. Emphasis on the observational and theoretical basis of our knowledge of the Universe on the large scale. Topics include the structure of the Milky Way Galaxy, active and passive galaxies, and Cosmology. Prerequisite: One year of college level physics and MATH 151. (Sufficient demand)

ASTR 307 - Observational Astronomy 2 hours. An introduction to astronomical observing techniques and data reduction. Emphasis placed on image acquisition and manipulation to determine things like the morphologies, distances, motions, and luminosities of various objects. This course is intended for students with interest in astronomy and some background in physics and mathematics. Prerequisite: One

semester of college level physics; pre-or co-requisite: MATH 151. (Sufficient demand)

ASTR 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

Biology

BIOL 106 - Field Botany 4 hours. Introduction to the taxonomy and adaptations of native and introduced plants in western New York ecosystems. Students will learn identification of species through laboratory and field studies. Biodiversity of natural ecosystems will be investigated and compared. Biology majors may receive Biology elective credit by fulfilling additional requirements. (F1) (F-I)

BIOL 107 - Human Anatomy and Physiology I 4 hours. This course examines the bases of the human body in health and disease. Dissection of the cat and other mammalian organs, and a series of physiology exercises investigate structure and function from cell to organ system of the integumentary, skeleto-muscular, nervous-sensory and endocrine systems. Three lecture/discussions and one three-hour laboratory. This course is offered as part of the BOCES New Visions Medical program. (F1)

BIOL 108 - Human Anatomy and Physiology II 4 hours. A continuation of Biology 107 with a focus on the 'internal' organ systems, including the circulatory, lymphatic, respiratory, digestive, urinary and reproductive. Three lecture/discussions and one three-hour laboratory. This course is offered as part of the BOCES New Visions Medical program. (F1)

BIOL 119 - Physiology of Aging 4 hours. Examines both the expected changes in normal human aging as well as the pathologies of the aging process. Topics covered include digestive, cardiovascular, sensory, hormonal, musculoskeletal and urogenital systems as well as cellular metabolism and drug absorption. Required of Gerontology majors. Four lectures. (F2) (F-II) (Alternate years)

BIOL 130 - Introduction to Human Genetics 4 hours. A look at human genetics from the human genome project and biotechnology to inheritance of traits. Emphasis will be placed on understanding current and past discoveries in genetics, how those discoveries may impact our lives, and what they mean for the non-scientist. Class will meet for 3 lectures and one two-hour lab per week. (F1) (F-III)

BIOL 150 - Biological Foundations 4 hours. This course introduces both biology majors and non-majors to the core concepts of biological literacy (evolution, structure and function, genetics and information flow, metabolism and energy, and living systems) and the competencies that underlie the disciplinary practice of Biology. (F2) (F-I)

BIOL 207 - Introduction to Anatomy and Physiology I 4 hours. Introduction to the structure and function of the human body focusing on general biology, chemistry, and physics by exploring the integumentary, skeletal, muscular, and nervous systems. (This course meets NYSED certification knowledge in scientific concepts). Three lectures and a laboratory. (F2) (F-II)

BIOL 208 - Introduction to Anatomy and Physiology II 4 hours. Introduction to the structure and function of the human body focusing on the cardiovascular, respiratory, digestive, lymphatic, and reproductive systems, with special attention

given to nutrition. Three lectures and a laboratory. Prerequisite: BIOL 207 or instructor permission.

BIOL 211 - Cell Biology 4 hours. The first course in a core sequence for biology majors, this course focuses on the molecular foundations of life, enzymology, metabolism, and cell ultrastructure, organization and function. Laboratory focuses on basic techniques including microscopy, micropipetting and the use of model organisms. C or better in BIOL 150 and in CHEM 105, CHEM 106 is recommended as a pre- or co-requisite.

BIOL 212 - Principles of Genetics 4 hours. Students who complete this course will have a fundamental knowledge of the principles of transmission, molecular and population genetics. Application of concepts through investigative laboratories. A required core course for biology majors. Three lectures and one three-hour laboratory per week. Prerequisite: 'C' or better in BIOL 211 and CHEM 106.

BIOL 213 - Structure and Function of Organisms 4 hours. Using one or more model systems (e.g. humans, plants), students will be able to explain structure-function relationships; how form follows function in animals and plants. Application of concepts through investigative laboratories. A required core course for biology majors. Three lectures and one two-hour laboratory per week. Prerequisite: 'C' or better in BIOL 211.

BIOL 226 - Biostatistics 4 hours. Application of statistics to experimental design, data analysis, and decision making in the biological sciences. Prerequisites: (BIOL 201/202) or BIOL 211 as Pre- or Co-requisite. (III)

BIOL 300 - Topics in Biology 1-4 hours. This course provides opportunities for examining areas not covered in the regular offerings. Topics vary each semester.

BIOL 302 - General Microbiology 4 hours. This course surveys the microbial world, with an emphasis on bacteria and viruses. The student will gain an understanding of how the study of microorganisms has paved the way for important advances in human health, agriculture, and food science. Major topic areas include structure/function, metabolism, genetics, biotechnology, and host-parasite relationships. The laboratory offers experience in aseptic handling of bacterial cultures as well as applications of classical and modern techniques for microbial identification and characterization. Three lectures and one three-hour laboratory. Prerequisites: (BIOL 201/202, or BIOL 211) and (CHEM 310 or 315).

BIOL 307 - Anatomy and Physiology: Nerves, Muscles, Skeleton 4 hours. This course examines the bases of the human body in health and disease. Using dissections of mammalian specimens, students investigate structure and function from cell to organ system of the integument, skeletal-muscular, and nervous-sensory systems. Three lectures and one two-hour laboratory per week. This course is part of the Anatomy and Physiology series. Prerequisite: BIOL 201 or 202 or 211.

BIOL 308 - Anatomy and Physiology: Viscera 4 hours. This course examines the bases of the human body in health and disease with a focus on 'internal' organ systems, including the circulatory, lymphatic, respiratory, urinary, and reproductive systems. Students engage in dissections of mammalian specimens. Three lectures and one two-hour laboratory per week. This course is part of the Anatomy and Physiology series. Prerequisite: BIOL 307.

BIOL 311 - Invertebrate Zoology 4 hours. An extensive study of selected species to illustrate invertebrate structure, biological relationships and adaptations to their habitats. Three lectures and one two-hour laboratory. Prerequisite: BIOL 201/202. (Alternate years)

BIOL 314 - Community and Systems Biology 4 hours. Living systems are interconnected and interacting. Living organisms must be able to perceive and respond to changes in their diverse and dynamic environments. Therefore, we consider biological systems at multiple functional scales to fully understand how organisms and their environments interact with and modify each other. Prerequisite: 'C' or better in BIOL 212 and BIOL 213.

BIOL 315 - Genetics and Evolution of Populations 4 hours. This course investigates modern evolutionary theory at the macro- and micro-evolutionary scale. Topics include historical perspectives, basic principles of evolution, mechanisms of evolution, genetics of populations, quantitative genetics and phylogenetics. Four hours of lecture per week. Prerequisites: BIOL 212 or BIOL 201/202; BIOL 213 recommended.

BIOL 322 - Botany 4 hours. A phylogenetic exploration of plants, with emphasis on adaptation of structure and function to different environments. Topics include anatomy, physiology, evolution, ecology, and economic botany. Three lectures and one two-hour laboratory period. Prerequisites: BIOL 201/202 or BIOL 211.

BIOL 345 - Vertebrate Biology 4 hours. A study of the systematics, adaptations, and ecological relationships of vertebrates. Topics focus on ichthyology, herpetology, ornithology, and mammalogy. The laboratory includes examination of specimens, field identification of animals, and methods of data collection. Prerequisite: BIOL 226.

BIOL 346 - Animal Nutrition 4 hours. Basic principles of animal nutrition, emphasizing characteristics and metabolism of nutrients, these nutrients in terms of feedstuffs, anatomy and physiology of gastrointestinal tracts, and nutritional lifecycles of various animals. Four lectures. Prerequisites: BIOL 201/202 or BIOL 211.

BIOL 348 - Animal Behavior 4 hours. A look at the study of animal behavior to interpret genetic, environmental, and physiological influences on development, control, adaptation and evolution of behavior. 4 lectures. Prerequisites: (BIOL 201/202 or BIOL 211) and BIOL 226.

BIOL 354 - Ecology 4 hours. Interactions of organisms and their environment with emphasis on populations, communities, and ecosystems. Three lectures and one three-hour laboratory. Prerequisite: BIOL 150 or 201 or ENVS 101. (Fall, alternate years)

BIOL 356 - Aquatic Ecology 4 hours. Introduction to ecology of lakes, streams, and wetlands. Three lectures and one three-hour laboratory. Prerequisite: BIOL 201 or ENVS 101. (Fall, alternate years)

BIOL 357 - Conservation Biology 4 hours. This course focuses on the biology that underlies our efforts to conserve genetic, species, and community diversity and the community/ecosystem/landscape dynamics that sustain them. We will review concepts of genetics, population biology, and landscape ecology to understand

threats to populations and species and the techniques used to sustain them. Prerequisite: BIOL 150 or 201 or ENVS 101. (Cross-listed as ENVS 357)

BIOL 358 - Biogeography 4 hours. Biogeography looks at patterns of living things in space and time. By combining ecological, evolutionary, and geographic points of view, we will see how life has evolved around the globe to exploit physical differences such as soils and climate. Landscape ecology quantifies spatial structure, especially as affected by humans, in regions comprising one or more ecosystems. Relating the two approaches helps us to appreciate how populations have survived geographical constraints in the past and to predict how they might fare in the future. Geographic information systems will be demonstrated as an important contemporary tool in spatial ecology. Prerequisites: BIOL 226 and (BIOL 213 or 354).

BIOL 375 - Comparative Vertebrate Anatomy 4 hours. A comprehensive review of the structure, taxonomy, evolution, and biological relationships of vertebrates. Two lectures and two two-hour laboratories. Prerequisites: BIOL 201/202 or BIOL 211. (Alternate years)

BIOL 376 - Animal Physiology 4 hours. Principles and problems concerned with the physiochemical responses and functioning of animal tissues and organs. Three lectures and one three-hour laboratory period. Prerequisite: BIOL 375.

BIOL 390 - Junior Seminar 1 hour. Development of writing and interviewing skills critical in applying to graduate and professional schools, internships, and for employment. Students write and critique cover letters, resumes, essays and sample applications, take sample entrance examinations, interview a professional in a career of interest, and receive phone and face-to-face mock interviews with feedback on appropriate dress, mannerisms, and ability to respond to questions. Emphasis on professionalism. Prerequisite: (BIOL 201/202) or BIOL 211 as Pre- or Co-requisite.

BIOL 400 - Research Topics 4-5 hours. Offerings are research-intensive courses that vary from year to year.

BIOL 402 - Immunology 4 hours. In this course students learn what makes up the immune system, and how it works in keeping us healthy. We'll also look at some of the more complex issues surrounding the immune system such as vaccination, autoimmune disease and transplantation. Upon completion of the course students will be able to name and describe the cells and organs of the immune system and understand the function of each. Students will also be able to describe the normal processes of immunity and regulatory controls, explain the results of immune component deficiencies and understand how normal immune function can cause disease. Prerequisite: BIOL 211 or 362; BIOL 302 recommended.

BIOL 410 - Endocrinology 4 hours. A study of endocrinology from molecular to organismal levels. Emphasis is placed on categories of hormones and receptors, regulation of physiological responses, and mechanisms of endocrine dysfunction. Four lectures. Prerequisites: BIOL 201/202; BIOL 376 or BIOL 252 recommended.

BIOL 420 - Biochemistry: Proteins and Metabolism 4 hours. Properties, biosynthetic pathways, and metabolism of carbohydrates, lipids, and nitrogenous compounds with related units on physical biochemistry, protein structure, bioenergetics and enzyme kinetics. Laboratories reinforce theoretical concepts and provide hands-on experience with modern biochemistry techniques and instrumentation. Three lectures and one three-hour laboratory. Prerequisites:

Either[BIOL 362 and CHEM 315/316] or [(BIOL 202 or 211) and (CHEM 343 or CEMS 235), and (CHEM 310 or CHEM 315)]. (Cross-listed as CHEM 420)

BIOL 422 - Biochemistry: Nucleic Acids 4 hours. This course surveys the biochemistry of the gene, with an emphasis on protein/nucleic acid interactions. Topics include nucleic acid structure, regulation of DNA replication and transcription, post-transcriptional modification of RNA, recombinant DNA techniques, and genetic engineering methods. Three hours lecture and one three-hour laboratory. (Students who wish to take only one semester of Biochemistry should take BIOL/CHEM 420.) Prerequisite: BIOL 212 or 362 and either CHEM 310 or 315. (Cross-listed as CHEM 422)

BIOL 425 - Physiological Plant Ecology 4 hours. An exploration of plant function from the tissue to the whole organism level, with emphasis on interactions with the environment. Topics include plant-water relations, nutrition, energy and carbon cycling, development, and stress physiology. Three lectures and one three-hour laboratory. Prerequisites: (BIOL 201/202 or 213), BIOL 226, and (CHEM 310 or 315). (Alternate years)

BIOL 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required. Independent Study is required of all students who are candidates for graduation with honors in Biology.

BIOL 485 - Internship in Biology 1-6 hours. Off-campus research in consultation with faculty and project advisors. Open to junior, senior and graduate biology students.

BIOL 490 - Biology Research Seminar 1 hour. An advanced topics seminar held once a week, conducted by enrolled students, local speakers, and outside speakers. Weekly topics and discussion will represent current research in a wide range of biological sciences. Prerequisites: BIOL 226 and at least one 300-400 level BIOL course.

Chemistry

CHEM 105 - General Chemistry I 4 hours. A systematic study of the fundamental principles, theories and calculations involved in chemistry. Basic concepts of bonding, chemistry of selected elements and their compounds, states of matter, stoichiometry, solution reactions, equilibrium, kinetics, electrochemistry, thermodynamics, nuclear chemistry, and an introduction to organic chemistry. Laboratory work includes experiments in stoichiometry, qualitative and quantitative analysis. Required for pre-health professionals and engineering, biology, and chemistry majors. Two lectures, one demonstration, one laboratory and one quiz per week. (F1) (F-I)

CHEM 106 - General Chemistry II 4 hours. CHEM 106 is a continuation of CHEM 105. Two lectures, one demonstration, one laboratory and one quiz per week. Prerequisite: CHEM 105 or CHEM 115. (F1) (F-I)

CHEM 116 - General Chemistry-Advanced II 4 hours. CHEM 116 is a continuation of CHEM 115. Prerequisite: CHEM 115 or 105. Students may not receive credit for both CHEM 106 and CHEM 116. (F1)

CHEM 200 - Special Topics in Chemistry 1-4 hours.

CHEM 300 - Special Topics in Chemistry 1-4 hours. This course explores special topics in chemistry appropriate for sophomore, junior, and senior level students majoring in chemistry or related fields. Contact the course instructor for additional information about any CHEM 300 course offering. Prerequisites: CHEM 105 and CHEM 106, or permission of instructor.

CHEM 310 - Basic Organic Chemistry 3 hours. A descriptive study of the structure and reactions of common aliphatic and aromatic compounds of carbon. For students interested in ceramics, materials science, environmental science, or ecology, but not suitable for chemistry majors or those interested in biochemistry, molecular biology, or the health professions. Prerequisite: CHEM 106 or CHEM 116 or permission of instructor.

CHEM 313 - Environmental Chemistry 4 hours. This course discusses the chemical fundamentals underlying important issues related to the environment and environmental policy in detail. Topics include the chemistry of ozone holes, smog, acid rain, natural waters, soil chemistry, climate change, pollution, remediation, and energy science. Prerequisites: CHEM 105 and CHEM 106.

CHEM 315 - Organic Chemistry I 4 hours. An introduction to organic compounds. Topics include structure identification using modern spectroscopic methods, bonding and reactions such as nucleophilic substitutions, eliminations and additions to alkenes. Laboratory topics include extraction/washing, recrystallization, TLC, melting points and distillation. Prerequisite: CHEM 105 and 106.

CHEM 316 - Organic Chemistry II 4 hours. An in-depth exploration of the chemistry of carbon-based compounds. Topics include enolates, reductions, oxidations, additions to the carbonyl, the Diels-Alder reaction, radicals Aromatic reactions, aromaticity, carbohydrates and amino acid chemistry. Laboratory topics include instrumentation and varying reactions. Prerequisite: CHEM 315.

CHEM 321 - Introduction to Analytical Chemistry 4 hours. A study of classical analytical techniques involving equilibria of aqueous systems as well as simple modern analytical techniques involving the methods and instrumentation of spectrophotometry and separation science will be presented. Laboratory exercises will include inorganic synthesis, "traditional wet methods of analysis," and instrumental methods of analysis. Two lectures and two three-hour laboratories per week. Prerequisite: CHEM 106 or CHEM 116.

CHEM 343 - Physical Chemistry I 4 hours. The first semester of our physical chemistry sequence covers thermodynamics from a combined classical/statistical perspective and chemical kinetics. Pre-requisite: CHEM 106, MATH 152, and PHYS 112 or 126.

CHEM 345 - Physical Chemistry Laboratory 1 hour. This course explores concepts in thermodynamics, kinetics, and quantum mechanics through seven laboratory experiments performed as teams in a simulated corporate research environment. Students are strongly encouraged to co-enroll in CHEM 346 or the equivalent. Prerequisites: CHEM 343 or CEMS 235.

CHEM 346 - Physical Chemistry II 3 hours. The second semester of our physical chemistry sequence covers quantum mechanics and spectroscopy. Prerequisite: CHEM 343 or CEMS 235.

CHEM 370 - Chemistry Projects 1 or 2 hours. Laboratory work or literature review involving a chemical topic of interest to the student and not covered in any of the regular course work. A final written report is required. CHEM 370 cannot be substituted for any of the required courses in the chemistry major and cannot be used to fulfill the additional credits needed for an ACS certified degree. A chemistry minor may count up to three credits of CHEM 370 toward the minor. Laboratory work that can be considered original research in chemistry should be performed as an Independent Study or an ARGUS project (CHEM 450). Prerequisites: Permission of instructor, a study plan approved by the Division Chair, and CHEM 106.

CHEM 372 - Inorganic Chemistry 3 hours. Principles of inorganic chemistry with emphasis on periodicity, symmetry and group theory, molecular orbital theory, bonding, acid/base chemistry, coordination chemistry, organometallic compounds, and catalysis. Prerequisite: CHEM 343 or CES 235.

CHEM 374 - Inorganic Chemistry Laboratory 1 hour. Eight to ten experiments designed to demonstrate the synthetic techniques used in modern inorganic chemistry. Inert atmosphere techniques will be included. Co-requisite: CHEM 372.

CHEM 400 - Advanced Chemistry Topics 1-4 hours. Special topics not covered by regular course work. All special topics courses must have the written approval of the Division Chair and should in general meet the criteria of the American Chemical Society's requirements for an advanced course. Prerequisite: CHEM 346, although this can be waived at the discretion of the Division Chair.

CHEM 420 - Biochemistry: Proteins and Metabolism 4 hours. Properties, biosynthetic pathways, and metabolism of carbohydrates, lipids, and nitrogenous compounds with related units on physical biochemistry, protein structure, bioenergetics and enzyme kinetics. Laboratories reinforce theoretical concepts and provide hands-on experience with modern biochemistry techniques and instrumentation. Three lectures and one three-hour laboratory. Prerequisites: Either [BIOL 362 and CHEM 315/316] or [(BIOL 202 or 211) and (CHEM 343 or CEMS 235), and (CHEM 310 or CHEM 315)]. (Cross-listed as BIOL 420)

CHEM 422 - Biochemistry: Nucleic Acids 4 hours. This course surveys the biochemistry of the gene, with an emphasis on protein/nucleic acid interactions. Topics include nucleic acid structure, regulation of DNA replication and transcription, post-transcriptional modification of RNA, recombinant DNA techniques, and genetic engineering methods. Three hours lecture and one three-hour laboratory. (Students who wish to take only one semester of Biochemistry should take BIOL/CHEM 420.) Prerequisite: BIOL 212 or 362 and either CHEM 310 or 315. (Cross-listed as BIOL 422)

CHEM 423 - Instrumental Analysis 3 hours. The theory and practice of modern instrumentation techniques and methods used in chemistry are presented. An in-depth look at spectroscopic, separation, and electrochemical methods and their associated instrumentation follow an introduction to instrumentation; interpretation of results is also covered. Required for chemistry majors. Prerequisites: CHEM 321 and CHEM 346 or equivalent.

CHEM 450 - Independent Study 1-4 hours. Original chemical research under faculty guidance. The work must have the potential to be published. An Approved Plan of Study and a written final report are required. Oral reports may also be required.

CHEM 461 - Advanced Chemistry Laboratory I 2 hours. A laboratory course integrating synthesis, purification, analysis, and characterization of chemical species. Synthetic work includes use of controlled atmospheres, high temperatures and non-aqueous systems. Purification of compounds is by distillation and recrystallization, as well as by various chromatographic techniques. Analysis and characterization include both wet chemical and instrumental techniques. Co-requisite: CHEM 423. Prerequisites: CHEM 321 and CHEM 346 or equivalent.

CHEM 485 - Internship in Chemistry 2-6 hours. Off-campus research in consultation with faculty and an off campus project advisor. An approved plan of study and a written final report are required. Oral reports may also be required. The work must represent original research in chemistry and have the potential to be published. Open to juniors and seniors. Prerequisites: Permission of instructor, a study plan approved by the Division Chair and in general, CHEM 343 although this can be waived by the Division Chair.

CHEM 490 - Chemistry Seminar 0 hours. The Chemistry Seminar is a three semester advanced topics course with a varied format ranging from outside speakers to development of skills such as literature searches, resumes, poster presentations and oral presentations.

Chinese

CHIN 101 - Chinese I 4 hours. This course is an introduction to the Mandarin Chinese language and cultures of the People's Republic of China. (II)

CHIN 102 - Chinese II 4 hours. The further development of basic language skills introduced in CHIN 101. A continuation of the study of the cultures of the People's Republic of China. Prerequisite: CHIN 101 or permission of the instructor. (II)

CHIN 200 - Special Topics 1-4 hours. Content varies. Prerequisite: CHIN 102 or permission of instructor.

CHIN 201 - Chinese III 4 hours. In this course students continue development of Chinese language skills, with attention to listening, speaking, reading and writing Mandarin. Students become more familiar with Chinese characters and gain a deeper understanding of China, its people and cultures. Prerequisite: CHIN 102 or permission of instructor. (II)

CHIN 202 - Chinese IV 4 hours. This course is the next phase for students who have completed CHIN 201. It continues in the strengthening of students' knowledge of and proficiency in Chinese. It enhances students' oral expression, reading comprehension, and cultural understanding. Prerequisite: CHIN 201. (II)

Communication Studies

COMM 101 - Introduction to Communication Studies 4 hours. An introduction to communication studies in a variety of contexts: intrapersonal, interpersonal, small group, and public. The class improves the student's understanding of communication as a process and facilitates day-to-day interactions.

COMM 110 - Mass Media and American Life 4 hours. An examination of the evolution of American mass media and their cultural, economic, and social implications. Students analyze varied media vehicles (including newspapers, books, magazines, sound recordings, films, and television programs) with regard to content, form, and demographic impact.

COMM 200 - Special Topics in Communication 1-4 hours. This course provides opportunities for examining communication studies areas not covered in the regular offerings. Topics vary each semester.

COMM 205 - Introductory Newswriting and Reporting 4 hours. An introductory journalism course emphasizing news gathering and reporting a variety of basic news stories, including hard news, features, and enterprise stories. Basic newswriting skills covered, including developing news judgment, style, structure, sources, and interviewing techniques.

COMM 210 - Interpersonal Communication 4 hours. This course is designed to increase students' awareness of interpersonal communication theories, practices, and impact.

COMM 211 - Public Speaking 4 hours. Students in this course have numerous opportunities to construct and present various types of speeches. These experiences are driven by situational contexts (e.g. academic presentations, special occasions, debates, etc.). In addition to the act of speaking, students will also be introduced to techniques associated with the effective use of presentational tools.

COMM 220 - Understanding Popular Culture and Media 4 hours. We often refer to popular entertainment as escapist without fully considering what we are escaping from, where we are escaping to, or in what ways the experience affects us. This class ponders these topics through an introduction to the core concepts and approaches associated with critical/cultural studies. (C)

COMM 221 - Pop Culture Goes Global 4 hours. This course examines U.S. popular culture and the media and their sociological, economic and political influence on cultures at home and abroad. It offers students a deeper understanding of globalization and its effect on their lives. (Every year; Fall) (GP) (Cross-listed as GLBS 221)

COMM 237 - Media and Politics 4 hours. This course examines the relationship between mass media and politics. We will explore the ways in which mass communications media shape the politics of elections, daily governance, U.S. foreign policy, interest groups, social movements, and identity. (Cross-listed as POLS 237, SOCI 237)

COMM 300 - Special Topics 1-4 hours. This course provides opportunities for examining communication studies areas not covered in the regular offerings. Topics vary each semester.

COMM 301 - Broadcasters, Advertisers, and Audiences 4 hours. An overview of television and radio broadcasting and advertising in the United States. The course examines how a variety of factors--historical, cultural, political, legal, economic, and technological--affect the content and character of American broadcasting.

COMM 302 - Public Relations Principles 4 hours. Public relations is the values-driven management of relationships with groups of people that can influence an organization's success. This course examines how organizations can ethically and systematically build productive, mutually beneficial relationships with such groups. To accomplish this, we discuss: (1) the historical antecedents and contemporary practice of public relations in America; (2) the day-to-day tasks and communication responsibilities of public relations practitioners; and (3) the various challenges PR practitioners encounter in their careers. No prerequisite; COMM 205 recommended.

COMM 309 - Persuasion: Reception and Responsibility 4 hours. This course provides majors in communication studies and related areas with a foundation for rhetorical thinking. Critical issues in persuasion are addressed, along with a historical survey of rhetorical philosophy and theory. Students successfully completing the course will know expert opinions on issues concerning persuasive communication.

COMM 315 - Understanding Global Media and Cultural Change 4 hours. In this course students analyze global media (news and entertainment) in order to better understand how global media messages influence societies and audiences worldwide. Students also develop an understanding of how to create their own objective and persuasive global media messages. (Cross-listed as GLBS 315) (Every other year; Spring) (GP)

COMM 321 - Public Relations Writing 4 hours. This writing course focuses on providing students with hands-on experience promoting organizations (non-profits, businesses, etc.) through PR releases and other promotional material aimed at targeted audiences via print, radio and TV. Students are also introduced to the art of writing advertisements for the print and broadcast media. Prerequisite: COMM 205 or permission of instructor. (Every other year; Spring)

COMM 325 - Global Communication 4 hours. Global Communication introduces students to communication and media issues impacting the global community in the digital age, including: international telecommunication networks, transnational media corporations (based in America, Asia, the Middle East, etc.), global news, global advertising, the Internet and information flow. Prerequisite: COMM 110 or permission of instructor. (Cross-listed as GLBS 325) (GP)

COMM 400 - Special Topics 1-4 hours. This course provides opportunities for examining communication studies areas not covered in the regular offerings. Topics vary each semester.

COMM 401 - Technology and Communication 4 hours. An exploration of questions raised by the introduction of new communication technologies with particular emphasis on the social, economic, and aesthetic impact of these emerging technologies, and their roles in education and national development. Prerequisite: junior/senior standing, or permission of instructor.

COMM 404 - Media Criticism 4 hours. An exploration of the communicative dimensions of media artifacts: magazines, newspapers, films, television programs, and popular music recordings. Analyses are conducted from rhetorical, semiotic, genre, auteur, feminist, psychoanalytic, and Marxist perspectives. Prerequisite: junior/senior standing, or permission of instructor.

COMM 405 - Television Criticism 4 hours. TV Criticism examines the medium by analyzing its industrial purposes, narrative structures, and the application of mise-en-scene, videography, editing, and sound. Students will familiarize themselves with several critical approaches such as semiotics, genre study, ideological criticism, gender and race studies. Prerequisite: COMM 110.

COMM 409 - Organizational Communication 4 hours. This course introduces students to major concepts regarding communication in organizations, including the professional environment.

COMM 410 - Communication Ethics 4 hours. An exploration of ethical perspectives that pertain to communication in a variety of contexts, including interpersonal, small group, organizational, public and mass. Students learn to become more responsible senders and receivers of communication. Prerequisites: COMM 101 and COMM 110.

COMM 411 - Media Law 4 hours. This course examines the legal concepts, processes, and foundations that govern American media and other forms of public expression. The First Amendment will form the basis for most topic areas covered in this course. Prerequisite: COMM 110 or permission of instructor.

COMM 412 - Gender and American Film 4 hours. This course is an overview of how mainstream, artistically and/or popularly successful Hollywood films reflect gender images expressed in stereotypes, power relationships, and sexuality. The class examines gender as a social construct. The goal is to amass a working knowledge of the theories associated with gender and film criticism as well as to determine how students have been influenced by these cinematic representations. (Cross-listed as WGST 412)

COMM 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

COMM 465 - Gender, Race, Class and Media 4 hours. This course investigates how women and minorities (including sexual minorities) are covered/portrayed by the news and entertainment media and how underlying economic, political and sociological factors affect such coverage. It explores how media portrayals influence the public's views regarding women and minorities and how women and minorities view themselves. And it examines critics' charges that the media portray women and minorities in a negative light and strategies used to counteract possible resulting harm. Prerequisite: COMM 110 or permission of instructor. (Cross-listed as WGST 465)

COMM 475 - Specialized Reporting 4 hours. A workshop course in which students select and pursue an area of interest. Students, working in a simulated newsroom environment, will cover beats ranging from the courts to the Arts. Emphasis on developing quality beat coverage. Prerequisite: COMM 205 or permission of instructor.

COMM 485 - Internship in Communication 1-4 hours. This course entails a workplace experience that extends what is learned within the Communication Studies curriculum. Interns report to their COMM advisor and a counselor from the Career Development Center throughout the process. Interested COMM majors and minors should consult with their advisor for additional information prior to enrolling in this course. Maybe be repeated up to a total of 8 earned credit hours. Prerequisite: COMM 101 and permission of instructor.

Computer Science

CSCI 156 - Computer Science I 4 hours. This course develops the fundamental concepts of computer programming including conditional statements, loops, procedural programming, scope of variables, GUI programming, and objects.

CSCI 157 - Computer Science II 4 hours. This course develops more advanced programming concepts including continued development of object oriented

programming, inheritance, creating and using Python packages, GUI programming. Prerequisite: CSCI 156 or permission of instructor.

CSCI 205 - Introduction to MySQL Programming 4 hours. This course is an introduction to MySQL database programming. Set up of a SQL database, programming MySQL using PHP, and MySQL database maintenance are all covered. Prerequisite: CSCI 157.

CSCI 220 - Introduction to GIS 4 hours. This course engages students in spatial thinking while providing them with the fundamentals to manipulate geographic (geospatial) data and utilize the ArcGIS geographic information system (GIS) for map production, spatial analysis and problem solving. (Cross-listed as ENVS 220)

CSCI 320 - Advanced GIS Applications 4 hours. This course advances the learning outcomes of Introduction to GIS (ENVS 220); namely to engage in spatial thinking while utilizing the ArcGIS geographic information system (GIS). Advanced applications include the raster spatial data model, remote sensing and spatial statistics. Prerequisite: ENVS/CSCI 220 or permission of instructor. (Cross-listed as ENVS 320)

CSCI 331 - LAMP Server Administration 4 hours. This course covers the basics of LAMP server administration and webpage design using open source tools. Topics include Linux system administration, setting up Apache, MySQL administration, and PHP development. Prerequisite: CSCI 205.

CSCI 450 - Independent Study 1-4 hours. Independent study is undertaken by the student under the supervision and guidance of the instructor. Written Plan of Study required.

Criminal Justice Studies

CRIM 300 - Special Topics 1-4 hours. An open course varying in contents from year to year, which allows concentration on special topics.

CRIM 322 - Juvenile Justice 2 hours. This course analyzes the philosophies that have influenced juvenile justice policy implementation. The course uses a text and supplemental readings to illustrate the processing system that funnels juveniles from the time of their arrest to their release. Prerequisite: SOCI 245.

CRIM 332 - Focusing on Police 2 hours. This course gives students an in-depth analysis of police operations. Discussions are centered on police operations and the social process involved in police-citizen contacts. Prerequisite: SOCI 245.

CRIM 340 - Concepts of Penology 4 hours. A survey of correctional concepts and philosophy with emphasis on the correctional institution as a community and the sociology of confinement. Additional focus on penal reform, correctional administration and innovation. Prerequisites: SOCI 110 and SOCI 245.

CRIM 351 - Seminar in Criminal Behavior 4 hours. Specific problems and issues concerning criminal behavior are examined in depth. The area of

investigation varies with the disciplinary orientation of the instructor. Includes analysis of the causes of particular kinds of behavior, examination of methods of control, and consideration of current approaches to rehabilitation. Prerequisites: SOCI 245; junior or senior standing.

CRIM 400 - Special Topics 1-4 hours. An open course varying in contents from year to year, which allows concentration on special topics.

CRIM 450 - Independent Study 1-4 hours. Individual research by a Criminal Justice Studies major with senior standing into an area of interest. Research topics are chosen to complement material covered in other courses and to provide the student with additional information relevant to career or graduate interests. Approved Plan of Study required.

CRIM 470 - Field Work in Criminal Justice Studies 2-4 hours. Students work with criminal justice related agencies, normally in the Alfred area, and are expected to apply their theoretical knowledge to the practical experience gained from field work. Prerequisite: Senior Criminal Justice Studies major and permission of instructor.

Dance

DANC 120 - Fundamentals of Dance 2 hours. Introduces new and continuing dance students to the art of dance with an emphasis on alignment, strength, and flexibility of the whole body. Dancers are challenged to develop their physical intelligence and artistic expression in center and across the floor combinations using a wide range of dynamics and rhythms. (C) (PE Requirement)

DANC 200 - Special Topics in Dance 1-4 hours. Courses offered according to students' interests. Topics vary from year to year. (Sufficient demand)

DANC 211 - Dance History 4 hours. A study of the historical development of dance from mid-eighteenth century to the twenty-first century with an investigation of the dance works, artists, and the historical context in which the works were created. Course will include discussion, viewings of live performance and videos, lectures, and experiential activities.

DANC 221 - Ballet I 2 hours. An elementary course in ballet technique including a ballet barre, with the traditional adagio tournament and allegro center floor work. Emphasis on placement and correct turn-out. (C) (PE Requirement)

DANC 222 - Modern Dance I 2 hours. An introductory course in various modern dance techniques including some improvisational work. May be repeated one time for credit. Prerequisite: DANC 120 or permission of instructor. (C) (PE Requirement)

DANC 223 - Jazz Dance I 2 hours. An introductory course in jazz dance technique incorporating performing aspects of the jazz medium. (C) (PE Requirement)

DANC 224 - Contact Improvisation 2 hours. Students learn to use the physical properties of weight, momentum, countertension and speed to provoke spontaneous, fully-embodied dancing. This studio class introduces basic principles and patterns, such as exchanging weight with a partner, that lead to increasingly complex and

daring movement. Working individually, with partners, and in groups, students learn to make alert and intelligent movement decisions as they improvise. Prerequisite: DANC 120 or permission of instructor. (C) (PE Requirement)

DANC 230 - Improvisation/Composition I 3 hours. A laboratory for developing skills as a choreographer and improviser. Emphasis on generating movement vocabulary through improvisation and understanding of dance elements (time, space, energy) for composition. Dance studies are created and performed throughout the semester. Prerequisite: DANC 120.

DANC 270 - Alfred University Dance Theatre 2 hours. The AU Dance Theatre presents students with the opportunity to engage in learning and performing a variety of dance works choreographed by faculty, guest artists and fellow students. AU Dance Theatre presents one work-in-progress "showing" and one concert each year. Participation is open to all students. Prerequisites: DANC 230 and DANC 330, or permission of instructor.

DANC 322 - Modern Dance II 2 hours. An extension of the beginning course, continued instruction is given in dance forms, movement, awareness, technique and patterns. May be repeated 4 times for credit to a maximum of 10 credit hours. Prerequisite: DANC 222 or equivalent experience to be judged by the instructor. (PE Requirement)

DANC 323 - Jazz Dance II 2 hours. A continuation of the beginning course for students already able to move within the jazz idiom. It includes more advanced work in jazz technique as well as combinations. May be repeated 4 times for credit to a maximum of 10 credit hours. Prerequisite: DANC 223. (PE Requirement)

DANC 330 - Improvisation/Composition II 3 hours. A laboratory for developing skills as a choreographer. Dance compositions are created and performed at the end of the semester. Emphasis on continuing development of the individual "voice" of the choreographer and the ability of the choreographer to "see" dance. Prerequisites: DANC 230 or 330 and one of the following: DANC 120, 221, 222, or 223; or permission of instructor.

DANC 331 - Site Specific Composition 3 hours. In this studio course students explore place/space as inspiration for creating performance-based compositions. How can the specifics of a space inspire imagination to inspire movement composition and performance? Students also study the works of contemporary site-specific artists. Prerequisite: Completion of one art foundations course (ART 101 or IART 101), DANC 230, or permission of instructor.

DANC 340 - New and Existing Repertory 3 hours. In this course students learn existing dance repertory and are involved in creating new dance works. Through the rehearsal process, informal performances and research students explore a variety of rehearsal techniques, explore the varying roles of the dancer in the creative process, develop performing skills, and deepen their understanding of the choreography and the choreographers who created the work. Students are required to perform these works for the AU community throughout the semester. Prerequisite: Two dance courses or permission of instructor.

DANC 370 - Choreographic Practicum 1-3 hours. This course provides the advanced student with the opportunity to choreograph new dance works under faculty supervision. Prerequisites: DANC 230 and permission of instructor. Repeatable up to six credits.

DANC 385 - Dance Internship 4 hours. An off-campus, independent study project in which the student gains insight from experiencing actual tasks and responsibilities undertaken and performed by persons in the dance field. At completion, a journal and final report is submitted to the faculty sponsor. Prerequisites: junior standing and permission of instructor.

DANC 450 - Independent Study 1-4 hours. Specialized pursuit of a subject within an area of dance not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

Economics

(Offered by the Business School in the College of Professional Studies. See p. 289 for course descriptions.)

English

ENGL 101 - Writing I 4 hours. Study and application of the basic principles of written communication: correctness, clarity, concreteness, effective organization, and accepted forms of documentation. (I)

ENGL 102 - Writing II 4 hours. This course offers intensive experience in essay writing. Through the close reading of literature and the practical experience of writing, students explore rhetorical strategies, learn accepted forms of documentation, develop a sense of voice, and deepen their responses to the written word. (ENGL 102 is prerequisite to 300 and 400-level studies in English.)

ENGL 200 - Special Topics in Writing 2 or 4 hours. A series of introductory writing courses, each being a study of a subject not covered in other 200-level courses. Topics may include feature writing, magazine writing, or writing in other specialized areas.

ENGL 202 - Fiction Workshop 4 hours. For beginning prose writers, a course on the elements, styles, and techniques of contemporary fiction and narrative. Students experiment with subject and voice with an emphasis on creating characters. Portfolio exam. (C)

ENGL 204 - The Art of the Personal Essay 2 hours. An examination of the best contemporary essayists. Students develop their own essays after reading and discussing these works. (Cross-listed as WGST 204)

ENGL 205 - The Play's the Thing! - Playwriting 4 hours. This team-taught course combines beginning acting exercises with improvisations in writing. Texts include full-length plays and one-acts. Students are expected to write and revise one-act plays over the course of the semester. (Cross-listed as THEA 205) (C)

ENGL 206 - Poetry Workshop 4 hours. A beginning writing course in poetry with an emphasis on originality and freshness of language and a basic understanding of poetic form. Required work includes extensive reading of contemporary poets, weekly writing, peer review, and a final portfolio of revised poems. (C)

ENGL 211 - The Short Story 2 or 4 hours. This introductory course may adopt one or more of the following approaches: an historical survey of the genre, examining the emergence and growth of this literary form; an aesthetic treatment; a cultural stance, illustrating how class, gender, and ethnicity influence literary texts; a thematic ordering, revealing how different works treat familiar themes. (A)

ENGL 213 - Introduction to Poetry 2 or 4 hours. This course introduces students to the main traditions of English verse and the fundamentals of poetic form. Selections include the major poets of the English language, as well as contemporary British, Irish, and American poets. (A)

ENGL 214 - Introduction to Drama 2 or 4 hours. A study of plays as literature, parallel to other genres, but unique by way of staging and performance. The course examines comedy and tragedy as well as less traditional dramatic forms. Readings are drawn from plays of ancient Greece and Rome, the Middle Ages and the Renaissance, the Neoclassical Period, and the twentieth century. (A)

ENGL 218 - Autobiography 2 or 4 hours. "[O]ne never finds truth; one creates it" (Lillian Smith). What does it mean when an individual writes his/her life? This course combines the study of literary autobiography with traditional critical approaches to the genre. Readings include stories, letters, diaries, poems, memoirs, and criticism. (A)

ENGL 220 - Special Topics in Literature 2 or 4 hours. A series of introductory courses, each being a study of literature not covered in other 200-level courses. (A)

ENGL 221 - Tales of King Arthur 2 or 4 hours. This course examines King Arthur from his historical origins, to both his glorious and not-so-glorious medieval forms, and finally to his modern incarnations. It introduces students to medieval romance, the concept of chivalry, and the transmission of the Arthurian legend from one culture to another. (A)

ENGL 225 - Shakespeare and Cinema 2 or 4 hours. This course explores some of Shakespeare's most popular plays and their film adaptations. Students focus on the literary analyses of character, theme, and language in the written texts. We also compare the cultural contexts of representative comedies, tragedies, and histories, with their contemporary film settings. (A)

ENGL 226 - The Holocaust and Literature 4 hours. In this course students examine the Nazi destruction of the European Jews through diaries, survivors? memoirs, novels, poetry and drama. Additionally, representations of the Holocaust in art, recorded testimony, public memorials, film and music are explored. (A) (GP)

ENGL 230 - Special Topics in Film 2 or 4 hours. A series of introductory courses, each being a study of film not covered in other 200-level film courses. (C)

ENGL 240 - American Literature(s) 4 hours. This course examines American literature from one of several possible perspectives: cultural, aesthetic, historical, thematic, political. Literary periods or scope of reading may vary according to the perspective. (A)

ENGL 243 - Lunatics, Lovers, and Poets: Southern Storytellers 2 or 4 hours. Southerners don't hide their skeletons in closets; they invite them into the living room to entertain at tea. This course focuses on works which examine what Flannery O'Connor defined as the Southern grotesque-individuals "forced to meet the extremes of their own nature." Exploring the world created when tragic merges with comic, other writers might include Faulkner, Williams, Welty, Percy, Crews, Dickey, and Tyler. (A)

ENGL 254 - Women Writers 2 or 4 hours. A course that examines issues of language, gender, and culture portrayed through the lens of the woman writer. Texts may include novels, stories, autobiographies, essays, letters, and poetry. (Cross-listed as WGST 254) (A)

ENGL 256 - Multicultural American Literature 4 hours. This course explores the rich diversity of American literature, focusing either on one cultural tradition or on different ethnic communities in relation to one another. African American, Asian American, Latino/a, Jewish American, Italian American, or Native American literatures may be included. (Cross-listed as WGST 256) (A)

ENGL 278 - The Middle Ages in Literature and Film 4 hours. This course examines the use and abuse of medieval concepts such as the quest, Christian morality, and courtly love, as well as of specific medieval characters and events by authors and filmmakers such as J.R.R. Tolkien, C.S. Lewis, T.H. White, John Cleese, Walt Disney, and Quentin Tarantino. (A)

ENGL 281 - Literature and Science 2 or 4 hours. "Three quarks for Muster Mark" (James Joyce). This course will explore and challenge the boundaries separating disciplines. Fictional representations of emerging technologies, medical nightmares, and futuristic utopias and dystopias are all possibilities for discussion. (A)

ENGL 292 - Tales of Terror 2 or 4 hours. "Only the perverse fantasy can save us" (Goethe). If you like women in white, gray castles, and dark secrets, this course is for you. An exploration of the conventions and tropes in Gothic literature. (A)

ENGL 293 - Writers Gone Wild: Literature and the Environment 4 hours. We explore representations of the natural world in literary texts, asking questions like "does my dog really love me or am I anthropomorphizing?" "Is gardening an act of love, ownership, creativity, or something else entirely?" "Are we really leading lives of quiet desperation, and how can hoeing beans help?" (A)

ENGL 325 - Survey of British Literature I 3 hours. This course provides an overview of early British literature: from Beowulf to Milton, it also includes Chaucer; 16th and 17th Century Poetry and Drama; Shakespeare and the Jacobeans. Prerequisite: One 200-Level Literature course.

ENGL 326 - Survey of British Literature II 3 hours. This course provides an overview of British literature after 1660: from the Restoration to the Modernists, it also includes 18th-Century Poetry, Drama, and Prose; 19th and 20th-Century Novels; Romantic, Victorian, and 20th-Century Poetry. Prerequisite: One 200-level Literature course.

ENGL 327 - Survey of American Literature 4 hours. This course introduces students to American literature in cultural context, with particular attention to constructs of Americanness as they appear in or are challenged by literary texts. Students further develop analytical reading and writing skills through weekly one-hour workshops. Prerequisite: One 200-level Literature course.

ENGL 328 - The Language of Literary Art 4 hours. This course introduces students to the elements of literary art. Through a sequence of readings and problems, students gain an understanding of diction, figuration, genre, point of view, and context as shaping components of literary form. Prerequisite: ENGL 102.

ENGL 400 - Major Figures in Literature 2 or 4 hours. A series of courses, each being a detailed examination of the work of a single major writer. Currently these include: Homer, Dante, Swift, Hardy, Lawrence, Cather, Hemingway, Faulkner, and Morrison. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 406 - A Medieval Bookshelf 4 hours. This course introduces students to the connections between medieval English literature, its classical sources, and medieval European literatures. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 407 - Chaucer 4 hours. This course introduces students to Chaucer's works. All readings are in Middle English, and students will gain competence in reading and pronouncing Chaucer's English. Readings include" The Book of the Duchess," excerpts from "The Legend of Good Women," "Troilus and Criseyde," and excerpts from "The Canterbury Tales." Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 408 - Women Writers in the Middle Ages 4 hours. This course examines the writings of medieval women - abbesses, merchants, wives, mothers, and mystics - to explore the challenges female writers such as Heloise, Margery Kempe, Julian of Norwich, and Christine de Pizan presented to orthodox Christianity, to gender stereotypes, and to medieval political and social structures. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course. (Cross-listed as WGST 408)

ENGL 410 - English Renaissance Literature 4 hours. This course focuses on the poetry and drama of the sixteenth and seventeenth centuries. The Elizabethan, the metaphysical, and the classical traditions of poetry are represented by Spenser, Shakespeare, Donne, Jonson, and Milton; the Elizabethan-Jacobean drama is presented by such dramatists as Marlowe, Jonson, and Webster. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 411 - Shakespeare's Comedies and Histories 4 hours. This course introduces theories of comedy and explores Shakespeare's development as a comic dramatist as students read the festive and romantic comedies, comparing his early efforts with his mature plays. It also examines Shakespeare's dramatization of English and Roman history, the genre of the history play, and the playwright's adaptation of history to the comic and tragic modes. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 412 - Shakespeare's Tragedies 4 hours. This course focuses on Shakespeare as a tragic artist. It introduces theories of tragedy, explores the playwright's experimentation with the genre, comparing his early efforts with his mature accomplishments, and examines some tragi-comedies. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 413 - The Eighteenth Century 4 hours. This course explores the works of such authors as Jane Austen, Oliver Goldsmith, Matthew Lewis, Lady Mary Wortley Montagu, and Jonathan Swift against the background of eighteenth-century values and ideas. Genres include the novel, drama, and poetry. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 414 - English Romantic Movement 4 hours. This course focuses on the well-known works of Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats as

well as on the less well known but important works of writers such as Anna Barbauld, Mary Robinson, and John Clare. Poems will be supplemented by works of fiction associated with British Romanticism such as Mary Shelley's "Frankenstein." Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 415 - Victorian Literature 4 hours. This course focuses on major Victorian poets and novelists such as Alfred Lord Tennyson, Matthew Arnold, Robert Browning, Elizabeth Barrett Browning, Christina Rossetti, Gerard Manley Hopkins, Charles Dickens, the Brontes, Thomas Hardy, and Oscar Wilde. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 422 - Irish Literature: 1690-Present 4 hours. A nation rich in song and story, Ireland has produced a distinctive national literature. This course explores three centuries of Irish writing. Genres include narrative, drama, and poetry. Selections include Swift, O'Rathaille, O'Bruadair, Mangan, Wilde, Shaw, Pearse, Yeats, Joyce, Heaney, and Kavanagh. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 424 - Life and Art of James Joyce 4 hours. This course focuses on Joyce's fiction, including "Dubliners," "A Portrait of the Artist as a Young Man," "Ulysses," and selections from "Finnegans Wake." Biographical readings will accompany the literature, and Homer's "Odyssey" will be studied in parallel with Joyce's "Ulysses." Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 431 - 19th Century American Literature 4 hours. This course explores the diverse literary experiments of a nation striving toward cultural and aesthetic independence. Readings and critical perspectives vary according to instructors. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 432 - 20th Century American Visions 4 hours. This course examines modern and postmodern literary experiments as manifested in American culture. Readings and critical treatments vary according to instructors. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 433 - Voices in British and American Poetry 4 hours. The "experience of each new age requires a new confession, and the world seems always waiting for its poet" (Emerson). Selected readings introduce representative poetic voices throughout each British and American age, from the Middle Ages to the present, from Beowulf to Prufrock. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 434 - African-American Literature 4 hours. This course traces the directions of African-American literature from the slave narrative through the Harlem Renaissance to contemporary fiction, drama, and poetry. Writers such as Frederick Douglass, Jean Toomer, Zora Neale Hurston, Langston Hughes, Richard Wright, Ralph Ellison, Lorraine Hansberry, James Baldwin, Alice Walker, and Toni Morrison are included. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 442 - Modern and Contemporary Drama 2 or 4 hours. This course begins with the birth of the modern play in the late 19th century, then traces the evolution of dramatic literature to the present time. Readings selected from such playwrights as Ibsen, Strindberg, Chekhov, Shaw, O'Neill, Williams, Miller, Ionesco, Albee, Baraka, Pinter, Stoppard, Shepard, Shaffer, Norman, and Mamet. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 445 - Modernism 4 hours. An examination of innovative poetry, fiction and drama produced in the first half of the twentieth century in England, Ireland, and America, with selected texts in translation when appropriate. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/ classroom setting. Approved Plan of Study required.

ENGL 459 - Literary Criticism and Theory 2 or 4 hours. This course examines how literature has been approached and understood from the time of Plato to the present day. Readings are selected from those critical and theoretical statements which have most profoundly influenced literary response and even literature itself. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 460 - Special Topics Seminar-Writing 1-4 hours. A series of courses, each being an advanced study of a subject not covered in detail by other 400-level courses. Prerequisite: ENGL 328 or one 200-level creative writing course (ENGL 200-206).

ENGL 461 - Special Topics Seminar-Literature 1-4 hours. A series of courses, each being an advanced study of a subject not covered in detail by other 400-level courses. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course.

ENGL 472 - Dramatis Personae 4 hours. An advanced poetry writing course for students interested in exploring character dynamics through the vehicle of the persona. Each student is expected to invent several personae and to write in the voices of those characters. The primary focus of the course is the writers' workshop. Prerequisite: ENGL 328 or one 200-level creative writing course (ENGL 200-206).

ENGL 473 - Auto/Biographical Acts: Studies in Creative Non-Fiction 4 hours. Students consider the moral and aesthetic decisions that writers make in the process of writing lives and rendering images of the world. Focus is on autobiographical and biographical writing. Portfolio exam. Prerequisite: ENGL 328 or one 200-level creative writing course (ENGL 200-206).

ENGL 474 - Writing the Short Story 4 hours. This course is an intensive writing workshop with an emphasis on the dynamics of the short story. Students are encouraged to experiment with form while learning the techniques of the well-crafted story. Portfolio exam. Prerequisite: ENGL 328 or one 200-level creative writing course (ENGL 200-206).

ENGL 475 - Writing Formal Poetry 4 hours. This advanced creative writing course focuses on the appreciation and craft of formal poetry. Students will learn to write in iambic meters, and will learn definitions and read examples of traditional forms such as blank verse, sonnets, sestinas, villanelles, triolets, and ghazals. The primary focus on the course will be the writers' workshop, in which students compose and critique poems written in traditional forms. Prerequisite: ENGL 328 or one 200-level creative writing course (ENGL 200-206).

ENGL 476 - Writing the Long Poem or Poetic Sequence 4 hours. This creative writing course explores long poems and poetic sequences by reading and analyzing examples, then using those models to create our own poems. Through workshop

and revision, students will write either a long poem or sequence of shorter poems. Prerequisite: ENGL 328 or one 200-level creative writing course (ENGL 200-206).

ENGL 481 - International Women Writers 4 hours. In this course we explore literature written by contemporary women from different cultures. Study focuses on voice, content, and style, with some attention to the conditions in which the work was produced and to its reception. Prerequisite: ENGL 325/326 or ENGL 327. (GP) (Cross-listed as WGST 481)

ENGL 485 - Internship in English 1-4 hours. An off-campus independent study project under the direction of a faculty sponsor. Students gain exposure to possible careers related to English studies. Requirements for this project include a journal, job evaluations, and a final report. May be taken during the summer or semester abroad.

ENGL 496 - English Honors Thesis 2 hours. To graduate with Honors in English, students must attain a cumulative GPA of 3.30 in their major, successfully complete this senior project, and pass an oral examination. Eligible seniors should discuss their project plans with the Division Chair before registering for ENGL 496.

English as a Second Language

ESL 400 - Special Topics 1-4 hours.

ESL 401 - Speaking and Listening 2 hours. This course will help non-native English speakers improve their speaking and listening skills. Students will work on pronunciation, oral presentation, and extracting meaning from conversations and other kinds of extended discourse.

Environmental Studies

ENVS 100 - Special Topics 1-4 hours. Consideration of environmental issues and topics introduced in 100-level courses. Topics vary from term to term.

ENVS 101 - Environmental Studies I - Natural Science 4 hours. An introductory science course for environmental studies majors, which may also be used by other students to fulfill graduation requirements in natural sciences. This course provides an understanding of basic ecological principles and an awareness of the interaction of physical, chemical, and biological forces on Earth. (F2) (F-III) (GP)

ENVS 102 - Environmental Studies I - Social Science 4 hours. This interdisciplinary social science course examines the environmental implications of various socio-cultural, economic and political patterns in primitive, agricultural and industrial settings. These problems in contemporary America receive special attention. (GP)

ENVS 105 - Atmosphere, Humans, Ecosystems 4 hours. Life forms have been influencing the nature of the atmosphere for millions of years, but in recent centuries, human activities have caused profound changes in the atmosphere that are now affecting ecosystems. These include emissions that have caused acid rain, global climate change, damage to the ozone layer, and mercury pollution. This course will explore the effects humans (and other biota) have had on the atmosphere and the results that these changes have had on ecosystems. (F2) (F-III) (GP)

ENVS 106 - The Water Planet 4 hours. All ecosystems on earth depend on water, but the supply of fresh, clean water is limited and endangered. In this course,

students study the water cycle and how humans interact with this limited resource. Emphasis is placed on practical activities (measurement and analysis of water) and contemporary environmental issues threatening our water supply, including oceanic dead zones, anthropogenic pollution in precipitation, impacts of over withdrawal of groundwater (e.g. subsidence, sinkholes) and effects of climate change on water availability. (F-III)

ENVS 120 - Hazardous Materials 3 hours. This course will acquaint the student with the complexities and dangers of environmental work involving hazardous wastes. Aspects of hazardous materials chemistry, legal and regulatory aspects of hazardous materials, safe work practices, and basics of toxicology will be covered.

ENVS 200 - Special Topics 1-4 hours. Further consideration of environmental issues and topics introduced in 200-level courses. Topics vary from term to term.

ENVS 204 - Environmental History 2 hours. This survey course looks at attitudes toward nature in American history, the evolution of mainstream and fringe environmental advocacy groups, and key people and events that have shaped the modern environmental movement.

ENVS 205 - Environmental Data Analysis 4 hours. Basic techniques and tools for manipulation of quantitative data, emphasizing environmental studies, data collection, analysis on spreadsheets and statistical packages, graphical presentation. Prerequisite: ENVS 101 or permission of instructor. (III)

ENVS 206 - Fieldcraft-Outdoor Proficiency 4 hours. This course helps students acquire basic skills to 1) use field tools and 2) build habits essential to the study of environmental and geological sciences. Topics include note taking, map reading, navigation, data collection and data sharing. Prerequisite: One Geology or Environmental Studies course plus permission of instructor. (Cross-listed as GEOL 206)

ENVS 210 - Ecology of the Bahamas 3 hours. We explore concepts central to ecology through the exploration of Bahamian plant and animal life, using an immersive, natural history approach. We observe connections between natural selection, biogeography, disturbances and historic land use. The course features a week-long field trip at the Gerace Research Center, Bahamas. Prerequistes: ENVS 101 or BIOL 201- plus permission of instructor. (GP)

ENVS 220 - Introduction to Geographic Information Systems 4 hours. This course engages students in spatial thinking while providing them with the fundamentals to manipulate geographic (geospatial) data and utilize the ArcGIS geographic information system (GIS) for map production, spatial analysis and problem solving. (Cross-listed as CSCI 220)

ENVS 240 - Environmental Research Procedures I 3 hours. In this course, students are taught contemporary methods for studying and solving environmental problems. These include geological, biological, and geographical methods. Students are given the opportunity in the course to learn and practice the procedures while working on relevant problems.

ENVS 241 - Environmental Research Procedures II 3 hours. Continuation of ENVS 240. In this course, students are taught contemporary methods for studying and solving environmental problems. These include geological, biological, and geographical methods. Students are given the opportunity in the course to learn and

practice the procedures while working on relevant problems. Prerequisite ENVS 240.

ENVS 245 - Spirituality and the Environment 2-4 hours. This course surveys past and present beliefs of major religions and spiritual movements in respect to the way those beliefs have shaped adherents' attitudes toward the environment. Readings include ancient creation myths, medieval mystical writings on nature and current interpretations and re-interpretations of religious beliefs about nature. The course focuses as well on the contemporary debate about religion and its place in the environment. (GP)

ENVS 300 - Special Topics 1-4 hours. Further considerations of environmental issues introduced in 100 and 200-level courses.

ENVS 320 - Advanced GIS Applications 4 hours. This course advances the learning outcomes of Introduction to GIS (ENVS 220); namely to engage in spatial thinking while utilizing the ArcGIS geographic information system (GIS). Advanced applications include the raster spatial data model, remote sensing and spatial statistics. Prerequisite: ENVS/CSCI 220 or permission of instructor. (Cross-listed as CSCI 320)

ENVS 330 - Ornithology 4 hours. This course explores what makes birds unique. Topics include evolution, taxonomy, natural history, ecology, and conservation. Students will also spend time outside developing identification skills and learning scientific field research techniques. Prerequisite: ENVS 101, BIOL 150, or permission of instructor.

ENVS 351 - Environmental Biogeochemistry 4 hours. Transformation and movement of elements on Earth, with emphasis on effects of humans and potential global change. Projects involve field and instrumental analyses. Prerequisites: ENVS 101 and CHEM 105 or permission of instructor.

ENVS 357 - Conservation Biology 4 hours. This course focuses on the biology that underlies our efforts to conserve genetic, species, and community diversity and the community/ecosystem/landscape dynamics that sustain them. We will review concepts of genetics, population biology, and landscape ecology to understand threats to populations and species and the techniques used to sustain them. Prerequisite: ENVS 101 or BIOL 201 or BIOL 202. (Cross-listed as BIOL 357)

ENVS 360 - Junior Seminar 1 hour. Students in this course attend weekly seminars on pertinent topics related to Environmental Studies. Required of all Environmental Studies majors.

ENVS 400 - Special Topics 1-4 hours. Further considerations of environmental issues introduced in lower level courses.

ENVS 415 - Natural Resources Management 3 hours. An introduction to the pressures and principles guiding the management of land, plants and wildlife. We discuss the philosophical and policy contexts within which management decisions are made, the associated governance and stewardship issues, and the technical tools available.

ENVS 440 - Environmental Research Planning 2 hours. How research in environmental fields is developed, proposed, performed, and presented, with an

emphasis on research projects to be conducted as required independent studies for Environmental Studies majors.

ENVS 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

ENVS 485 - Internship in Environmental Studies 1-4 hours. An off-campus independent study project. Students gain experience by serving as interns at public agencies or private firms which deal with environmental problems. Instructor permission required.

ENVS 490 - Senior Seminar 2 hours. Students in this course will be guided through some of the common aspects of their senior research projects, such as literature searches, task mapping, and development of analytical protocols. All students will be required to present a weekly report on the progress of their senior research. Students will also attend the weekly Environmental Studies seminar series and learn about research techniques and procedures used by professionals. Required of all ENVS majors.

ENVS 499 - Senior Project in Environmental Studies 2-4 hours. Independent research under an instructor's supervision. Presentation of project is required for graduation.

Equestrian

Activity Courses

Note: All 100-level EQUS and some Dance courses can be applied to the University Physical Education requirement.

EQUS 100 - Special Topics 2 hours. Offerings in riding or other equestrian physical activity which vary year to year. (PE Requirement)

EQUS 101 - English Riding: Level I 2 hours. Open to students with little or no riding experience for basic hunter seat equitation taught at the walk, trot and canter. Topics include horse grooming, hoof care, safety procedures (on and off the horse), care of riding equipment, and a horse's health. (PE Requirement)

EQUS 102 - English Riding: Level II 2 hours. Competent hunter seat flat riders are introduced to jumping, trail and recreational riding. The course emphasizes safety and training riders to recognize their own abilities in the ring, on the trail, or in the barn. Topics include horse care, cost and management of one's own horse. Prerequisite: EQUS 101 or permission of instructor. (PE Requirement)

EQUS 103 - English Riding: Level III 2 hours. Riders entering this course should have a secure hunter seat at the walk, trot and canter and should exhibit good control over single fences (maximum height two feet). This course further conditions riders for more strenuous exercises on the flat and the course requires riders to jump small courses. Prerequisite: EQUS 102 or permission of instructor. (PE Requirement)

EQUS 104 - English Riding: Level IV 2 hours. Riders at this level should be competent to walk, trot, canter, and jump with reasonably good equitation. This course furthers the riders' abilities over higher (maximum three feet) fences and more complex courses. Riders continue practice teaching and, time permitting, pleasure and practice sessions, as well. Prerequisite: EQUS 103 and permission of instructor. (PE Requirement)

EQUS 105 - Introduction to Dressage 2 hours. Open to students with intermediate experience in the English disciplines. Dressage is offered to equip students with a broad base of knowledge in classical horsemanship encompassing theory, philosophy, riding, and care of the horse. Students will be introduced to the basics of training level dressage. Prerequisite: EQUS 102 or permission of instructor. (PE Requirement)

EQUS 107 - Combined Training 2 hours. Concentrating on three areas: Dressage, Cross Country Jumping and Stadium Jumping Students are given an introductory working and riding knowledge in combined training. During the course students attend one clinic in each phase and a three day event. Prerequisite: EQUS 103 or permission of instructor. (PE Requirement)

EQUS 110 - Western Riding: Level I 2 hours. Open to students with little or no riding experience in the western disciplines. Skills taught include: bridling, saddling, and horsemanship for the walk, jog and lope. Topics include grooming, hoof care, lungeing, safety procedures, care of horse and equipment. (PE Requirement)

EQUS 111 - Western Riding: Level II 2 hours. Open to students with beginning experience in the western disciplines. Skills taught include: western pleasure, horsemanship and showmanship patterns. Topics include safety procedures, proper tack, attire, equipment, and care of horse. Prerequisite: EQUS 110 or permission of instructor. (PE Requirement)

EQUS 112 - Western Riding: Level III 2 hours. Open to students with intermediate experience in the western disciplines. Skills taught include: western pleasure, horsemanship, showmanship and introductory trail obstacles found on trail course patterns. Topics include showing the all-around horse at breed shows, safety procedures, care of horse and equipment. Prerequisite: EQUS 111 or permission of instructor. (PE Requirement)

EQUS 113 - Western Riding: Level IV 2 hours. Open to students with intermediate or above experience in the western disciplines. Skills taught include: speed events including barrel racing, pole bending, stake race, and goat tying. Topics include: safety procedures, care of horse and equipment and introductory knowledge of team penning. Prerequisite: EQUS 112 and permission of instructor. (PE Requirement)

EQUS 115 - Dressage II 2 hours. Theoretical and practical experience in effectively riding dressage at USDF Training Level and beginning First Level movements. The practical side of this course prepares the student for introduction to competition. The theoretical side develops the student's comprehension of the history and philosophy of dressage. Prerequisite: EQUS 103 or 105; or permission of instructor. (PE Requirement)

EQUS 118 - Introduction to Reining 2 hours. Designed for the advanced rider who wants to become proficient in riding reining patterns. Lecture topics include: general knowledge and observation of reining patterns, condition of the horse needed to compete in reining, health, safety issues, and the shoeing needs of reining horses. Lab skills include: loping circles, lead changes, spins, run downs, sliding stops, and roll backs. Prerequisite: EQUS 112 or permission of instructor. (PE Requirement)

EQUS 119 - Introduction to Reined Cow Horse 2 hours. The course builds on the skills taught in EQUS 118-Introduction to Reining and includes the use of cows to

further students' knowledge of Reined Cow Horse events and the rules and regulations of the events. Prerequisite: permission of instructor.

EQUS 120 - Driving I 2 hours. Open to all students regardless of horse experience. Students learn safe ground handling practices and basic horse care as well as harnessing, hitching and driving single horses. Other topics include safely starting a horse in harness and exploring historical and current disciplines in driving. (PE Requirement)

EQUS 121 - Driving II 2 hours. Students learn safe ground handling practices around draft horse pairs, including harnessing, line driving, hitching and driving implements. Additional topics include care and management of draft horses and draft horse showing. Prerequisite: EQUS 120. (PE Requirement)

EQUS 122 - Driving III 2 hours. Students apply draft horse driving and management skills in hands-on field work. Course topics include the use of horses to do work, driving a variety of implements and tools, and the modern uses of draft horses in the industry. Prerequisite: EQUS 121. (PE Requirement)

EQUS 200 - Special Topics 1-4 hours. An open theory/classroom course varying in content from year to year.

EQUS 205 - Introduction to Equine Science 4 hours. This course covers classroom studies of anatomy, nutrition, disease, and veterinary aspects of owning a horse or running a stable. Barn assignments deal with particular injuries and there are demonstrations with horses in terms of wrapping various wounds and treating common equine ailments.

EQUS 212 - Methods of Teaching Riding 4 hours. This course covers various techniques and philosophy used in teaching riding for pleasure and beginning shows. Safety protocol, mounted and unmounted, is stressed along with basic horsemanship skills. Students have the opportunity to assist instructors with classes at the Equestrian Center. Prerequisite: permission of instructor.

EQUS 215 - Equine Business Management 4 hours. Students learn about the management aspects of a stable including: the needs and basic care of the equine, layout and design of stables, and running a stable as a business.

EQUS 216 - Horse Show Management 4 hours. Students learn what is involved in managing a horse show including planning, prize list, advertising, officials, knowledge of rules of sanctioning organizations, ordering awards. Students must be available to work some weekends at shows held at Equestrian Center. At the end of the semester, students manage their own show at the Center.

EQUS 218 - Judging Horse Shows 4 hours. Open to students with advanced level riding skills in either English or Western riding. Students will learn how to evaluate and place conformation, halter and performance classes according to the standards set by various organizations and breeds of horses.

EQUS 223 - Hunter and Jumping Course Design 2 hours. Technical aspects and differences between hunter, jumper, equitation and stadium jumping courses will be discussed. Hands on application will be provided by assisting show managers with course design at shows at the Equestrian Center along with assisting instructors with setting jumps for jumping classes.

EQUS 225 - Equine Nutrition 2 hours. This course examines digestive physiology; involving carbohydrates, proteins, fats, minerals and vitamins. Also, a practical approach to proper feedstuffs and use of quality feedstuffs to maintain health and productivity of horses.

EQUS 226 - Caring for the Equine Anatomy 2 hours. Guest speakers introduce students to alternative equine anatomy care and caring for the equine anatomy in general. An equine chiropractor, a saddle fitter and farrier, among others, discuss the importance of their professions in caring for the horse's anatomy. Students learn the history and benefits of equine massage, study equine skeletal anatomy, connective tissue, muscle location (origin and insertion) and function.

EQUS 228 - The Equine Industry in Ireland 2 hours. Students learn about the strategies for the development and promotion of the internationally competitive Irish Sport Horse Industry, which has evolved as a collaboration of the governing bodies of Ireland with Irish Sport Horse Breeders. Travel to Ireland for 10 days is a required part of the course. (GP)

EQUS 385 - Internship in Equestrian Studies 1-4 hours. An off-campus project in the field serving as an intern in an area of equestrian studies. When the field experience is completed, a journal and final report is submitted.

EQUS 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

French

FREN 101 - French I 4 hours. Introduction to the language and culture of the French-speaking world; speaking, reading, understanding and writing. Practice in language lab. Emphasis on communicative skills. Assumes no prior knowledge of the language. (II)

FREN 102 - French II 4 hours. Continuation and further development of the skills learned in FREN 101. Prerequisite: FREN 101, 41-60% on French Language Placement Exam, or permission of instructor. (II)

FREN 200 - Special Topics 1-4 hours. Content varies. Prerequisite: FREN 102, 61% or higher on French Language Placement Exam, or permission of instructor.

FREN 201 - French III 4 hours. Continuation and further development of the skills learned in FREN 102. Prerequisite: FREN 102, 61% or higher on French Language Placement Exam, or permission of instructor. (II)

FREN 202 - French IV 4 hours. Continuation and further development of the skills learned in FREN 201. Prerequisite: FREN 201 or permission of instructor. (II)

FREN 210 - Global Perspectives: Paris 2 hours. A course enabling students to develop an understanding and appreciation of another culture, first in the classroom, and then two weeks in Paris. Focus is on history, art, and contemporary culture. Open to all students. (Cross-listed as GLBS 210) (GP)

FREN 300 - Special Topics 1-4 hours.

FREN 301 - Advanced French Conversation 4 hours. Intensive practice in speaking French, with particular attention to the French sound system. Topics for

conversation are taken from contemporary French journals, newspapers, films, etc. Prerequisite: FREN 202 or permission of instructor.

FREN 302 - Advanced French Grammar and Composition I 4 hours. An analysis of the grammatical structure of the French language with emphasis on the more complex problems in French syntax and usage, followed by practice in composition. The course is conducted in French. Prerequisite: FREN 202 or permission of instructor. (Alternate years)

FREN 305 - French Pronunciation and Phonetics 2 hours. This course focuses on oral proficiency and listening comprehension, as well as French phonetics. Students gain a better understanding of the phonetic structure of French and improve all aspects of their pronunciation, including intonation, phrasing, syllable structure and stylistic interpretation. Prerequisite: FREN 201.

FREN 311 - French Literature I 4 hours. A historical-critical view of French literature from the Middle Ages through the 18th century. Readings from anthologies and selected complete texts from each period. Discussion and reading in French. Prerequisite: FREN 310 or permission of instructor.

FREN 316 - Contemporary French Culture 4 hours. Introduction to the most important elements of present-day French culture, literature, film, art, and music. Recent history and politics, economics and social structure; religion, family, cuisine, and customs. Readings and discussions in French. Prerequisite: FREN 202 or permission of instructor. (Alternate years)

FREN 400 - Special Topics in French 1-4 hours. Content varies from year to year with topics such as French Women's Literature and Feminist Theory, Bilingualism in Quebec, Medieval French Literature, Ethnic Minorities in France, Caribbean French Culture. The course is conducted in French. Prerequisite: FREN 310 or permission of instructor.

FREN 410 - French Film Criticism 4 hours. Examines the basic elements of the art of French film in order to understand both the historical development of filmmaking in France and the personal vision of each director. Students view films by such filmmakers as Melies, Renoir, Carne, Truffaut, and Varda. (C) (GP)

FREN 450 - Independent Study 1-4 hours. For students with a particular interest in an aspect of French language or literature not covered in any established course. Approved Plan of Study required.

FREN 485 - Internship in French 1-4 hours. An off-campus project in consultation with faculty in the Division of Modern Languages. Students gain experience in a variety of careers involving French and related fields. The internship must be conducted in French. Requirements for this project include a journal, job evaluations, and a final report. May be taken during the summer or semester abroad. FREN 202 or equivalent proficiency recommended. (GP)

FREN 490 - Modern Languages Senior Seminar 0 hours. In this seminar students have the opportunity to complete their electronic portfolio and prepare for an oral defense. In consultation with professors and peers, students select the documents to include in keeping with portfolio requirements. As part of this seminar, students write and revise their Senior Reflective Statement and their resume or curriculum vitae.

Geology

GEOL 101 - This Dynamic Earth 4 hours. An introduction to the nature of the materials that make up the earth, their genesis and arrangement (both inside the earth and at the surface) and to the physical processes that act upon them. Topics include: rocks and minerals, the structure of the earth, plate tectonics, land forms. Three lectures and a laboratory. (F1) (F-I)

GEOL 103 - Earthquakes and Volcanoes 4 hours. This course reviews what is presently known about earthquakes and volcanoes, investigates ways to reduce loss of life and property, and explores some current research which may lead to a better understanding of these violent natural events. (F2) (F-II)

GEOL 104 - Earth and Life through Time 4 hours. An introduction to the history of the earth and life on it, and to the techniques for "reading" these from the rock record. Topics include geologic time, sedimentary rocks and depositional environments, fossils, ancient and recent geologic events and the evolution of life. Three lectures and a laboratory. (F1) (F-I)

GEOL 106 - Elementary Oceanography 4 hours. A study of the major contemporary concepts of biological, chemical, geological, and physical oceanography. The nature and origin of ocean basins, sea water composition, water masses, oceanic circulation, waves, tides, marine ecology, biological productivity, sedimentation, and plate tectonic theory are discussed. (F2) (F-II)

GEOL 110 - Lunar Geology 2 hours. Naked eye observations permit us to understand why the Moon appears where it does in the sky, how its appearance changes, and how it affects things on Earth. This course studies these data using computers, personal observations and models. (F2) (F-I)

GEOL 200 - Special Topics in Geology 1-4 hours. This course discusses topics of either general or specific nature not covered in detail in other 100 or 200-level courses, for example the evolution and extinction of the dinosaurs. (Sufficient demand)

GEOL 201 - Surficial Geology 4 hours. In this study of the earth's surface materials, major topics include weathering and soil formation, glacial deposits, aeolian deposits, surface water hydrogeology and related geomorphology. Three lectures and one laboratory per week. Prerequisite: One of GEOL 101, GEOL 104, ENVS 101; or permission of instructor.

GEOL 206 - Fieldcraft-Outdoor Proficiency 4 hours. This course helps students acquire basic skills to 1) use field tools and 2) build habits essential to the study of environmental and geological sciences. Topics include note taking, map reading, navigation, data collection and data sharing. Prerequisite: One Geology or Environmental Studies course plus permission of instructor. (Cross-listed as ENVS 206)

GEOL 301 - Structural Geology 4 hours. Students learn how to recognize deformational features such as folds, faults, joints and dikes; how to, correlate these with three dimensional geometric techniques such as folding lines and stereographic nets; and how to derive from these features the important tectonic parameters active at the time of their formation: maximum stress direction, principal stress differences, confining pressure and strain rate. Prerequisite: one geology course.

GEOL 302 - Mineralogy and Petrology 4 hours. Description, classification, and genetic interpretation of the rock forming minerals and the igneous and metamorphic rocks which are formed from them. Focus will be on mineral and rock associations in space and time, with emphasis on tectonic and environmental interpretations. Prerequisite: one 100-level geology course or permission of instructor.

GEOL 307 - Stratigraphy and Sedimentation 4 hours. The chemical and physical processes leading to weathering, erosion, transport, deposition, lithification and alteration of sediments are considered along with the economic aspects of sedimentary rocks, such as the occurrence of oil, natural gas, and coal. Prerequisite: one geology course or permission of instructor.

GEOL 400 - Special Topics in Geology 1-4 hours. A discussion of topics appropriate to current geological phenomena, including such topics as environmental geochemistry or economic geology. (Sufficient demand)

GEOL 408 - Tectonics 4 hours. The formation and evolution of cratons, rifts, Atlantic type margins, shear zones and island arcs are discussed in this course. A detailed study is made of the geological structure and history of the Appalachians, Rockies, Alps and Himalayas. (Alternate years)

GEOL 414 - Geophysics 4 hours. A study of the structure and evolution of the solid earth using information derived from geophysical investigations. The shape of the earth, its gravity, magnetic field, thermal and rheological characteristics as well as the gravitational fields are used to impose constraints on possible models of the planet. (Alternate years)

GEOL 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

GEOL 464 - Hydrogeology 4 hours. An examination of the hydrologic system as a whole and in parts. Emphasis is on subsurface water and hydrogeochemistry. Additional topics may include water use and management, water pollution, and flood control. Laboratories emphasize field and laboratory techniques of water quality and quantity analysis. Prerequisite: GEOL 201 or permission of instructor.

German

GRMN 101 - German I 4 hours. Introduction to the language and culture of the German-speaking world. Development of skills in speaking, reading, understanding and writing. Practice in language lab. Emphasis on communicative skills. Assumes no prior knowledge of the language. (II)

GRMN 102 - German II 4 hours. This course builds on introductory German I, increasing students' communicative skills through an exploration of German-speaking cultures. Students improve their proficiency in speaking, listening, writing and reading German through engaging in class activities and independent work. Students learn to perform in real-life situations like traveling, ordering in restaurants, and finding a job. Prerequisite: GRMN 101, 41-60% on German Language Placement Exam, or permission of instructor. (II)

GRMN 200 - Special Topics in German 1-4 hours. Content varies from year to year.

GRMN 316 - German History and Culture 4 hours. Cultural and historical development of the German-speaking world from accounts of the earliest Germanic tribes to post-unification Germany of the 1990s and twenty-first century. Readings, discussions and assignments are in German. Prerequisite: GRMN 202 or permission of instructor. (GP)

GRMN 400 - Special Topics 1-4 hours. Special topics may include: Literature and Film of the former GDR, History of the German Language, German Literature of the Renaissance, Contemporary Writers in the German-speaking World, Minority Writers in Germany, and The History of Jews in Germany. Readings, discussions and assignments are in German. Prerequisite: 300-level German course or permission of instructor.

GRMN 450 - Independent Study 1-4 hours. For students with a particular interest in an aspect of German language, culture or literature not covered in any established course. A 4-hour independent study is required of German majors. Approved Plan of Study required.

GRMN 485 - Internship in German 1-4 hours. An off-campus project in consultation with faculty in the Division of Modern Languages. Students gain experience in a variety of careers involving German and related fields. The internship must be conducted in German. Requirements for this project include a journal, job evaluations, and a final report. May be taken during the summer or semester abroad. GRMN 202 or equivalent proficiency recommended. (GP)

Gerontology

GERO 118 - Introduction to Adult Development and Aging 4 hours. This course examines adulthood and aging from a biopsychosocial perspective. Topics include research methodology in adulthood; theories of normal aging, physical and environmental influences on adult development; diseases and disorders associated with aging; changes in cognition; intelligence and wisdom; gender and minority issues in aging; issues regarding death and dying. It also challenges popular misconceptions about aging. (Cross-listed as PSYC 118) (E1)

GERO 300 - Special Topics in Gerontology 2-4 hours. A series of directed readings on special topics, changing from semester to semester. Through a combination of reading, seminar feedback, and guest lectures, students are able to explore areas of special interest in greater depth. Prerequisite: PSYC 101. Recommended GERO 118 or permission.

GERO 429 - Cognition and Aging 2 hours. A lecture and discussion course covering current research and theories of cognitive processes in the older adult. Basic topics include age differences in memory, verbal processes, motor performance, perception, problem solving, and intelligence. Prerequisite: PSYC 101. Recommended: PSYC 332 or GERO 118 or permission of instructor. (Cross-listed as PSYC 429) (Alternate years)

GERO 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

GERO 485 - Gerontology Internship 4 hours. Field work associated with federal, state or local agencies for the aging, or with social service, health care, legal, recreational or residential facilities primarily serving older adults. Supervision provided jointly by agency personnel and the instructor. At least 6 hours per week in

a field placement is expected. Prerequisites: Senior Gerontology major and permission of instructor.

Global Studies

GLBS 101 - Introduction to Global Studies 4 hours. This course introduces students to an overview of contemporary human patterns from geographic, environmental, linguistic, socio-cultural, religious, political, and economic perspectives. From this global framework, students learn to communicate (and think) across cultures. (E3) (GP)

GLBS 200 - Special Topics 1-4 hours. An open course, varying in content from year to year, which allows for concentration in specialized areas. (Sufficient demand)

GLBS 210 - Global Perspectives: Paris 2 hours. A course enabling students to develop an understanding and appreciation of another culture, first in the classroom, and then two weeks in Paris. Focus is on history, art, and contemporary culture. Open to all students. (Cross-listed as FREN 210) (GP)

GLBS 212 - Buenos Aires: Literature and the Arts 2 hours. The course introduces students to the ways in which Argentine fiction produces Buenos Aires both as a center of European high culture and as a site of social conflict and vibrant popular culture. Students respond analytically to Argentine literature through engagement in close reading. Readings of literary texts are combined with study of related artistic tendencies in historical context. The course concludes with a trip to Buenos Aires. Travel is a required part of this course. (Cross-listed as SPAN 212) (A) (GP)

GLBS 215 - Framing Gender: Latin American Film 4 hours. This course introduces students to Latin American film from the 1940?s to the present. Students analyze filmic representations of gender, race, sexuality, and socio-economic class in historical context, exploring relationships among art, politics and culture. Students develop an understanding of film-making practices and acquire and apply critical skills and theoretical approaches to thinking, speaking, and writing about films. (Cross-listed as SPAN 215, WGST 215) (C) (GP)

GLBS 216 - Cuba Close Up: Film since the Revolution 4 hours. Cuban cinema was transformed by the Revolution, which elevated the importance of film in Cuba and contributed to its political nature. Students analyze filmic representations of gender, race, and socioeconomic class in their historical contexts, exploring the relationship among art, politics, and culture. Students develop critical skills for viewing and interpreting films and for speaking and writing about films and film genres. (Cross-listed as SPAN 216, WGST 216) (C) (GP)

GLBS 221 - Pop Culture Goes Global 4 hours. This course examines U.S. popular culture and the media and their sociological, economic and political influence on cultures at home and abroad. It offers students a deeper understanding of globalization and its effect on their lives. (Every year; Fall) (GP) (Cross-listed as COMM 221)

GLBS 300 - Special Topics 1-4 hours. An open course, varying in content from year to year, which allows for concentration in specialized areas. (Sufficient demand)

GLBS 311 - Nip, Tuck, Perm, Pierce, Tattoo, Embalm: Adventures with Embodied Culture 2 hours. People the world over modify their bodies in prescribed ways. This course examines the body from head to toe in far-flung cultures, but especially in the U.S., asking, ?How?? ?Why?? and ?What does it mean?? (Cross-listed as ANTH 311)

GLBS 315 - Understanding Global Media and Cultural Change 4 hours. In this course students analyze global media (news and entertainment) in order to better understand how global media messages influence societies and audiences worldwide. Students also develop an understanding of how to create their own objective and persuasive global media messages. (Cross-listed as COMM 315) (Every other year; Spring) (GP)

GLBS 323 - The History of Stuff 4 hours. In this class we learn about the history of everyday commodities around us and how they transformed human civilization: how silver revolutionized global trade, how coffee helped create the public sphere, how rubber led to mass murder and how cocaine figures in transnational organized crime, and more. (Cross-listed as HIST 323)

GLBS 325 - Global Communication 4 hours. Global Communication introduces students to communication and media issues impacting the global community in the digital age, including: international telecommunication networks, transnational media corporations (based in America, Asia, the Middle East, etc.), global news, global advertising, the Internet and information flow. Prerequisite: COMM 110 or permission of instructor. (Cross-listed as COMM 325) (GP)

GLBS 400 - Special Topics 1-4 hours. An open course, varying in content from year to year, which allows for concentration in specialized areas. (Sufficient demand)

GLBS 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

GLBS 495 - Global Issues Seminar 4 hours. This integrative capstone course allows seniors to study a variety of global issues in-depth and to present the results of their own particular global experiences and studies. Topics examined will vary from year to year. The seminar may be focused on a central theme or on a variety of issues, depending upon the students' international interests and the instructor's discretion. Prerequisites: GLBS 101; Study Abroad; senior standing. (Cross-listed as ANTH 495 and SOCI 495) (GP)

History

HIST 107 - The World in the 20th Century 4 hours. Surveys political, social, economic, and intellectual movements shaping twentieth century states and peoples. Special attention is devoted to the decline of European hegemony, the rise of the United States, and the evolution of "emerging" nations in Asia, Africa, and the Americas. (D) (GP)

HIST 110 - The Making of Europe 4 hours. An investigation into the origins and development of Europe, from ancient civilizations to 1650. Focus on the formation of nations, empires, and ideologies; social and cultural developments; and cultural interactions within and beyond Europe's borders. (D)

HIST 111 - Modern Western History 4 hours. A survey of developments in Europe and the Western Hemisphere since the 1500s, with emphasis on the impact of ideas and ideologies (including Fascism, Nazism, and Communism), social and economic change (including industrialism), revolutions and world wars, and imperialism. (D) (GP)

HIST 120 - The Ancient Mediterranean 4 hours. Survey of civilizations that helped shape modern-day Eurasia and North Africa - Mesopotamia, Egypt, Minoan Crete, Israel, Greece, Persia, and Rome. Emphasis on the interaction of these cultures around the Mediterranean Sea. Evaluation based on short papers, exams and quizzes, and participation. (D)

HIST 121 - Medieval Cultures 4 hours. Exploration of the three dominant cultures of the medieval period: Europe, the Byzantine Empire, and the Islamic world, with a special focus on their interactions. (D)

HIST 152 - The Spectacular Spanish Empire: Rise, Decline, Influence 4 hours. "Spectacular" and "fascinating" have been used to describe the largest empire ever to exist. Covering ca. 1492?1975, this course traces Spain's "rise and fall" while examining developments in nationalism and imperialism in Europe and in the Americas, Topics include politics, culture, and Spain's legacy in the modern world. (D)

HIST 200 - Topics in History 1-4 hours. A historical examination of issues in history. Topics will vary each time the course is offered. (Sufficient demand)

HIST 211 - American History I 4 hours. American history from Jamestown to the Civil War with particular attention to the political, social, and economic development of the new nation. (D)

HIST 212 - American History II 4 hours. American life from the Civil War to the present with particular attention to the transformation from a rural to an urban society, movements for social reform, and the further extension of civil and political rights. Can be taken as a continuation of HIST 211 or may be taken independently. (D)

HIST 223 - Survey of German History 4 hours. This course offers a survey of German history from the earliest evidence of the Germanic tribes through developments in the last decade in Germany. (D)

HIST 300 - Topics in History/Non-American 1-4 hours. Studies of different non-American historical themes, with topics varying each time the course is given.

HIST 301 - America in War during the 20th Century 4 hours. With reference to both World Wars, Korea, Vietnam, and the Gulf War, the course addresses origins, strategy and leadership, political and social effects, and moral and legal issues including the army code of conduct, Hiroshima, the Nuremburg Trials, and Mylai. (GP) (Alternate years)

HIST 303 - The Civil War Era: 1830-1877 4 hours. A study of the War Between the States, including analyses of the political, social, economic, and ideological differences between the sections; the war and its aftermath; the historiography of the war: and an evaluation of the traditional view of the war as the "watershed" of American history. (Alternate years)

HIST 306 - Prosperity and Depression: America 1919-1941 2 hours. A survey of the Roaring Twenties and the Great Depression. The course examines political, social, and economic developments, as well as the importance of cultural phenomena like Lindbergh's flight, the impact of movies, the rise and fall of the KKK, and the stock market crash. (Sufficient demand)

HIST 307 - Post-World War II America 4 hours. A historical survey of domestic events since World War II with particular attention to the fate of the New Deal, McCarthyism, the Kennedy legacy, the impact of Vietnam, and the civil rights and women's movements. (Alternate years)

HIST 308 - Americans and Their Environments 4 hours. An inquiry into Americans' attitudes toward and relationships to environments they encounter and create, ca. 1600 - present. Topics include "Nature," industrialization, fine arts and architecture, government and citizen actions, and the impact of the U. S. on global resources.

HIST 309 - Israelis, Arabs and American Foreign Policy 2 hours. A historical survey of the Arab-Israeli conflict from the nineteenth-century beginnings of Zionism to the Second Intifada, with special attention to the role played by the USA.

HIST 310 - The Ancient Greeks 4 hours. The origins, growth and development of the Greek world from Mycenean through Hellenistic times (12th-1st centuries, B.C.E.), with topics such as the Homeric myths, Sparta, Athens, democracy, the polis, the Hellenistic world. (Alternate years)

HIST 311 - The Roman World 4 hours. Rome from a river village to an empire (5th century B.C. - 3rd century A.D.), including its traditional origins, Etruscan control, republicanism, social conflict, imperialism, Julius Caesar, Antony and Cleopatra, Augustus and Nero, imperial life and livelihood. (Alternate years)

HIST 312 - Early Medieval Europe, 400-1050 4 hours. This course covers European history from the end of the Roman Empire to the beginning of feudal society. Through reading, lectures and discussions, students discover that the "Dark Ages" were actually filled with activity and innovation. (Alternate years)

HIST 320 - Europe and the Americas, 1450-1750 4 hours. An inquiry into the dynamics and results, for both Natives and Europeans, of encounters between them. Included are assumptions and situations of each side, conflicts and cooperation among groups, and adaptations of Europeans to the new environment and Natives to European presence. No prerequisite.

HIST 321 - The History of Fascism 4 hours. This course is a study of the history of fascism. We examine the origins of fascist ideas and organizations; the varieties of fascist organizations and beliefs in Europe and European colonies; and the impact of fascism on politics and society before, during and after the Second World War. (GP)

HIST 322 - Churchill, Stalin, Roosevelt, Hitler 2 hours. A biographical approach to the Great Depression and World War II period. (GP)

HIST 323 - The History of Stuff 4 hours. In this class we learn about the history of everyday commodities around us and how they transformed human civilization: how silver revolutionized global trade, how coffee helped create the public sphere, how rubber led to mass murder and how cocaine figures in transnational organized crime, and more. (Cross-listed as GLBS 323)

HIST 324 - Queer American History 4 hours. What is queer history? Why write it? Who should be included? This course addresses the possible content and theoretical issues in the study of lesbian, gay, bisexual, and trans people in America since the seventeenth century. Prerequisite: sophomore standing or permission of instructor. (Cross-listed as WGST 324)

HIST 325 - Imperialism in Africa and Asia 4 hours. This course examines how, from 1830 to 1980, foreign powers conquered vast territories of Africa and Asia. Topics discussed include: pre-colonial societies and trade; theories of imperialism, commodities and finance; genocide; anti-colonialism and decolonization.

HIST 326 - The Modern Middle East and North Africa 4 hours. This course offers an overview of the modern history of the Middle East and North Africa. Topics include the end of the Ottoman Empire, the Nahda or cultural renaissance, colonialism and decolonization, Arab cinema and art, the petroleum industry and OPEC, the Israeli-Palestinian conflict, the Islamic Revolution in Iran, and more. (GP)

HIST 327 - Propaganda: Persuasion, Art and War 4 hours. Is propaganda the opposite of knowledge, or one of the means for its dissemination? In this course we examine the development of propaganda, or mass persuasion. Topics include art, contemporary media, public relations and war. (GP)

HIST 328 - Visions of Modernity: Art, Politics and Ideas 4 hours. This course is a history of the ?big ideas? of our modern era and how they define our lives. We examine foundational works in psychoanalysis, art and cinematic theory, Existentialism, postcolonial theory and deconstruction. (Cross-listed as PHIL 328)

HIST 329 - Revolution and Culture: Hegel, Marx, Nietzsche 4 hours. An in-depth study of major texts by Hegel, Marx, and Nietzsche, with a thematic focus on the nature of historical change, the interpretation of history, and the relationship between material life and culture, including religion, philosophy, politics, and morality. (Cross-listed as PHIL 329, POLS 329)

HIST 359 - History of Chinese Thought 4 hours. Focusing on the relationship between religion and philosophy, this course develops an understanding of the distinctive character of Chinese culture by surveying the development of religion and philosophy from antiquity to the medieval period and challenges of the twentieth century. (Cross-listed as PHIL 359, RLGS 359)

HIST 360 - Topics in History/American 1-4 hours. Studies of different American historical themes, with topics varying each time the course is given.

HIST 365 - The British Isles in the Middles Ages 4 hours. The history of the British Isles from the Anglo Saxon invasions to the end of the Tudor dynasty. Focus on the interrelationship of all four regions--England, Wales, Scotland, and Ireland--in the Middle Ages. (Sufficient demand)

HIST 371 - American Diplomacy: 1763-1898 2 hours. An analysis of American foreign policy in the eighteenth and nineteenth centuries, with special attention to the domestic attitudes and developments which affected the diplomacy of continental expansion. (Sufficient demand)

HIST 372 - America as a World Power, 1898-Present 4 hours. American diplomacy in the age of mass production, world wars, fascism and communism including close scrutiny of the conflict between isolationism and internationalism. (Alternate years)

HIST 375 - The Creation of American Culture 4 hours. An examination of the dynamics of both "serious" and "popular," culture in nineteenth century America, with specific attention to their interaction, as well as to the relationships between the developing political/social ideology and the creative activity of the era. (Alternate years)

HIST 376 - Modern American Culture 4 hours. An examination of the variety of artistic expression, both "serious" and "popular," in 20th century America, with particular attention to relationships between artistic media, democratic ideals, economics, and technology.

HIST 377 - History of American Slavery 2 hours. A history of American slavery and race relations from the 17th century until emancipation. (Sufficient demand)

HIST 383 - The Nazi Holocaust 2 hours. This course will cover a number of topics, including German anti-Semitism and the means by which Hitler engineered the Final Solution. Half the course will focus on the Nazis, the other half on their victims. It concludes with a discussion of Holocaust "denial" and the nature of evil. (GP)

HIST 385 - Internship in History 1-4 hours. Internship under supervision. Available irregularly.

HIST 387 - Modern France, 1815-Present 4 hours. A historical survey of the development of modern France. Particular attention is given to the emergence of a modern democratic society and the attempt to resolve a revolutionary heritage. (GP) (Alternate years)

HIST 421 - The Age of Franklin and Jefferson 4 hours. This course examines the transformation of the colonies into an independent federation, with particular attention to paradoxes symbolized in the lives and thought of Franklin and Jefferson. Includes thorough studies of the Revolution and its legacy, the U.S. Constitution, and the social, economic, and intellectual dynamics of the early republic. Prerequisite: sophomore standing or permission of instructor. (Alternate years)

HIST 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

Individually Structured Major

ISM 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course by the student in the Individually Structured Major program, under supervision of the student's ISM board. Approved Plan of Study required.

ISM 495 - Baccalaureate Project 4-6 hours. Senior project within the Individually Structured Major Program under supervision of the student's Advisory Board. Prerequisite: Permission of Advisory Board Chair.

Interdisciplinary Art

IART 101 - Interdisciplinary Art I 4 hours. Thematically-organized foundation course. Creative projects combine studio work with art theory. Instruction in wide range of visual media. Approaches and techniques include drawing from observation, abstraction, color theory, and painting as well as exposure to associated conceptual issues. (C)

IART 102 - Interdisciplinary Art II 4 hours. In this course we investigate the fundamental sculptural elements of form, mass, scale, structure and space. Students build an understanding of dimensional concepts through basic sculptural techniques and material exploration, as well as the theoretical concepts of Structuralism, site-specificity, and art as experience. (C)

IART 103 - Interdisciplinary Art III 4 hours. Continuation of IART 102.

IART 104 - Interdisciplinary Art IV 4 hours. Continuation of IART 103.

IART 120 - Discovering Contemporary Art 4 hours. Following current trends in museums and galleries, this course offers methods of engagement to appreciate and evaluate contemporary art. Through discussions, readings, gallery visits and creative projects, students develop an understanding of the elements of art and the cultural and social conditions that influence artists. (Odd years; Fall) (C)

IART 200 - Studio Topics in Interdisciplinary Art 1-4 hours. Specialized studio areas are offered. The area changes each time the course is taught. Prerequisite: completion of an art foundation program.

IART 300 - Special Topics in Interdisciplinary Art 1-4 hours. Specialized art theory or studio areas are offered. The topic changes each time the course is taught.

IART 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

IART 460 - Interdisciplinary Art Seminar 4 hours. A topical seminar primarily for Interdisciplinary Art majors. Topics vary from year to year. (Sufficient demand)

IART 470 - Individual Project: Senior Studio 2-4 hours. Seniors work independently on projects that extend their application of the concepts, techniques, and practices relevant to art making, with significant attention paid to clarifying and refining the Senior Show presentations. With emphasis on in-depth query and purposeful research, this is a self-directed, capstone studio course with an emphasis on the verbal and written articulation of the "what" and "why" of studio practice. Open to Interdisciplinary Art majors with senior standing.

IART 485 - Interdisciplinary Art Internship 1-4 hours. Internship under supervision in such agencies as a regional art council, museum, gallery, etc. Available irregularly.

Italian

ITAL 101 - Italian I 4 hours. Introduction to the language and culture of the Italian-speaking world; speaking, reading, understanding, and writing. Practice in language lab. Emphasis on communicative skills. Assumes no prior knowledge of the language. (II)

ITAL 102 - Italian II 4 hours. Continuation and further development of the skills learned in ITAL 101. Prerequisite: ITAL 101 or permission of instructor. (II)

ITAL 200 - Special Topics in Italian 1-4 hours. Content varies from year to year. Prerequisite: ITAL 102 or permission of instructor.

ITAL 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

Latin

LATN 101 - Latin I 4 hours. An Introduction to the Latin language. This course includes an introduction to basic Latin grammar as well as short reading passages. The focus of this course will be on classical Latin. There will be some emphasis on pronunciation and spoken Latin. There will be readings in English on both the history of Latin as an Indo-European language as well as on Roman history. (II)

LATN 102 - Latin II 4 hours. This course builds on introductory Latin I. Students explore the history and cultures of the Roman Empire as well as the roots of English. Students improve their proficiency in reading and writing Latin through engaging in class activities and independent work. Prerequisite: LATN 101 or permission of instructor. (II)

LATN 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

Liberal Arts and Sciences

CLAS 100 - Special Topics in Liberal Arts and Sciences 1-4 hours. Opportunities are provided for the examination of interdisciplinary topics not normally justified as regular offerings. Topics vary from year to year.

CLAS 101 - Transfer Seminar 1 hour. As the cornerstone of the College of Liberal Arts and Scinces Transfer Student Program, this seminar provides an opportunity for students to get to know the intellectual community they have joined, while introducing them to campus resources that will help them succeed. Throughout the seminar, students further develop core skills that lead to academic and professional accomplishment. The Transfer Student Program also facilitates mentoring relationships among the transfer students and their faculty and peers. Graded Pass/Fail.

Mathematics

MATH 101 - Communicating with Numbers 4 hours. Topics include ratios and proportions, proportionality as distinct from proportions, constant of proportionality, rates, percentages, total change vs. percent change, and handling data. (III)

MATH 102 - Mathematics for Teachers: Grades K-6 4 hours. This is a content course for those preparing to teach Kindergarten through Grade 6. This course prepares candidates with the knowledge base to teach math in accordance with the State learning standards as prescribed by NYSED regulations. Topics include: Mathematical language and vocabulary, equivalent forms, mathematical equations, graphing and diagrams.

MATH 104 - Quantitative Methods for Business 4 hours. An introduction to the quantitative methods needed by students in business-related majors. Topics covered include equations and graphs, functions, and systems of equations.

MATH 151 - Calculus I 4 hours. An introduction to differentiation and integration of functions of a single variable, with applications. Four years of college preparatory mathematics strongly recommended. Not open to students with credit in MATH 152. (III)

MATH 152 - Calculus II 4 hours. A continuation of single variable calculus including transcendental functions, methods of integration, and series. Prerequisite MATH 151. Not open to students with credit in MATH 253.

MATH 200 - Topics in Mathematics 1-4 hours. Special topics in mathematics which vary from year to year. (Sufficient demand)

MATH 250 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Written Plan of Study required. Open to qualified students.

MATH 253 - Calculus III 4 hours. Multivariate calculus, derivatives and integrals of vector functions with Stoke's and Green's theorems. Prerequisite: MATH 152.

MATH 271 - Differential Equations 3 hours. Ordinary differential equations with applications to the sciences. Prerequisite: MATH 253.

MATH 281 - Foundations of Higher Mathematics 4 hours. An introduction to logic and proof: Topics include sets, symbolic and predicate logic, inductions, and cardinality. Prerequisite: MATH 253.

MATH 331 - Mathematics from a Historical Perspective 3 or 4 hours. This course explores a wide variety of topics in the history of mathematics, from the development of numeral systems to the structure of the modern mathematical community. Many of these topics are explored through the many heroes of mathematics. Prerequisites: MATH 253; ENGL 102 or ENGR 110.

MATH 351 - Introduction to Operations Research 4 hours. Optimization techniques with application to decision making. Linear programming and other topics, e.g., network analysis, dynamic programming, game theory, stochastic processes, queueing theory.

MATH 371 - Linear Algebra 4 hours. The concepts of vector space, independence, basis and linear transformations, with applications to systems of linear equations, eigenvalue problems and bilinear and quadratic forms. Prerequisite: MATH 253.

MATH 381 - Mathematical Statistics 4 hours. The theoretical basis for statistics including probability, random variables, expectation, a curve of important probability distributions, sums of independent random variables, and confidence intervals. Prerequisite: MATH 253.

MATH 382 - Actuarial Exam Preparation 1 hour. The content includes definitions and applications in risk management and insurance using calculus-based probability theory. Taken in preparation for the Society of Actuaries Exam P/Casualty Actuarial Society Course 1 exam. Corequisite: MATH 391.

MATH 391 - Statistical Methods 3 hours. This course introduces statistical inference and is a study of different methods of statistical estimation and tests of statistical hypotheses. Prerequisite: MATH 381.

MATH 400 - Topics in Mathematics 1-4 hours. Special topics in mathematics which vary from year to year. (Sufficient demand)

MATH 401 - Advanced Engineering Mathematics 4 hours. Fundamental concepts of applied analysis including Fourier series and integrals, Laplace transforms, partial differential equations and boundary value problems and special functions. Prerequisite: MATH 271.

MATH 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required, which must include the student reading and producing proofs. Open to qualified third and fourth year students, MATH 450 is required of all candidates for departmental honors.

MATH 461 - Geometry 4 hours. An introduction to both Euclidian and non-Euclidian geometry, with emphasis on the axiomatic method and its place in the current secondary mathematics curriculum. Prerequisite: MATH 253.

MATH 481 - Modern Algebra 4 hours. The fundamental structures and techniques of algebra including topics such as groups, rings, fields, quotient structures, theory of equations and polynomials. Prerequisite: MATH 281.

MATH 491 - Advanced Calculus 4 hours. Elements of real function theory including some notions from logic, the topology of the real line, continuity, uniform continuity, differentiation and limits of sequences. Prerequisite: MATH 281.

Music

MUSC 101-108 - Private Lessons 1 hour. One half-hour private lesson per week. Private lesson fee includes the use of practice rooms. Note: Some sections may require permission of instructor.

MUSC 110 - Music Appreciation 4 hours. An introductory course which introduces students to a wide variety of music, focusing on the evolution of Western European Classical music, but also touching upon American popular forms and some World Music. The course examines the historical and social background of classical music and emphasizes art of listening. (C)

MUSC 120 - Music Theory I 4 hours. A study of the basic rudiments of music--notation, pitch, rhythm, melody and harmony and how these elements combine to create music. The course includes music writing (elementary composition), ear training (recognition of melodic, rhythmic and harmonic patterns) and dictation (the ability to write these patterns in traditional music notation). A background in music, such as playing an instrument or vocal/choral experience, is recommended.

MUSC 130 - Beginning Class Piano I 2 hours. Class lessons in piano technique for the beginner. Covers basics of tone conception, rhythm, articulation, and fingering, five-finger patterns and tonic chords in major keys. Simple composition projects are a requirement of the course. No previous musical training required. (C)

MUSC 131 - Beginning Class Piano II 2 hours. A continuation of MUSC 130. Beginning work in pedaling and phrasing, easier major scales and one minor scale in three forms, primary chords in major and minor in block and arpeggio from, composition, transposition and harmonization. Prerequisite: MUSC 130 or permission of instructor. (C)

MUSC 132 - Beginning Voice Class I 2 hours. Group lessons in technique and the art of singing. Class presents the practical application of vocal techniques, breath support, posture, diction and projection to increase the student's ease and confidence in using the singing voice as a means of expression. Outside reading and listening is required of students. (C)

MUSC 133 - Music of the Guzheng 2 hours. This course is a step-by-step guide for beginners to learn the basic skill of playing the Guzheng (Chinese Zither), a traditional Chinese instrument. Students have a chance to join the AU Guzheng Ensemble if they wish. (C)

MUSC 200 - Special Topics 1-4 hours. Includes courses in related areas of study. If applicable, small rental fee or breakage deposit required for applied music courses such as woodwinds class, Celtic music, etc. (Sufficient demand) One four-hour topics course is required for the minor and also fulfills the "C" credit for General Education. (C)

MUSC 211 - World Music 4 hours. World Music is an exploration of Non-Western European music. It is an introduction to the study of "ethnomusicology" and the role of music in society at large and a broad-ranging view of how this role is fulfilled in a variety of cultures. The course will focus on the indigenous cultures and music of Native America, Latin America, Africa, Eastern Europe, India, Indonesia and East Asia (Japan and Korea). Student projects will explore the popular music of one or more of these areas. (C) (GP)

MUSC 212 - American Music 4 hours. This is a listening/survey course of the music of the United States from colonial times to the present. The course will examine the historical and social backgrounds of the incredible diversity of American Music, including Native American, Classical and Popular music through the ages, Folk, Jazz and the beginnings of Rock `n Roll. Students will also learn basic skills on a folk instrument (lap dulcimer, recorder, guitar) to give a hands on approach to learning American Folk Music. (C)

MUSC 213 - Introduction to Jazz 2 hours. This course examines the origins of jazz, how it was created and the directions it has taken. We discuss the history of jazz and consider social reactions to the music and artists by listening and by reading historical writing. (C)

MUSC 214 - Reel Music in America 4 hours. This course traces the history and development of film music through lecture, reading and film viewing. The class includes discussion and evaluation of different compositional styles and learning how to listen critically to film scores while viewing movies. We discuss how music and its relationship to film have changed over the last century. In this way, we uncover how music establishes psychological moods and guides our emotions. (Every Year) (C)

MUSC 220 - Music Theory II 4 hours. This course develops students' understandings of harmonic compositional practices of 17th through 19th century music. Students continue the study of composition and analysis and become more

proficient with harmonic analysis using figured bass, bass position symbols, and Roman numerals. Prerequisite: MUSC 120.

MUSC 271 - University Chorus 2 hours. University Chorus, a large singing ensemble is open to all students. The repertoire varies from traditional to global to popular and musical theatre. A major work is performed every other semester with the AU orchestra. Previous works include Handel's "Messiah", Vivaldi's "Gloria", Mozart's "Requiem" and Orff's "Carmina Burana". (C)

MUSC 272 - Chamber Singers 2 hours. The Alfred University Chamber Singers, a select vocal ensemble of 20-30 singers, performs a wide variety of repertoire in concerts on and off campus. Open to all students by audition. (C)

MUSC 273 - Symphonic Band 2 hours. Band members study and perform music composed and arranged for the modern symphonic band, including orchestral transcriptions. Various styles of music, from classical to contemporary, are performed, including major symphonic and concert band literature. (C)

MUSC 274 - Jazz Ensemble 2 hours. The Jazz Ensemble provides an opportunity to explore the many styles of jazz in a big band context, including swing, be bop, Latin, and fusion. Students are also given the chance to develop their skills in improvisation. Open to all students by audition. (C)

MUSC 275 - University Symphony Orchestra 2 hours. Open to all students, the symphony orchestra provides students an opportunity to study music ranging from the classical era to the 20th Century. The ensemble presents a concert each semester which often features student soloists. A major work is performed every other semester with the AU Chorus. Previous works include Handel's "Messiah", Vivaldi's "Gloria", Mozart's "Requiem" and Orff's "Carmina Burana". (C)

MUSC 277 - Soprano/Alto Chorus 2 hours. The focus of this course is music written for soprano and alto voices, often composed by women. Areas of emphasis are vocal production, choral blend and basic music reading. The ensemble performs a fall concert. (C)

MUSC 278 - Tenor/Bass Chorus 2 hours. This course offers the opportunity to explore literature for 3 and 4 part tenor/bass vocal ensembles. This course introduces the basics of singing technique Basic music reading skills are also introduced. The chorus performs one concert on campus and one concert at a location off campus. (C)

MUSC 279 - Chamber Music 1 hour. Chamber Music refers to small ensembles (string quartets, woodwind quintets, flute duets/trios/choirs; piano trios [piano plus two other instruments] or virtually any combination of instruments and/or voices). Students will be assigned to a group and will work on classical music for their particular ensemble. Students enrolled in this class should have at least a moderate facility on their instrument and be able to read music.

MUSC 301-308 - Private Lessons, Advanced 2 hours. Advanced study. One-hour lesson per week. Private lesson fee. Permission of instructor required.

MUSC 332 - Advanced Voice Class 2 hours. A continuation of MUSC 132. Continued work on vocal technique and expression with additional emphasis on singing in foreign languages (Italian and German diction).

Students will learn and the use the IPA - the International Phonetic Alphabet. Prerequisite: MUSC 132 or permission of the instructor.

MUSC 450 - Independent Study 1-4 hours. Specialized pursuit of a subject within an area of music history or literature not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

MUSC 495 - Senior Recital 1 hour. Students enrolled in Private Lessons for at least six semesters are encouraged to present a half or full recital during their Senior year.

Performance Design and Technology

PDAT 120 - Technical Theatre 4 hours. A lecture/lab course in stage technology covering set construction, lighting, sound and scenic painting. Through a combination of lectures and hands-on practical experience, this course covers the art and design areas of set construction and provides a basic understanding of common stagecraft techniques. Lab hours required. (C)

PDAT 200 - Special Topics in Performance Design and Technology 1-4 hours. Includes non-regularly scheduled course offerings in areas related to performance design and technology.

PDAT 220 - Design Fundamentals for Stage, Dance and Film 4 hours. A beginning design course introducing students to common principles of theatrical and performance design: scene, lighting, costume, sound, makeup, and props. Script analysis, research methods, the "isms"-- realism, symbolism, absurdism, postmodernism -- design unity, color, light/shadow, line/weight, and shapes, will be covered. (Cross-listed as THEA 220) (C)

PDAT 221 - Costume Construction 3 hours. A study of practical skills needed to transform a designer's rendering into 3-dimensional garments, including the nature and character of a range of fabrics, auxiliary materials, proper methods and the universal language of the textile world. Non-Theatre majors are welcome in this course. May be repeated for credit up to a total of 9.00 credit hours. (Cross-listed as THEA 221)

PDAT 222 - Stage Makeup 2 hours. A basic course introducing students to the principles of designing and applying stage makeup. Projects and makeup crew assignments required. (Cross-listed as THEA 222) (C)

PDAT 224 - Entertainment Lighting: Electricity and Equipment 2 hours. This course gives students the necessary knowledge and skills to perform the duties of a theatrical electrician. The student becomes familiar with the tools and equipment of lighting, as well as the theory of electricity and lighting systems, through instruction and hands on experience.

PDAT 225 - Woodworking Techniques for the Stage 2 hours. This course gives the student the necessary knowledge and skills to perform the duties of a scenic carpenter. Students become familiar with the tools, equipment, and materials of carpentry, as well as the theory of construction and scenic techniques and styles, through instruction and hands on experience.

PDAT 270 - Play Production 1-4 hours. A lab course designed to give students practical production experience under faculty supervision in the areas of technical

theatre and design. May be repeated for credit to maximum of 4 hours. Prerequisite: Permission of instructor.

PDAT 300 - Topics in Performance Des/Tech 1-4 hours. Includes non-regularly scheduled course offerings in areas related to performance design and technology.

PDAT 320 - Scene Design 3 hours. A scenic design course, which builds on the principles of design taught in THEA 220. It further develops skills in research methodology, script analysis, sketching and painting techniques, model building, graphics, use of computer-aided design. Representative scripts will be studied. Prerequisite: PDAT/THEA 220 or permission of instructor. (Cross-listed as THEA 320)

PDAT 321 - Lighting Design 3 hours. A study of basic electricity and theatrical lighting equipment with an emphasis on both the artistic as well as the technical aspects of stage lighting Crew assignments required. Prerequisite: PDAT/THEA 220 or permission of instructor. (Cross-listed as THEA 321)

PDAT 322 - Stage Costume Design 3 hours. A costume focused design course which builds on the principles of design taught in PDAT 220. It further develops skills in research methodology, script analysis, costume design theories, artistic processes, and costume construction for specific plays. Lab hours required. Prerequisite: PDAT/THEA 220 or permission of instructor. (Cross-listed as THEA 322)

PDAT 350 - Independent Study 2-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/ classroom setting. Junior standing and an approved Plan of Study required.

PDAT 370 - Advanced Play Production 1-4 hours. Advanced level continuation of PDAT 270. May be repeated for credit up to a maximum of 6 credit hours.

PDAT 385 - Internship in Performance Design and Technology 2-4 hours. An independent project allowing students to gain experience in professional or semi-professional performance design/technical theatre settings. A written Plan of Study describing the requirements of the course is required. Prerequisite: Junior standing; approval of Division Chair.

PDAT 470 - Advanced Projects in Theatrical Design and Technology 1-4 hours. This projects course is a faculty supervised experience for the advanced student in one of several areas of design: scenic; lighting; costume; sound; props; makeup; and technical direction. Prerequisite: PDAT/THEA 120 and 220; One of the following: PDAT/THEA 222, 320, 321, 322, 323; or permission of instructor. (Cross-listed as THEA 470)

PDAT 495 - Senior Project 2-4 hours. Students complete a project for the Performance Design and Technical Theatre minor in their areas of interest. The project is to be submitted as a proposal to the faculty and approved in advance, with advisory support and supervision provided by the appropriate faculty member. Prerequisites: senior standing; approved written proposal; permission of instructor.

Philosophy

PHIL 101 - Introduction to Philosophy 4 hours. This course provides students who have had little or no acquaintance with philosophy with a workable knowledge of philosophical language and familiarity with its method. (B)

PHIL 201 - Existentialism 4 hours. An elementary study of the interpretation of human existence by selected existentialist thinkers. (Sufficient demand) (B)

PHIL 246 - Sex and the Body Politic 4 hours. This course examines how citizens' ideas about gender shape politics and how politics shapes the perceptions of gender of citizens. Studying the politics of sex and gender provides interesting perspectives on issues and even challenges our very understanding of what politics is. (Cross-listed as POLS 246, WGST 246)

PHIL 281 - Ethics 4 hours. An attempt to understand the fundamental human alternatives in the wake of the moral skepticism of our age. Traditional answers to the question "What is the good life?" will be examined by reading selected philosophers from Plato to Sartre. (B)

PHIL 282 - Introduction to Logic 4 hours. Standard propositional logic, quantifier logic, and informal fallacies. Logical concepts are compared with some concepts of the English language. Discusses the nature of formal systems and emphasizes the development of proof techniques. Recommended for pre-law students. (III)

PHIL 283 - Philosophy of the Arts I 4 hours. Conceptual analysis of the arts and what they reveal about human existence. Emphasis is placed on questions about creativity and meaning. Topics include representation and truth, expression, art and language, and the nature of cultural regularities. Special emphasis on the rise of modernism and formalism. (B)

PHIL 300 - Topics in Philosophy 1-4 hours. Varying topics from year to year are selected from either the history of philosophy or contemporary philosophic problems. Prerequisites vary depending on the topic. (Sufficient demand)

PHIL 309 - Philosophical Psychology 4 hours. Logical analysis of concepts about the mind, emphasizing problems of meaning for such terms as sensation, imagination, emotion, memory, dreams, intention, belief, reason, motivation, consciousness and personal identity. Methods of psychological explanation are also studied. (Sufficient demand) (Cross-listed as PSYC 309)

PHIL 310 - Animal Consciousness 2 or 4 hours. This course is an examination of the nature of consciousness through discussion of the issues raised by the cognition and consciousness of non-human animals. Prerequisite: completion of at least one philosophy course or permission of instructor.

PHIL 311 - Greek Philosophy 4 hours. This course covers the history of Greek philosophy from the Presocratic through the Hellenistic period. Special emphasis is given to Plato and to Aristotle. (Cross-listed as POLS 311)

PHIL 312 - Modern Philosophy 4 hours. The history of European Philosophy during the l7th and 18th centuries. Examines figures whose thought reflects the rise of modern science and the emergence of the modern state. Emphasis given to such thinkers as Hobbes, Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant. (Alternate years)

PHIL 315 - Pragmatism 2 or 4 hours. This course examines philosophies which emphasize the practical character of truth and reality as well as the determination of values. Thinkers studied include C.S. peirce, William james, John Dewey and

Richard Rorty. Prerequisite: completion of at least one philosophy course or permission of instructor.

PHIL 321 - Nietzsche 4 hours. Nietzsche is considered as 19th century philosopher and precursor of 20th century thought. Topics include: Nietzsche's perspectivism, theory of interpretation, genealogical critique of morality, religion and history, and ideas about art, tragedy, will to power, eternal recurrence, and the overman.

PHIL 328 - Visions of Modernity: Art, Politics and Ideas 4 hours. This course is a history of the "big ideas" of our modern era and how they define our lives. We examine foundational works in psychoanalysis, art and cinematic theory, Existentialism, postcolonial theory and deconstruction. (Cross-listed as HIST 328)

PHIL 329 - Revolution and Culture: Hegel, Marx, Nietzsche 4 hours. An in-depth study of major texts by Hegel, Marx, and Nietzsche, with a thematic focus on the nature of historical change, the interpretation of history, and the relationship between material life and culture, including religion, philosophy, politics, and morality. (Cross-listed as HIST 329, POLS 329)

PHIL 341 - Modern Political Theory 4 hours. A survey of the major political theorists from the Renaissance through the twentieth century, with primary emphasis on western thinkers. Particular attention given to theory as an historical and cultural phenomenon. (Cross-listed as POLS 341)

PHIL 359 - History of Chinese Thought 4 hours. Focusing on the relationship between religion and philosophy, this course develops an understanding of the distinctive character of Chinese culture by surveying the development of religion and philosophy from antiquity to the medieval period and challenges of the twentieth century. (Cross-listed as HIST 359, RLGS 359)

PHIL 360 - Special Topics in Art Theory 1-4 hours.

PHIL 388 - Topics in Metaphysics 2-4 hours. Metaphysical topics concern very basic questions about reality such as: How can things change and be the same? What constitutes personal identity? What is time? If the world is deterministic, can people be free? and, Does any kind of God exist? Prerequisite: completion of at least one philosophy course or permission of instructor. (Sufficient Demand)

PHIL 389 - Evolutionary Philosophy Topics 2 or 4 hours. The treatment of important philosophical topics using insights gained through evolutionary theory. Topics such as "evolution and morality," "culture and evolution," "evolution and human nature" will be discussed. Prerequisite: completion of at least one philosophy course or permission of instructor.

PHIL 390 - Social and Political Philosophy Topics 2 or 4 hours. This course treats topics in social and political philosophy such as "Equality," "Freedom and Responsibility," "Freedom." Prerequisite: completion of at least one philosophy course or permission of instructor.

PHIL 400 - Topics in Philosophy 1-4 hours. Varying topics from year to year are selected from either the history of philosophy or contemporary philosophic problems. Prerequisites vary depending on the topic. (Sufficient demand)

PHIL 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

Physics

PHYS 111 - Introductory General Physics I 4 hours. A lecture and laboratory course which includes mechanics, wave motion and sound, fluids and heat. Calculus is not used but some knowledge of algebra and trigonometry is assumed. (F1) (F-I)

PHYS 112 - Introductory General Physics II 4 hours. A lecture and laboratory course including electricity and magnetism, optics, and some modern physics. Calculus is not used but some knowledge of algebra and trigonometry is assumed. Prerequisite: PHYS 111 or PHYS 125. (F1) (F-I)

PHYS 125 - Physics I 4 hours. A calculus-based lecture and laboratory course which includes one and two dimensional kinematics and dynamics, the work energy theorem, conservation of energy, the impulse momentum theorem, conservation of momentum, rotational and simple harmonic motion and gravitation. Prerequisite: MATH 151. (F1) (F-I)

PHYS 126 - Physics II 4 hours. This calculus-based lecture and laboratory course includes electric field and potential, direct and alternating current circuits, magnetism and magnetic induction and an introduction to electromagnetic and other waves. Prerequisites: MATH 152 and PHYS 125. (F1) (F-I)

PHYS 200 - Special Topics in Physics 1-4 hours. Topics vary from year to year and are designed especially for, but not limited to, non-science majors. Typical topics might be light and color, music and sound; or laboratory topics to include aspects of physics of interest to artists, musicians, photographers, environmentalists, etc. (Sufficient demand)

PHYS 201 - Computing in the Physical Sciences 3 hours. In this course students apply computer programming, logic, and/or modeling software to physical problems. Depending on the instructor or semester, various languages or modeling packages will be used. The emphasis is on the flow of logic and on how computers can be used to answer questions that cannot be answered in other ways. Prerequisites: PHYS 125/126.

PHYS 325 - Elementary Optics 3 hours. This course discusses geometrical and wave optics with special emphasis on optical instruments. Prerequisite: PHYS 126.

PHYS 326 - Elementary Modern Physics 3 hours. This course includes basic relativity, quantum and waves aspects of radiation and particles, atomic structure, and an introduction to nuclear physics properties. Prerequisite: PHYS 126.

PHYS 341 - Advanced Physics Laboratory 2 hours. A laboratory course involving experiments in mechanics, acoustics, heat, optics, electricity, and magnetism, electronics and atomic and nuclear physics. Prerequisite: PHYS 126.

PHYS 400 - Special Topics 1-4 hours. Topics vary from year to year and are designed especially for, but not limited to, non-science majors. Typical topics might be light and color, music and sound; or laboratory topics to include aspects of physics of interest to artists, musicians, photographers, environmentalists, etc. (Sufficient demand)

PHYS 401 - Quantum Mechanics I 4 hours. This course presents Schrodinger's theory of quantum mechanics with applications to atomic systems. Includes origin of the quantum theory, wave-particle duality, approximation methods, and time-dependent problems. Prerequisite: PHYS 226. (Alternate years)

PHYS 402 - Quantum Mechanics II 4 hours. Continuation of Quantum Mechanics I. Focuses on the applications of quantum mechanics postulates to real systems. Time independent perturbation theory is developed as are nonperturbative techniques such as variational theory. These ideas are applied to real atoms, molecules, metals, etc. Time dependent perturbation is also constructed and applied to electrodynamics. Non relativistic quantum electrodynamics is then applied to realistic systems. Prerequisite: PHYS 401.

PHYS 405 - General Relativity 4 hours. We start with an extensive review of special relativity, followed by a detailed development of differential geometry which is the mathematics of the Einstein equations. The Einstein equations are then applied to such classic problems as the deflection of light by stars, the precession of the perihelion of mercury, the behavior of static and rotating black holes, and cosmology. Prerequisite: PHYS 326.

PHYS 410 - Particle Physics 4 hours. Local gauge invariance is applied to the quantum theories of electrodynamics, strong, and weak V-A interactions. The Feynman rules and diagrams for these interactions are developed with a strong emphasis placed on the calculation of cross sections. The unification of electromagnetism and weak interactions into electroweak theory is developed and used to calculate cross sections. The important role that spontaneous symmetry breaking and the Higg's mechanism play in particle physics is developed in detail. Prerequisite: PHYS 401.

PHYS 421 - Statistical and Thermal Physics 4 hours. Statistical and Thermal Physics deals with the various aspects of macroscopic thermodynamics and describes these statistically in terms of the microstates of systems. Examples taken mainly from gaseous and solid systems. Prerequisite: PHYS 126, MATH 253. (Alternate years)

PHYS 423 - Advanced Mechanics 4 hours. This course makes more sophisticated use of the basic laws of mechanics and includes sections on rotating coordinate systems, orbits in inverse square law fields, the analysis of vibrating systems and waves, Lagrange's and Hamilton's equations, and an introduction to the topic of chaos. Prerequisites: MATH 271, PHYS 125 and PHYS 126. (Alternate years)

PHYS 424 - Advanced Electricity and Magnetism 4 hours. A study of electric and magnetic fields and their origins in free space as well as in materials. Includes an introduction to vector calculus, solutions to Laplace's equation, multipole expansions, and Maxwell's equations in differential and integral form. Prerequisites: PHYS 126, MATH 271. (Alternate years)

PHYS 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

Political Science

POLS 110 - American Politics 4 hours. An introductory survey of the American political system. Emphasis on the structures and processes of the political system with additional study of some of the problems faced by the system. (E2)

POLS 120 - Great Issues in Politics 4 hours. What is politics? Why is politics important? This course explores various understandings of politics and their impact on differing views of citizenship and the possibilities of public life. Through readings of classic texts, students address questions about the obligations of citizenship, the role of the state, and the relationship between freedom and equality. (E2)

POLS 200 - Special Topics 1-4 hours. Examines topics of special interest not normally covered in other political science courses. Examples are Biopolitics, Political Socialization. (Sufficient demand)

POLS 214 - Politics and the Environment 2 or 4 hours. Examines America's recent quest for coherent environmental policy, with special emphasis upon the politics of air and water pollution control.

POLS 220 - Perspectives on Political Science 2 hours. Intended as a foundation course for further work in political science. Students examine frequently used approaches to the study of politics, consider the question of personal values in political science, and investigate attempts to study politics in a scientific way.

POLS 230 - Introduction to Data Analysis and Statistics 4 hours. An introduction to statistics and data analysis in social and political life, covering the nature of variables, descriptive statistics, probability, and inferential statistics. Students use computer software to further their understanding. (Cross-listed as SOCI 230) (III)

POLS 232 - Judicial Processes 2 hours. The theory and practice of judicatory systems with primary emphasis on Anglo-American judicial processes and problems.

POLS 237 - Media and Politics 4 hours. This course examines the relationship between mass media and politics. We will explore the ways in which mass communications media shape the politics of elections, daily governance, U.S. foreign policy, interest groups, social movements, and identity. (Cross-listed as COMM 237, SOCI 237)

POLS 242 - Approaches to Law 4 hours. What is the law and why do we obey it? What authority stands behind law? How do our answers influence the way we make and interpret law? We examine how others have approached these kinds of questions with an eye toward better understanding our own legal system.

POLS 246 - Sex and the Body Politic 4 hours. This course examines how citizens' ideas about gender shape politics and how politics shapes the perceptions of gender of citizens. Studying the politics of sex and gender provides interesting perspectives on issues and even challenges our very understanding of what politics is. (Cross-listed as PHIL 246, WGST 246)

POLS 251 - European Politics 4 hours. From post-WWII attempts to prevent future conflicts has grown a unique political structure called the European Union. This course analyzes the political institutions and political culture of both the European Union and some important countries making up the EU. (GP)

POLS 253 - Dictatorship and Democracy 4 hours. This course comparatively examines four political movements (Liberalism, Communism, Fascism, and Islamic

Fundamentalism) that have shaped the evolution of modern politics around the world, from authoritarian rule to representative democracy.

POLS 271 - World Politics 4 hours. This course examines the changing nature of world politics, exploring broad themes such as the evolution of warfare, the role of leading powers, the rise of international organizations, and global political economy. Specific transnational challenges addressed include terrorism, human rights, nuclear proliferation, clashing collective identities and environmental degradation. (E2) (GP)

POLS 273 - Terrorism and International Security 4 hours. This course will deepen students' understandings of 1) what terrorism is, 2) how terrorism has evolved over time, 3) the key factors generating contemporary terrorism, 4) how terrorism is inspired, financed and organized, and 5) counterterrorist strategies. (GP)

POLS 282 - Latin American Politics 4 hours. After a brief review of the region's colonial and 19th-century political histories, this course focuses on the changing patterns of modern politics in leading Latin American countries, from "oligarchical" plutocracy to mass-based populism and socialist revolution, from repressive military authoritarianism to more recently established models of representative and participatory democracy. (GP)

POLS 300 - Special Topics 1-4 hours. Examines topics of special interest not normally covered in other political science courses. Examples are Biopolitics, Political Socialization. (Sufficient demand)

POLS 311 - Greek Philosophy 4 hours. This course covers the history of Greek philosophy from the Presocratic through the Hellenistic period. Special emphasis is given to Plato and to Aristotle. (Cross-listed as PHIL 311)

POLS 313 - State and Local Politics 4 hours. In the American governmental system, the intertwined destinies of states and their local governments are critical. This course studies the structure of decision-making at the state and local level, forces affecting decision, outcomes of decision, and the challenges governments face. (Alternate years)

POLS 316 - American Constitutional Law and Politics 4 hours. An examination of the development of the Supreme Court as a major political institution concentrating primarily on the Court's decisions and its internal politics. Prerequisite: POLS 110; junior or senior standing recommended.

POLS 318 - The Presidency 4 hours. After studying the evolution of presidential power, this course will examine the relationship of the presidency to other branches of government. Students will also learn how presidents work within and against political constraints in order to get policies enacted. Prerequisite: POLS 110.

POLS 329 - Revolution and Culture: Hegel, Marx, Nietzsche 4 hours. An in-depth study of major texts by Hegel, Marx, and Nietzsche, with a thematic focus on the nature of historical change, the interpretation of history, and the relationship between material life and culture, including religion, philosophy, politics, and morality. (Cross-listed as HIST 329, PHIL 329)

POLS 331 - Parties and Elections 4 hours. Analysis encompasses theories of parties, party organization, party conduct of campaigns and elections, voting behavior, and party roles in government. Emphasis on the American system.

POLS 341 - Modern Political Theory 4 hours. A survey of the major political theorists from the Renaissance through the twentieth century, with primary emphasis on western thinkers. Particular attention given to theory as an historical and cultural phenomenon. (Cross-listed as PHIL 341)

POLS 346 - American Political Thought 4 hours. This course introduces students to political thought in the United States. It explores "liberal" ideals such as individualism, freedom, equality, citizenship, and democracy, as well as important alternatives to those ideas. It will also examine the ways in which race, ethnicity, and gender have shaped American political thought. Prerequisite: POLS 110.

POLS 355 - Public Policy 4 hours. The policy process is the heart of politics: "Who gets What, When, How?" This course emphasizes the stages of the process and the types of policies that government considers. A case study of some policy area (elderly) is provided.

POLS 400 - Special Topics 1-4 hours.

POLS 411 - Bureaucracy 4 hours. Analysis of the administrative policy processes at the national level. Internal interaction and budgetary processes as well as interchange with external governmental and political institutions. Prerequisite: POLS 110. (Alternate years)

POLS 417 - American Civil Liberties 2 hours. Analysis of such current legal and political issues as free speech, religion, poverty, privacy, obscenity, and racial and sexual discrimination with attention to both established and latent areas of concern. Focuses on Supreme Court activity. Other governmental action considered, along with the theoretical and social contexts of the problems examined. Prerequisite: junior or senior standing.

POLS 431 - Research Design and Strategies 4 hours. This course examines the methods by which social science researchers generate new knowledge and covers major data collection designs, sampling techniques, and measurement strategies. Students spend the semester developing their research skills and designing their own research proposals. Prerequisite: SOCI 110, ANTH 110, or POLS 110. (Cross-listed as SOCI 431)

POLS 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Open to Political Science majors at the permission of instructor. Approved Plan of Study required.

POLS 470 - Field Work 2-4 hours. Supervised on-site field work on an approved topic.

Psychology

PSYC 101 - Introduction to Psychology 4 hours. An introduction to the scientific study of behavior and mental processes. Topics typically include sensation and perception, learning and memory, consciousness, cognition and mental abilities, motivation and emotion, human development, personality, gender and sexuality, psychological disorders and therapies, and social influences on behavior. (E1)

PSYC 118 - Introduction to Adult Development and Aging 4 hours. This course examines adulthood and aging from a biopsychosocial perspective. Topics include

research methodology in adulthood; theories of normal aging, physical and environmental influences on adult development; diseases and disorders associated with aging; changes in cognition; intelligence and wisdom; gender and minority issues in aging; issues regarding death and dying. It also challenges popular misconceptions about aging. (Cross-listed as GERO 118) (E1)

PSYC 210 - Communication and Counseling Skills 2 hours. Focused on working with adults, this course teaches interpersonal communication and counseling skills and theory to students preparing for careers in the helping professions. The course promotes self-understanding through experiential learning and role playing. Videotaping and microlabs may be employed. Prerequisite: PSYC 101 or GERO 118.

PSYC 220 - Psychological Methods and Statistics 4 hours. An introduction to the use of data and theory in psychology. Topics include: philosophy of the scientific method, experiments and other research strategies, descriptive and inferential statistics and hypothesis testing. The course emphasizes statistical reasoning and its relationship to the scientific method. Required for majors and minors. Prerequisite: PSYC 101. (III)

PSYC 230 - Psychological Research and Design I 2 hours. Students learn how to apply the scientific method to study human behavior. The steps from reviewing the literature and generating a hypothesis to developing measurement procedures will be practiced. The final project will be an APA-style research proposal. Prerequisite: PSYC 220.

PSYC 251 - Principles of Learning and Behavior Modification 4 hours. The principles and techniques of behavioral assessment and management are examined, including how to strengthen adaptive behavior through shaping, reinforcement schedules, and relapse prevention and how to minimize or eliminate maladaptive behavior through behavior modification methods such as stimulus control and extinction procedures. Prerequisite: PSYC 101.

PSYC 261 - Cognitive Development 4 hours. The course examines the theories and research in cognitive development from infancy through adolescence. Piagetian, Vygotskian, and Information-Processing Approaches are explored while examining the development of processes including attention, perception, memory, language, and reasoning. Prerequisite: PSYC 101.

PSYC 262 - Social Development 4 hours. This course examines theories and research in child and adolescent social development. Relations with parents and peers, prosocial behavior, aggression, sex-role development, and social-cognitive development are studied. Prerequisite: PSYC 101.

PSYC 282 - Social Psychology 4 hours. A study of the influence that people have on each other's behavior, perception, motivation, feelings and cognition. Topics include the self and identity, social perception and cognition, attribution, race and gender, prejudice and discrimination, conformity and obedience, groups and leadership, attitudes and persuasion, aggression and violence, helping and altruism, attraction and love, conflict and peacemaking. Prerequisite: PSYC 101.

PSYC 300 - Special Topics 1-4 hours. A series of directed readings, changing from semester to semester, which affords the student an opportunity to pursue topics of special interest in greater depth by intensive reading, discussion and seminar feedback.

PSYC 302 - Psychological Measurement 4 hours. An introduction to psychological assessment through a survey of the principles of test design, scoring, and interpretation for tests of achievement, intelligence, personality, career interests, and attitudes. Specific concepts include: item analysis and norms, reliability and validity, ethical and legal standards. Prerequisite: PSYC 101 and PSYC 220.

PSYC 309 - Philosophical Psychology 4 hours. Discussion of the nature of consciousness, self-consciousness, and intentionality. Topics include: mind and language, the architecture of the human mind, varieties of psychological explanation, recent mind/body debates, the reality of selves, and animal consciousness and its evolutionary value. Prerequisite: previous coursework in psychology, philosophy or permission of instructor. (Cross-listed as PHIL 309)

PSYC 311 - Sensation and Perception 4 hours. A study of the physiological and psychological processes involved in the immediate experience of sensory stimulation. Topics include sensory systems and coding mechanisms, psychophysical methods, signal detection, illusions, and complex perceptual processes. Prerequisite: PSYC 101.

PSYC 320 - Parenting Seminar 2-3 hours. This course provides students with an opportunity to learn about effective parenting through reading of literature and group discussion. The course explores a wide variety of issues, concerns, and problems that parents often face as well as the joy and gratification that effective parenting brings. Prerequisite: PSYC 101. (Cross-listed as WGST 320)

PSYC 322 - Health Psychology 2-4 hours. The critical link between health and behavior is the focus of this course. Students discuss and explore, in seminar format, health-related topics such as nutrition, addiction, exercise, life stress, health care delivery systems, alternative medicine, AIDS, health promotion behavior and personality and proneness to disease. Prerequisite: PSYC 101.

PSYC 330 - Neuropsychology 4 hours. A non-laboratory course dealing with the neurological correlates and determinants of behavior. Emphasis on basic neuroanatomy and neurophysiology underlying human behavior, i.e., the physical basis of movement sensation, perception, emotion, motivation, learning, memory and language.

PSYC 332 - Cognitive Processes 4 hours. An exploration of the psychological organization and functions of the mind. The point of view of people as active processors of information is adopted. Topics include attention, recognition, varieties of memory, psycholinguistics and consciousness. Emphasis is placed on the experimental method and its application to the study of cognitive experiences and activities. Prerequisite: PSYC 101 or permission.

PSYC 341 - Theories of Personality 4 hours. This course examines the philosophic, scientific, and applied aspects of personality theory and research. The major orientations toward investigating personality will be explored, e.g., psychodynamic, depth-psychological, trait-factor, humanistic, and cognitive-personality models. Emphasis is placed on developing a working knowledge of each theory and methods of conducting personality research. Prerequisite: PSYC 101.

PSYC 342 - Abnormal Psychology 4 hours. Examines the biological, psychological and societal perspectives on the taxonomy, etiology, and treatment of clinically significant psychopathology. Provides a basis for understanding the

personal and social problems of such individuals. Prerequisite: PSYC 101. Recommended: PSYC 261, 262, 282 or 341.

PSYC 351 - Human Sexuality 4 hours. In this course we discuss sexual attitudes and behavior, gender roles, love and intimacy, contraception and abortion, pregnancy and childbirth, marriage and family life, variations in sexualities, STDs, and the many psychological and cultural factors that affect human sexual behavior. (Cross-listed as WGST 351)

PSYC 352 - Research Techniques 2-4 hours. This course involves the conduct of laboratory and/or field research and experiments to teach techniques and skills used to gather data in specific subfields of psychology, usually child development. The specific area to be covered may change from term to term (e.g., personality, social, learning, cognition). Prerequisite: PSYC 220 and relevant courses (such as PSYC 261 or 262) or permission of instructor.

PSYC 362 - Industrial/Organizational Psychology 4 hours. This course is designed to acquaint students with work psychologists perform in organizational settings. Topics may include methodology of industrial/organizational psychology, personnel selection, training and development, job satisfaction, leadership, work motivation, human performance and human engineering, performance appraisals, job stress and consumer behavior. Prerequisite: PSYC 101.

PSYC 371 - The Psychology of Death and Dying 4 hours. The study of death addresses questions rooted at the center of human experience. Included are historical and modern concepts, attitudes and practices toward the dying and the bereaved; psychological stages and experiences through which the dying may pass; an investigation of suicide including prevention, intervention and postvention; the concept of death in health care, medical ethics and law. Prerequisite: PSYC 101.

PSYC 372 - Psychology of Gender 4 hours. This course examines the psychological, biological, social, and life-span development differences and similarities of the genders. Topics include cognitive abilities and achievement, personality characteristics, work issues, violence prevention, love relationships and sexualities, reproductive concerns, and physical and mental health issues. Prerequisite: PSYC 101. (Cross-listed as WGST 372)

PSYC 389 - Introduction to Art Therapy 3 hours. An introduction to art as a psychotherapeutic modality. Topics include art as a diagnostic tool, art as a means for emotional expression, theoretical backgrounds, and developmental stages of art. This course promotes experiential learning through participation in art therapy exercises. Prerequisite: PSYC 101; PSYC 342 and either PSYC 261 or 262 recommended.

PSYC 411 - Psychological Research and Design II 4 hours. An advanced course in psychological research methods. Includes the logic of various research designs (variables, confounds) and their statistical analysis. The class designs and conducts several studies, gathering and interpreting data. Involves APA style report writing and the use of computers in research. Prerequisites: PSYC 220 and PSYC 230.

PSYC 429 - Cognition and Aging 2 hours. A lecture and discussion course covering current research and theories of cognitive processes in the older adult. Basic topics include age differences in memory, verbal processes, motor performance, perception, problem solving, and intelligence. Prerequisite: PSYC 101.

Recommended: PSYC 332 or GERO 272 or permission of instructor. (Cross-listed as GERO 429) (Alternate years)

PSYC 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

PSYC 471 - Child Psychopathology 3 hours. Through readings, presentations, and discussions, this course seeks to illuminate variation in child/adolescent behavior, emotion, and personality. Course material will consist of theory, research, and practice regarding "disturbed" and "disturbing" children and adolescents. Prerequisite: PSYC 261, 262 or 342; or permission of the instructor. Not open to students who have taken PSYC 477.

PSYC 472 - Child Interventions 3 hours. This seminar introduces students to interventions for children and adolescents with disabilities and mental health disorders. Treatment strategies will be explored (such as behavior modification, play therapy, family therapy) along with treatment settings in which such therapies are delivered (schools, community mental health centers, institutions). Prerequisite: PSYC 261, 262, or 342.

PSYC 477 - Child and Adolescent Psychopathology 4 hours. This course explores the field of child and adolescent psychopathology, including the theories and research that serve as the foundation of assessment, diagnosis and treatment of psychological disorders. Prerequisite: PSYC 261, 262 or 342; or permission of the instructor. Not open to students who have taken PSYC 471.

PSYC 485 - Practicum 2-4 hours. A supervised field experience planned to develop skills in designing interventions within educational, vocational, social services or mental health settings. In addition to field placements, students may meet in weekly seminars to discuss current literature. Prerequisites: PSYC 101 and permission of instructor.

PSYC 491 - Clinical Procedures 4 hours. Focuses on the development and application of general clinical skills. Each student has the opportunity to demonstrate these skills through supervised interactions with a volunteer counselee. Prerequisites: PSYC 210, 341 or 342; and permission of Division Selection Committee.

PSYC 492 - Clinical Practicum 4 hours. This course provides advanced clinical/counseling-track psychology students with practical experience in a human service setting. Since each practicum site offers a somewhat different experience, attempts are made to place students in a setting that matches their interests. Supervision is provided for both on-site and in-class work. Prerequisites: PSYC 491 and permission of Division Selection Committee.

PSYC 497 - Senior Seminar 2 hours. This course provides students with an opportunity to explore contributions of important research and theorists through reading of literature, group discussions, and paper presentations. It will also focus on a variety of contemporary topics and issues. Required for majors. Prerequisite: Completion of 20 hours of psychology coursework.

Religious Studies

RLGS 105 - Introduction to Religions of the World 4 hours. An introduction to the study of religion through an examination of selected religious traditions (e.g.,

Christian, Jewish, Islamic, Hindu, Buddhist, Daoist, Yoruba). Attention is given to the experience, expression, and practice of religion in different historical and cultural contexts as well as to different theoretical approaches to the study of religion. (B) (GP)

RLGS 165 - Asian Religions 4 hours. An introduction to selected Asian religious traditions (e.g., Hindu, Buddhist, Sikh, Shinto, Confucian, Daoist), with attention to their historical and contemporary contexts. (B) (GP)

RLGS 200 - Topics in Religious Studies 1-4 hours. An examination of issues in religious studies. Topics vary each time the course is offered. (Sufficient demand)

RLGS 240 - Religion in America 4 hours. An examination of the impact of religion in shaping American culture. Major thinkers such as Edwards, James, Emerson and Niebuhr, historical movements such as revivalism and social gospel, and distinctive themes such as religious pluralism, civil religion and ethnic awareness. (Sufficient demand) (B)

RLGS 251 - Who Wrote the Bible? 4 hours. The course will examine the ways that social, political, cultural and historical situations affected the formation of the Bible. It will also consider various ways that religious ideas are conveyed through stories, histories, mythologies, and poetry. (B)

RLGS 254 - Birth of the Christian Tradition 4 hours. An exploration of the early Christians' religious experience both by studying their writings (e.g., letters, gospels, apocalyptic discourses, theological treatises, liturgical manuals - some in the New Testament) and by examining the Jewish, Greek and Roman cultures from which Christianity emerged. (Sufficient demand) (B)

RLGS 274 - Hindu Religious Traditions 4 hours. The third largest religion in the world, Hinduism includes a diversity of religious practices, communities, traditions, and beliefs. This course examines aspects of Hinduism from the Vedic period to the present day while introducing different approaches to the academic study of religion. (B)

RLGS 300 - Topics in Religious Studies 1-4 hours. An examination of issues in religious studies. Topics vary each time the course is offered. (Sufficient demand)

RLGS 307 - Myth, Ritual, and the Creative Process 4 hours. A cross-cultural explanation of how people establish their world views by narrating stories and by acting out their deepest aspirations and beliefs. Special attention to how and why symbolic frameworks are transmuted from certain forms to others through creative imagination. Prerequisite: One course in Religious Studies or Philosophy, or permission of instructor. (Alternate years)

RLGS 319 - Jesus: Sage, Savior, Superstar 4 hours. This course examines a variety of ways people have understood Jesus and his teachings. We study the four Biblical gospels, gospels that were excluded from the Bible, non-Christian perspectives on Jesus, and representations of him in art and popular culture. Prerequisite: sophomore or higher class standing or permission of instructor. Completion of at least one previous course in philosophy or religious studies is preferred.

RLGS 359 - History of Chinese Thought 4 hours. Focusing on the relationship between religion and philosophy, this course develops an understanding of the

distinctive character of Chinese culture by surveying the development of religion and philosophy from antiquity to the medieval period and challenges of the twentieth century. (Cross-listed as HIST 359, PHIL 359)

RLGS 369 - Buddhism 4 hours. This course traces the historical development of Buddhist philosophies and practices throughout India, Asia, Europe, and the Americas. There is discussion of the differences among Theravada and Mahayana traditions. Buddhist ethics, practices, and arts are introduced and we explore changes from the rise of modern science and contacts with Christianity. Prerequisite: Sophomore standing or one previous course in PHIL/RLGS or permission of instructor.

RLGS 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

Science

SCIE 110 - Weather Elements 2 hours. Analyzes the fundamental physical processes of the atmosphere and their relationships to the daily weather pattern and weather forecasting in the United States. May be taken for science credit. (Sufficient demand) (F2) (F-III)

SCIE 111 - Science in Science Fiction 2 or 4 hours. Science fiction is intimately connected with science. In the sub-genre of hard science fiction, the story is founded on sound scientific or technological extrapolations and explores how individuals and society react to the changes. This course will look at the science used in a variety of short stories, novels and films. Topics can include planetary science, genetic engineering, artificial intelligence, celestial mechanics, black holes, chemistry, physics, and ecology. (F2) (F-III)

SCIE 115 - Life in the Universe 4 hours. In this course, we take a look at the past and future of astrobiology. Issues covered include how we discovered our physical place in the universe, the origins of life and intelligent life, the physical and chemical conditions need for life as we know it, and where we can find those conditions in the solar system and beyond. (F2) (F-III)

SCIE 117 - Integrated Science 4 hours. Content-based survey of the Physical Setting Core Curriculum for Elementary (K-4) and Intermediate (5-8) Level Science, emphasizing the chemical and physical laws that describe our surroundings and the interactions of inanimate environmental components. Illustrates chemistry and physics concepts with real-world examples and links them with earth science, numeracy, and art as reinforced by the associated inquiry-based laboratory addressing the complementary Process Skills. Includes modern methods of acquiring, analyzing, modeling/interpreting, and communicating data from the physical sciences. Manipulatives, models, and experiments for understanding physical properties and chemical structure are featured in the hands-on laboratory. Prerequisite: Major or minor in education; others by permission of instructor. (F1)

SCIE 127 - Doing Science 4 hours. In this course, students learn science by doing science, planning and executing their own experiments devised to answer questions they have about a central theme. This course is taught by faculty from different scientific or mathematics backgrounds who guide students in their investigations. Content will cover a broad range of scientific disciplines, emphasizing earth, environmental and life sciences. Fulfills the CLAS Quantitative Reasoning basic competency (III) and counts as a lab science in general education. (F1) (F-I)

SCIE 200 - Special Topics in Science 1-4 hours. Topics vary from year to year.

SCIE 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

Sociology

SOCI 110 - Introduction to Sociology 4 hours. The foundation course in sociology, studying such concepts as social organization, culture, personality, and social processes such as interaction, socialization, social stratification, race and ethnic relations, and collective behavior. Designed primarily for freshmen. (E3)

SOCI 200 - Special Topics 1-4 hours. An open course, varying in content from year to year, which allows for concentration on such specialized areas as Political Sociology, Demography, Criminology, Social Change, Stratification, and the like. Prerequisites: SOCI 110 or ANTH 110 or permission of instructor. (Sufficient demand)

SOCI 230 - Introduction to Data Analysis and Statistics 4 hours. An introduction to statistics and data analysis in social and political life, covering the nature of variables, descriptive statistics, probability, and inferential statistics. Students use computer software to further their understanding. (Cross-listed as POLS 230) (III)

SOCI 235 - Socialization 4 hours. An inquiry into the processes by which social actors learn the norms, behaviors, and patterns of attention appropriate to their positions in society. Topics discussed include: "nature versus nurture," theoretical approaches to socialization, social structure, and socialization in adult life. The relationship between socialization and other sociological concepts, such as gender, social class, and occupation are discussed. Prerequisite: SOCI 110 or ANTH 110. (Alternate years).

SOCI 236 - Cults, Sects and the Main Line 4 hours. A scientific approach to the universal phenomenon of religion in human society. How does one approach such a study? What is "religion?" What function does religion supply in the maintenance of society? Are there alternative belief systems equally functional? What kinds of people are drawn to various types of religious expression? What is the place of religion in the society of the future? Prerequisites: SOCI 110 or ANTH 110 and junior or senior standing, or permission of instructor. (Alternate years)

SOCI 237 - Media and Politics 4 hours. This course examines the relationship between mass media and politics. We will explore the ways in which mass communications media shape the politics of elections, daily governance, U.S. foreign policy, interest groups, social movements, and identity. (Cross-listed as COMM 237, POLS 237)

SOCI 242 - Social Problems 4 hours. Current social issues discussed and analyzed from a sociological perspective. Issues vary each term but may be drawn from the following: population and the environment; work and alienation; education; health; leisure, social welfare, and other areas. Prerequisite: SOCI 110 or ANTH 110. (Sufficient demand)

SOCI 245 - Crime and Society 4 hours. This introductory course provides students with a foundational understanding of the American criminal justice system. In this course, students learn about the empirical reality of crime, including categories and

patterns of offending, as well the primary actors involved in the criminal justice process. Heavy emphasis is placed on a critical examination of the conflicts and contradictions of this system and an assessment of social responses to crime. Prerequisite: SOCI 110 or ANTH 110.

SOCI 253 - Social Welfare Institutions 4 hours. Examines social welfare institutions in the context of change brought about by industrialization and urbanization. Focus on types of welfare, welfare policy and the structure of services. (Cross-listed as WGST 253)

SOCI 343 - Race and Ethnicity 4 hours. A discussion of theory and research concerning racial and ethnic relations in the United States and in various parts of the world. (GP)

SOCI 344 - Sociology of Deviance 4 hours. Deviance is presented as an aspect of the normal functioning of a society. This course is a study of the processes by which attitudes and behaviors are defined as deviant, and by which those labels are applied to individuals. Prerequisite: SOCI 110 or ANTH 110 or permission of instructor.

SOCI 346 - Sociology of Sex and Gender 4 hours. Examines the concepts of sex and gender as they are defined in sociological literature, focusing on how social contexts (i.e., education, employment, family, sexuality and reproduction, etc.) construct gender which, in turn, shapes future opportunities for individuals in society. Prerequisite: SOCI 110 or ANTH 110. (Cross-listed as WGST 346)

SOCI 348 - Sociology of Families 4 hours. An investigation of the relationship between the family and other social institutions, particularly in regard to the family functions of population maintenance, socialization and social placement. Prerequisite: SOCI 110 or ANTH 110. (Cross-listed as WGST 348)

SOCI 400 - Special Topics 1-4 hours. An open course, varying in content from year to year, which allows for concentration on such specialized areas as Political Sociology, Demography, Criminology, Social Change, Stratification, and the like. Prerequisites: SOCI 110 or ANTH 110 and junior or senior standing or permission of instructor. (Sufficient demand)

SOCI 420 - Social Theory: A Survey 4 hours. An examination of contemporary theoretical schools, e.g. symbolic interactionism, structural functionalism, exchange and conflict, and ethnomethodology. Special attention devoted to the precursors and contemporary representatives of the respective schools. Prerequisite: SOCI 110 or ANTH 110 or permission of instructor.

SOCI 431 - Research Design and Strategies 4 hours. This course examines the methods by which social science researchers generate new knowledge and covers major data collection designs, sampling techniques, and measurement strategies. Students spend the semester developing their research skills and designing their own research proposals. Prerequisite: SOCI 110, ANTH 110, or POLS 110. (Cross-listed as POLS 431)

SOCI 450 - Independent Study 1-4 hours. Work on some topic not covered in any established course chosen by the student in consultation with the instructor. Work under this title may be carried out alone, in cooperation with other departments, or in an honors colloquium where a common problem is chosen. Approved Plan of Study and permission of departmental staff required.

SOCI 470 - Application of Sociology Field Work 2-4 hours. Field work associated with social services, corrections, health care, or educational agencies. Weekly class-workshop sessions and individual field work. Focus on the student's relationship with colleagues, professionals, and the public in various accredited institutional settings. Prerequisite: junior or senior standing and permission of instructor. (Sufficient demand)

SOCI 495 - Global Issues Seminar 4 hours. This integrative capstone course allows seniors to study a variety of global issues in-depth and to present the results of their own particular global experiences and studies. Topics examined will vary from year to year. The seminar may be focused on a central theme or on a variety of issues, depending upon the students' international interests and the instructor's discretion. Prerequisites: GLBS 101; Study Abroad; senior standing. (Cross-listed as ANTH 495 and GLBS 495) (GP)

Spanish

SPAN 101 - Spanish I 4 hours. Introduction to the language and culture of the Spanish-speaking world: speaking, reading, understanding and writing. Practice in language lab. Emphasis on communicative skills. Assumes no prior knowledge of the language. (II)

SPAN 102 - Introductory Spanish II 4 hours. This course builds on Introductory Spanish I, increasing students' communicative skills and exploration of Spanish-speaking cultures. Students improve their proficiency in speaking, listening, writing and reading Spanish through engaging in class activities, in the language lab and with independent work. Students learn to perform practical tasks like ordering in restaurants, dressing, visiting others, and making living arrangements. Prerequisite: SPAN 101, 41-60% on Spanish Language Placement Exam, or permission of instructor. (II)

SPAN 200 - Special Topics 1-4 hours. Subject matter not covered in other courses. Topics vary from one semester to another.

SPAN 201 - Intermediate Spanish III 4 hours. Students integrate and expand on structures and vocabulary, developing cultural awareness through literature, video and online materials. Participation in three weekly classes with their professor and one weekly conversation group with an international teaching assistant increases students' language skills proficiency. Prerequisite: SPAN 102, 61% or higher on Spanish language Placement Exam, or permission of instructor. (Every fall semester). (II)

SPAN 202 - Intermediate Spanish IV 4 hours. Students complete their integration of basic structures and vocabulary, increasing cultural understandings through literature, video and online materials. Participation in three weekly classes with their professor and one weekly discussion group with an international T.A. develops students' oral and written expression. This course may be taken as the elective for the Spanish minor. Prerequisite: SPAN 201 or permission of instructor. (II) (Every spring semester)

SPAN 212 - Buenos Aires: Literature and the Arts 2 hours. The course introduces students to the ways in which Argentine fiction produces Buenos Aires both as a center of European high culture and as a site of social conflict and vibrant popular culture. Students respond analytically to Argentine literature through engagement in close reading. Readings of literary texts are combined with study of related artistic

tendencies in historical context. The course concludes with a trip to Buenos Aires. Travel is a required part of this course. (Cross-listed as GLBS 212) (A) (GP)

SPAN 215 - Framing Gender: Latin American Film 4 hours. This course introduces students to Latin American film from the 1940?s to the present. Students analyze filmic representations of gender, race, sexuality, and socio-economic class in historical context, exploring relationships among art, politics and culture. Students develop an understanding of film-making practices and acquire and apply critical skills and theoretical approaches to thinking, speaking, and writing about films. (Cross-listed as GLBS 215, WGST 215) (C) (GP)

SPAN 216 - Cuba Close Up: Film since the Revolution 4 hours. Cuban cinema was transformed by the Revolution, which elevated the importance of film in Cuba and contributed to its political nature. Students analyze filmic representations of gender, race, and socioeconomic class in their historical contexts, exploring the relationship among art, politics, and culture. Students develop critical skills for viewing and interpreting films and for speaking and writing about films and film genres. (Cross-listed as GLBS 216, WGST 216) (C) (GP)

SPAN 300 - Special Topics 1-4 hours. Subject matter not covered in other courses. Topics vary from one semester to another.

SPAN 301 - Advanced Conversation and Composition 4 hours. In this workshop-style course, students practice the styles and mechanics of writing and speaking in academic, professional, and informal contexts. Authentic Hispanic cultural materials are the basis for students? essays, speeches, and informal conversation. This course is required for the Spanish major and minor. Prerequisite: SPAN 202 or permission of instructor. (Every fall semester)

SPAN 311 - Peninsular Culture and Literature I: Medieval - Eighteenth Century 4 hours. An introduction to canonical cultural works of Spain from the Middle Ages through the eighteenth century. Cultural discourse placed in context with socio-historical periods. Essays, literature, videos and/or films. Predominantly in Spanish.(Alternate years)

SPAN 312 - Peninsular Culture and Literature II: 19th - 20th Century 4 hours. An introduction to canonical cultural works of nineteenth-and twentieth-century Spain. Cultural discourse placed in context with socio-historical periods. Can be taken independently or as a continuation of SPAN 311. Course components predominantly in Spanish. (GP) (Alternate years)

SPAN 315 - Latin American Culture and Literature I 4 hours. Students are introduced to Latin American culture and literature through analysis of art, architecture, and original texts from the pre-Colombian period to 1900. Films and historical readings enhance students' understanding of indigenous and Hispanic cultures, art, and politics in Latin America. The course is conducted in Spanish and may be taken as one of the core courses for the Spanish major and minor. (Alternate fall semesters)

SPAN 316 - Latin American Culture and Literature II 4 hours. Students are introduced to Latin American culture and literature through analysis of original texts from 1900 through the present. Films and historical readings facilitate students' engagement with literature in its socio-historical context, as well as enhancing students' ability to make connections between artistic and political movements. This

course is conducted in Spanish and may be taken as one of the core courses for the Spanish major and minor. (GP) (Alternate spring semesters)

SPAN 360 - Literary Theory Seminar 4 hours. This course is intended to introduce students with a major or a minor in a foreign literature and language to Literary Theory and Criticism. Students use different types of theory to analyze texts in English and in their target language. This course is required of all foreign language and literature majors and is recommended for those students with a minor in a foreign language. Prerequisite: SPAN 202 or permission of instructor.

SPAN 400 - Topics in Hispanic Literature 1-4 hours. A study of the literary manifestations of socio-cultural areas such as religion, honor, love, politics, and individuality which are of concern to Hispanics. Taught in Spanish. (Sufficient demand.)

SPAN 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Independent study is required of Spanish majors. Approved Plan of Study required.

SPAN 485 - Internship in Spanish 1-4 hours. An off-campus project in consultation with faculty in the Division of Modern Languages. Students gain experience in a variety of careers involving Spanish and related fields. The internship must be conducted in Spanish. Requirements for this project include a journal, job evaluations, and a final report. May be taken during the summer or semester abroad. SPAN 202 or equivalent proficiency recommended. (GP)

SPAN 490 - Modern Languages Senior Seminar 0 hours. In this seminar students have the opportunity to complete their electronic portfolio and prepare for an oral defense. In consultation with professors and peers, students select the documents to include in keeping with portfolio requirements. As part of this seminar, students write and revise their Senior Reflective Statement and their resume or curriculum vitae.

Theatre

THEA 110 - Introduction to Theatre 4 hours. A study of theatre as a creative process and cultural phenomenon, including text and performance analysis, the examination of dramatic literature, and opportunities to experience and explore the work of the actor, the playwright, the director, the designer, and the producer. Scripts and productions which are the sources for discussions and assignments are drawn from a full range of cultures and time periods. (C)

THEA 200 - Special Topics 1-4 hours. Includes non-regularly scheduled course offerings in related areas of study. Examples include Musical Theatre, Theatre and Social Change, Ritual and Theatre, Performance Theory, Ethnic Theatre.

THEA 205 - The Play's the Thing! - Playwriting 4 hours. This team-taught course combines beginning acting exercises with improvisations in writing. Texts include full-length plays and one-acts. Students are expected to write and revise one-act plays over the course of the semester. (Cross-listed as ENGL 205) (C)

THEA 210 - The Performing Arts: A Global Perspective 4 hours. Introduces the student to performing arts in society at large and a broad-ranging overview of how this role is fulfilled in a variety of cultures. It begins with a foundational exploration of the roots of theatrical, musical, and movement forms of expression in early tribal

and American indigenous societies, followed by contrasting these forms to more familiar contemporary Western forms of expression. Perspectives are then compared and contrasted to selective performance traditions of Central/South America, Africa, India, Japan, Indonesia, China and others. (C) (GP)

THEA 211 - Women in Theatre, Society and Politics 3 hours. A survey course tracing the role(s) of women in theatre - audience, acting, directing, writing, designing, managing - from the ancient Greeks to contemporary times in a range of cultures. Representative plays, essays, and production artifacts are studied to discover the changing roles of women. (Cross-listed as WGST 211)

THEA 212 - From Page to Stage: Script Analysis 4 hours. Play-scripts are the primary source materials for theatrical performances. Focusing on analysis of play texts as well as examining structure, genre, theme, style, character, language and imagery, this course encourages creative investigation and research for theatre practitioners and scholars. (C)

THEA 220 - Design Fundamentals for Stage, Dance and Film 4 hours. A beginning design course introducing students to common principles of theatrical and performance design: scene, lighting, costume, sound, makeup, and props. Script analysis, research methods, the "isms"-- realism, symbolism, absurdism, postmodernism -- design unity, color, light/shadow, line/weight, and shapes, will be covered. (Cross-listed as PDAT 220) (C)

THEA 221 - Costume Construction 3 hours. A study of practical skills needed to transform a designer's rendering into 3-dimensional garments, including the nature and character of a range of fabrics, auxiliary materials, proper methods and the universal language of the textile world. Non-Theatre majors are welcome in this course. May be repeated for credit up to a total of 9.00 credit hours. (Cross-listed as PDAT 221)

THEA 222 - Stage Makeup 2 hours. A basic course introducing students to the principles of designing and applying stage makeup. Projects and makeup crew assignments required. (Cross-listed as PDAT 222) (C)

THEA 230 - Stage Management Fundamentals 2 hours. This course demonstrates the stage manager's role in theatrical productions and how essential it is for success. Topics include pre-production research, rehearsal protocol, production guidelines, stagecraft terminology, and developing a shared language with designers, directors, producers, cast, and crew.

THEA 240 - Acting I 4 hours. A beginning level course open to all students. Through progressive acting exercises, students are introduced to realism based theatrical performance, with emphases and exploration in vocal, physical and creativity development, text and character analysis. Plays from a full range of cultures are used for scene study assignments. (C)

THEA 242 - Performance Lab 4 hours. This course provides students with specialized focus on various aspects of theatrical performance in a laboratory, experimental workshop setting. This flexible course is intended to respond to unique interests and needs of students not otherwise emphasized in other courses. Lab may focus on improvisational techniques, audition techniques, monologue development, masking, puppetry, or styles of acting. (C)

THEA 270 - Play Production 1-4 hours. A lab course designed to give students practical production experience under faculty supervision in the areas of acting or directing. May be repeated for credit to maximum of 4 hours. Prerequisite: Permission of instructor.

THEA 300 - Special Topics 1-4 hours. Includes non-regularly scheduled course offerings in related areas of study. Examples include Musical Theatre, Theatre and Social Change, Ritual and Theatre, Performance Theory, Ethnic Theatre.

THEA 311 - Theatre: History, Art, Politics and Society I 4 hours. An examination of theatre's place in many world cultures, primarily focusing on the development of Western Drama, from earliest times through 1650. Emphasis on performance content and style, theatre architecture, and management practices as a reflection of a given culture's social, religious and political structures, and aesthetic impulses. Prerequisite: THEA 110 or permission of instructor.

THEA 312 - Theatre: History, Art, Politics and Society II 4 hours. An examination of theatre's place in many world cultures, primarily focusing on the development of Western Drama, from 1650 to the present. Emphasis on the performance content and style of dramatic literature, theatre architecture, and management practices as a reflection of a given culture's social, religious and political structures, and aesthetic impulses. Prerequisite: THEA 110 or permission of instructor.

THEA 320 - Scene Design 3 hours. A scenic design course, which builds on the principles of design taught in THEA 220. It further develops skills in research methodology, script analysis, sketching and painting techniques, model building, graphics, use of computer-aided design. Representative scripts will be studied. Prerequisite: PDAT/THEA 220 or permission of instructor. (Cross-listed as PDAT 320)

THEA 321 - Lighting Design 3 hours. A study of basic electricity and theatrical lighting equipment with an emphasis on both the artistic as well as the technical aspects of stage lighting Crew assignments required. Prerequisite: PDAT/THEA 220 or permission of instructor. (Cross-listed as PDAT 321)

THEA 322 - Stage Costume Design 3 hours. A costume focused design course which builds on the principles of design taught in THEA 220. It further develops skills in research methodology, script analysis, costume design theories, artistic processes, and costume construction for specific plays. Lab hours required. Prerequisite: PDAT/THEA 220 or permission of instructor. (Cross-listed as PDAT 322)

THEA 340 - Acting II 3 hours. This intermediate level course emphasizes text analysis, scene study, in-depth character development, character relationship explorations, and exploration of the interface between text and subtext with a direct application to performance. Prerequisite: THEA 240 or permission of instructor.

THEA 342 - Advanced Performance Lab 4 hours. Advanced level continuation of THEA 242. May be repeated one time for credit (8 hours maximum).

THEA 350 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/ classroom setting. Junior standing and an approved Plan of Study required.

THEA 370 - Advanced Play Production 1-4 hours. Advanced level continuation of THEA 270. May be repeated for credit up to a maximum of 6 credit hours.

THEA 385 - Internship in Theatre 2-4 hours. An independent project allowing students to gain experience in professional or semi-professional theatre settings. A written Plan of Study describing the requirements of the course is required. Prerequisite: Junior standing; approval of Division Chair.

THEA 400 - Special Topics 1-4 hours. Includes non-regularly scheduled course offerings in related areas of study. Examples include Musical Theatre, Theatre and Social Change, Ritual and Theatre, Performance Theory, Ethnic Theatre.

THEA 430 - Directing I 3 hours. The theory and practice of play production from script selection to early rehearsals to final production, focusing on directorial vision, text analysis, staging principles, actor coaching, organization of the production book. Final scenes or short one-act plays to be performed for the public are expected. A full range of scripts and approaches is discussed and used for classroom and outside assignments. Prerequisite: Junior Standing.

THEA 431 - Directing II 3 hours. The continued exploration of the processes and practices of production direction from conceptualizing, to auditions, to staging, resulting in the public presentation of a one-act play. Topics include special rehearsal problems, actor coaching, rehearsal pacing, and blocking. Prerequisite: THEA 430 or permission of instructor.

THEA 440 - Acting III 3 hours. Intended for the serious student of acting, this advanced performance course applies the in-depth skills developed in Acting II to historical texts: the Greek classics, Shakespeare, Restoration Comedy, Comedia del' Arte, turn-of-the century modern realism. Prerequisites: THEA 240 and 340.

THEA 470 - Advanced Projects in Theatrical Design and Technology 1-4 hours. This projects course is a faculty supervised experience for the advanced student in one of several areas of design: scenic; lighting; costume; sound; props; makeup; and technical direction. Prerequisite: PDAT/THEA 120 and 220; One of the following: PDAT/THEA 222, 320, 321, 322, 323; or permission of instructor. (Cross-listed as PDAT 470)

THEA 490 - Senior Seminar 1 hour. This course provides tools to bridge the gap between academic theatre and what comes next. Topics include exploration of options, the "business" of theatre, marketing oneself, resume building, taxes for independent "contractors", and preparation of materials (auditions, portfolios). Prerequisite: Theatre major; senior standing.

THEA 495 - Senior Project 2-4 hours. Students complete a project for the Theatre major in their areas of interest. The project is to be submitted as a proposal to the faculty and approved in advance, with advisory support and supervision provided by the appropriate faculty member. Prerequisites: senior standing; approved written proposal; permission of instructor.

Women's and Gender Studies

WGST 101 - Women in Society 4 hours. This interdisciplinary course is the foundation of Women's Studies. It examines the relationship of women worldwide to institutions and developments in the social, political, and economic spheres. Topics include biological issues, women and work, women as family members, media portrayal of women, and the origins and development of modern feminism.

WGST 200 - Special Topics 1-4 hours. Topics vary in content from term to term.

WGST 201 - Gender and Leadership 2 hours. In this course, members of the Women's Leadership Academy explore leadership theory and issues of gender and leadership. We examine questions such as: what qualities make an effective leader, why are so few women in leadership roles in certain professions, and what might feminist theory or chaos theory have to do with leadership? We approach these questions from both a personal and academic perspective. Participants assess their own leadership style and develop a personal philosophy of leadership. Class assignments include team-building activities and attendance at skill-building workshops. Prerequisite: Membership in the Women's Leadership Academy and instructor's permission.

WGST 204 - The Art of the Personal Essay 2 hours. An examination of the best contemporary essayists. Students develop their own essays after reading and discussing these works. (Cross-listed as ENGL 204)

WGST 211 - Women in Theatre, Society and Politics 3 hours. A survey course tracing the role(s) of women in theatre - audience, acting, directing, writing, designing, managing - from the ancient Greeks to contemporary times in a range of cultures. Representative plays, essays, and production artifacts are studied to discover the changing roles of women. (Cross-listed as THEA 211)

WGST 215 - Framing Gender: Latin American Film 4 hours. This course introduces students to Latin American film from the 1940?s to the present. Students analyze filmic representations of gender, race, sexuality, and socio-economic class in historical context, exploring relationships among art, politics and culture. Students develop an understanding of film-making practices and acquire and apply critical skills and theoretical approaches to thinking, speaking, and writing about films. (Cross-listed as GLBS 215, SPAN 215) (C) (GP)

WGST 216 - Cuba Close Up: Film since the Revolution 4 hours. Cuban cinema was transformed by the Revolution, which elevated the importance of film in Cuba and contributed to its political nature. Students analyze filmic representations of gender, race, and socioeconomic class in their historical contexts, exploring the relationship among art, politics, and culture. Students develop critical skills for viewing and interpreting films and for speaking and writing about films and film genres. (Cross-listed as GLBS 216, SPAN 216) (C) (GP)

WGST 246 - Sex and the Body Politic 4 hours. This course examines how citizens' ideas about gender shape politics and how politics shapes the perceptions of gender of citizens. Studying the politics of sex and gender provides interesting perspectives on issues and even challenges our very understanding of what politics is. (Cross-listed as PHIL 246, POLS 246)

WGST 253 - Social Welfare Institutions 4 hours. Examines social welfare institutions in the context of change brought about by industrialization and urbanization. Focus on types of welfare, welfare policy and the structure of services. (Cross-listed as SOCI 253)

WGST 254 - Women Writers 2 or 4 hours. A course that examines issues of language, gender, and culture portrayed through the lens of the woman writer. Texts may include novels, stories, autobiographies, essays, letters, and poetry. (Cross-listed as ENGL 254)

WGST 256 - Multicultural American Literature 4 hours. This course explores the rich diversity of American literature, focusing either on one cultural tradition or on different ethnic communities in relation to one another. African American, Asian American, Latino/a, Jewish American, Italian American, or Native American literatures may be included. (Cross-listed as ENGL 256) (A)

WGST 300 - Special Topics 1-4 hours. Topics vary in content from term to term.

WGST 305 - Gender and Organizations 3 hours. This course builds an understanding of gender issues within organizations as well as policies that organizations can implement to create a more equitable work environment. Topics of discussion encompass the impact of gender on communication, influence, and perceptions of competence, what progress has been made regarding gender equality and what still remains to be resolved. (Cross-listed as MGMT 305)

WGST 320 - Parenting Seminar 2 hours. This course provides students with an opportunity to learn about effective parenting through reading of literature and group discussion. The course explores a wide variety of issues, concerns, and problems that parents often face as well as the joy and gratification that effective parenting brings. Prerequisite: PSYC 101. (Cross-listed as PSYC 320)

WGST 324 - Queer American History 4 hours. What is queer history? Why write it? Who should be included? This course addresses the possible content and theoretical issues in the study of lesbian, gay, bisexual, and trans people in America since the seventeenth century. Prerequisite: sophomore standing or permission of instructor. (Cross-listed as HIST 324)

WGST 346 - Sociology of Sex and Gender 4 hours. This course examines the concepts of sex and gender as they are defined in sociological literature, focusing on how social contexts (i.e., education, employment, family, sexuality and reproduction, etc.) construct gender which, in turn, shapes future opportunities for individuals in society. Prerequisite: SOCI 110 or ANTH 110. (Cross-listed as SOCI 346)

WGST 348 - Sociology of Families 4 hours. An investigation of the relationship between the family and other social institutions, particularly in regard to the family functions of population maintenance, socialization and social placement. Prerequisite: SOCI 110 or ANTH 110. (Cross-listed as SOCI 348)

WGST 351 - Human Sexuality 4 hours. In this course we discuss sexual attitudes and behavior, gender roles, love and intimacy, contraception and abortion, pregnancy and childbirth, marriage and family life, variations in sexualities, STDs, and the many psychological and cultural factors that affect human sexual behavior. (Cross-listed as PSYC 351)

WGST 372 - Psychology of Gender 4 hours. This course examines the psychological, biological, social, and life-span development differences and similarities of the genders. Topics include cognitive abilities and achievement, personality characteristics, work issues, violence prevention, love relationships and sexualities, reproductive concerns, and physical and mental health issues. Prerequisite: PSYC 101. (Cross-listed as PSYC 372)

WGST 382 - Women/Art/History: Feminist Art in a Global Frame 4 hours. This course examines 20th and 21st century art and media that engage with feminist and

gender issues in a global context. The first few weeks are spent reviewing a concise history of first- and second-wave feminist thought, particularly its relation to art and visual culture. Thereafter, selected contemporary art from all regions of the globe are covered. Cross-listed as ARTH 382) (GP)

WGST 400 - Special Topics 1-4 hours. Topics vary in content fromterm to term.

WGST 408 - Women Writers in the Middle Ages 4 hours. This course examines the writings of medieval women - abbesses, merchants, wives, mothers, and mystics - to explore the challenges female writers such as Heloise, Margery Kempe, Julian of Norwich, and Christine de Pizan presented to orthodox Christianity, to gender stereotypes, and to medieval political and social structures. Prerequisite: ENGL 325/326 or ENGL 327 or one 200-level Literature course. (Cross-listed as ENGL 408)

WGST 412 - Gender and American Film 4 hours. This course is an overview of how mainstream, artistically and/or popularly successful Hollywood films reflect gender images expressed in stereotypes, power relationships, and sexuality. The class examines gender as a social construct. The goal is to amass a working knowledge of the theories associated with gender and film criticism as well as to determine how students have been influenced by these cinematic representations. (Cross-listed as COMM 412)

WGST 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/ classroom setting. Approved Plan of Study required. The end of this course of study must include a public presentation, such as an oral thesis defense, a Women's and Gender Studies Roundtable, the Undergraduate Research Forum or an art exhibition/performance.

WGST 465 - Gender, Race, Class and Media 4 hours. This course investigates how women and minorities (including sexual minorities) are covered/portrayed by the news and entertainment media and how underlying economic, political and sociological factors affect such coverage. It explores how media portrayals influence the public's views regarding women and minorities and how women and minorities view themselves. And it examines critics' charges that the media portray women and minorities in a negative light and strategies used to counteract possible resulting harm. Prerequisite: COMM 110 or permission of instructor. (Cross-listed as COMM 465)

WGST 475 - Women's Leadership Academy Practicum 2 hours. The practicum is a semester-long experience in active, authentic leadership around a service project conducted by members of the Women's Leadership Academy. This course is taken twice for credit. Prerequisite: WGST 201.

WGST 481 - International Women Writers 4 hours. In this course we explore literature written by contemporary women from different cultures. Study focuses on voice, content, and style, with some attention to the conditions in which the work was produced and to its reception. Prerequisite: ENGL 325/326 or ENGL 327. (GP) (Cross-listed as ENGL 481)

WGST 485 - Internship 1-4 hours.

New York State College of Ceramics

School of Art and Design

ART 101 - Foundation I 8 hours. All BFA students are required to take Foundation. The year-long experience is an expansive course in studio practice and field experience focused on hands-on skill building using low-tech materials to cultivate an understanding of basic artistic principles, idea and concept evolution. Studio practice is augmented by personal research, studies in art history and contemporary art practice. BFA candidates are accepted into that program via portfolio review and academic qualifications.

ART 102 - Foundation II 8 hours. All BFA students are required to take Foundations II, a series of four, rotating, topic-specific studio workshops conducted by Art & Design faculty. These workshops address 2-D, 3-D, and 4-D Concepts. Topics vary from year to year. BFA candidates are accepted into that program via portfolio review and academic qualifications. Prerequisite: ART 101.

ART 111 - Beginning Drawing 4 hours. Studio work in painting and drawing. A general course for beginners investigating the individual's ideas in various media. (C)

ART 121 - Beginning Sculpture 4 hours. A course focusing on idea development, using both traditional and nontraditional three-dimensional materials. (C)

ART 122 - Beginning Glass Studio 4 hours. A course focusing on idea development using both traditional and non-traditional three-dimensional applications of blown, slumped, and cast glass. (C)

ART 133 - Beginning Black and White Photography 4 hours. Introduces students to the basic elements of photography and fundamental camera and darkroom techniques. Emphasis on black and white photography as an interpretive medium. (C)

ART 151 - Beginning Ceramics 4 hours. This course offers a preliminary approach to ceramics for students not enrolled in the BFA program. Students are introduced to fundamental methods of making, decorating, and firing. Additional work outside of class required. (C)

ART 161 - Beginning Printmaking 4 hours. Students are introduced to the medium and language of printmaking through hands-on demonstrations and technical and conceptual assignments. Discussions, critiques, readings and slide shows/movies add to the student's knowledge of printmaking and expose students to the versatility of the medium. (C)

ART 200 - Special Topics in Art 2-4 hours. Theory or other elective credit topics are explored Does not count toward BFA studio requirements.

ART 201 - Introduction to Handbuilding 4 hours. This course covers an extensive range of clay construction processes exclusive of the wheel. Fundamental problems in ceramics such as timing, gravity and weight are experienced in assignments that explore basic sculptural concepts. Students are introduced to historic and contemporary models to understand the possibilities offered by ceramic materials.

Basic ceramic processes from glaze mixing to kiln firing are experienced within the context of experimental materials exploration.

ART 202 - Introduction to Modeling and Mold-making 4 hours. This course focuses on understanding mold-making processes and the development of castable forms. Students use clay, plaster, wood, masonite, and paper as source materials for mold fabrication. (Fall and Spring)

ART 203 - Introduction to Wheel 4 hours. In this course, the potter's wheel is used as the forming process for making vessels expressive of the visual, tactile, and intellectual possibilities available through the medium. Provided is a direct experience with process and materials that teach necessary skills and techniques to enable students to correlate the hand and eye with the mind. The objective of the course is to help students develop creative ideas and concepts into works of art. Historical references are also explored.(Fall and Spring)

ART 212 - Introduction to Design Studio: Type and Image 4 hours. This core design studio course introduces students to graphic design through hands-on and process-oriented studio practice. A series of projects and exercises explore typography image-making. Emphasis is on visual literacy, critical thinking, craft, and empathy for audience experience. Problem solving embraces a wide variety of tools and materials. Studio practice includes digital equipment and design-related software such as InDesign, Photoshop, and Illustrator.

ART 218 - Introduction to Photography 4 hours. This course focuses on basic digital photography skills including camera function, color correction, organizing and editing images and inkjet printing. Through assignments, reading discussion, lecture and critique, students examine how photographs function in order to engage in critical discourse with the medium. A fully manual digital single lens reflex camera (DSLR) and a portable hard drive are required.

ART 225 - Introduction to Print Media 4 hours. This course is focused on image making and image processing in relation to experiencing a broad range of printmaking processes and forms. It provides an introduction to the tools, technologies, and concepts necessary to develop the skills to make images within a contemporary print framework. Practices including woodcut, etching, lithography, monoprints, and new digital inkjet print technologies will be investigated. Printed images will evolve by working with a combination of hand and digital processes, with ink and with computer software, thus allowing the print to be understood as both physical and electronic process. Ideas inherent to the process of printmaking such as reproduction, translation, synthesis, remixing, proofing, recombination, and collage form the basis for discussion and inquiry. (Fall and Spring)

ART 232 - Introduction to Video, Sound, Interactive 4 hours. This core studio course introduces creative explorations of time-based media. Processes include video and audio recording, video and audio synthesis, digital editing software and concepts, video/sonic/interactive environments, animation (2d, immersive 3d), website production and social media.

ART 246 - Introduction to Painting 4 hours. In this course students will be introduced to painting within a structure that allows for the concurrent development of their technical and conceptual skills. Through a series of projects designed to explore the richness of painting in oil and/or water media, student will work towards proficiency with paint and gain confidence in the production and realization of ideas. Work will be done from observation, from the imagination, and from a variety

of viewpoint and techniques. Discussions, reading, field trips, and critiques will enhance student's knowledge of the critical dialogs surrounding painting, and will expand the notion of what painting can be.

ART 255 - Introduction to Sculpture 4 hours. An introduction to the possibilities associated with contemporary sculptural practice, with an emphasis on the development of ideas and conceptual reasoning, and the safe usage of materials and processes. A wide range of techniques will be covered, including structure and fabrication, mold making and casting, and the consideration of space, site, interaction, and context. May not be repeated for credit. (Fall and Spring)

ART 262 - Introduction to Glass 4 hours. This course offers a survey of glass working techniques with an emphasis on conceptual development and material manipulation. Technical demonstrations in glass blowing, hot glass casting, kiln forming, and cold manipulation will be combined with conceptually based projects to create contemporary sculpture.

ART 265 - Summer Glass I 2 or 4 hours. This is an intensive course in glassblowing. Emphasis is on personal expression and skill development. Demonstrations, slides, and lectures center on traditional and non-traditional glass working techniques for the artist. Open to all levels. (Offered only in Summer; counts as elective or additional studio credit only)

ART 266 - Summer Glass II 4 hours. This class incorporates various ways to cast glass using methodologies tailored to the beginning and intermediate student. Using hot casting, kiln forming, ZirCar ceramic shell and pate de verre, the student is exposed to a varied breadth of techniques within this intensive, condensed course. (Offered only in Summer; counts as elective or additional studio credit only)

ART 268 - Summer Glass: Cast Light 4 hours. This is an intensive course covering cast glass, color theory, the therapeutic effects of colored light, and approaches and applications for at and design. Demonstrations include a broad range of techniques incuding flow casting, sand casting, resin bonded sand molds, cold working, and more. (Offered only in Summer; counts as elective or additional studio credit only)

ART 282 - Figure Drawing 4 hours. A study of the expressive possibilities of the human form through drawing. Students will explore the figure in many ways with a variety of drawing media. From anatomical study and gesture to portraiture and narrative, this course will investigate the powerful history of figurative art and its potential for individual expression. Fundamental drawing and visual language skills are stressed. This course fulfills the drawing requirement. Prerequisite: Completion of an Art Foundation Program or permission of instructor.

ART 283 - Drawing: Observation to Abstraction 4 hours. An investigation of the ways in which perceptual study can lead to pure abstraction. Through observational drawing and formal analysis, students will discover the abstract principles that exist in all visual imagery. Assignments cover a broad range of drawing techniques and concepts including biomorphic, geometric, and conceptual abstraction. The potential for abstraction to communicate ideas will be explored. Fundamental drawing and visual language skills are stressed. This course fulfills the drawing requirement. Prerequisite: Completion of an Art Foundation Program or permission of instructor.

ART 284 - Drawing: Analyzing Nature 4 hours. This course covers both technical and conceptual aspects of drawing through the investigation and analysis of natural

forms. Subjects range from found objects in nature to microscopic materials, the landscape, and the human body. Emphasis is placed on integrating technical mastery of the visual elements of drawing with expressive content, while working with a wide variety of materials. Fundamental drawing and visual language skills are stressed. This course fulfills the drawing requirement. Prerequisite: Completion of an Art Foundation Program or permission of instructor.

ART 285 - Digital Drawing 4 hours. This course promotes an approach to drawing using digital formats that push the concept of computer beyond its status of "tool". We approach the computer as a creative partner seeking answers to the questions most appropriate for its use in drawing. Newly developed technique and vocabularies will be explored, including raster drawing, micro marking, pixel displacement, wave set processing, gradient manipulations, spectral graphics, autopoiesis, non-destructive editing, data base collage, aleatoric composition, tweening animation, video still frame manipulation, and serialism. Traditional drawing tools are used alongside experimental approaches. Prerequisite: Art Foundation Program (ART 101/102)

ART 289 - Robert C. Turner Gallery Internship 1-3 hours. Students work as interns in various capicities to provide creative leadership, programming, and management of the Robert C. Turner Gallery, the student-run gallery of the School of Art and Design. The instructor of record provides oversight and evaluation of internship activities. Repeatable for credit up to a total of 6.00 credit hours. Prerequisite: sophomore standing.

ART 290 - Wood Studio Practicum 2 hours. This course is an in depth investigation into wood fabrication useful to artists and designers. Open to all School of Art and Design students. May be repeated once for credit.

ART 291 - Metal Studio Practicum 2 hours. This course is an in depth investigation into metal fabrication useful to artists and designers. Open to all School of Art and Design students. May be repeated once for credit.

ART 292 - Wood Practicum 2 2 hours. This course combines analog and digital design/output processes in wood. Students focus on developing and integrating fluencies of common wood tools with small, affordable ShopBot routers and larger industrial scale CAD/CAM equipment in the 3D Digital Fabrication Lab. May be repated one time for credit.

ART 300 - Special Topics in Art 1-4 hours. Topics and issues not covered in other junior studio courses are explored. Usually counts toward BFA studio requirements in Fall and Spring Semesters.

ART 301 - Ceramic Sculpture I 4 hours. This course emphasizes the rigorous development of conceptual skills with the goal of developing an individual approach to a full integration of ideas, material and process. Students are encouraged to experiment with different strategies, including installation work, mixed-media projects, and a variety of traditional ceramic techniques. Construction and firing techniques are explored as well. Prerequisite: ART 201 or 202. (Fall and Spring)

ART 302 - Ceramic Sculpture II 4 hours. Continuation of ART 301. Prerequisite: ART 201 or 202.

ART 303 - Ceramic Tile 4 hours. Ceramic tile is a potent form of artistic inquiry that offers students an alternative approach to clay not covered in traditional pottery

or sculpture courses. The course challenges assumptions about tile, presenting ideas of space, shape modulation, movement, repetition, density, image, color and texture. Students will address problems involved in planning, fabricating, and installing large projects. Prerequisite: ART 201 or 202. (Fall or Spring)

ART 304 - Ceramic Color and Surface 4 hours. This course focuses on the possibilities that ceramic materials offer within a studio-based class. The experimental use of materials as well as traditional techniques are explored to develop a personal approach to glaze and surface. Projects can include functional or sculptural work. (Fall or Spring)

ART 305 - Ceramic Pottery I 4 hours. Through an exploration of pottery form this course addresses artistic inquiry, studio practice, and the genre of functional ceramics. Issues relative to ceramic history, contemporary material culture, and craft theory are part of the dialogue. Primarily wheel based, these classes may also include casting and handbuilding systems. Prerequisite: ART 203. (Fall and Spring)

ART 306 - Ceramic Pottery II 4 hours. Continuation of Ceramic Pottery I. Prerequisite: ART 203; ART 305 recommended. (Spring)

ART 307 - Ceramic Systems I 4 hours. The mold forming process is a methodology employed in ceramics to investigate the definitions, concepts, and applications of a system. A sculptural and/or utilitarian approach will be determined by the instructor.

ART 308 - Ceramics: Hybrid Vessel I 4 hours. In this course we address perceptions of the vessel as a utilitarian, sculptural and conceptual object. Historical and contemporary contexts constitute premise for inquiry. Students create vessels defined as hybridized. Prerequisite: ART 201, 202, or 203.

ART 309 - Ceramic Systems II 4 hours. A further study of ceramic systems. ART 307 recommended.

ART 310 - Ceramics: Hybrid Vessel II 4 hours. Continuation of ART 308-Ceramics: Hybrid Vessel I. Prerequisite: ART 201, 202, or 203.

ART 311 - Design Studio: Graphic Form 4 hours. This course focuses primarily on image-making as it relates to graphic design. We study how form conveys meaning, the changing role of style in design, and how type and image work together. Prerequisite: ART 211 or permission of instructor.

ART 312 - Design Studio: Typography 4 hours. This course focuses on type as image, type as information, and the interaction of type and image. We explore letterforms and writing systems propelled by the human need to represent things, to represent ideas, and to express ourselves. Projects include a variety of traditional and digital media. Students work with design-related software including InDesign, Illustrator, Photoshop, Dreamweaver, and FontLab. Prerequisite: ART 211 or permission of instructor.

ART 313 - Design Studio: Graphic Systems 4 hours. This advanced studio course focuses on design applications for complex, multifaceted projects and visual systems. Students learn how to design and produce holistic solutions for projects such as brand identities, wayfinding systems, symbol sets, and multiple component design projects. Prerequisite: ART 212.

ART 318 - Alternative Process 4 hours. This course is an introduction to alternative methods of black & white printing. Students learn the basics of negative enlargement, including an introduction to digital imaging and manipulation as well as theories of negative scales. The course also covers paper, sensitization and the different chemistry involved in each of the processes. Printing methods include cyanotype, Van Dyke brown, kallitype, gum bichromate, platinum/palladium and printing out paper. Prerequisite: ART 218. (Fall)

ART 321 - View Camera 4 hours. This course introduces students to black and white darkroom photography through the use of large-format cameras. Using monorail, 4x5 view cameras students learn the mechanics of the camera, develop new sheet film and make silver gelatin prints. Through lectures on contemporary artists, videos and related readings, students begin to synthesize technique and concept by developing their own projects. View cameras are provided. Prerequisite: ART 218.

ART 322 - Advanced Digital Photography 4 hours. This course provides an opportunity for students to go deeper into the digital skills they acquired in the introductory photography course. Advanced digital editing, including tablet use, Photoshop, and layers and masks, offer students the possibility of creating seamless manipulations and the opportunity to explore the full potential of the digital platform. These techniques are presented through discussion of contemporary practice and culture. Prerequisite: ART 218.

ART 323 - Studio Lighting 2 hours. Principles of light and the clean-slate nature of the studio will be explored, along with subject, background, and studio tools. Digital camera fluency will provide necessary feedback. A self-directed project is required. Prerequisite: ART 218.

ART 324 - Contemporary Photographic Practice 4 hours. This course explores the role of the contemporary photographer as maker, critic and organizer. Emphasis is placed on research and writing in conjunction with image making. As an introduction to independent studio work, students are expected to produce work regularly and critique of new work takes place every other week. Prerequisite: ART 218.

ART 325 - Advanced Print Media 4 hours. An extensive investigation into the traditional and non-traditional uses of materials and processes that grow out of the concepts inherent in kinetic, photographic and electronic printmaking processes. The focus is on issues involving specific forms of print media (book, print-suite, single print, mass production, CD-ROM, print installation). Time and instruction provided help to deepen students experience in one or more printmaking processes including etching, lithography, woodcut, and digital inkjet technologies. Content varies from instructor to instructor. At least one Sophomore Design, Video/Sonic, or Print Media Studio is required or permission of instructor. ART 225 highly recommended. May be repeated once for credit. (Fall and Spring)

ART 328 - Artists Multiples 4 hours. This advanced course explores ideas about artists' books and a wide range of printed multiple forms including objects, installations, CD-ROM and DVD. The notion of the multiple is explored in contrast to the traditional fine art print. Offset printing, traditional processes, and new emerging technologies will be utilized to produce work. Ideas inherent to the process of printmaking such as reproduction, translation, synthesis, remixing, proofing, recombination and collage will form the basis for discussion and inquiry

At least one Sophomore Design, Video/Sonic, or Print Media Studio is required or permission of instructor. ART 225 highly recommended (Spring)

ART 329 - Digital Print Media 4 hours. An exploration of printing activities and techniques that question and expand the interfaces of the traditional print media of lithography, woodcut, and etching with contemporary digital imaging activities and techniques. Through the making of work we will look at how digital technologies affect the contemporary vocabulary of printmaking. We work with moving and still images and with images on paper as well as on the internet. We make, send and receive images as ways of understanding how ideas about print media are expanding, how these same ideas have historically been rooted in notions about communication, and how we can conceive and make print translations that cross traditional media. Prerequisite: At least one Expanded Media Sophomore Design, Video/Sonic, or Print Media Studio or permission of instructor. ART 225 highly recommended. (Fall)

ART 332 - Junior Video 4 hours. An advanced studio course dedicated to working with video as a creative medium. Students explore methods of 'real time' image processing and digital compositing using tools spanning three decades of processor design, all of which can be used in combination to develop unique works of art. Junior Video explores a wide range of theories and traditions including but not limited to: advanced digital image processing, analog video synthesis, advanced computer editing, video installation, lighting, scripting, and a variety of other experimental approaches. Critiques of student work and an investigation of the history of Video Art are of great importance to this course. At least one Expanded Media Sophomore Design, Video/Sonic, or Print Media Studio is required or permission of instructor. ART 232 highly recommended. May be repeated once for credit. (Fall and Spring)

ART 335 - Interactive Media Art 4 hours. Explore technological processes that expand and complicate relationships of art and audience. Design responsive environments, 3D stereographics, "augmented realities" onsite and across networks. Develop generative systems that visualize, sonify, or animate data. Make your own software for "live cinema" performance. Prerequisite: One sophomore-level studio art course or permission of instructor.

ART 339 - Junior Sonic Art 4 hours. An advanced studio course dedicated to working with sound as a creative medium. Not a music course, it is designed for visual art students who wish to explore a wide range of possibilities for working in sound. This course examines many technologies and traditions including but not limited to: digital sound processing, graphic notation, algorithmic synthesis, ambient structures, atmospherics, digital editing, live multi-track recording, and granular synthesis. Critiques of student work and an investigation of the history of experimental sound are of great importance to this course. Prerequisite: At least one Expanded Media Sophomore Design, Video/Sonic, or Print Media Studio or permission of instructor ART 232 highly recommended. May be repeated once for credit. (Fall and Spring)

ART 340 - Design for Web and Mobile Devices 4 hours. This course introduces students to the building blocks of design for the web and screen-based media. Students explore the application of design principles and the design process for screen-based media with emphasis on content, aesthetics, user experience and craftsmanship. Students learn the basics of computer languages for interactive graphic design. Exercises and projects develop skills in software applications including InDesign, Photoshop, Illustrator and Dreamweaver.

ART 344 - Animation and Interactivity 4 hours. Students will explore the 'database' as a source for creative interactive art production. The class will encompass gathering, listening, documenting, sifting and reordering an array of media and computer based production techniques. Sound, video, animation, and image will be considered through a process of experimental storytelling, and 'deconstruction' via web based, CD-Rom and/or DVD authoring software. This course is a unique opportunity to explore the boundaries of moving and still images, language and sounds through the construction of complex screen interfaces. Projects will be computer based and potentially touch screen accessible. At least one Sophomore Expanded Media Design, Video/Sonic or Print Media studio is required or permission of instructor. May be repeated once for credit. (Spring or Fall)

ART 346 - Junior Painting 4 hours. Junior painting involves intensive exploration into issues of painting and drawing with emphasis on the beginnings of each student's unique means of expression. It is a continuation of the basic painting experience begun in the sophomore year with concentration on problem solving through structured assignments. Students are encouraged to find ways of approaching common experience as well as developing independent work. Sessions are complimented by readings, critiques, presentations, and field trips. May be repeated. Course content varies from instructor to instructor. Prerequisite: ART 246. (Fall and Spring)

ART 348 - Junior - Mixing Materials 4 hours. From Picasso's cubist collages to Anselem Keifer's lead and straw works, the class combines both traditional and non-traditional painting and drawing materials that enhance narrative structures, work as metaphoric transformations, and the creation of formal dynamic juxtapositions. Projects are designed to encourage exploration of new realms of expression. Prerequisite: ART 246. (Spring)

ART 349 - Water-based Media 4 hours. Students explore the use of watercolor, gouache, acrylic, and egg tempera and experiment with various supports and surfaces, including paper, grounds, canvas, panel, and more. Prerequisite: ART 246.

ART 355 - Sculpture Foundry: From Miniature to Monumental 4 hours. This junior level course examines the process and practice of contemporary cast metal sculpture. The aim is to provide a platform to develop and push the boundaries related to the art of Foundry. In a critically engaged studio environment, students develop concepts and explore casting in bronze, iron, steel, copper, aluminum, while engaging with a variety of mold-making and construction techniques, including lost wax and the patination of metals. Individual or collaborative projects from miniature to monumental may include object-based work or site-specific installations. May be taken twice for credit. Prerequisite: ART 255.

ART 361 - Glass Blowing 4 hours. An intermediate-level exploration of glass and combinations of glass and other media as they apply to sculpture. Concentration in hot glass and glass blowing techniques (including color techniques), and mold making. Projects are developed to foster self-determination of ideas in relation to media. Prerequisite: ART 262.

ART 362 - Advanced Glass Blowing 4 hours. A continuation of ART 361 that further develops personal expression in glass sculpture. Processes include glass blowing, solid working, mold making, and color, utilizing high-temperature glass enamels. Prerequisite: ART 361. (Spring)

ART 363 - Glass and Light 4 hours. This course is an in-depth investigation into the potential of light as a material and a comprehensive introduction to working with luminous tube technology --a normally commercial process--as a means of sculptural expression. The course examines neon's potential in combination with other materials both traditional and non-traditional as well as sealing, bending, processing of neon tubes, safe installation, and wiring. No prerequisite. (Spring)

ART 364 - Glass Casting 4 hours. An introductory investigation of personal expression through cast glass sculpture with an emphasis on mold making. Students learn open-faced solid glass casting using both loose and rigid sand molds. Topics range from the object and figurative sculpture to geometric abstraction and site-specific environments. (Fall)

ART 365 - Lamp Design 4 hours. The goal of the course is to use the "lamp" format as a medium of creative expression. The course incorporates a variety of material and processes including tube bending, simple electric circuiting and elemental metal and woodworking. No prerequisite. (Fall)

ART 366 - Advanced Glass Casting 4 hours. A continued development of sculptural expression using glass casting techniques. An intense mold making experience casting 3-dimensional glass projects in sand, wax, plaster, latex, and ceramic shell molds. (Spring)

ART 368 - Installation and Expanded Applications 4 hours. This course explores the aesthetic and conceptual possibilities of light and mixed media. Using traditional and non-traditional methods of neon-making, the emphasis is placed on the tension between contrasting materials when creating artworks.

ART 373 - Material Poetics in Dimensional Studies 4 hours. This course explores the relationship between material and meaning. Projects investigate the significant use of materials and context in service to ideas and develop material vocabulary as a means to shape the viewing experience. Prerequisite: ART 255 or permission of instructor.

ART 374 - Advanced Paper/Mixed Media 4 hours. Advanced Paper/Mixed Media involves intensive exploration into issues of art making with emphasis on the development of each student's unique means of expression. The course concentrates on problem solving, development of ideas, and conceptual possibilities within the contemporary art practice.

ART 375 - Space and Place 4 hours. This course explores the use of space (physical) and place (contextual) as materials for expression. Through experiential site research, students create installations, site-specific interventions, and public works. Making use of a variety of sculptural materials and processes they fit the needs of the projects and investigating site as an inspiration, venue, and medium. Prerequisite: ART 255 or permission of instructor.

ART 378 - Art and Ecology 4 hours. This class explores the intersection of art and ecology through the critical inquiry of student-directed investigations. Topics covered may include ecology, environmental art, sustainability, and community activism responding to local ecological issues through use of creative methodologies. Prerequisite: ART 255 or permission of instructor.

ART 379 - Environmental Foundry: The Art and Act of Metal Casting 4 hours. This course examines progressive metal casting processes utilizing experimental

mold making and furnace building techniques, new and emerging technologies, alternative materials and sustainable energy resources. Encouraging dialogue, the class is structured as a creative research group to gather information and develop conceptual responses to the act and art of casting. Prerequisite: ART 255.

ART 380 - Alfred Summer Ceramics 4 hours. This 4-week intensive summer course offers a comprehensive ceramic art experience. This course is intended for students to work independently with faculty oversight and guidance from Graduate Teaching Assistants. Individual work space is provided with wheels, tables and other basic equipment. Personal Development is emphasized. (This course may be taken twice for credit.)

ART 381 - Advanced Drawing 4 hours. A topical course providing students an intense immersion in both observational and conceptual drawing practices. Topics may include figure drawing, nature drawing, and drawing systems. May be repeated once for credit, preferably with a different instructor. Course content varies from instructor to instructor. (Fall)

ART 382 - Ceramic Materials I: Claybodies and Glazes 4 hours. This course covers the fundamentals of body and glaze development focusing on ceramic raw materials and their role in forming and firing for functional ware and sculpture bodies. Glaze formulations are also discussed, including glaze chemistry, texture, and causes of common defects. (Fall)

ART 383 - Ceramic Materials II: Problem Solving for Artists 4 hours. This is an open forum discussion-based course that builds on ART 382-Ceramic Materials I and stresses the application of ideas and concepts to solve studio problems. Students are expected to participate in the discussion, to bring examples of problems, and share the results of experiments to rectify those problems. Prerequisite: ART 382. (Spring)

ART 385 - Internship 1-4 hours.

ART 387 - Introduction to 3D Modeling and Rapid Prototyping 2 hours. This course offers visualization and digital fabrication techniques using computer software and rapid prototyping equipment. Fundamental techniques in computer modeling using Rhino 3D software are covered. Through tutorials and in-class demonstrations, students learn to create 2D drawings and 3D objects. (Can be taken 3 times for credit)

ART 388 - Methods in Electronic Arts 2 hours. This elective course is designed to introduce students to the primary software applications and concepts used in the preparation of a wide variety of print and digital media. The course will focus on acquiring the skills necessary to move easily between the most relevant page layout, imaging, video and sound software as well as developing skills in digital file and digital color management. This course is open to all students interested in expanding their knowledge and expertise of software used in the digital arts. It is strongly recommended for beginning as well as advanced students working in Design, Print Media, Sonic, Video and Interactive Arts. (Fall or Spring)

ART 389 - Exhibition Design 2 hours. This course is an introduction to concepts, skills, and methods required to design and install exhibitions of contemporary art in professional museum and gallery settings. Topics covered include exhibition planning, concept design, technical lighting, and proper handling, storage, and installation of artwork. Student gain firsthand experience installing an exhibition at

the Cohen Art Center and proposing a mock exhibition for the Fosdick-Nelson Gallery with drawings and scale models. Field trips to area museums and galleries provide additional opportunities to study and analyze exhibition design and to meet with professional museum and gallery preparatory and curatorial staff.

ART 390 - Methods for Digital Output 2 hours. This course compliments ART 387-Intro to 3D modeling and Rapid Prototyping, allowing the student to acquire a practical application for 3D modeling through use of CAD (SolidWorks, Rhino), CAM (Delcam for SolidWorks, RhinoCam and Mastercam), and reverse engineering software (Rapidworks, Scanstudio). Students learn technical competency in contemporary technology for 3D fabrication. Prerequisite: ART 387 or ENGR 102. (Can be taken 3 times for credit)

ART 391 - Introduction to Computer Aided Design 2 hours. This course introduces computer aided design (CAD) using Pro/Desktop software. Through in-class demonstrations and weekly assignments we learn basic modeling techniques that are universal to all CAD programs. We also explore different strategies for modeling and examine the advantages and disadvantages of each. Students have the opportunity to develop skills that are relevant to their current studio practices through a final project.

ART 392 - Individual Projects with Freshman Foundation Faculty 2-4 hours. Project or media based independent study with a faculty member in the foundations division. This course can only be used for elective credit; it does not replace sophomore, junior or senior studio requirements. Approved Plan of Study required.

ART 393 - Ceramic Art Individual Projects 2-4 hours. Project or media based independent study with a faculty member in the ceramic art division. This course can only be used for elective credit; it does not replace sophomore, junior or senior studio requirements. Approved Plan of Study required.

ART 394 - Sculpture and Dimensional Studies Individual Projects 2-4 hours. Project or media based independent study with a faculty member in the sculpture and dimensional studies division. This course can only be used for elective credit; it does not replace sophomore, junior or senior studio requirements. Approved Plan of Study required.

ART 395 - Expanded Media Individual Projects 2-4 hours. Project or media based independent study with a faculty member in the expanded media division. This course can only be used for elective credit; it does not replace sophomore, junior or senior studio requirements. Approved Plan of Study required.

ART 396 - Drawing, Painting, or Photography Individual Projects 2-4 hours. Project or media based independent study with a faculty member in the drawing, painting, photography division. This course can only be used for elective credit; it does not replace sophomore, junior or senior studio requirements. Approved Plan of Study required.

ART 397 - Glassartengine 2 hours. This is an interdisciplinary course between glass engineering students and glass art students. The course is taught by various faculty across both areas combining both technologies and philosophies to foster collaborations yielding unknown results. (Studio elective for art students; Technical Elective for engineering students.) May be repeated for credit up to a total of 8 credit hours. Prerequisite: For art students: One junior glass course (ART 361-366); for engineering students: junior/senior majoring or minoring in glass.

ART 398 - Exhibition Design Individual Projects 2-4 hours. Project or media based independent study with a faculty member in exhibition design. This course can only be used for elective credit; it does not replace sophomore, junior or senior studio requirements. Approved Plan of Study required.

ART 400 - Special Topics in Art 1-4 hours. Theory or other elective credit topics are explored. Does not count toward BFA studio requirements.

ART 401 - Senior Studio 4-6 hours. The senior level studio course content is defined by students near the end of the junior year. Faculty are designated on the basis of the senior proposal.

ART 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

ART 484 - Introduction to Kiln Procedures and Construction 4 hours. The focus of this lab/lecture course is the operation, maintenance and design of ceramic art based kilns. Discourses include: kiln theory, combustion, fuels, refractory materials, basic electrical theory and construction. Students design their own kiln using blueprints, calculations for heat input and a material source list.

ART 499 - Senior Show 0 hours. The culminating exhibit for the BFA degree. Prerequisite: 68-72 studio credit hours earned and senior standing in the BFA program.

Art History

ARTH 120 - Topics in Art History: Non-western 2 hours. Selected topics in non-western art history are covered. Topics vary from term to term. (C)

ARTH 121 - Wild Spirits and Divine Kings 2 hours. This course introduces students to art from a variety of cultures that Westerners long dismissed as "primitive." The premises that all art performs a function and that artists contribute to the orderly functioning of society allow us to look at Non-Western art without the bias and ethnocentrism that have historically colored our views. The class investigates such aspects of African, Oceanic, Native American and Pre-Columbian art as style and iconography, but focuses on its use in religious, political, and social contexts. (C) (GP)

ARTH 122 - Arts of the Pacific Isles 2 hours. This course examines the arts of Melanesia, Micronesia, and Polynesia in cultural context, emphasizing their relationship to other aspects of Oceanic societies. Topics will include the men's house and women's art in New Guinea, art and leadership in Island Melanesia, the decorated body in Polynesia, patterns of power in Micronesia, and continuity and change in Pacific art. (C) (GP)

ARTH 123 - Art of China 2 hours. This quarter-long survey will introduce beginning art history students to the arts of China from the prehistoric period to present day. Among the topics to be discussed will be ancient bronzes and other funerary arts, the classical style of the Han Dynasty, landscape painting in the Song Dynasty and contemporary issues in post-Mao China. The course will consist of lectures, exams and a short research paper. (C)

ARTH 126 - Arts of Asia: Ancient to Modern 2 hours. This course examines the artistic and architectural highlights of Asia from pre-history to the present. Areas include China, Japan, South and Southeast Asia, as well as key monuments of the Islamic World. (C)

ARTH 130 - Topics in Art History: Ancient to Baroque 2 hours. Selected topics art history from ancient to baroque are covered. Topics vary from term to term. (C)

ARTH 133 - Renaissance and Baroque Art and Architecture: From the Classical Ideal to Theatrical Expression 2 hours. This course surveys the developments in architecture, sculpture and painting from the European Renaissance to Baroque periods (late 14th through 17th centuries). Works of art are studied as individual monuments related to the historical culture that produced them. (C)

ARTH 136 - The Role of the Medieval Image 2 hours. This course surveys the influences and development of Christian art from its beginnings in the early Christian period until the Gothic era by investigating the character and function of the image during the Middle Ages. Main themes include ritual, relics and veneration; pilgrimage; theology in art; and the age of cathedrals.

ARTH 137 - Ancient Art: History, Legend, and Legacy 2 hours. This course provides a critical survey of ancient art. We focus on the great empires of antiquity--Babylonian and Egyptian, Greek and Roman--that emerged in the Near East and Mediterranean region. (C)

ARTH 140 - Topics in Art History: Modern 2 hours. Selected topics in modern art history are covered. Topics vary from term to term. (C)

ARTH 141 - 20th Century Art 2 hours. This class will provide a critical introduction to modern art. It will trace the contexts of modern art movements and explore key themes. We will look at a wide-range of art genres, including painting, sculpture, and photography. (C)

ARTH 143 - Art and Social Ideals 2 hours. This course will introduce students to the development of the concept of modernism in art and will focus on discussing examples of related utopian visions of an idealized past or an anticipated future. (C)

ARTH 144 - The Ideal Body 2 hours.

ARTH 211 - Issues and Debates in Contemporary Art 3 hours. A topically structured, discussion-based thematic study of issues and debates relevant to major movements and developments in contemporary art. Students are introduced to vital, ongoing conversations within the School as well as a variety of coexisting and competing opinions about investments in art. The course encourages students to develop, strengthen, and present their own views about art. Should be taken Fall Semester sophomore year.

ARTH 300 - Topics in Art History 2 or 4 hours. Topics vary from semester to semester. May be repeated for credit.

ARTH 301 - African Art I 4 hours. A survey of the arts of sub-Saharan Africa with an emphasis on sculpture. The course focuses on the role art plays in African cultures and also introduces students to a wide range of art forms and styles. (GP)

ARTH 302 - African Art II 4 hours. Continuation of ARTH 301, a survey of the arts of sub-Saharan Africa. (GP)

ARTH 304 - Global Arts: Contemporary Asia 4 hours. This course examines contemporary arts of Japan, China, North/South Korea, India, Pakistan, Tibet, and Vietnam, with a focus on emerging theories of global arts and diverse art practices, such as curating, viewing, and the making of Asian art today.

ARTH 305 - South Asian Arts 15-20c: Mughals to Modern 4 hours. This course examines the visual arts of the South Asian subcontinent from the Mughal period, in the 16th century, to modern art of the mid-20th century. In addition to religious and royal architecture, we view paintings, sculpture, courtly arts, prints and photography.

ARTH 321 - Greek and Roman Art and Architecture 4 hours. This course introduces the architecture, painting, sculpture, pottery and other forms of material culture from Ancient Greece and Rome to further our understanding of the foundations of western civilization and western approaches to art, beauty and civic planning.

ARTH 322 - Medieval Art and Architecture 4 hours. This course explores medieval art--architecture, painting, sculpture and the decorative arts--through the study of subject matter and the major stylistic developments from the religious and secular spheres of medieval society. Other topics include patronage; artistic production; and workshop practices.

ARTH 324 - Medieval Illuminated Manuscripts 4 hours. This course surveys the role and development of illuminated manuscripts?hand-written, painted books?in Western Europe beginning with the seventh century and ending in the fifteenth century with the invention of the printing press.

ARTH 331 - Italian Renaissance Art and Architecture 4 hours. This course is an in-depth study of the major stylistic forms, directions and iconography in Italian Renaissance art and architecture (14th through 16th centuries). We explore the systems of art-making and patronage in the major urban and court centers.

ARTH 332 - Northern Renaissance Art 4 hours. This course is an examination of Northern Renaissance art (France, Germany, the Netherlands and England) from the 1400s until about 1600. The period is marked by an increase in the materialism of religious faith, most notably observed in the extravagant artistic patronage by the royal courts and the Church.

ARTH 333 - Baroque Art and Architecture 4 hours. This class is a survey of European art and architecture during the 17th century within cultural, religious, political and intellectual frameworks. Main themes include: the impact of the Counter Reformation on the visual arts; urban planning; art as propaganda; specialization of the art market; rise of art academies and art theory.

ARTH 342 - Primitivism: A Western Perspective 4 hours. This course will investigate the issue of primitivism, one of the major topics in modernism. We examine the problematic nature of primitivism, specifically artists' involvement in the broader discourse of colonialism. The class will critique a variety of art practices--including photographic mapping, "black deco" spectacle, ethnographic Surrealism--ranging from the mid 19th century to the present. Prerequisite: ARTH 211.

ARTH 343 - Modern Art 4 hours. Encompassing the movements of Symbolism to Surrealism, this course covers the developments in modern art during the first half of the 20th Century. Students explore such themes as modernity, primitivism, and utopian theory as well as the stylistic developments and formal innovations of this period.

ARTH 351 - In, of, and around Contemporary Craft 4 hours. This course investigates the nature and place of craft in modern culture. We traverse a century of craft-based practices--from the artisan guilds of the Arts and Crafts Movement to the virtual guilds of today--focusing on recent strategies and practices. Prerequisite: one 100-level art history course.

ARTH 352 - Contemporary Projects in Art 4 hours. This interactive course focuses on and studies the projects of selected contemporary artists. These projects serve as platforms for investigating issues and problems related to various contemporary art forms and movements including, the embodiment of the viewer, play and reality, new technologies and consciousness, ironic modernism, and the critique of the post-medium condition. This course can be substituted for ARTH 211 in the BFA curriculum.

ARTH 354 - Recent Sculptural Practices 4 hours. A series of recent projects exploring contemporary issues in sculpture will be the focus of this class. We will be looking an international array of artists, including: Matthew Barney (United States), Robert Irwin (United States), Juan Munoz (Spain), Doris Salcedo (Colombia), Thomas Schutte (Germany), and Rachel Whiteread (Britain). The work of these artists will be examined in the context of larger post-war debates. (GP)

ARTH 355 - Picasso in Context 4 hours. This course offers an in-depth study of Picasso in relation to other modern artists and movements. Special attention is paid to the nature of style. Students conduct research on the development of abstraction in the early twentieth century.

ARTH 382 - Women/Art/History: Feminist Art in a Global Frame 4 hours. This course examines 20th and 21st century art and media that engage with feminist and gender issues in a global context. The first few weeks are spent reviewing a concise history of first- and second-wave feminist thought, particularly its relation to art and visual culture. Thereafter, selected contemporary art from all regions of the globe are covered. (Cross-listed as WGST 382) (GP)

ARTH 392 - Art History Individual Projects 2-4 hours. Project or media based independent study with a faculty in the art history division. This course can only be used for elective credit. It is not intended to replace sophomore, junior or senior studio requirements. Permission of the instructor is required.

ARTH 400 - Topics in Art History 2 or 4 hours. Topics vary from semester to semester. May be repeated for credit. Prerequisite: One 300-level art history course.

ARTH 411 - Pre-Columbian Art 4 hours. A survey course that acquaints students with major monuments and styles of Pre-Columbian American art, including: architecture, sculpture, ceramics, dress, and body adornment Examined are several millennia of pre-contact art traditions in Meso America and South America from earliest art producing cultures to the Aztecs and Incas. The course looks at archaeological contexts and investigates possible meanings for art and written records dating from early periods that enhance our understanding of later cultures. Prerequisite: One 300-level art history course.

ARTH 445 - Understanding Culture through the Lens of World Cinema 4 hours. Through the lenses of various themes?youth, sexuality, class, religion, politics, revolution, time, and space?this course explores how different cultures throughout the world understand and communicate their cultural values through cinema. (GP)

ARTH 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

ARTH 460 - Exploring Art History: Concepts, Methods and Practices 4 hours. This writing-intensive seminar introduces students to research methods in art history and to a range of approaches of historical and current significance. Students identify art historical problems, formulate hypotheses, conduct research, read critically, build arguments, and present reports. Prerequisites: completion of one upper-division (300-400) Art History course and permission of instructor.

ARTH 461 - Viewing Sculpture: Figurative, Modernist, Minimalist, Performative 4 hours. A close examination of the nature of sculptural viewing over the past 200 years. Sculptural theory is considered alongside contemporary artistic practice, ranging from Antonio Canova's neoclassical figures to Janet Cardiff's audio walks. Primary sources will be used for class discussion, along with Potts' "The Sculptural Imagination". In addition to thinking critically about the phenomenon of viewing, we will investigate the changing attitudes toward sculpture and the broadening definitions of three-dimensional work in the modern period. Prerequisite: One 300-level art history course.

ARTH 466 - Histories of Photography in the Non-Western World 4 hours. This seminar focuses on how photography and its modern modes of vision were disseminated and adapted around the globe since its 1839 invention in Europe. The course is designed as a research lab: students develop both a short written report and related visual project. (GP)

ARTH 493 - Art in the Age of Digital Recursion 4 hours. A round-table seminar based on extensive group discussions and in-depth research on recent innovations in technology and how that technology has impacted art production and theory. Prerequisite: One 300-level art history course.

ARTH 499 - B.S. Thesis in Art History and Theory 2 hours. Capstone course open to graduating majors in Art History and Theory for the development of an article of publishable quality presented as a B.S. Thesis. Students write the thesis under the guidance of their primary advisor. Prerequisites: Completion of at least five upper-division Art History courses and permission of major advisor.

New York State College of Ceramics

Kazuo Inamori School of Engineering (Statutory)

Biomaterials Engineering/Ceramic Engineering/Glass Engineering Science/
Materials Science and Engineering
CEMS 200 - Special Topics 2-4 hours.

CEMS 203 - Introduction to Ceramic Powder Processing 3 hours. An introduction to ceramic powder processing that couples lectures with laboratory experiments. The course the practical aspects of ceramic processing: powder characterization, colloidal stability and suspension rheology, ceramic fabrication and microstructure evolution (sintering and densification). Prerequisite: CHEM 106.

CEMS 214 - Structure and Properties of Materials 3 hours. This course introduces the student to the relationships between the various levels of structure (electronic, atomic, crystal, microstructure and macrostructure) in a material and the influence of structure on properties and performance. The influence of structure on mechanical, electrical, optical, thermal and magnetic properties are discussed in the context of bonding, defects, crystal, micro and macrostructure. A significant aspect is the emphasis on the raw materials from which fuels, engineering polymers, ceramics and metals are derived. Prerequisites: CHEM 106, MATH 152.

CEMS 215 - Microscopy and Microstructural Characterization 3 hours. This course introduces optical, electron, and scanning probe microscopy techniques used to characterize the microstructure of materials. Lectures focus on the fundamental physical/chemical phenomena associated with the various techniques, their practical application, and the interpretation of the resultant data. Capabilities and limitations of these techniques are discussed. Laboratory exercises consist of the preparation and hands-on characterization of a variety of materials via both optical and electron microscope techniques. Prerequisites: CEMS 214 and PHYS 126; Pre- or Co-requisite: CEMS 216.

CEMS 216 - Bonding and Structure of Materials 3 hours. An introduction to the basic principles of solid materials structure. Electronic, atomic, and crystal structure are the primary focus for discussion. Structure is the foundation for understanding the physical and chemical properties of materials and for discussing defects in crystals. Key concepts are bonding within solids, rules that govern packing of atoms to form crystals, crystal structure, techniques for describing material's crystallography and selected properties of crystalline materials. Discussions culminate in an overview of common crystal structures in metals and ceramics. Prerequisites: CHEM 106 and CEMS 214.

CEMS 221 - Electrical Engineering Laboratories 2 hours. In this course we study circuit elements, voltage and current laws, mesh and node equations, voltage and current sources, energy and power. Other topics include: series and parallel circuits, equivalent circuits, sinusoidal sources and circuit responses, and principles of circuit analysis. Prerequisite: PHYS 126; MATH 271 as pre- or co-requisite; or permission of instructor.

CEMS 235 - Thermodynamics of Materials 4 hours. This course introduces the fundamental concepts of thermodynamics, equilibrium, and thermochemistry relevant to materials systems. Prerequisites: CHEM 106, MATH 253, CEMS 214.

CEMS 237 - Thermal Processes in Materials 4 hours. This course studies the basic principles of high-temperature reactions and processes. The course is divided into several subunits: ternary phase diagrams, surface and interface phenomena, atomic defects in materials, diffusion, and sintering theory. Students will get a solid foundation in each of these areas as well as seeing the interrelation and importance of those principles with respect to a control of the microstructure and properties of materials. Prerequisite: CEMS 235 or CHEM 343.

CEMS 300, 400 - Special Topics 1-4 hours. This course covers topics which are not ordinarily covered in detail in the general curriculum, but are either current areas of faculty research or areas of current or future industrial interest.

CEMS 301 - Ceramic Science for the Artist 4 hours. The science and technology of whitewares covering mineralogy, raw material characterization, mixing, suspension behavior and control, rheology and plasticity, forming processes, drying, firing, the use of phase diagrams, thermal stress and microstructural evolution, mechanical properties, and glazing. This course provides the non-engineering student with the practical basis necessary for analyzing problems commonly encountered in the production of whitewares. Homework assignments are practical in nature. The project will require the application of the principles learned in class. Prerequisite: Junior standing in a non-engineering program.

CEMS 302 - Problem Solving for Ceramic Artists 2 hours. This is a projects-based course intended to teach problem-solving techniques and skills for ceramic artists. This course builds on CEMS 255-Raw Materials for Artists. Lectures are focused on problem solving and discussions of problems associated with the generation of ceramic art, including raw materials, fabrication, glazing, and firing.

CEMS 314 - Ceramic Processing Principles 3 hours. Ceramic processing and fabrication is discussed in terms of scientific principles and engineering unit operations. Topics include the beneficiation and characterization of raw materials, colloidal behavior and rheology, additives, particle packing, mixing, forming processes, drying, and sintering. Prerequisite: CHEM 106.

CEMS 316 - Chemical Processing in Ceramics 3 hours. This course provides the knowledge and working understanding of the chemical facts and principles involved in the synthesis of raw materials and the chemical fabrication techniques used in current industrial practice. The discussion focuses attention on both oxide and non-oxide ceramics involved in high-performance structural and electronic applications. The design of chemical processes is emphasized in assignments. Prerequisite: CHEM 106.

CEMS 317 - Sintering 3 hours. This course covers solid-state, liquid-phase, viscous-phase, and reactive sintering in terms of mechanisms, grain growth, impurity segregation and grain boundaries, microstructural evolution, and microstructure related properties. Oxide and non-oxide materials and experimental methods are also discussed. Prerequisites: CEMS 237 and 314 or permission of instructor.

CEMS 318 - Refractories 3 hours. This course provides technical information concerning the raw materials, processing, microstructure, properties and applications of the principal types of refractories and high-temperature insulations. Technological and engineering factors pertinent to manufacture, process design and control and design of refractory and insulation systems are presented. An understanding of current practice is used as a basis for recognizing refractory needs for design and applications, and areas for research and development of materials for future applications.

CEMS 322 - Introduction to Glass Science 3 hours. A survey of the nature of the vitreous state with detailed consideration of structural and kinetic theories of glass formation. Composition-structure-property relationships are emphasized to illustrate how glass compositions can be designed to fulfill a particular set of product requirements. Processes for "post-forming" treatments which further tailor properties are also presented. Prerequisite: CEMS 235.

CEMS 325 - Glass Laboratory 2 hours. This laboratory prepares students to fabricate and measure the properties of glass correlating composition and property relations, and observing trends. Optical property analysis is emphasized as are novel fabrication techniques such as sol-gel glass design for high-tech applications such as biomedical and photonics. Pre- or co-requisite CEMS 322.

CEMS 328 - Industrial Glass and Coatings on Glass 3 hours. The material covered in this lecture-based course include (1) glass markets, applications, and processing, (2) coatings on glass: processing, properties, and functionality, and (3) current topics in the glass industry. Prerequisite: CEMS 322.

CEMS 334 - Introduction to Polymers 3 hours. An introduction to the polymeric materials for engineering and industrial use that studies the fundamental classes, processing, properties, and uses of polymeric materials. In addition to the major polymers, specialty polymers for biological, electrical, and high-performance uses are discussed. Necessary organic nomenclature is covered. Prerequisite: CEMS 235 or CHEM 343.

CEMS 336 - Physical Metallurgy I 3 hours. Introduction to the physical and mechanical properties of metals with an emphasis on relating structure to properties. Strength, toughness, ductility, dislocations, phase diagrams, alloying, phase transformations, strengthening mechanisms, heat treatment, and solidification in metal systems. Processing and properties of plain carbon steels. Overview of forming and joining methods. Prerequisites: CEMS 214/235/251 or MECH 241/244/320.

CEMS 342 - Thermal and Mechanical Properties 4 hours. This course is an in introduction to the thermal and mechanical behavior of materials, including ceramics, glasses, metals, and polymers. Properties considered include strength, elastic modulus, hardness, toughness, thermal stresses, heat capacity and enthalpy, thermal conductivity, and thermal expansion. Heat transfer is also covered. Discussion includes the effects on thermal and mechanical properties structure (atomic scale and microstructure), processing, and temperature. Prerequisites: CEMS 214, 235 and 237.

CEMS 344 - Properties II: Electrical, Magnetic, and Optical 4 hours. Underlying the macroscopic electrical (electronic) properties of materials is the behavior of the

atomic state. In this course, a summary of basic concepts covering the electrical, magnetic, and optical behavior of solids is presented. Emphasis is placed on the fundamental properties of electrons and ions in solids. The relationship of these fundamental properties to ceramics is discussed using microstructure, property relations. The use of materials (ceramics) in electrical, magnetic, and optical devices is discussed through solutions to numerical problems. Prerequisites: PHYS 126, MATH 271, CEMS 237.

CEMS 347 - Spectroscopy 2 hours. This course introduces spectroscopic techniques used to characterize the atomic structure of materials. Lectures focus on the fundamental physical/chemical phenomena associated with the various techniques, their practical application, and the interpretation of the resultant spectra. Capabilities and limitations of the various techniques are discussed. Laboratory exercises consist of hands-on characterization of the bulk and surface structure of various materials via the spectroscopic techniques discussed in lecture. Prerequisite: CEMS 216.

CEMS 349 - X-ray Characterization 2 hours. This course, which includes a laboratory, introduces x-ray techniques used to characterize materials. Prerequisite: CEMS 216 and junior standing.

CEMS 352 - Electroceramics 3 hours. A survey of ceramics that are used for their electrical, magnetic, optical and piezoelectric functions including discussion of their design, composition, critical properties, processing techniques and applications. Categories include insulators, ceramic superconductors, capacitors, resistors, gas sensors, thermistors, varistors, piezoelectric, magnetic and electro-optic ceramics. Prerequisite: PHYS 126, CEMS 214.

CEMS 368 - Introduction to Bioengineering 3 hours. Bioengineering combines advances in engineering, biology and medicine to improve human health. It is, by necessity, cross-disciplinary. This course surveys and integrates selected aspects of engineering, biomedical, and clinical sciences to provide students with a global perspective of the field. Offered Fall semesters only. Prerequisites: CEMS 214 and BIOL 211 or permission of the instructor.

CEMS 411 - Science of Whitewares 3 hours. The science and technology of whitewares (i.e., primarily stonewares and porcelains) covering mineralogy, raw material characterization, mixing, rheology and plasticity, forming processes, drying, firing, phase equilibria, thermal stress evolution, microstructural characterization, physical properties, and glazing. This course provides students with a fundamental basis for analyzing problems encountered in whitewares production so that general knowledge can be used to solve specific problems. Prerequisites: CEMS 203, 314.

CEMS 420 - Optics and Photonics 3 hours. The focus of this course is the foundations of linear optics leading to detailed exploration of electronic and vibrational processes in different materials and photonics. Advanced topics include femtosecond laser pulses and THz spectroscopy. Format consists of lectures and hands-on laboratory for research/measurements. Prerequisites: CEMS 344, PHYS 325.

CEMS 423 - Mass Transport in Glasses and Melts 3 hours. A thorough discussion of the fundamentals of diffusion processes, which will be followed by

discussion of ionic diffusion and ion exchange, gas diffusion, viscosity, ionic conductivity and dielectric relaxation, mechanical relaxation, chemical durability, and weathering in glasses, glass-ceramics, and melts. The effects of both atomistic structure and morphology will be discussed for each of these topics. Prerequisites: CEMS 235, 237 and 322.

CEMS 438 - Nanotechnology 3 hours. The science and engineering of creating materials, functional structures and devices on the nanometer scale. Carbon nanotubes, nanocrystals, quantum dots, nanoscale films and composites, properties of materials as a function of size, self-assembly. Molecular engineering, bionanotechnology, devices and applications. Prerequisite: CEMS 214.

CEMS 440 - Laser Processing of Materials 3 hours. This course introduces students to basic principles of laser processing technology. The application of the laser for processing materials and three-dimensional devices is discussed, including laser material interactions, laser-assisted film deposition, and laser micro- and nano-manufacturing. Prerequisites: CEMS 214 and junior standing.

CEMS 446 - Mechanics of Composites 3 hours. An introduction to the mechanical properties of composites. Topics include matrices and reinforcements, fabrication techniques, review of elasticity, micromechanics, classical lamination theory, and design criteria. Prerequisites: CEMS 214 and (CEMS 251 or MECH 241).

CEMS 465 - Biocompatibility 4 hours. This course focuses on the application of materials to restoring human anatomy which has been compromised due to disease or trauma. This lecture series looks at how synthetic and natural materials restore body function and how they interact with host tissues, including materials science, surface interactions, and medical procedures. Prerequisite: CEMS 368.

CEMS 466 - Skeletal Tissue 3 hours. The skeleton contains 206 bones that provide strength and rigidity yet allow flexibility. However, bone can fail as a result of both disease and insult. In this course we study the hierarchical structure of bone, how disease affects it and, subsequently, its repair both medically and surgically. Offered every year. Prerequisite: CEMS 368.

CEMS 468 - Biomedical Materials 3 hours. A survey of ceramic, metal and polymer materials and devices for repair and replacement parts in the human body. Emphasis is on the nature of the materials, the design and fabrication of devices, properties, applications and the problems of introducing foreign materials into the biosystem. Prerequisites: CEMS 214 and 251.

CEMS 480 - Thesis 2 hours. An independent research project carried out under the supervision of a faculty member. Taken twice for a total of 4.00 semester credit hours of thesis. Senior standing required.

CEMS 484 - Engineering Operations 4 hours. This course helps students understand the engineering and business aspects of a glass and ceramic manufacturing facility with an overview of large scale manufacturing processes of glass/ceramic products. Major topics covered are: quality control, plant layouts and the use of charts, the economics of manufacturing including cost estimation, cost accounting, depreciation, cash flow, tax consequences and rate of return analysis. Significant emphasis is placed on a term report covering set-up of business plans for

a hypothetical glass or ceramic product. A visit to at least one glass or ceramic manufacturing plant is required. Senior standing required.

Kazuo Inamori School of Engineering (Non-Statutory)

Engineering

ENGR 101 - Introduction to Engineering 2 hours. An introduction to engineering with consideration of real engineering problems, such as those identified as Engineering Grand Challenges by the National Academy of Engineering. This course is taught in a project-based learning environment.

ENGR 102 - Computer Aided Design 2 hours. An introduction to 3D conceptualization, computer aided solid modeling and design, engineering drawings, and simulation using SolidWorks. The class is conducted in a "learning-laboratory" style in which students exercise a self-paced individual learning experience through the completion of class projects and weekly quizzes.

ENGR 104 - Computer Aided Engineering 2 hours. An introduction to mathematical calculations and computer programming techniques for science and engineering. Assignments include tutorial exercises and group project assignments focusing on engineering design and analysis of systems, devices, and materials. MatLab is the primary tool used.

ENGR 110 - Technical Communications 4 hours. Technical communication is the delivery of information in an organized manner. This course will examine tools, resources, and design methods used to create technical documents. The course is designed for students who have solid grammar, spelling, and punctuation skills. Prerequisite: ENGL 101 or equivalent.

ENGR 111 - Explorations in Biomaterials 1 hour. An "Engineering Exploration" course focusing on biomaterials. This hands-on laboratory course covers data collection, analysis and reporting. First-year engineering students enroll in two different "Engineering Exploration" courses.

ENGR 112 - Explorations in Ceramic Engineering 1 hour. An "Engineering Exploration" course focusing on ceramic engineering. This hands-on laboratory course covers data collection, analysis and reporting. First-year engineering students enroll in two different "Engineering Exploration" courses.

ENGR 113 - Explorations in Renewable Energy Engineering 1 hour. An "Engineering Exploration" course focusing on renewable energy. This hands-on laboratory course includes solar, wind, fuel cell and sustainable design. First-year engineering students enroll in two different "Engineering Exploration" courses.

ENGR 114 - Explorations in Glass Engineering 1 hour. An 'Engineering Exploration" course focusing on glass science and engineering. This hands-on laboratory course covers data collection, analysis and reporting. First-year engineering students enroll in two different "Engineering Exploration" courses.

ENGR 115 - Explorations in Materials Science and Engineering 1 hour. An "Engineering Exploration" course focusing on materials science and engineering.

This hands-on laboratory course covers data collection, analysis and reporting. First-year engineering students enroll in two different "Engineering Exploration" courses.

ENGR 116 - Explorations in Mechanical Engineering 1 hour. An "Engineering Exploration" course focusing on mechanical engineering. This hands-on laboratory course covers data collection, analysis and reporting. First-year engineering students enroll in two different "Engineering Exploration" courses.

ENGR 160 - Freshman Seminar 0 hours. A series of lectures each semester for first year engineering students on topics of importance to engineers. Attendance mandatory.

ENGR 200 - Special Topics 2-4 hours.

ENGR 206 - Engineering Economy 3 hours. The analysis and evaluation of alternative uses of capital in engineering and business projects. Financial decision-making for engineering and management alternatives involving investment, operating cost and time value of money. Prerequisite: MATH 152.

ENGR 208 - Energy in the World 2 hours. This non-technical energy course provides a basis for students to be engaged participants in the contemporary energy discussion. The disparate types of distributions of energy resources are examined as significant drivers in diplomacy, politics, and economics. The environmental effects of energy sources are complex, but are a central topic of the 21st century. Students learn why various nations have chosen, often been pushed, towards various energy responses, and gain an awareness of the complexity and global variability of issues. Counts toward the Humanities/Social Sciences requirement. (GP)

ENGR 210 - Discovery and Disaster 2 hours. Throughout history, technological discoveries have enabled humanity to do new things in new ways. In some cases, these "discoveries" have been driven by "disaster" or led to "disaster". In this course, we examine a number of such discoveries. We place the events in cultural, technical, historical, environmental, and ethical context. Counts toward the Humanities/Social Sciences requirement. Prerequisite: Sophomore standing.

ENGR 215 - International Solar Energy Projects 2 hours. Students develop a global perspective through understanding of Chinese culture and tradition; first in the classroom setting, second with hands-on design projects, and third by traveling to an international solar event, such as the Solar Decathlon in Datong, China. The focus of this course is on the history, engineering, and contemporary culture of China, with particular emphasis in Chinese architecture and engineering. Travel to China is a required course component. Open to all students. Prerequisite: permission of instructor. (GP)

ENGR 220 - Circuit Theory I 4 hours. Voltage and current laws, voltage and current sources, resistor, capacitor, and inductor. Series and parallel circuits, equivalent circuits, mesh and node equations, sinusoidal response, electric power and energy. Prerequisite: PHYS 126; pre- or co-requisite: MATH 271.

ENGR 301 - Engineering Leadership: Principles and Practice for E-LEAD 1 hour. As a required course for students in the E-LEAD (Engineering Leadership Education and Development) program, this course explores the nature, theory, and practice of leadership. Permission of the instructor is required for registration.

ENGR 305 - Engineering Statistics 3 hours. Statistics as a tool in scientific and engineering applications. Topics include design of experiments, hypothesis testing, analysis of variance, regression analysis, statistical quality control, Bayesian decision-making and industrial applications and design. Prerequisite: MATH 152.

ENGR 306 - Engineering Economics 2 hours. This course enables students to understand economic aspects of an engineering project. They learn some engineering economic tools including analysis of financial statement, understanding of the concept of the "time value of money," proficiency in calculating equivalent cash flows, and capability of evaluating investment projects. Prerequisite: MATH 152.

ENGR 320 - Data Acquisition 2 hours. This course explores data acquisition principles. Topics include basic measurements, data interface and acquisition, analog and digital signals, programming and interfaces for instrument and system control, data formatting, and data analysis and visualization techniques. Prerequisites: PHYS 126, MATH 271.

ENGR 360 - Undergraduate Seminar 0 hours. A series of lectures each semester for sophomore, junior, and senior engineering students on topics of importance to engineers. Attendance mandatory.

ENGR 370 - Engineering Leadership Project 1 hour. This is an optional course for students in the E-LEAD (Engineering Leadership Education and Development) program. Students gain practical experience to apply leadership skills in the design and deployment of a project. Prerequisite: Permission of instructor. (Can be taken twice for credit)

ENGR 388 - Applied Complex Variables 3 hours. Complex numbers, algebra, functions and integration. Taylor and Laurent series, theory of residues, conformal mapping, and the Schwarz-Christoffel transformation. Applications to fluid dynamics, electrostatics and electrical machines. Impulse functions. Applications to Fourier transforms and the inversion of the LaPlace transform. Some linear algebra and matrix theory introduced as needed for an understanding of dynamic systems. Prerequisite: MATH 271.

ENGR 395 - Engineering Design 2 hours. This course introduces the junior-level student to engineering design as a part of the capstone experience. Students learn basic design principles and study some selected examples. Small teams of students complete a design project. Prerequisite: Junior standing or permission of the instructor.

ENGR 400 - Special Topics in Engineering 2-4 hours. Special topics in engineering are offered. Topics vary from year to year.

ENGR 401 - Sources of Renewable Energy 3 hours. The main objective of this course is to gain an elementary familiarity with renewable forms of energy. The course addresses three distinct areas: power and energy, generating power from renewable sources of energy, and the economics and markets of energy, in particular generation and distribution. Topics of discussion include the nature and physics of power and energy, different sources of energy, renewable sources of energy, in

particular wind, solar and hydro, sustainability, depletion model, as well as demand and resources. Prerequisites: PHYS 125 and 126.

ENGR 450 - Independent Study 1-3 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Junior or senior standing and approved Plan of Study required.

ENGR 471 - Genetic Algorithms 3 hours. Genetic Algorithms, GA, is a collection of search and optimization techniques that function according to the evolutionary processes. Simple GA, classifier systems, GA with variable population size, and GA in machine learning context are introduced. Also, selected applications in optimization techniques and prediction methods are discussed. This is a project-oriented course. Students should have knowledge of C++, MATLAB, or a similar programming language.

ENGR 480 - Senior Capstone Individual Project 2 hours. THis capstone project is conducted by an indovidual student, typically over two consecutive semesters. Successful projects involve project planning and management; decision-making under realitic constraints; problem solving; data collection, analysis, and evaluation; and communication of results in a poster presentation and writen report. Repeatable for credit up to 4 credit hours. Prerequisite: senior standing.

ENGR 484 - Optimization Methods in Engineering 3 hours. In this course we study optimization as an engineering design tool. Topics covered include nonlinear programming, computational techniques for unconstrained and constrained problems, conjugate gradient, feasible directions methods, and design applications. Prerequisites: ENGR 104 and MATH 271.

ENGR 490 - Senior Capstone Group Project 2 hours. THis capstone project is conducted by a group of students, typically over two consecutive semesters. Successful projects involve project planning and management; decision-making under realitic constraints; problem solving; data collection, analysis, and evaluation; and communication of results in a poster presentation and writen report. Repeatable for credit up to 4 credit hours. Prerequisite: senior standing.

Mechanical Engineering

MECH 211 - Statics 3 hours. Two and three-dimensional force systems, the concept of equilibrium, analysis of trusses and frames, centroids, bending moment and shear diagrams, friction. Prerequisites: PHYS 125, MATH 152.

MECH 212 - Dynamics 3 hours. Rectilinear and curvilinear motion, translation and rotation, momentum and impulse principles, and work-energy relationships. Prerequisites: PHYS 125, MATH 253.

MECH 241 - Mechanics of Materials 3 hours. The mechanics of solid deformable bodies, members subjected to tension, compression, flexure and torsion. Beam topics, stability of columns, combined stresses and strains. Prerequisite: MECH 211.

MECH 320 - Thermodynamics I 3 hours. Thermodynamic properties of gases, vapors and liquids. Laws of thermodynamics, energy and availability analysis. Prerequisites: MATH 253, PHYS 125.

MECH 321 - Thermodynamics II 3 hours. Applications of thermodynamic principles to the analysis of energy systems including power and refrigeration cycles. Mixtures and solutions, chemical reactions and equilibrium. Prerequisite: MECH 320.

MECH 324 - Fluid Mechanics I 3 hours. Principles of mechanics and thermodynamics applied to fluids at rest or in motion. Compressible and incompressible flow, viscous and non-viscous flows, boundary layers, pipe flow, dimensional analysis. Prerequisites: MECH 212, MATH 253.

MECH 326 - Heat Transfer 3 hours. Principles of steady-state and transient conduction, radiation and convection. Applications to heat exchangers and environmental problems. Prerequisites: MECH 320, 324.

MECH 327 - Thermal Sciences Laboratory 2 hours. Experiments are conducted to illustrate aspects of fluid mechanics, thermodynamics, and heat transfer. Concurrent Registration: MECH 321 and 326. Prerequisites: MECH 320, 324 or CEMS 235, 332.

MECH 343 - Mechanics of Materials Laboratory 2 hours. Experiments designed to illustrate the principles of mechanics of materials and the methods of experimental mechanics. Prerequisites: MECH 211, MECH 241, MATH 271.

MECH 354 - Mechatronics 3 hours. Mechatronics is an integration of mechanical, electrical, electronic, and control engineering. Topics include sensors, signal processing, mechanical and electrical actuation systems, system models, frequency response, closed-loop controllers, and PLC?s. Prerequisite: ENGR 220.

MECH 362 - Kinematics and Dynamics of Machinery 3 hours. Analysis and synthesis of mechanisms. Applications to reciprocating engines, cams, gears, flywheels, balancing, critical speeds, torsional vibration. Prerequisite: MECH 212.

MECH 364 - Machine Design I 3 hours. Analysis, synthesis and design of machine elements and systems. Development of engineering judgment, stress and failure analysis, design for finite and infinite life. Corrosion, wear, lubrication, springs, and bolts. Prerequisites: (MECH 241 or CEMS 251), MECH 362.

MECH 366 - Manufacturing 3 hours. Analysis of manufacturing processes. Topics include casting, forging, extrusion, drawing, sheet-metal working, machining, powder metallurgy, fabrication of non-metals, joining, and many others. Plant tours are a required part of the course. Prerequisite: MECH 244 or CEMS 214. Pre- or Co-requisites: MECH 364 and ENGR 305.

MECH 400 - Topics in Mechanical Engineering 2-4 hours. Special topics in mechanical engineering which vary from year to year. Prerequisite: Permission of instructor. (Sufficient demand)

MECH 415 - Mechanical Vibrations I 3 hours. Harmonic oscillator; response of damped linear systems; multi-degree of freedom systems; introduction to vibrations of continuous systems. Prerequisite: MATH 271.

MECH 417 - Introduction to Finite Element Analysis 3 hours. Use of the finite element method to solve problems in the areas of stress analysis, heat conduction.

and fluid flow. Weighted residual and variational approaches, shape functions, numerical integration, and the patch test. Prerequisites: (CEMS 251 or MECH 241), MATH 271.

MECH 422 - Control Systems 3 hours. Linear feedback control system modeling analysis, and compensation techniques. Prerequisite: RNEW 322.

MECH 424 - Fluid Mechanics II 3 hours. Advanced topics in fluid mechanics: compressible flows, boundary layers, potential flow, turbomachinery. Prerequisites: MECH 320, 324, MATH 271.

MECH 425 - Digital Control Systems 3 hours. This course covers such topics as discrete time systems and the z-transform, sampling and stability analysis techniques, digital controller design, microcomputer implementation of digital systems, quantization and round off noise analysis. Prerequisite: MECH 422.

MECH 434 - Heating, Ventilation, and Air Conditioning 3 hours. Applied engineering thermodynamics; psychometrics; humidification and dehumidification processes; air cooling processes, heating processes; heat vapor transmission, fluid flow and pressure losses; air conveying and distribution. Prerequisite: MECH 321, (MECH 326 or CEMS 332).

MECH 435 - Industrial Control via Microcontroller 3 hours. This course covers industrial control process and principles, fundamentals of microcontroller systems, hardware, software, embedded processors, logic, circuits, debugging, development tools, architecture, designs, and controls.

MECH 438 - Alternative Vehicle Energy Control and Powertrain Design 3 hours. In this course we explore the design fundamentals of alternative energy vehicles including electric and hybrid vehicles. Topics covered include power electronics, power systems, drivetrain, component modeling, battery systems, supervisory control and fault diagnosis. We rely heavily on model-based design including Simulink, with an emphasis on electric and hybrid vehicles. Prerequisites: ENGR 104 and ENGR 220.

MECH 448 - Mechanics of Composite Materials 3 hours. An introduction to composite materials with an emphasis on their selection, analysis, and use in modern engineering applications. Advantages and limitations of composite materials, basic concepts and characteristics. Stiffness and strength theories for uniaxial and multidirectional composite materials, with a macromechanical emphasis. Prerequisites: MECH 241, MECH 244 or CEMS 214, MATH 271.

MECH 452 - Fatigue and Fracture Mechanics 3 hours. This course is an introduction to linear elastic fracture mechanics and calculation of stress intensity factors. Concepts of fracture, fracture toughness, fracture resistance are covered, along with fatigue crack nucleation, crack growth, high and low cycle fatigue, temperature effects, and predictive equations. Prerequisites: (MECH 241 or CEMS 251), MATH 271.

MECH 454 - Multiscale Analysis for Deformation and Failure 3 hours. The goal of this course is to develop tools for students to analyze deformation and failure of engineering materials from multiscale points of view. By developing knowledge of micromechanics, meso-mechanics and macro-mechanics students will have a

foundation to develop more understanding and useful skill for analysis of elasticity, inelasticity, fracture and fatigue of engineering materials. Prerequisites: (MECH 241 or CEMS 251) MATH 271.

MECH 464 - Machine Design II 3 hours. Analysis, synthesis and design of machine elements and systems. Design of specific machine elements will be covered, including shafts, fasteners, springs, bearings, gears, clutches, brakes and flexible mechanical elements. Prerequisite: MECH 364.

MECH 486 - Modeling and Simulation of Dynamic Systems 3 hours. Mathematical modeling of physical systems and simulation of linear system responses. System response to varied inputs are studied using classical techniques. Laplace transforms and modeling and simulation software. Prerequisites: (MECH 326 or CEMS 332) and (ELEC 220 or CEMS 221).

MECH 495 - Senior Design Project I 3 hours. Individual and group comprehensive design projects employing basic and professional approaches to planning, organizing, judgmental and economic factors. Integrative aspects of creative design and analysis, interdisciplinary systems. Emphasis on technical communication skills. Prerequisite: Senior standing and permission of instructor.

MECH 496 - Senior Design Project II 3 hours. Continuation of MECH 495 and culmination in a comprehensive design report and developmental prototype, as required. Prerequisite: MECH 495.

Renewable Energy Engineering

RNEW 200, 300 - Special Topics 1-3 hours. . Special topics in renewable energy engineering which vary from year to year.

RNEW 201 - Renewable Energy 3 hours. The main objective of this course is to gain an elementary familiarity with renewable forms of energy. The course addresses three distinct areas: power and energy, generating power from renewable sources of energy, and the economics and markets of energy. Prerequisite: MATH 152.

RNEW 255 - Power System Operation and Economics 3 hours. This course covers power system operation, generation scheduling, and trading. The idea is to minimize the total operation cost of a power system subject to power balance and other constraints. Different minimization methods are covered and the coordination between thermal and renewable generation are discussed. Prerequisites: MATH 151 and MATH 152.

RNEW 303 - Software Engineering 4 hours. Software engineering concepts and techniques, structured design and modular construction, fundamentals of programming style; high level language programming, error detection and error location techniques.

RNEW 310 - Fuel Cell Principles and Technology 3 hours. This course is designed for advanced undergraduate students to gain the basic science and engineering concepts behind fuel cell technology. It emphasizes the functional scientific principles and practical application. Prerequisite: junior standing.

RNEW 320 - Circuit Theory II 4 hours. First order and second order circuits, natural and forced response, step response, passive and active filters, transformers, dependent sources (modeling, biasing, and gain calculation), Fourier series, Fourier series analysis. Prerequisite: ENGR 220.

RNEW 322 - Signals and Systems 3 hours. Signal and system modeling concepts, system analysis in time domain, Fourier series and transform, Laplace transform, state variable techniques, z-transform, analysis and design of digital filters, FFT and applications. Prerequisite: ENGR 220.

RNEW 431 - Wind Energy 3 hours. The primary objective of this course is to gain an elementary familiarity with wind energy. After a brief review of power and energy, wind energy is introduced. Topics of discussion include history and evolution of wind energy technology, power in the wind, wind turbines, components and operation of typical wind systems, small scale hybrid energy systems, markets, demand, and resources. The course also includes a class project. Prerequisites: MATH 152 and PHYS 126.

RNEW 432 - Solar Energy Systems 3 hours. In this course we study solar radiation, theory of light, topics of heat transfer associated with solar energy, radiation characteristics of materials, collectors, energy storage, solar loads and the economics. The physics of voltaic systems will also be discussed. This course includes a design project. Prerequisite: MECH 320.

RNEW 441 - Energy, Renewables and the Environment 3 hours. The main objective of this course is to gain an elementary familiarity with energy, covering the concept, forms, resources, and its impact on the environment, all with an emphasis on the renewables. We discuss physics of energy, its different forms--mined and otherwise, the Sun, the Earth and the environment. The course includes a number of field trips. Prerequisites: PHYS 125 and senior standing.

RNEW 461 - Power Electronics for Renewable Systems 3 hours. This course is an introduction to power electronics with emphasis on applications such as energy conservation and renewable energy. Topics include introductory switching devices, devices for power electronics, and converter design and simulation. Basic concepts of DC-DC converters in continuous and discontinuous modes are included, along with design for motor drives and transformer-isolated switch-mode power supplies. Prerequisite: ENGR 220.

RNEW 468 - Electric Machinery 3 hours. Magnetic theory and circuits, balanced polyphase circuits, and fundamentals of electromechanical energy conversion. Phasors, per-unit notation, transformers, three-phase and single-phase induction motors, synchronous, direct current and specialized machines. Prerequisite: ENGR 220.

RNEW 490 - Engineering Design Methods 2 hours. The purpose of design is to convert resources into devices, systems. processes and products to meet human needs. Detailed analysis and application of the design problem solving process are practiced. Prerequisite: Senior standing.

RNEW 496 - Senior Design Project 4 hours. The student develops an original individual design project with a faculty advisor from conception to design, construction and testing. A complete report is required.

College of Professional Studies

School of Business

Accounting

ACCT 211 - Financial Accounting 3 hours. This fundamental course introduces the student to the language of business. The basic theory and practice of financial accounting is studied including the balance sheet equation, the system of debits and credits, transaction analysis, adjusting entries, financial statement preparation, closing entries, income determination and the accounting for assets and liabilities. Prerequisite: Sophomore or higher class standing.

ACCT 212 - Managerial Accounting 3 hours. The second course of study of the fundamental principles of accounting has an emphasis on managerial accounting. The application of the accounting model on investments, long term liabilities and corporate stockholders' equity is studied. The course also introduces the student to the basics of managerial accounting information and the cost of goods manufactured, explains approaches to costing products and services and explains managerial accounting's use in decision making, planning and controlling the business. Prerequisite: ACCT 211.

ACCT 300 - Special Topics in Accounting 1-4 hours. Topics not covered in other accounting courses are presented.

ACCT 361 - Intermediate Accounting I 3 hours. This course expands and broadens the accounting concepts and principles developed in previous accounting courses. The course considers the conceptual framework underlying the financial statements and focuses on the recognition and measurement of income, assets, and liabilities. Prerequisite: ACCT 211, junior standing.

ACCT 362 - Intermediate Accounting II 3 hours. The continuation of the accounting principles and concepts discussed in Intermediate I. Major emphasis is on debt financing, equity financing, investments in debt securities and equity securities, leasing, employee compensation and pensions, and earnings per share. Prerequisite: ACCT 361, junior standing.

ACCT 371 - Personal Income Tax 3 hours. Income taxes, payroll taxes and estate and gift taxes. The importance of income taxation relating to business decisions and the need for tax research and planning emphasized. Preparation of individual, partnership, and corporate returns with detailed analysis of the underlying tax concepts. The burdens and benefits of social security taxes and unemployment taxes. The tax aspects of family estate planning. Prerequisites: ACCT 211, junior standing.

ACCT 372 - Cost Accounting 3 hours. Analysis of cost behavior, cost-profit volume analysis, budgeting, job order and process cost systems, standard costs and cost control. Quantitative methods and behavioral developments are applied to cost accounting data. The objective is improvement of the quality of the cost information provided for managerial decision making. Prerequisites: ACCT 212, ECON 201, junior standing.

ACCT 441 - Auditing Theory and Practice 3 hours. Current auditing practices and objectives of independent accounting firms examined in detail. Particular emphasis placed on auditing theory and procedures and the ethical and legal responsibilities of auditing. Prerequisite: ACCT 362 either previously or concurrently.

ACCT 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

ACCT 451 - Financial Reporting and Analysis 3 hours. A course covering a variety of complex topics in financial reporting. These include accounting for income taxes, employee compensation, disclosures, earnings per share, accounting changes, and statement analysis. Prerequisite: ACCT 362.

ACCT 460 - Seminar in Accountancy 3 hours. The seminar in accounting examines major contemporary issues in the field. Issues covered may include topics such as taxes, financial accounting theory, C.M.A and C.P.A problems, or international accounting problems. Students are responsible for presenting, discussing, and writing about ideas expressed in the professional literature. Prerequisite: 6 hours of accounting coursework.

ACCT 462 - Advanced Accounting 3 hours. An advanced course in the theory of financial accounting with heavy emphasis on special problem areas in accounting such as partnership accounting, home office and branch accounting, mergers and acquisitions, consolidated statements, bankruptcy, estates and trusts, fund accounting and international accounting problems. The current pronouncement of the major authoritative bodies reviewed and illustrated. Prerequisite: ACCT 362.

ACCT 471 - Corporate Taxation 3 hours. A continuation of Personal Income Tax. Emphasis is on corporate taxation. Corporations to be examined include C Corps, S Corps, and the Limited Liability Corporations. Taxation of partnerships, estates, and trusts will also be covered. Prerequisite: ACCT 371.

Business

BUSI 100, 300 - Topics in Business 1-3 hours. Topics not covered in other Business courses are presented.

BUSI 105 - Business Perspectives 1 hour. This course is a survey of business concepts, principles, techniques and theories. The goal of the course is to expose students to the need for a high level of awareness of the business function interactions a decision maker faces in a competitive information-driven world. Topics covered include, but are not limited to, the following: global business environment, marketing, production operations, information technology, and innovation management.

BUSI 106 - Contemporary Business 3 hours. Students gain experience in the creation and operation of a business either through simulation or an actual business. Through this experience, students have primary exposure to all of the business functions: accounting, finance, marketing, information systems and management.

BUSI 113 - Business Statistics 3 hours. The elements of basic statistical theory and technique are introduced with an emphasis on applications to business situations. Computer-based software packages complement these objectives.

BUSI 213 - Research Methods for Business 3 hours. This course introduces students to research methods in business. Students learn how to develop a research idea, obtain data, statistically analyze the data, and explain the results. Real world business research is also covered. Prerequisite: BUSI 113.

BUSI 261 - Operations Research 3 hours. Scientific approach to the analysis and solution of economic and business problems to provide a quantitative basis for model building and decision making. Mathematics is applied to business decision making through techniques such as linear programming, queuing theory, network models, Markov analysis, etc. Prerequisites: MATH 107 and BUSI 113; ECON 201 either previously or concurrently.

BUSI 301 - Family Business Management 3 hours. This course explores the unique issues that a family business encounters from its initial founding through its generational development and to its ultimate success or demise. Family businesses that prosper generation to generation pursue unconventional strategies. Because they are values-driven and think very long-term, it is theorized that successful family businesses take approaches not commonly found in the current management practices at most companies. Issues addressed include: family firm performance, family business culture, challenge of succession, conflict and harmony, business vs. family communication, family constitution, and corporate vs. family business governance.

BUSI 439 - Entrepreneurship in the 21st Century 3 hours. The primary objectives of this course are twofold: 1) provide students with an introduction to the theoretical and practical aspects of entrepreneurship and small business development, and 2) identify, probe and gain insights into the role family based business plays in socio-economic development and private enterprise.

BUSI 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

BUSI 457 - International Business 3 hours. The volume, composition, and pattern of worldwide trade; the significance of international trade to the American economy. An introductory description of the international payments mechanism, an elementary analysis of the balance of payments, and a survey of U.S. continental policies, the role, impact and structure of the multinational enterprise and the government policies towards it, firms, marketing, accounting and management responses to the international environments. Prerequisite: Junior standing. (GP)

BUSI 460 - Seminar in Business 3 hours. The seminar in business examines major contemporary issues in the field of business administration. Students are responsible for presenting, discussing, and writing about ideas, theories, frameworks, and applications within the field of business.

BUSI 485 - Internship 1-4 hours. Faculty-supervised experience in which the student applies theoretical knowledge in practical situations. Each student submits a paper outlining the experience and is responsible for procuring an on-site supervisor's evaluation of his/her work. A minimum of 80 hours of practical experience is required for each credit. A maximum of four (4) internship credits can be included in the 120 academic credits required for graduation.

BUSI 499 - Business Policy 3 hours. This capstone course assumes an integrative business approach to the application of strategic management. The purpose of course is to assure students of understanding and utilizing the principles and practices in attaining and sustaining competitive advantage in the market place. Prerequisites: MGMT 328, FIN 348, MKTG 221; Senior standing.

Economics

ECON 100, 300 - Topics in Economics 1-4 hours. Topics not covered in other economics courses are presented.

ECON 201 - Principles of Microeconomics 4 hours. Introduction to the principles of microeconomics and a survey of contemporary economic issues. Includes study of market systems and structures, government regulation of business, labor markets and income distribution, strategic behavior, and market failure. Prerequisite: sophomore standing. (E2)

ECON 202 - Principles of Macroeconomics 3 hours. Study of the factors involved in the problems of unemployment, inflation, economic growth, and the role of fiscal and monetary policies. Includes coverage of the money and banking system and international trade.

ECON 331 - Money and Banking 3 hours. The principles and organization of the monetary and banking system and importance of the money supply. The structure of the banking system and the techniques used by the Federal Reserve are covered, along with monetary theory, other factors affecting income, employment and inflation, the controversies surrounding the use of monetary and fiscal policies and the international dimensions of the issues. Prerequisites: ECON 201/202, junior standing.

ECON 412 - International Economics 3 hours. An introduction to the workings of the world economic system and the interactions among different countries. It consists of three parts: Trade, which asks how and why different countries engage in the process of exchanging goods and services and the consequences of such interactions on the country itself and on others; International financial and monetary system, which looks at a country's balance of payments account, exchange rate determination, and open macroeconomic analysis and policy; International development, which surveys experiences of developing countries, including their relationship with developed countries. Builds upon students' earlier knowledge of economic models and analytical tools, tailoring them to analyzing developments in the world economy, and using them to judge the soundness and/or appropriateness of government actions. Prerequisites: ECON 201/202, junior standing. (GP)

ECON 420 - Healthcare Economics 3 hours. This course provides an overview of health economics. It largely focuses on empirical research on determinants of health but also provides a basic theoretical framework of health economics.

ECON 445 - Managerial Economics 3 hours. Emphasizes the application of fundamental theoretical and analytical tools of economics useful in managerial decision making. Empirical studies and cases involving actual managerial situations at the levels of industry and firms are examined. Prerequisite: FIN 348 or permission of instructor. (Cross-listed as FIN 445)

ECON 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

ECON 460 - Seminar in Economics 3 hours. The seminar in economics examines major contemporary issues in the field. Students are responsible for presenting, discussing, and writing about ideas, theories, frameworks, and applications within the field expressed in the professional literature. Prerequisite: One course in Economics numbered 300 or above.

ECON 462 - Industrial Organization 3 hours. In this course, the theory of the firm is extended using the structure-conduct-performance paradigm and more recent theories of industrial organization. An important portion of the course is allocated to presentation of factual and institutional material on market structure, firm conduct, industry performance, and antitrust policy. Prerequisites: ECON 201/202 and junior standing.

Finance

FIN 205 - Student Managed Investment Fund 1 hour. A lecture course designed to introduce topics that facilitate the student's ability to participate in the management of the Student Managed Investment Fund. Topics covered include but are not limited to the following: History of Equity Ownership; Debt and Equity Securities; Ratio Analysis; Risk and Return (beta and portfolio analysis), Financial Publications, Research Tools and Databases, Analysis of Financial Statements, Stock and Bond Valuation Techniques; Financial Markets and Stock Screening. Corequisite: FIN 206.

FIN 206 - Student Managed Investment Fund Laboratory 1 hour. Students gain practical experience in managing a stock portfolio by engaging in the trading of stocks under the supervision of faculty. This 1.00 credit course may be repeated for credit to a maximum of five credit hours. Prerequisite: FIN 205. Satisfies the field experience requirement for School of Business majors.

FIN 300 - Topics in Finance 1-3 hours. Topics not covered in other finance courses are presented.

FIN 306 - Student Managed Investment Fund Advanced Laboratory 2 hours. Students build on their experience in managing a stock portfolio by engaging in the trading of stocks under supervision of faculty. Students manage an individual portfolio using advanced trading strategies and present a special topic on investing. This course may be repeated one time for credit. Prerequisites: FIN 205, FIN 206, junior standing and permission of instructor.

FIN 310 - Introduction to Financial Planning 3 hours. In this course students are introduced to the concepts of estate and financial planning. The goal is to provide the student with a firm grounding in the basic lifetime financial planning process along with an overview of the tax advantages of proper estate planning.

FIN 348 - Managerial Finance 3 hours. An introductory course explaining the tools and the new responsibilities modern financial managers deal with in a rapidly changing world environment characterized by uncertainty. The course identifies and examines the financing needs of the firm, its cost of capital, and assets and liabilities management using modern decision support systems for the application of new financial innovations, such as contingent claims and securitization of assets. Prerequisites: ACCT 211/212, ECON 201/202.

FIN 445 - Managerial Economics 3 hours. Emphasizes the application of fundamental theoretical and analytical tools of economics useful in managerial decision making, through an examination of empirical studies and cases involving actual managerial situations at the levels of industry and firms. Prerequisite: FIN 348 or permission of instructor. (Cross-listed as ECON 445)

FIN 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

FIN 453 - Financial Markets and Institutions 3 hours. Surveys the dynamic roles played by financial intermediaries in transforming traditional financial institutions to a modern financial services industry responding to new institutions and individual investors in channeling savings and investments. The course focuses on the role played by non-bank financial institutions, the structure of interest rates, the flows of loanable funds and the measurement and management of risk in a regulated and deregulated financial system, using financial instruments such as SWAPS and asset securitization. Prerequisite: FIN 331 or permission of instructor.

FIN 454 - Security Analysis 3 hours. Provides a comprehensive introduction to the application of the techniques of security analysis and portfolio management. Relates economic-industry-company analysis to evaluate individual securities: bonds, preferred stocks, common stocks, and options. Considers the procedures involved in the selection of securities portfolio along the concept of risk-return tradeoffs. Prerequisite: FIN 348.

FIN 455 - Business Financial Decisions 3 hours. Examines the question of how financial resources available to the firm should be allocated to many possible investment projects. Emphasizes developing analytical techniques which make it possible to answer questions such as: Should a new plant be built? Equipment replaced? Bonds refunded? A new product introduced? Should a merger or divestment take place? Prerequisite: FIN 348.

FIN 458 - International Financial Management 3 hours. Emphasizes the practical relevance of the microelements of international finance which influence the profit and loss accounts and balance sheets of corporations with overseas operations. Factors such as the impact of exchange rate fluctuations, major alternative non-traditional sources of financing and regional investment decisions, imperfections in world product, factor and financial markets along with country risk-return profiles are examined. Prerequisite: FIN 348 or permission of instructor. (GP)

FIN 460 - Seminar in Finance 3 hours. This seminar course examines major contemporary issues in the field of finance. The topics covered vary from semester to semester. Students are responsible for presenting, discussing, and writing about theories, frameworks, and application expressed in the professional literature. Prerequisite: One course in Finance numbered 300 or above.

Law

LAW 241 - The Legal Environment of Business 3 hours. An introduction to the body of law associated with the business environment. Topics include the judicial system and court procedure, business torts and crimes, contracts, bailments, forms of business structure, bankruptcy, an overview of securities regulations and the antitrust laws and consumer protection statutes.

LAW 442 - Commercial Law 3 hours. An overview of the common law principles and statutory law affecting commercial transactions. Topics include agency, partnerships, corporations, commercial paper and sales. Prerequisites: LAW 241, junior standing.

Management

MGMT 300 - Topics in Management 1-4 hours. Topics not covered in other Management courses are presented.

MGMT 305 - Gender and Organizations 3 hours. This course builds an understanding of gender issues within organizations as well as policies that organizations can implement to create a more equitable work environment. Topics of discussion encompass the impact of gender on communication, influence, and perceptions of competence, what progress has been made regarding gender equality and what still remains to be resolved. (Cross-listed as WGST 305)

MGMT 328 - Management and Organizational Behavior 3 hours. This course builds an understanding of individual and group behavior within organizations, the means of assessing such organizational behavior and specific techniques for managing behavior toward improved performance. The goal for the course is for students to develop skills grounded in behavioral science that are essential for assuming a leadership position in organizational environments. Prerequisite: Junior standing.

MGMT 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

MGMT 460 - Seminar in Management 3 hours. The seminar in management examines major contemporary issues in the field. Examples of topics include corporate culture, creativity, computer based simulations, total quality management, managing strategic change, and human capital development. Students are responsible for presenting, discussing, and writing about ideas, theories, frameworks, and applications within the field of management. Prerequisite: MGMT 328.

MGMT 472 - Human Resource Management 3 hours. Examines the contribution that a properly functioning personnel department makes to the effectiveness of a business. Covers internal organization and workings of the personnel department, its relationship to the rest of the enterprise, major problem areas, and the legal environment defining the employer-employee relationship. Prerequisite: MGMT 328.

MGMT 484 - Operations Management 3 hours. Introduces students to functions, problems, and techniques associated with management of production operations in manufacturing firms and service organizations. The problem oriented approach focuses on analytical techniques so students learn to recognize problems arising in operations management areas and to apply analytic techniques meaningfully. Topics include plant location, plant layout and design, inventory control, quality control, production planning and control (including PERT), production scheduling, queuing, mathematical programming, simulation, and forecasting. Prerequisites: BUSI 113, ACCT 212, MGMT 328.

Management Information Systems

MIS 101 - Computers and Society 3 hours. Examining the impact of computers on problem-solving in society, students comprehend the general algorithmic approach to organizing, synthesizing and analyzing information and how computers assist in the reasoning process. Students present problem solutions through oral and written communications.

MIS 390 - Introduction to Management Information Systems 3 hours. This course in information theory covers the subjects of computer hardware and software, the system development process, principles of data management and modern computer-based information systems. Emphasis is placed on business problem analysis and development of computer-based business applications. Prerequisite: junior standing.

MIS 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/ classroom setting. Approved Plan of Study required.

Marketing

MKTG 221 - Marketing Principles and Management 3 hours. A survey of marketing concepts, principles, techniques and theories. Emphasizes the development and implementation of an effective marketing strategy, and control of the marketing function within the firm. The role of marketing in society and the efficient distribution of goods and services are addressed. Prerequisite: Sophomore standing.

MKTG 300 - Topics in Marketing 1-3 hours. Topics not covered in other Marketing courses are presented.

MKTG 310 - Graphic Design in Marketing 3 hours. This course introduces students to graphic design, its creative process, and the importance of its role in business and marketing. In addition to an overview of the history of graphic design/typography, students will receive hands-on instruction in Adobe Creative Suite (inDesign and Photoshop) to develop a greater understanding of visual communications, as well as opportunities to develop the skills for effective interaction with people in creative services.

MKTG 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

MKTG 452 - Market Research 3 hours. Emphasizes planning, organization and application of marketing research in making marketing decisions. Topics include: marketing information systems, research design, data collection and analysis, and evaluating research results. Emphasis given to sampling methods, hypothesis testing, market measurement and forecasting, use of models in marketing, decision making techniques, and behavioral research methodologies. Cases are used as part of the course. Prerequisite: MKTG 221.

MKTG 453 - Marketing Practicum 3 hours.

MKTG 460 - Seminar in Marketing 3 hours. The seminar in marketing examines major contemporary issues in the field. Students are responsible for presenting, discussing, and writing about ideas, theories, frameworks, and techniques of marketing. Prerequisite: MKTG 221.

MKTG 479 - Consumer Behavior 3 hours. Deals with changing markets and the influence of environmental and interpersonal factors on consumer behavior. Integrates concepts, theories and tools from social science and quantitative disciplines to provide a framework of understanding consumers and forecasting market demand. Different strategies and techniques of consumer research are presented and evaluated. Prerequisite: MKTG 221.

MKTG 482 - Sales Management 3 hours. Concerned with the management of the personal selling function, this course uses theories and tools of behavioral sciences for developing an effective sales force through recruiting, selection, training, compensating and evaluation of sales performance. Emphasizes sales forecasting, establishment of sales quotas, and sales analysis. Prerequisite: MKTG 221.

MKTG 486 - Promotion Strategy 3 hours. Investigates current theory and methods of promotion. The major elements of the promotional mix are analyzed in detail with emphasis on using pertinent decision theory models when allocating scarce resources to the defined elements of the total promotional mix. Prerequisite: MKTG 221.

MKTG 489 - International Marketing 3 hours. Emphasizes marketing management problems, techniques and strategies in the global marketing environment and the culture dynamics involved in international marketing. Strategies are developed for product, price, promotion and distribution functions given the complex international legal environment and consumer customs in foreign business. Prerequisite: MKTG 221. (GP)

MKTG 499 - Strategic Marketing Management 3 hours. This capstone course offers students the opportunity to focus their experience and knowledge of marketing on an aggressively competitive environment. The course will explore ways in which corporate strategy can be executed by marshalling marketing-oriented resources, and directing them to the achievement of marketing goals.

Education

EDUC 100, 300, 400 - Special Topics in Education 1-4 hours.

EDUC 105 - Education Perspectives 1 hour. This course introduces the field of education and the resources available at Alfred University necessary for academic, personal, and professional accomplishment in the field.

EDUC 120 - School Violence Prevention and Intervention Workshop (SAVE) 0 hours. This workshop provides teacher candidates with training in school violence prevention and intervention. Topics include: the warning signs that relate to violence or signal precursors to violent behavior in children; the statutes, regulations and policies relating to a safe, nonviolent school climate; academic supports and management strategies that promote a nonviolent school climate; methods for integrating social skill development and problem-solving skills into ongoing curriculum and instruction; intervention techniques for addressing violent situations; and, referral processes for students with violent behaviors. This course must be completed prior to student teaching.

EDUC 121 - Child Abuse Identification and Reporting Workshop 0 hours. This workshop is approved by, and designed to meet certification regulations of, the New York State Education Department (NYSED). The workshop includes objectives related to detecting and reporting child abuse; meeting professional and legal responsibilities related to child abuse; strategies for preventing child abduction. This course must be completed prior to student teaching.

EDUC 122 - Dignity for All Students Workshop (DASA) 0 hours. This workshop fulfills the training requirement on harassment, bullying, and discrimination prevention and intervention under the NYS Dignity for All Students Act. This is a participatory workshop which includes activities to help students understand and address personal and hidden biases as well as related behaviors and the school

setting. Topics include: introduction to the Dignity for All Students Act and reporting requirements for educators and more. This course must be taken prior to student teaching.

EDUC 230 - Psychological Foundations of Education 3 hours. This course is a survey of human developmental processes and variations, particularly as related to learning, motivation, and communication. Emphasis is placed on applying psychological knowledge, understanding, and skills to stimulate and sustain student interest, cooperation, and achievement in the classroom.

EDUC 231 - Social Foundations of Education 3 hours. This introductory course discusses the function of education in society, and, in particular, the organization of the American school system, the influences affecting our schools, and present practice and trends. This course includes the Safe Schools Against Violence in Education (SAVE) workshop required for teacher certification.

EDUC 345 - Education Fieldwork 3 hours. This course is designed for those students seeking New York State certification in the Middle Childhood, Adolescence and special subject areas. It includes a minimum of 100 hours of documented observation in a pre-assigned placement, along with projects, activities and the development of an initial teaching narrative. Students should design their schedules to include a significant block of time, compatible with the school day, in order to complete the required observation hours. Prerequisites: EDUC 230 and 231 and declaration of minor in education, or permission of instructor.

EDUC 374 - Integrated Methods: Social Studies, Science, Mathematics, and Computer Application 6 hours. The integrated methods course combines the teaching of Social Studies, Science, Mathematics and Computer Application into one six credit course and is taught in conjunction with classroom practicum experiences in Early Childhood/Childhood Education. Through these integrated experiences, practicum students will develop the initial ability and skill to: plan and implement appropriate learning experiences; become familiar with the purpose and contents of New York State Learning Standards in content areas and demonstrate the ability to relate these standards with the ongoing process of instructional planning; distinguish among and apply a variety of teaching approaches to accommodate differing developmental needs and learning styles of students and engage students in active learning; become familiar with appropriate strategies to assess the diverse needs of students and develop professional teacher communication and interpersonal skills. Prerequisite: Admission into the Early Childhood/Childhood Education Program.

EDUC 375 - Early Childhood/Childhood Practicum 3 hours. The practicum provides opportunities for students to observe actual classroom settings, gaining "hands on" experience while taking concurrent course work. This course includes three full days a week of field experience in two different grade level placements. Field placements in local school systems provide an opportunity for students to blend theory with practice and experiential application. Transportation to area schools is required.

EDUC 405 - Literacy in the Content Area 3 hours. The course shows teachers how to apply reading methodology to subject area learning. It takes a balanced approach, providing a realistic and practical treatment of reading and methodology issues, theory and research. Prerequisites: EDUC 230 and 231 and declaration of minor in education, or permission of instructor.

EDUC 413 - Using Literature in Intermediate and Adolescent Classrooms 3 hours. This course takes a practical approach to the study and selection of literature for use in teaching intermediate and adolescent students. The riches of classical and contemporary writings for classroom use are overviewed. Various educational methods which integrate children's literature into the intermediate and adolescent curriculum are reviewed. Prerequisites: EDUC 230 and 231 and declaration of minor in education, or permission of instructor.

EDUC 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/ classroom setting. Approved Plan of Study required.

EDUC 460 - Seminar in Teaching and Professional Development 3 hours. Taken concurrently with EDUC 462 and EDUC 463, this course addresses general issues of professional development of educators. Topics include, but are not limited to classroom management, teaching learning process, and issues of professionalism.

EDUC 461 - Student Teaching for Early Childhood/Childhood Certification 12 hours. Cooperating schools make it possible for student teachers to practice teach under typical public school conditions. The Division of Education, the major department, and cooperating teacher supervises observation, teaching, and discussion. Open only to students who are approved by the Division of Education. Transportation to area schools is required. Fingerprint clearance is recommended.

EDUC 462 - Student Teaching for Middle/Adolescent Certification 12 hours. Cooperating schools make it possible for student teachers to practice teach under typical public school conditions. The Division of Education, the major department, and cooperating teacher supervises observation, teaching, and discussion. Open only to students who are approved by the Division of Education. Transportation to area schools is required. Fingerprint clearance is recommended.

EDUC 463 - Student Teaching-Art Education 12 hours. Cooperating schools make it possible for student teachers to practice teach under typical public school conditions. The Division of Education, the major department, and cooperating teacher supervises observation, teaching, and discussion. Open only to students who are approved by the Division of Education. Transportation to area schools is required. Fingerprint clearance is recommended.

EDUC 464 - Seminar in Professional Development: Visual Arts 3 hours. Taken concurrently with EDUC 463, this course addresses specific issues of professional development of art educators. Topics include, but are not limited to classroom management; management of art materials, teaching learning process in art, collaboration with school professionals and issues of professionalism. Students will develop the initial teaching portfolio using LlVETEXT.

EDUC 471 - Methods of Teaching Literacy 6 hours. This course involves a study of the planning and implementation of literacy instruction birth-grade 6. The big ideas of early literacy; phonemic awareness, alphabetic principle, fluency, vocabulary and comprehension instruction for all students, including those with special needs, will be covered. Prerequisite: Admission into the Early Childhood/Childhood Education Program.

EDUC 472 - Competency Skills in Teaching Literacy 3 hours. This course gives students an opportunity to demonstrate achieved competency skills for teaching literacy at the Early Childhood/Childhood level. Attention will be given to the

current New York State Learning Standards and how to incorporate these standards into the curriculum. Prerequisite: EDUC 471 and admission into Student Teaching in Early Childhood/Childhood Education.

EDUC 473 - Assessment in the Early Childhood/Childhood Classroom 3 hours. This course examines assessment procedures, strategies, and techniques used and constructed for early childhood/childhood classroom teaching and learning purposes. Traditional and nontraditional means of assessment will be explored and an emphasis is placed on the alignment of assessment, instruction and content.

EDUC 474 - Orientation to the Early Childhood/Childhood Classroom 3 hours. This course helps students focus on problems, opportunities and challenges of the early childhood/childhood curriculum and classroom. It covers such issues as teacher awareness, teacher expectations, modeling, classroom management and grouping, as well as the socialization process within the early childhood/childhood classroom.

EDUC 488 - Current Teaching Methods: Middle Childhood Subjects 3 hours. Discussion of goals, methods, and materials used to successfully teach middle childhood subjects. Classroom observation and teaching required. Prerequisites: EDUC 230 and EDUC 231, declaration of minor in education.

EDUC 489 - Current Teaching Methods: Adolescent Subjects 3 hours. Discussion of goals, methods, and materials used to successfully teach middle/adolescence and special subjects. Prerequisites: EDUC 230 and EDUC 231, declaration of minor in education.

EDUC 491 - Methods and Curriculum in Art Education 3 hours. This course provides a foundation and introduction to a variety of teaching methods as well as techniques, methods and materials for art education. This course helps with the transition to teacher as students prepare for student teaching placement. Prerequisites: EDUC 230 and 231; Pre- or Co-requisite: EDUC 345, declaration of minor in education.

Special Education

SPED 456 - Human Development: Exceptionality 3 hours. This course covers the range of physical, cognitive, communication, and social/emotional exceptionalities in human development from childhood to early adulthood. One focus is on the commonalities, not just the differences, between children and youth with disabilities and their nondisabled peers. A second focus is on understanding the different contexts of disability. Prerequisites: EDUC 230 and 231 and declaration of minor in education, or permission of instructor.

Athletic Training

ATHT 103 - Prevention and Care of Athletic Injuries 4 hours. An introduction to the athletic training profession, inflammation process, anatomy review, rehabilitation, recognition and prevention of common athletic injuries, taping, rehabilitation and evaluation skills in a laboratory portion, including fifty (50) clock hours of athletic training room observation, cleaning duties, and ACI assignments. A lab fee may be assessed.

ATHT 104 - Introduction to Clinical Experiences in AT 1 hour. An introduction to practical experience courses with supervision provided by a Certified Athletic Trainer in an athletic training environment at Alfred University. A minimum of 50 clock hours is required. Prerequisites: ATHT 103 and ATHT 111.

ATHT 105 - Athletic Training Perspectives 1 hour. This course introduces the field of athletic training and the resources available at Alfred University necessary for academic, personal, and professional accomplishment in the field.

ATHT 110 - Medical Sciences 2 hours. This course provides a general overview of career opportunities in athletic training and other health/wellness related fields. Emphasis is placed on the domains of athletic training and application of them with regard to health and wellness in active populations.

ATHT 111 - Emergency Medicine in Athletic Training 3 hours. Basic level life support techniques including CPR, rescue breathing, and care of choking victim in conjunction with first aid techniques such as using a sling, splinting controlling bleeding and ambulation. Satisfies requirements for American Red Cross Professional Rescuer Certification.

ATHT 190 - Principles of Strength Training and Reconditioning 2 hours. This course is intended to cover the essentials of strength training and reconditioning to prepare a student who is interested in becoming a Certified Strength and Conditioning Specialist or a Certified Personal Trainer. One hour of lecture and two hours of physical activity each week. (PE Requirement)

ATHT 200 - Special Topics 1-4 hours. Topics of interest in Athletic Training are explored. Topics vary from term to term.

ATHT 201 - Clinical Experience in Athletic Training I 1 hour. Practical experience supervised by a Certified Athletic Trainer in an athletic training environment at Alfred University. A minimum of 50 clock hours is required. Emphasis on clinical proficiencies of basic first aid, wound care, preventative taping and wrapping, record keeping, and ACI assignment during sports season. Prerequisites: Formal retention within ATEP, ATHT 103 and ATHT 111. A lab fee may be assessed.

ATHT 202 - Clinical Experience in Athletic Training II 1 hour. Practical experience supervised by a Certified Athletic Trainer in an athletic training environment at Alfred University. A minimum of 100 clock hours is required. Emphasis on clinical proficiencies pertaining to etiology, pathology, treatment and management of athletic injuries and illnesses and ACI assignments during sports season. Prerequisites: Formal retention within ATEP, ATHT 103 and 210. A lab fee may be assessed.

ATHT 205 - Structural Kinesiology 3 hours. This course focuses on the anatomical and mechanical components of human movement. An emphasis will be placed on the functional anatomy of the musculoskeletal and articular systems. Additional focus will be placed on examining the neuromuscular system and basic biomechanical principles associated with human movement.

ATHT 210 - Advanced Athletic Training 3 hours. The study of specific concerns related to the field of athletic training in order to develop a thorough understanding of the etiology, pathology, treatment and management of athletic injuries and illnesses. Prerequisite: ATHT 103.

ATHT 215 - Personal Health and Wellness 2 hours. This course provides students with knowledge of current health problems including physical fitness, nutrition, and major diseases, and encourages application of this knowledge for healthful living.

ATHT 222 - Nutrition for Human Performance and Exercise 2 hours. This course focuses on human nutrition and metabolism, with particular emphasis on the implications of nutrition on human performance and physical activity. (F2)

ATHT 232 - Introduction to Sports Management 3 hours. This course introduces the student to the sport management profession. Students are provided a comprehensive look at basic organizational structure found in the sport industry. Emphasis is placed on leadership, planning and policy development, program evaluation, legal and financial issues and other attributes required of a sport manager. Students also become acquainted with career opportunities in the sport management field.

ATHT 242 - Sports, Society, and Ethics 3 hours. In this course we investigate the social significance of sport and use the sociological perspective for understanding the nature of sport. We examine current and historical events, rules, laws and governing organizations. Topics include values, principles, racial and gender equity, coaching, commercialization, enhancing stimulants and ergogenic aids, eligibility, violence, sportsmanship and Code of Ethics in sports.

ATHT 265 - Integrative Therapeutic Applications I 3 hours. This course is designed to provide students with an introduction to the applications of therapeutic modalities integrated with appropriately applied therapeutic exercise techniques in professional practice for the prevention, care, and rehabilitation of athletic injuries. This course includes a one-hour per week laboratory component. Prerequisite: ATHT 210.

ATHT 276 - Integrative Therapeutic Applications II 3 hours. This course is designed to provide students with an advanced study of the applications of therapeutic modalities integrated with appropriately applied therapeutic exercise techniques in professional practice for the prevention, care, and rehabilitation of athletic injuries. This course includes a one-hour per week laboratory component. Prerequisite: ATHT 265.

ATHT 300 - Topics in Athletic Training 1-4 hours. Topics of interest in Athletic Training are explored. Topics vary from term to term.

ATHT 301 - Clinical Experience in Athletic Training III 1 hour. Practical experience supervised by a Certified Athletic Trainer in an athletic training environment at Alfred University. A minimum of 100 clock hours is required. Emphasis on clinical proficiencies of advanced taping and bracing techniques, medication record keeping, the asthmatic athlete, skin conditions, and nutritional consideration, ACI assignment during sports season. Prerequisites: Formal retention within ATEP, ATHT 103 and 210. A lab fee may be assessed.

ATHT 302 - Clinical Experience in Athletic Training IV 1 hour. Practical experience supervised by an Approved Clinical Instructor (ACI)/Certified Athletic Trainer in an athletic training environment at Alfred University or affiliated site. A minimum of 150 clock hours is required. Emphasis on clinical proficiencies to advanced understanding of the etiology, pathology, treatment and management of athletic injuries and illnesses. Clinical assignment to ACI during season. Prerequisites: Formal retention within ATEP, ATHT 348. A lab fee may be assessed.

ATHT 310 - Orthopedic Procedures 2 hours. This course is designed to expose students to clinical examination, imaging, surgical interventions, as well as various

other orthopedic procedures that are commonly seen in the allied health profession. Prerequisite: ATHT 103.

ATHT 334 - Physical Evaluation of the Lower Extremity 3 hours. This course is designed to provide students with an intensive, thorough study of orthopedic evaluation techniques used within the clinical and on-field environments to assess athletic related injuries to the lower extremity sustained by physically active individuals. Normal joint kinematics and subsequent pathomechanics will also be discussed. This course includes a one-hour per week laboratory component. Prerequisites: Formal retention within ATEP and ATHT 210; or permission of instructor.

ATHT 348 - Physical Evaluation of the Upper Extremity 3 hours. This course is designed to provide students with an intensive, thorough study of orthopedic evaluation techniques used within the clinical and on-field environments to assess athletic related injuries to the upper extremity sustained by physically active individuals. Normal joint kinematics and subsequent pathomechanics will also be discussed. This course includes a one-hour per week laboratory component. Prerequisites: Formal retention within ATEP and ATHT 210; or permission of instructor.

ATHT 356 - Theory and Techniques of Therapeutic Modalities 4 hours. This course presents therapeutic modality theory as well as application of techniques necessary in their planning and implementation. Prerequisites: Formal retention within ATEP and ATHT 210.

ATHT 367 - Theory and Techniques of Therapeutic Exercise 4 hours. This course is designed to provide students with treatment theories and techniques necessary in the planning and implementation of therapeutic exercise for prevention, care, and rehabilitation of athletic injuries. Prerequisites: Formal retention within ATEP and ATHT 356.

ATHT 392 - Biomechanics 2 hours. The study of skeletal, joint, and muscular systems in the human body, including analysis of muscular-skeletal movement applied to exercise, sports, and dance-related skills. Emphasis will be placed on the principle of rigid body mechanics (statics and dynamics), Newton's Laws and how they govern human movement in sport and exercise. Prerequisite: Concurrent enrolment in ATHT 205.

ATHT 393 - Physiology of Exercise 3 hours. The study of physiological changes in the body with exercise, sports, and dance activities. Emphasis on neuromuscular, cardiovascular, and respiratory systems, and their adaptations to training. Prerequisite: BIOL 108 or permission of instructor.

ATHT 401 - Clinical Experience in Athletic Training V 1 hour. Practical experience supervised by a Certified Athletic Trainer in an athletic training environment at Alfred University. A minimum of 150 clock hours is required. Emphasis on clinical proficiencies of advanced assessment and management of injuries to the lower extremity, as well as therapeutic modalities. ACI assignment during sports season. Prerequisites: Formal retention within ATEP, ATHT 334 and 348. A lab fee may be assessed.

ATHT 403 - Medical Aspects of Athletic Training 1 hour. This is a course for senior athletic training students. It is designed to expose the athletic training student to the necessary recognition, evaluation and treatment skills needed to assess a

variety of medical conditions affecting athletes and physically active individuals. Emphasis will be on developing clinical proficiencies of advanced assessment related to pathologies and disorders affecting the endocrine, exocrine, respiratory and autonomic nervous systems.

ATHT 420 - Pharmacology in Athletic Training 2 hours. This course is designed as an introduction to pharmacology. Pharmacodynamics, pharmacokinetics, drug interactions and reactions will be discussed. Extra attention will be given to drugs commonly used in sports medicine. This course is offered primarily for athletic training majors. Prerequisite: BIOL 201 or permission of instructor.

ATHT 432 - Organization and Administration of Athletics 2 hours. An in-depth study of administrative techniques including budgeting, personnel, and the use of computers in the athletic setting.

ATHT 450 - Independent Study 1-4 hours. Academic inquiry into an area not covered in any established course, and carried on outside the usual instructor/classroom setting. Approved Plan of Study required.

ATHT 459 - Research Design in Athletic Training 2 hours. In this course students establish or advance their understanding of research through critical exploration of research language, ethics and approaches. The language of research is introduced, along with ethical principles and challenges, and the elements of the process within quantitative, qualitative, and mixed methods approaches. Students use these theoretical underpinnings to begin to critically review literature relevant to athletic training, which allows students to formulate their own research proposal to the Human Subjects Review Committee.

ATHT 469 - Research Methods in Athletic Training II 1 hour. A continuation of ATHT 459, this course provides students an opportunity to either complete the research project that was submitted to the Alfred University Human Subjects Review Committee or to complete other in-class research. Prerequisite: ATHT 459.

ATHT 485 - Clinical Internship in Athletic Training 4 hours. Provides seniors with an opportunity for off-campus affiliated clinical experience related to the field of athletic training and sports medicine. Emphasis on the clinical proficiencies pertaining to administrative responsibilities. Practical experience supervised by a Certified Athletic Trainer. A minimum of 200 clock hours is required. Prerequisite: Concurrent enrollment in ATHT 495.

ATHT 490 - Senior Seminar in Athletic Training 1 hour. Capstone educational course focusing on preparing the athletic training student for the BOC exam, graduate school/job applications, and career development issues. Review of athletic training domains, exam simulations, mock interviews, and practical application of skills will be emphasized. Prerequisite: ATHT 301, ATHT 302.

ATHT 495 - Current Topics in Athletic Training 2 hours. This course is designed to serve as a culmination of the athletic training curriculum. This capstone course addresses current prevention, assessment, and rehabilitation of the most common conditions found in an athletic training work environment. Pharmacological and professional development topics will also be addressed. Additional material will be presented pertaining to the contemporary issues affecting the current state of the athletic training profession. Prerequisite: ATHT 432.

Health Fitness Management

HFMT 305 - Field Experience in Health Fitness Management 1 hour. This course serves to allow students to apply theory discussed in the classroom in a practical setting similar to that in which they have interest in working. Students spend time observing and/or assisting professionals in a professional setting as assigned by the instructor.

HFMT 405 - Program Design and Implementation in Health Fitness Management 3 hours. This course applies principles learned in prior courses to more advanced concepts, including power lifting, agility, and plyometrics techniques, while investigating emerging concepts in strength training and fitness. Concepts learned in lecture are applied in the lab setting. Prerequisites: BIOL 208, ATHT 111, ATHT 190.

HFMT 410 - Exercise Prescription 3 hours. In this course we take a "hands-on approach" that applies basic exercise testing principles of cardiovascular fitness, muscular strength and endurance, flexibility, nutrition, and body composition to specific populations. Different screening and testing devices, along with psychological health/mentality pertaining to exercise, are investigated. Prerequisites: BIOL 208, ATHT 111, ATHT 392.

HFMT 420 - Special Populations and Health Appraisal 3 hours. This course is designed to provide students with the understanding of exercise and conditioning as they relate to special populations. Content includes: identifying factors of special populations; risk factors associated with special populations, guidelines for exercise test administration, and the principles of exercise prescription for special populations ranging from cancer patients to pregnancy. Prerequisite: BIOL 208, Pre- or co-requisite: ATHT 432.

HFMT 485 - Internship 3 hours. This course is designed to allow students to apply theory, concepts, and competencies discussed in the classroom to real situations in a professional setting. A variety of sites, depending on the career goal of the student, may be chosen. Prerequisite: Senior standing; HFMT 305.

HFMT 490 - Senior Seminar 2 hours. This course provides education focusing on preparing the Health Fitness Professional, including health fitness management students, for potential certification exams (NSCA, ACSM, NASM, etc.), graduate school/job applications, and career development issues. A variety of learning techniques, such as exam simulations, mock interviews, and practical application of skills, are emphasized as the student transitions from student to professional. Prerequisite: Senior standing.

HFMT 495 - Health Promotion Program Design 2 hours. The focus of this course is the promotion of healthcare, healthy living, and health-related programs to various populations. Depending upon the population being served, healthcare and/or health lifestyle needs may differ and require specific programming. Topics of discussion include current national and regional health lifestyle trends and what type of programming may best serve specific populations. This course looks into the design of programs that best fill these needs. Prerequisite: Senior standing.

Summary of Registered Academic Programs

The following programs of study are offered by Alfred University. Their Higher Education General Information System (HEGIS) codes are listed to allow cross-reference between Alfred University and other New York institutions. These numbers may be requested by state and federal offices when filing for loans and awards.

Note: Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain student aid awards.

Major	HEGIS Code	Degree
Accounting	0502	BS
Art History and Theory	1003	BS
Athletic Training	1299.30	BS
Biology	0401	BA
Biomaterials Engineering	0905	BS
Business Administration	0506	BS
Business and Marketing	0501	BS
Ceramic Art	1009	BFA
Ceramic Engineering	0916	BS
Chemistry	1905	BA
Communication Studies	0601	BA
Comparative Cultures	4903	BA
Criminal Justice Studies	2105	BA
Early Childhood/Childhood Education	0802	BS
English	1501	BA
Environmental Studies	0420	BA
Finance	0504	BS
Foreign Language and Culture Studies	1199	BA
General Science	4902	BA
Geology	1914	BA
Gerontology	2299.10	BA
Global Studies	2210	BA
Glass Engineering Science	0916	BS
Health Fitness Management	0599	BS
History	2205	BA
Individually Structured Major	4901	BA
Interdepartmental Major	4901	BA
Interdisciplinary Art	1001	BA
Interdisciplinary Art with Art Education	0831	BA, BS
Marketing	0509	BS
Materials Science and Engineering	0915	BS
Mathematics	1701	BA, BS
Mathematics with Actuarial Science	1701	BS
Mechanical Engineering	0910	BS
Middle Childhood/Adolescence Educ-Earth Science	1917.01	BA
Middle Childhood/Adolescence Educ-Social Studies	2201.01	BA
Middle Childhood/Adolescence Educ-Biology	0401.01	BA
Middle Childhood/Adolescence Educ-Chemistry	1905.01	BA
Middle Childhood/Adolescence Educ-English	1501.01	BA
Middle Childhood/Adolescence Educ-French	1102.01	BA

Middle Childhood/Adolescence Educ-Math	1701.01	BA
Middle Childhood/Adolescence Educ-Physics	1902.01	BA
Middle Childhood/Adolescence Educ-Spanish	1105.01	BA
Philosophy	1509	BA
Physics	1902	BA
Political Science	2207	BA
Psychology	2001	BA
Renewable Energy Engineering	0999	BS
Sociology	2208	BA
Spanish	1105	BA
Special Subjects: Visual Arts	1002	BFA
Theatre	1007	BA

Board of Trustees

Life Trustees

Administration

MARK ZUPAN, Ph.D.
President

SUSAN GOETSCHIUS, B.S.
Vice President for University Relations

GIOVINA M. LLOYD, M.B.A.
Vice President for Business and Finance

DOREEN D. EDWARDS, PH.D.,
Acting Vice President for Statutory Affairs and Dean, Inamori School of Engineering

EARL E. PIERCE, JR., M.A.
Vice President for Enrollment Management

W. RICHARD STEPHENS, JR., Ph.D.
Provost and Vice President for Academic Affairs

KATHY WOUGHTER, M.S. Ed.
Vice President for Student Affairs

MARY C. MCALLISTER, A.A.S.
Corporate Secretary, Alfred University

Staff

Admissions

JAMIE MARCUS, M.S. Ed
Director of Admissions

MARTHA BENTLEY, B.F.A.
Admissions Counselor

LINDSEY K. CHAMBERLAIN, B.A.
Admissions Counselor

HANNAH CLARK, B.S.
Coordinator Enrollment/Recruiting Marketing

EILEEN M. CODY, B.A.
Admissions Counselor

BARBARA CONDRATE, B.S.
Regional Associate Director, Admissions

JARAD COOPER, M.B.A.
Admissions Counselor

SARA LOVE., M.A.
Admissions Counselor

MICHELLE L. POMEROY, B.A.
Associate Director, Admissions

JEFFREY A. SCHARL, B.A.
Admissions Counselor

KATHLEEN M. TORREY, M.S. Ed.
Regional Associate Director, Admissions

TRACY R. VALENTINE, B.S.
Admissions Counselor

KRISTEN E. VARGASON, M.S. Ed.
Associate Director, Admissions

SUSAN F. WEIT, M.P.A.
Regional Associate Director, Admissions

Athletics

PAUL VECCHIO, M.S., Ed.D.
Director of Athletics;
Chair of Physical Education

AMANDA HUBBARD, M.S.
Head Women's Volleyball Coach

JESSICA HURLBUT, M.S.
Head Athletic Trainer

STEVE SHANK,
Director, Equestrian Program

JASON H. LOCKNER, M.S.
Head Men's Lacrosse Coach; Instructor in Physical Education

AUTUMN MCLAIN, B.A.
Women's Tennis Coach, Assistant Women's Basketball Coach

GREG SCHEIFER, M.S.
Assistant Men's Basketball Coach

BOB RANKL, M.S.
Head Football Coach

LUKE WESNESKI, M.S.
Head Women's Softball Coach

ERYNN ANDERSON, M.A.
Head Women's Lacrosse Coach

LAZARUS MORGAN, M.A.
Assistant Football Coach

BRADY BONACQUISTI, M.S.Ed., CAS
Assistant Football Coach

SCOTT LINN, M.S.
Assistant Football Coach

WILLIAM SORTORE, M.S., Ed.D.
Head Men's/Women's Cross Country and Track Coach

BRIAN STRIKER, B.S.
Head Men's and Women's Swimming Coach

BRIAN FRIEDLAND
Men's Tennis Coach

LAUREN PARTRIDGE
Head Alpine Ski Coach

RUSS PHILLIPS, M.S.
Head Men's Basketball Coach; Instructor in Physical Education

MATT SMITH, M.S., APC
Head Men's Soccer Coach

AILEEN ASCOLESE, M.S.
Head Women's Soccer Coach

MONIQUE MCLEAN M.A.
Head Women's Basketball Coach

IAN CRAMER, M.S., ATC
Athletic Trainer

COLTON KAMPA, M.S., ATC
Athletic Trainer

TIM PRISKEY, B.S.
Life Skills Coordinator/Assistant Men's Lacrosse Coach

Business and Finance

JODI HOWE, B.S., M.B.A.
Controller

MARK GUINAN, B.B.A.
Director, Human Resources

MICHAEL NEIDERBACH, B.A.,M.B.A., J.D.
Executive Director, Capital Operations and Legal Affairs

BRIAN DODGE
Director, Physical Plant

CHRIS BOND, M.A.
Director, Sponsored Research Administration

AMANDA RUSCITTO, M.B.A.
Bursar

DONNA STURDEVANT, A.A.S., B.S.
Director, Office & Procurement Services

Center for Academic Success
LIZ SHEA, M.A., CAS
Director

LEAH E. HOUK, M.A., CAS
Assistant Director, CAS

Contracted Services - Bookstore
MARCY K. BRADLEY, M.B.A.
Manager, Alfred University Bookstore

Contracted Services - Dining Services
JOHN DIETRICH
Director, Dining Services

Engineering Administration
MATTHEW M. HALL, Ph.D.
Director of Center for Advanced Ceramic Technology/CACT

BARRY WATKINS
Business Program Coordinator/CACT

Financial Aid
EARL E. PIERCE, JR., M.A.
Director of Student Financial Aid

ERVILLA A. CRANDALL, M.P.S.
Assistant Director, Student Financial Aid

JANINE C. MOSHER, B.S.
Assistant Director, Student Financial Aid

DIANE M. MULKIN, B.S.
Associate Director, Student Financial Aid

Information Technology Services
GARY ROBERTS
B.A., SUNY, Geneseo; M.S.L.S., SUNY at Buffalo
Director, Information Technology Services; Associate Librarian

Opportunity Programs
NADINE D. SHARDLOW, B.A.
Director of the Arthur O. Eve Opportunity Programs

MICHELE M. DOORLEY, B.A.
Senior Counselor, Opportunity Programs

WENDY I. MARVIN
First Year Counselor, Opportunity Programs

Ombuds Officer
GARY B. OSTROWER, Ph.D.

Registrar
LAWRENCE J. CASEY, M.P.A.

TAMMY JURSZAWILLIAMS, M.S. Ed
Assistant Registrar

Schein-Joseph International Museum of Ceramic Art at Alfred
SUSAN KOWALCZYK, M.F.A.
Collections Manager

Student Affairs
KIMMY MacCREA, M.S.
Counselor

LILY WOLF, B.A., M.S.
Counselor

STANLEY TAM, Ph.D.
Director, Health and Wellness Center

ANA DEVLIN-GAUTHIER, M.A.
Coordinator, Leadership Programs and Women's Leadership Center

JILL CRANDALL, M.S.
Assistant Director, Career Development Center

MARIANN WALSH, M.S.
Recruiting Coordinator/Career Advisor, Career Development Center

JOHN DOUGHERTY
Chief, Public Safety

NORMAN POLLARD, Ed.D.
Dean of Students

VICTORIA GEBEL, MSED
Director, Residence Life

SHAWN ISSACS, M.S.
Associate Director, Residence Life

AUTUMN McCLAIN, B.A.
Assistant Director, Residence Life

Center for Student Involvement
PATRICIA A. DEBERTOLIS, M.S.Ed.
Assistant Dean of New Student Programs

DANIEL J. NAPOLITANO, M.S.Ed.
Director, Student Activities/Multicultural Affairs

CRAIG ARNO, B.A.
Coordinator of Diversity Programs

Summer Programs
BONNIE DUNGAN, B.S.
Director of Summer Programs and Parents Programs

University Relations
JODI BAILEY, B.A
Director, Annual Giving and Alumni Engagement

CHRIS BOSWELL, B.S.
Assistant Sports Information Director

DEBORAH CLARK, B.A.
Acting Director of Communications and Editor, Alumni Publications

ANNE CORNELL, B.A.
Director, Research and Prospect Management

JEFF DANAHER
Assistant Director, University Relations

THERESA DOUGHERTY, B.A
Director, Advancement Services

AMY JACOBSON, Esq.
Director, Gift Planning

ROBIN MAZEJKA, B.A.
Director, Major Gifts

RICK W. McLAY, B.F.A.
Director of Publications

JANET MARBLE
Assistant Director of Alumni Engagement

MONICA REGINIO
Director, Donor Relations

MARK WHITEHOUSE, B.A.
Associate Director of Communications

Faculties

College of Liberal Arts and Sciences

LOUIS J. LICHTMAN (1970)
B.S., Brooklyn; Ph.D., University of Maine
Professor of Psychology; Dean, College of Liberal Arts and Sciences

JENNIFER POSENER, M.S.
Assistant Dean, College of Liberal Arts & Sciences

Division of Biology

JEAN A. CARDINALE (2000)
B.S., M.S., Ph.D., University of Rochester
Professor of Biology;

CHERYLD L. EMMONS (1999)
B.S., Siena College; M.S., Bowling Green State Univ.; Ph.D., University of Florida
Professor of Biology

GEOFFREY M. LIPPA (2015)
B.S., Hobart and William Smith Colleges; M.S, Ph.D., University of Rochester
Visiting Assistant Professor of Biology

JOLANTA SKALSKA (2013)
M.S. Adam Mickiewicz University; Ph.D. Polish Academy of Sciences
Assistant Professor of Biology

HEATHER ZIMBLER-DELORENZO (2009)
B.S., Emory University; M.S, Ph.D., Auburn University
Associate Professor of Biology; Acting Chair, Division of Biology

Division of Chemistry

GARRETT McGOWAN (1997)
B.S., University of Maine; Ph.D., University of Vermont
Professor of Chemistry;

JOHN D'ANGELO (2007)
B.S., SUNY Stony Brook; Ph.D., University of Connecticut at Storrs
Associate Professor of Chemistry

ANDREW G. EKLUND (2001)
B.A., College of Wooster; Ph.D., University of California at Irvine
Associate Professor of Chemistry, Chair, Division of Chemistry

Division of English

ALLEN W. GROVE (1997)
B.S., Massachusetts Institute of Technology; M.A., Ph.D., University of Pennsylvania
Professor of English; Chair, Division of English

TIMOTHY COX (2008)
B.A., Mansfield University of Pennsylvania; M.A., Ph.D., The Pennsylvania State University
Visiting Gertz Assistant Professor of Composition and Technical Communication

JULIANA GRAY (2006)
B.A., University of Alabama; M.A., University of Tennessee; Ph.D., University of Cincinnati
Associate Professor of English; Director, First Year Experience Program

SUSAN NEAL MAYBERRY (1982)
B.A., Meredith College; M.A., North Carolina State University; Ph.D., University of Tennessee
Professor of English

SUSAN P. MOREHOUSE (1990)
B.A., Hampshire College; M.F.A., University of Virginia
Professor of English

ROBERT J. REGINIO (2008)
B.A., M.A., Ph.D., University of Massachusetts at Amherst
Associate Professor of English

MELISSA A. RYAN (2004)
B.A., Middlebury College; M.A., Ph.D., University of Arizona
Associate Professor of English

Division of Environmental Studies and Geology

FREDERIC BEAUDRY (2010)
B.S., Université du Québec; M.S., Humboldt State University; Ph.D., University of Maine
Associate Professor of Environmental Studies; Chair, Division of Environmental Studies and Geology

MICHELE M. HLUCHY (1988)
B.A., Colgate University; M.S., Ph.D., Dartmouth College
Professor of Geology; Donald Hagar Professor in the Natural Sciences;

OTTO MULLER (1982)
B.A., M.S., Ph.D., University of Rochester
Professor of Geology

Division of Human Studies

EMRYS WESTACOTT (1996)
B.A., University of Sheffield; M.A., McGill University; Ph.D., University of Texas
Professor of Philosophy; Chair, Division of Human Studies

LAUREL JAY CARPENTER (2005)
B.A., Tufts University; M.F.A., University of Connecticut
Associate Professor of Art

CHRISTOPHER CHURCHILL (2011)
B.A., Concordia University; M.A., Ph.D., Queen's University
Associate Professor of History and Global Studies

WILLIAM S. DIBRELL (1983)
B.A., M.A., San Diego State University; Ph.D., Michigan State University
Professor of Philosophy

ELIZABETH ANN DOBIE (1995)
B.A., Southern Connecticut State University; M.A., Ph.D., University of Connecticut
Professor of Art Theory

VICKI L. EAKLOR (1984)
B.A., Adams State College; M.A., M.A., Ph.D., Washington University (St Louis)
Professor of History

K. DALE INGLETT (2007)
B.F.A., Augusta State University; M.F.A., University of Georgia
Associate Professor of Art

GARY B. OSTROWER (1969)
B.A., Alfred University; M.A., Ph.D., University of Rochester
Kruson Distinguished Professor of History

Division of Mathematics

JOSEPH A. PETRILLO (2005)
B.S., Wilkes University; M.A., Ph.D., Binghamton University, SUNY
Associate Professor of Mathematics; Chair, Division of Mathematics

DARWYN C. COOK (2000)
B.A., M.A., SUNY College at Potsdam; Ph.D., Louisiana State University
Associate Professor of Mathematics

XIUHONG DU (2008)
B.S., Dalian University of Technology; M.A., Ph.D., Temple University
Associate Professor of Mathematics

LIKIN C. SIMON ROMERO (2014**)**
B.S., Universidad Nacional Autónoma de México; Ph.D., West Virginia University
Assistant Professor of Mathematics

AMANDA TAYLOR (2014)
B.A., University of Maine at Farmington; M.A., Binghamton University
Instructor of Mathematics

Division of Modern Languages

KERRY ANN KAUTZMAN (2000)
B.A., Gannon University; M.A., Ph.D., University of Cincinnati
Associate Professor of Spanish; Chair, Division of Modern Languages
Director of Transfer Experience

CECILIA BEACH (1997)
B.A., Pomona College; M.A., Middlebury College; D.E.A., Universite de Paris VII; Ph.D., New York University
Professor of French

ERIN REDMOND (2009)
B.A., University of Toronto; M.A., Duke University; M.A., Ph.D., University of Texas at Austin
Associate Professor of Spanish

SANDRA L. SINGER (1994)
B.A., Michigan State University; M.A., Ph.D., University of Wisconsin-Madison
Professor of German and History

Division of Performing Arts

LISA E. LANTZ (1997)
B.M., University of Toledo; M.M., University of Michigan; D.M.A., Ohio State University
Professor of Music/Strings; Chair, Division of Performing Arts

D. CHASE ANGIER (2002)
B.A., University of California-Los Angeles; M.F.A., The Ohio State University
Professor of Dance

LUANNE M. CROSBY (1992)
B.M., Ed., M.M. Ed., State University of New York, Fredonia School of Music;
D.M.A. Voice, Cleveland Institute of Music
Professor of Music/Voice and Chorus

J. STEPHEN CROSBY (1994)
B.S., Alaska Pacific University; M.F.A., Florida State University
Professor of Theatre

CHRISTOPHER FOSTER (2007)
B.M.ED., M.M, University of Nevada; D.M.A., University of North Texas
Associate Professor of Music

BECKY B. PROPHET (1992)
B.A., Alfred University; M.A., Ph.D., University of Michigan
Professor of Theatre

Division of Physics and Astronomy

ROGER J. LOUCKS (2002)
B.S., Houghton College; M.S., Rensselaer Polytechnic Institute;
Ph.D., University of Illinois at Urbana-Champaign
Professor of Physics; Chair, Division of Physics and Astronomy

DAVID R. DE GRAFF (1992)
B.S., St. Lawrence University; M.S., Ph.D., University of North Carolina
Associate Professor of Astronomy

JOSEPH D. KIRTLAND (2012)
B.S., Cooper Union; M.S., Ph.D., Cornell University
Assistant Professor of Physics

G. DAVID TOOT (1986)
B.S., Mount Union College; Ph.D., University of Colorado
Professor of Physical Sciences; Director of Stull Observatory

Division of Psychology and Communication Studies

DANIELLE D. GAGNE (2004)
B.A., Keene State College; M.A., Ph.D., University of New Hampshire
Associate Professor of Psychology; Chair, Division of Psychology and
Communication Studies

GORDON D. ATLAS (1989)
B.A., Binghamton University, SUNY; M.S.W., Ph.D., University of Michigan
Professor of Psychology; Director, Honors Program

AMY L. BUTTON (2014)
B.A., St. Bonaventure University; M.A., Alfred University
Instructor of Psychology

NANCY E. FURLONG (1983)
B.A., SUNY at Fredonia; M.A., University of Dayton; Ph.D., University of Pittsburgh
Professor of Psychology

BETHANY JOHNSON (2011)
B.A., Hendrix College; M.A., Ph.D., University of Nebraska
Assistant Professor of Psychology

ROBERT J. MAIDEN (1982)
B.A., University of Michigan: M.A., Ph.D., New School for Social Research
Professor of Psychology; Director, Gerontology

Communication Studies Program

PAMELA D. SCHULTZ (1992)
B.A., Oakland University; M.A., Bowling Green State University; Ph.D., Wayne State University
Professor of Communication Studies; Director, Communication Studies

ROBYN S. GOODMAN (1995)
B.A., California State University; M.A., University of Missouri; Ph.D., Michigan State University
Professor of Communication Studies

NICHOLAS G. SCHLEGEL (2016)
B.A. Eastern Michigan University; M.A., Ph.D., Wayne State University
Assistant Professor of Communication Studies

Division of Social Sciences

KAREN L. PORTER (1986)
B.A., SUNY at Potsdam; M.A., Ph.D., Syracuse University
Professor of Sociology; Chair, Division of Social Sciences
Director of Criminal Justice Studies Program

ARTHUR L. GREIL (1977)
B.A., Syracuse University; M.A., Ph.D., Rutgers University
Professor of Sociology

MICHELLE LOWRY (2015)
B.A., Alfred University; M.A., Columbia University; C.A.S, Psy.D., Alfred University
Assistant Professor of Criminal Justice

ROBERT A. MYERS (1987)
B.A., Davidson College; M.A., Ph.D., University of North Carolina; M.P.H., Harvard University
Professor of Anthropology and Public Health

JEFFREY SLUYTER-BELTRÃO (2005)
B.A., College of William and Mary; M.I.A., Columbia University; Ph.D., University of California/Berkeley
Associate Professor of Political Science; Director, Comparative Cultures and Global Studies

ROBERT STEIN (2004)
B.A., Stanford University, M.A., Ph.D., University of Michigan
Associate Professor of Political Science

New York State College of Ceramics

School of Art and Design

GERAR EDIZEL (1990)
B.F.A., State Academy of Applied Fine Arts, Istanbul, Turkey;
M.F.A., Southern Illinois; M.A., Ph.D., Cornell University
Professor of Art History; Chair, Division of Art History
Acting Dean, School of Art and Design

ROBIN CASTER-HOWARD, M.F.A.
Assistant Dean, School of Art and Design

SHARON McCONNELL, M.F.A.
Director, Fosdick-Nelson Gallery

SARAH BLOOD (2014)
B.A. Hons, M.A., University of Sunderland, UK
Assistant Professor of Glass

PEER D. BODE (1987)
B.A., SUNY at Binghamton; M.A.H., SUNY at Buffalo
Professor of Video Art

XIAOWEN CHEN (1999)
B.F.A., Lu Xun Academy of Fine Arts, Shenyang, China; M.A., M.F.A., Illinois State University
Professor of Printmaking

HOPE M. CHILDERS (2011)
B.F.A., M.A., Louisiana State University; Ph.D., University of California
Assistant Professor of Art History

WILLIAM S. CONTINO (2008)
B.F.A., Alfred University; M.F.A., Maryland Institute College of Art
Associate Professor of Print Media

DIANE COX (1991)
B.A., University of Colorado; M.F.A., School of the Art Institute of Chicago
Associate Professor of Sculpture

ANNE C. CURRIER (1984)
B.F.A., Art Institute of Chicago; M.F.A., University of Washington
Kruson Distinguished Professor of Ceramics; Chair, Division of Ceramic Art

ANDREW DEUTSCH (1996)
B.F.A., Alfred University; M.F.A., Renesselaer Polytechnic Institute
Professor of Sonic and Video Arts; Chair, Division of Expanded Media

KATHERINE DIMITROVA (2011)
B.A. University of California; M.A., Ph.D., University of Pittsburgh
Assistant Professor of Art History

KAREN DONNELLAN (2014)
B.des., National College of Art and Design;
M.F.A., Rochester Institute of Technology
Assistant Professor of Art and Design

ANDREA GILL (1984)
B.F.A., Rhode Island School of Design; M.F.A., Alfred University
Professor of Ceramics

JOHN GILL (1984)
B.F.A., Kansas City Art Institute; M.F.A., Alfred University
Professor of Ceramics

D. WAYNE HIGBY (1973)
B.F.A., University of Colorado; M.F.A., University of Michigan
Kruson Distinguished Professor of Ceramics

BRETT W. HUNTER (2002)
B.A., Kalamazoo College; M.A., Bowling Green State University
Associate Professor of Sculpture

M. MICHELLE ILLUMINATO (2006)
B.F.A., Carnegie Mellon; M.F.A., University of Wisconsin
Associate Professor of Foundations, Chair, Freshman Foundation

MEGHEN JONES (2014)
B.A., Earlham College; M.A., Musashino, Tokyo, Japan;
M.A., Ph.D., Boston University
Assistant Professor of Art History

MATTHEW W. KELLEHER (2015)
Assistant Professor of Ceramic Art, M.F.A. (University of Nebraska-Lincoln), M.A. (University of North Iowa); B.F.A. (Kansas City Art Institute).

CORAL LAMBERT (2007)
B.F.A., Canterbury School of Art; M.F.A., Manchester Metropolitan University
Associate Professor of Sculpture

BARBARA LATTANZI (2006)
B.F.A., Art Institute of Chicago; M.A., SUNY at Buffalo
Associate Professor of Interface Design and Motion Graphics

JUDY LIVINGSTON (2001)
B.F.A., M.F.A., University of Michigan
Associate Professor of Graphic Design

LYDIA McCARTHY (2011)
B.F.A. Massachusetts College of Art; M.F.A., University of North Carolina at Chapel Hill
Assistant Professor of Photography

WALTER McCONNELL (1997)
B.F.A., University of Connecticut; M.F.A., Alfred University
Professor of Ceramic Art

MARY DRACH McINNES (1997)
B.A., University of California; M.A., Ph.D., Boston University
Professor of Art History; Chair, Division of Art History

STEPHANIE E. McMAHON (2008)
B.F.A., Alfred University; M.F.A., University of Texas at Austin
Associate Professor of Painting, Chair, Division of Drawing, Painting and Photography

ANGUS POWERS (2006)
B.F.A., Alfred University, M.F.A., Temple University
Associate Professor of Glass; Chair, Division of Sculpture and Dimensional Studies

KATARINA RIESING (2014)
B.A., Smith College; M.F.A., Univerwsity of Wisconsin- Madison
Assistant Professor of Art and Design

JOSEPH SCHEER (1989)
B.F.A., Alfred University; M.A., M.F.A., University of New Mexico
Professor of Printmaking

LINDA SIKORA (1997)
F.A., David Thompson University Center; B.F.A., Nova Scotia College of Art and Design; M.F.A., University of Minnesota
Professor of Ceramics; Chair, Division of Ceramic Art

LINDA SORMIN (2016)
M.F.A. (Alfred University); B.A. (Andrews University).
Associate Professor of Ceramic Art

ANGIE Y. TO (2002)
B.F.A., Alberta College of Art and Design; M.F.A., The Ohio State University
Associate Professor of Foundation

M. KEVIN WIXTED (1998)
B.A., M.A., Bloomsburg University
Professor of Painting

Kazuo Inamori School of Engineering

DOREEN EDWARDS (1997)
B.S., South Dakota School of Mines and Technology; Ph.D., Northwestern University
Professor of Materials Science and Engineering;
Dean, Kazuo Inamori School of Engineering

EMILIE L. CARNEY, M.B.A.
Assistant Dean, Kazuo Inamori School of Engineering

Ceramic Engineering and Materials Science (Statutory)

WILLIAM B. CARLSON (1987)
B.Arch., Engineering; M. Engineering; Ph.D., Pennsylvania State University
Professor of Systems Engineering and Product Design

WILLIAM M. CARTY (1993)
B.S., M.S., University of Missouri-Rolla; Ph.D., University of Washington
John F. McMahon Professor of Ceramic Engineering
Director, Whitewares Research Center
Program Chair, Ceramic Engineering

ALEXIS G. CLARE (1989)
B.Sc., Ph.D., University of Reading (England)
Professor of Glass Science

ALASTAIR N. CORMACK (1985)
B.A., M.A., Cambridge (England); M.Sc., Ph.D., University College of Wales
Professor of Ceramic Science; Van Derck Frechette Professor of Ceramic Science

HERBERT GIESCHE (1993)
M.S., Ph.D., University of Mainz, Germany
Associate Professor of Ceramic Engineering

MATTHEW M. HALL (2003)
B.S., University of Missouri-Rolla; M.B.A. University of Rochester; M.S., Ph.D., Alfred University
Associate Professor, Biomaterials and Glass Science

WILLIAM C. LaCOURSE (1970)
B.S., M.S., SUNY at Stonybrook; Ph.D. Renesselaer Polytechnic Institute
Kruson Distinguished Professor of Glass Science

DAVID W. LIPKE (2013)
B.S., Harvey Mudd College; Ph.D., Georgia Institute of Technology
Assistant Professor of Materials Science and Engineering

SCOTT T. MISTURE (1996)
B.S., Ph.D., Alfred University
Inamori Professor of Materials Science and Engineering
Program Chair, Materials Science and Biomaterial sEngineering

STEVEN M. PILGRIM (1993)
B.S., Ph.D., Pennsylvania State University
Professor of Materials Science and Engineering

S.K. SUNDARAM (2011)
M. Tech., Indian Institute of Technology, Kharagpur (India)
Ph.D., Georgia Institute of Technology
Inamori Professor of Materials Science and Engineering

ANTHONY W. WREN (2011)
B.Sc., National University of Ireland, Maynooth (Ireland);
M.Sc., Ph.D., University of Limerick (Ireland)
Assistant Professor of Biomaterials

YIQUAN WU (2011)
B.S., Wuhan University of Science and Technology; M.S., Chinese Academy of Sciences and University of Science and Technology of China; Ph.D., Imperial College London
Assistant Professor of Ceramic Engineering and Materials Science

Electrical and Renewable Energy Engineering (Non-Statutory)
JALAL BAGHDADCHI (1999)
B.S., University of Massachusetts; M.S., Ph.D., North Carolina Agricultural and Technical State University
Associate Professor of Electrical Engineering, Renewable Energy Engineering

WALLACE B. LEIGH (1988)
B.S., University of Utah; Ph.D., Northwestern University
Professor of Electrical Engineering, Renewable Energy Engineering
Program Chair, Division of Electrical, Mechanical and Renewable Energy Engineering

XINGWU WANG (1988)
B.S., Harbin Naval Engineering Institute; M.S., Hangzhou University; Ph.D., SUNY at Buffalo
Professor of Electrical Engineering, Renewable Energy Engineering

Mechanical Engineering (Non-Statutory)
EHSAN GHOTBI (2013)
B.S., Amirkabir University; M.S., Institute for Management and Planning Studies; M.S., Ph.D., University of Wisconsin
Assistant Professor of Mechanical Engineering

JOSEPH W. ROSICZKOWSKI (1988)
B.S., M.S., Ph.D., Clarkson University
Associate Professor of Mechanical Engineering

College of Professional Studies

NANCY J. EVANGELISTA (1997)
B.S., Western Michigan University; M.S., Ph.D., Syracuse University
Professor of School Psychology;
Associate Provost
Dean of the Graduate School and the College of Professional Studies

ANTONIO WILLIAMS (2007)
B.A. Alfred University, M.S. American Public University
Assistant Dean, College of Professional Studies

School of Business
BRUCE ROSENTHAL (2013)
B.F.A. Syracuse University; M.B.A. Rutgers University;
Ph.D. University of the Sciences
Director, School of Business

ZONG DAI (2003)
B.S., Hubei Finance College, China; M.S., Anhwei University, China;
M.B.A., University of Saskatchewan, Canada;

Ph.D., University of Manchester, United Kingdom
Professor of Business Administration
J. Henry Smith Endowed Professorship

SHARON M. DAVIDSON (1982)
B.S., Bucknell; CPA Pennsylvania and New York; CMA;
M.S., Rochester Institute of Technology
Professor of Accountancy

THERESA A. GUNN (2008)
B.S., M.B.A., Alfred University; Ph.D., TUI University
Associate Professor of Accountancy

SANGJOON LEE (2005)
B.A., Yonsei University, Korea; M.B.A., George Washington University;
Ph.D., SUNY at Buffalo
Associate Professor of Economics;
Neville Chair in Economics

MARK LEWIS (2011)
M.B.A., Pacific Lutheran University; B.S., SUNY Institute of Technology
Assistant Professor of Finance and Information Systems
Tredennick Endowed Chair in Entrepreneurial Studies

GRZEGORZ PAC (2009)
B.S., Saint Peter's College; Ph.D., University of Colorado at Boulder
Associate Professor of Economics

DIANA MAGUIRE (2015)
B.B.A., MBA, St. Bonaventure University; EdD, Creighton University
Assistant Professor of Management

NADIA NAFAR (2015)
B.B.A, Al Akhawayn University; M.B.A., Ph.D., Old Dominion University
Assistant Professor of Finance

AMY RUMMEL (1990)
B.Sc., Juniata College; M.Sc., Ph.D., Purdue University
Professor of Marketing;
Jon & Mary Tabor Chair in Family Business

LUIS RODRIGUEZ (2014)
B.S. Long Island University; M.B.A. Baruch College, CUNY; JD., LLM, New York Law School
Assistant Professor of Law and Taxation

Division of Athletic Training

CHRISTOPHER L. YARTYM (1999)
B.S., Ithaca College; M.S., Indiana State University
Clinical Instructor of Athletic Training; Program Director

JESSICA HURLBUT (2012)
B.S., Alfred University; M.S., University of Hartford
Assistant Athletic Trainer

JOSHUA LONG (2013)
B.S. Mercyhurst University; M.S. Ohio University
Clinical Instructor of Athletic Training

Division of Education

DAVID TERRY (2009)
B.S., Hobart College; M.S., University of Florida;
Ph.D., SUNY at Buffalo
Associate Professor of Education; Chair, Division of Education

CORRIE BURDICK (2008)
B.F.A., M.S., Ph.D., Syracuse University;
Assistant Professor of Education

ANNA JACOBSON (2014)
B.A., M.A.T., University of New Hampshire
Ph.D. Indiana University
Assistant Professor of Education

LENISA JOSEPH (2015)
B.A., University of the West Indies; M.A., Ph.D., University of Maryland
Assistant Professor of Special Education

KELLY WILLIAMS (2002)
B.A., SUNY Potsdam; M.S., SUNY Potsdam; M.Ed., St. Lawrence University
Clinical Instructor of Education

Division of Counseling and School Psychology

MARK FUGATE (1992)
B.A., Oral Roberts University; M.A., University of Pennsylvania;
Ph.D., Lehigh University
Professor of School Psychology
Chair, Division of Counseling and School Psychology

JANA G. ATLAS (1995)
B.A., SUNY Binghamton; M.S., SUNY Albany; Ph.D., Wayne State University
Professor of School Psychology

STACY L. BENDER (2013)
B.S., University at Buffalo, SUNY, M.A., Ph.D. Michigan State University
Assistant Professor of School Psychology

J. STEPHEN BYRNE (2011)
B.A., Boston College; M.A., Psy.D., Marywood University
Assistant Professor of Counseling

JAIME CASTILLO (2016)
B.S., Penn State University; M.S., The University of Scranton; Ph.D. Syracuse University
Assistant Professor of Counseling

KEVIN CURTIN (2010)
B.S., St. John Fisher College; M.S., Radford University;
Ph.D., George Washington University
Associate Professor of Counseling

CRIS W. LAUBACK (2005)
A.B., Colgate University; M.A., Psy.D., Alfred University
Associate Professor of School Psychology

KASIE R. LEE (2013)
B.A., M.Ed., Vanderbilt University, Ph.D., University of North Texas
Assistant Professor of Counseling

LYNN O'CONNELL (2005)
B.A., SUNY at Plattsburgh; M.A., Psy.D., Alfred University
Associate Professor of School Psychology

Libraries

Herrick Memorial Library

STEPHEN S. CRANDALL (1977)
B.S., Alfred University; M.L.S., SUNY at Geneseo; M.B.A., Alfred University
Dean, AU Libraries, Director, Herrick Memorial Library; Librarian

ELLEN J. BAHR (2006)
B.A., University of Wisconsin-La Crosse; M.A., New York University; M.L.I.S., Rutgers
Information Systems Librarian & Coordinator of Interlibrary Loan; Associate Librarian

LAURIE L. McFADDEN (1993)
B.S., Alfred University; M.L.S., SUNY at Buffalo
University Archivist; Head of Special Collections; Cataloger; Librarian

BRIAN T. SULLIVAN (2008)
B.A., SUNY at Fredonia; M.A., Northeastern Seminary; M.L.S., SUNY at Buffalo
Information Literacy Librarian; Assistant Librarian

Scholes Library of Ceramics

MARK A. SMITH (1993)
B.M.Ed., SUNY at Fredonia; M.S.Ed., Elmira College; M.L.S., SUNY at Buffalo
Associate Dean, AU Libraries; Director, S.R. Scholes Library; Librarian

TREVOR N. RILEY (2014)
B.A., University of Arizona; M.L.S., Catholic University of America
Engineering/Emerging Technology Librarian; Assistant Librarian

EVA SCLIPPA (2013)
B.A., Furman University; M.L.S., University of North Carolina at Chapel Hill
Art Librarian/Coordinator of Library Instruction; Assistant Librarian

Emeriti

DANIEL D. ACTON
B.A., Muskingum College; M.B.A., Miami (of Ohio); D.B.A., Kent State University; CPA, New York
J. Henry Smith Research Fellow; Professor of Accountancy, Emeritus

VASANTHA R.W. AMARAKOON
B.Sc., University of Ceylon (Sri-Lanka); B.Sc.,
University of Leeds (England); Ph.D., University of Illinois
Professor of Ceramic and Electrical Engineering, Emeritus

MARTHA G. ANDERSON
B.A., St. Olaf College; M.A., New York University,
Institute of Fine Arts; Ph.D., Indiana University
Professor of Art History

PAMELA A. ARMSTRONG
B.A., Chatham College; M.S. in Ed., Alfred University; M.L.S., SUNY at Geneseo
Research Services Librarian, Emerita

GEORGE W. BALL
B.S., Union College; M.S., Comp. Sc., Rochester Institute of Technology;
M.S., Ph.D., Syracuse University
Professor of Computer Science, Emeritus

WESLEY E. BENTZ
B.A., Whitman; Ph.D., University of Rochester
Kruson Distinguished Professor of Chemistry, Emeritus

BRADLEY S. BOWDEN
B.S., Massachusetts; Ph.D., University of Connecticut
Professor of Biology, Emeritus

VERNON L. BURDICK
B.S., M.S., Alfred University; Ph.D., University of Missouri
Professor of Ceramic Engineering, Emeritus

LEWIS C. BUTLER
B.A., Alfred University; M.S., Rutgers University; Ph.D., University of Illinois
Dean, Graduate School and Professor of Mathematics, Emeritus

STUART L. CAMPBELL
B.A., M.A., University of Oregon; Ph.D., University of Rochester
Kruson Distinguished Professor of History, Emeritus

ROBERT A. CONDRATE
B.S., Worcester Polytechnic Institute; Ph.D., Illinois Institute of Technology
Professor of Spectroscopy, Emeritus

BRUCE E. CONNOLLY
B.S., University of Rochester; M.S.L.S., Syracuse University
Public Services Librarian; Associate Librarian, Emeritus

WILLIAM B. CRANDALL
B.S., M.S., Alfred University
Associate Professor of Ceramic Science, Emeritus

PHILIP H. CRAYTON
B.A., Alfred University; M.A., Ph.D., State University of New York at Buffalo
Professor of Chemistry, Emeritus

PAUL T. CULLEY
B.S., Alfred University; M.L.S., SUNY at Geneseo
Assistant Librarian, Emeritus

JAMES F. CURL
B.A., Davidson; M.A., Northwestern University; M.Ed., Ph.D., University of Pittsburgh
Professor of Education, Emeritus

ANNE C. CURRIER
B.F.A., Art Institute of Chicago; M.F.A., University of Washington
Kruson Distinguished Professor of Ceramics, Emeritus

ROBERT J. DOHERTY
B.F.A., Rhode Island School of Design; M.F.A., Yale University
Professor of Design, Emeritus

ROGER T. DOUGLASS
B.A., Kansas; M.A., University of Michigan; Ph.D., University of Kansas
Professor of Mathematics, Emeritus

JOANNE DROPPERS
B.A., Cornell University
University Carillonneur, Emerita

CLIFFORD DuBREUIL
B.S., Indiana University
Professor, Emeritus
Head Coach Men's Indoor and Outdoor Track and Field

FRANK G. DUSERICK (1978)
B.S., U.S. Naval Academy; M.B.A., Harvard University
Kruson Distinguished Professor of Business Administration, Emeritus

WILLIAM A. EARL
B.F.A, M.S., Alfred University
Associate Professor Ceramic Engineering and Science, Emeritus

STEPHEN D. EDWARDS
B.A., San Jose State University; M.F.A., Illinois State University
Professor of Glass, Emeritus

JINGHONG FAN (2000)
B.S., Shanghai Jiao Tong University; M.S., Ph.D., University of Cincinnati
Professor of Mechanical Engineering, Emeritus

PETER S. FINLAY
B.A., Williams; M.S., University of Vermont; Ph.D., Syracuse University
Professor of Biology, Emeritus

JOHN R. FOXEN
B.A., Morningside College; M.A., Ph.D., Iowa State University
Dean, College of Liberal Arts and Sciences,
Professor of Speech and Dramatic Art, Emeritus

ROGER FREEMAN
B.A., University of Wisconsin; M.S., Illinois Institute of Technology
Professor of Photography, Emeritus

ADDISON E. FREY
B.S., Ohio University; Ph.D., University of Pittsburgh
Associate Professor of Mathematics, Emeritus

EDWARD GAUGHAN (1989)
B.A., King's College; Ed.M., Ph.D., Temple University
Professor of Psychology, Emeritus

JOHN C. GILMOUR
B.A., Maryville University; Ph.D., Emory University
Kruson Distinguished Professor of Philosophy, Emeritus

GORDON GODSHALK
B.S., University of California; M.S., Ph.D., Michigan State University
Professor of Biology, Emeritus

LOUIS GREIFF
B.A., New York University; M.A., Ph.D., Syracuse University
Professor of English, Emeritus

LAURA GREYSON
B.A., University of California; Ph.D., Rutgers University
Professor of Political Science, Emeritus

ELIZABETH GULACSY
B.A., M.L.S., George Peabody College
Art and Serials Librarian; College Archivist; Associate Librarian, Emerita

ROBERT A. HEINEMAN (1971)
B.A., Bradley University; M.S., Ph.D., American University
Kruson Distinguished Professor of Political Science, Emeritus

WILLIAM M. HALL (1980)
B.A., SUNY Geneseo; M.A., Ph.D., Syracuse University
Provost Emeritus

DORIS E. HARRINGTON
B.A., Ithaca College; M.A., New York University
Professor of Physical Education, Emeritus

WALLACE C. HIGGINS
B.F.A., Alfred University
Associate Professor of Ceramic Design, Emeritus

DEAN W. HOOVER
B.A., Hiram College; M.A., University of Denver
Professor of Mathematics, Emeritus

SHARON HOOVER
B.S., Kent State University; M.S., Montana State University;
M.A., Ph.D., SUNY at Buffalo
Professor of English; Fred H. Gertz Professor of English, Emerita

BENJAMIN W. HOWARD
B.A., Drake University; M.A., Ph.D., Syracuse University
Professor of English, Emeritus

JOHN C. HOWARD
A.B., Boston College; M.B.A., Columbia University; Ph.D., Pennsylvania State University
Professor of Marketing, Emeritus

WILFRED V. HUANG,
B.S., Purdue University; M.S., Ph.D., SUNY at Buffalo
Professor of Management Information Systems, Emeritus
Director, Confucius Institute at Alfred University

CARLA C. JOHNSON
B.A., University of Pennsylvania; M.L.S., SUNY at Geneseo; M.S.Ed., Alfred University
Dean, AU Libraries, Director, S. R. Scholes Library; Librarian, Emerita

PAUL F. JOHNSON III
B.S., Alfred University; M.E., Ph.D., University of Florida
Professor of Ceramic Engineering, Emeritus

DAVID KOWALEWSKI
B.A., Mt. Angel College; M.A., Ph.D., University of Kansas
Professor of Political Science, Emeritus

THOMAS LACAGNINA
B.F.A., M.F.A., Rochester Institute of Technology
Associate Professor of Wood Design, Emeritus

PATRICIA LACOURSE
B.S., SUNY at Stony Brook; M.A., Alfred University; M.L.S., Syracuse University
Associate Librarian, Emerita

JAMES T. LANCASTER
B.S.E.E., Tennessee Polytechnic; M.S., Ph.D., Virginia Polytechnic Institute
Professor of Electrical Engineering, Emeritus

EUGENE A. LOVELACE
B.A., Harpur College; M.S., Ph.D., University of Iowa
Professor of Psychology, Emeritus

FRANCIS R. MCBRIDE
B.A., University of Notre Dame, M.L.S., SUNY Geneseo
Associate Librarian, Emeritus

THOMAS K. MCDOWELL
B.S., M.S., Central Michigan University
Associate Professor of Computer Science, Emeritus

AROLANA M. MEISSNER
B.A., Ripon College; M.L.S., University of Maine
University Librarian, Emerita

DAVID C. MEISSNER
B.A., Ripon College, Ph.D., University of Maine
Professor of Psychology, Emeritus

EUGENE MONROE
B.S., University of Wisconsin; M.A., Ph.D. University of Illinois
Associate Professor of Ceramic Science, Emeritus

THEODORE L. MORGAN
B.F.A., Western Michigan University; M.F.A., Ohio University
Professor of Art

ROGER H. MORITZ
B.S., Valparaiso University; M.S., Ph.D., University of Pittsburgh
Cole Professor of Applied Mathematics, Emeritus

SHARON MORRISON
B.S., SUNY/Oswego; M.S., University of Missouri; M.S., University of Nebraska
Associate Professor of Education, Emerita

MARTHA A. MUELLER
B.S., University of Kansas; M.S. in L.S., Carnegie Institute of Technology
Associate Librarian, Emerita

HENRY NEBEL
B.S., University of Rochester; Ph.D., SUNY at Buffalo
Professor of Physics, Emeritus

DOLUN OKSOY
B.S., University of Ankara; M.A. Union College, Ph.D., Schenectady
Professor of Management Science and Information Systems, Emeritus

MARC OLSHAN
B.S., Cornell University; M.A., Columbia University; Ph.D., Cornell University
Professor of Sociology, Emerita

TONI OLSHAN
B.S., M.S., Cornell University; M.S.L.S., Clarion University
Associate Librarian, Emeritus

THOMAS V. PETERSON
B.A., Stanford University; M.T.S., Harvard Divinity School; M.A., Ph.D., Stanford University
Professor of Religion, Emeritus

CARLSON C.P. PIAN
B.S.E., M.S.E., Ph.D., University of Michigan
Professor of Mechanical Engineering, Emeritus

J. ROBERT PIPAL
B.S., Iowa State University; Ph.D., Massachusetts Institute of Technology
Professor of Chemistry, Emeritus

BEVERLY POTTER
Registrar, Emeritus

MARIO PRISCO
B.F.A., M.F.A., Syracuse University
Dean, School of Art and Design; Kruson Distinguished Professor of Art, Emeritus

L. DAVID PYE
B.S., Ph.D., Alfred University
Professor of Ceramic Engineering and Dean, Emeritus

JOELLA M. RAND
B.S.N., M.S. in Ed., University of Akron; Ph.D., Syracuse University
Professor of Education, Emerita

DANIEL E. RASE
B.S., M.S., Alfred University; Ph.D., Pennsylvania State University
Associate Professor of Ceramic Science, Emeritus

THOMAS H. RASMUSSEN
A.B., Earlham College; Ph.D., Syracuse University
Professor of Political Science, Emeritus

JAMES P. RAUSCH
B.A., M.A., Ph.D., Kent State University
Professor of Biology, Emeritus

JAMES S. REED
B.S., Pennsylvania State University; Ph.D., Alfred University
Kruson Distinguished Professor of Ceramic Engineering, Emeritus

ABDERRAHMAN ROBANA
B.S.B.A., M.B.A., Washington University (St. Louis); Ph.D., New York University
Professor of Finance and Business Administration, Emeritus

ANGELA M. ROSSINGTON
A.A.S., Alfred State College; B.S., Alfred University; M.S., SUNY at Buffalo
Professor of Nursing, Emerita

DAVID R. ROSSINGTON
B.S., Ph.D., Bristol (England)
Professor of Physical Chemistry, Emeritus

DONALD ROYCE-ROLL
B.S., University of Nebraska; M.A., Michigan State University;
Ph.D., Cornell University
Professor of Art History, Emeritus

RICHARD D. SANDS
B.S., Oberlin; M.S., Ph.D., Syracuse University
Professor of Chemistry, Emeritus

WALTER A. SCHULZE, JR.
B.S., M.S., Ph.D., Pennsylvania State University
Professor of Ceramic Engineering and Materials Science, Emeritus

JAMES E. SHELBY, JR.
B.S., M.S., Ph.D., University of Missouri
Professor of Glass Science, Emeritus

STUART E. SMITH
B.A., M.Ed., University of Rochester; Ed.D., Syracuse University
Professor of Education, Emeritus

HARRIE STEVENS
B.S., Alfred University; Ph.D., Rutgers The State University of New Jersey

PAUL STRONG
B.A., Colby College; M.A., Ph.D., University of Wisconsin
Kruson Distinguished Professor of English, Emeritus

SUSAN STRONG
B.A., University of Wisconsin-Madison; M.L.S., SUNY Geneseo; Ph.D., University of Rochester
Reference and Assessment Librarian, Emerita

JIANXIN TANG
B.S., Guangxi University (China); M.S., University of Bridgeport;
Ph.D., University of Connecticut
Professor of Electrical Engineering, Renewable Energy Engineering, Emeritus

JENIFER TAYLOR
B.S., University of Washington; M.S. in Ed., Ph.D., Alfred University
Associate Professor of Ceramic and Electrical Engineering, Emerita

WILLIAM W. UNDERHILL
B.A., M.F.A., University of California at Berkeley
Associate Professor of Sculpture, Emeritus

JAMES R. VARNER
B.S., M.S., Ph.D., Alfred University
Kruson Distinguished Professor of Ceramic Engineering, Emeritus

ARUN K. VARSHNEYA
B.Sc., Agra (India); B.Sc., Sheffield (United Kingdom);
M.S., Ph.D., Case Western Reserve University
Professor of Glass Science and Engineering, Emeritus

FRANCES A. VIGGIANI
B.A., University of Massachusetts; M.R.P., Ph.D., Cornell University
Associate Professor of Management, Emerita

WILLIAM J. WALKER
B.A., M.A., Ph.D., Syracuse University
Professor of Education, Emeritus

BARBARA R. WARE
B.A., Alfred University, A.L.A.A., Australia
Assistant Librarian, Emerita

MICHAEL W. WEBB
B.Sc., Ph.D., Bristol (England)
Professor of Physics, Emeritus

KATHERINE D. WIESENDANGER
B.S., M.Ed., University of Maine; Ed.S., Southwestern Louisiana University, Ed.D., Mississippi State University
Kruson Distinguished Professor of Education, Emerita

ROBERT C. WILLIAMS
A.B., The College of the Holy Cross; M.A., Ph.D., University of Illinois
Professor of Mathematics; Cole Professor for Applied Mathematics, Emeritus

GLENN E. ZWEYGARDT
B.F.A., Wichita State University; M.F.A., Maryland Institute College of Art
Professor of Sculpture, Emeritus

Academic Calendars

The Alfred University academic calendar consists of two 15-week semesters (inclusive of final exams), each with 75 scheduled class meeting days; one 12-week Summer Term (in 6 Sessions); and one 4- to 5-week term between semesters, called “Allen Term,” in which short-term faculty-led travel courses and online courses are offered. During Fall and Spring semesters, some 2-credit courses are offered in a half-semester format, meeting only in A-Block (first half) or in B-Block (second half).

Academic Calendars are available at https://my.alfred.edu/services/academic-calendar.cfm.

Telephone Directory

General Information	607 871 2111 or 607 871 2175
Specific Information Concerning an Academic Branch	
College of Professional Studies	607 871 2124
College of Liberal Arts and Sciences	607 871 2171
School of Art and Design	607 871 2412
Kazuo Inamori School of Engineering	607 871 2242
Graduate School	607 871 2124
Catalogs and Admissions Information	
Director of Admissions	607 871 2115 or 800 541 9229
Financial Aid and Scholarships	
Director of Financial Aid	607 871 2159
Housing	
Director of Residence Life	607 871 2186
Summer Programs	
Summer Programs Office	607 871 2612
Student Service Center	607 871 2123
• Registrar	
• Student Accounts	
Parent Relations	
Director of Parent Programs	607 871 2612
Health Services/Health Records	
Wellness Center: Health Services	607 871 2400
Student Affairs	
Vice President for Student Affairs; Dean of Students	607 871 2132