

Muhlenberg College Catalog

One Hundred Sixty-Ninth Academic Year

2016-2017

Allentown, Pennsylvania 18104-5586 Telephone: 484-664-3100 TTY/TDD: 484-664-3623 Fax: 484-664-3234

Information given in this catalog is correct as of the date of publication. Unexpected changes may occur during the academic year. Therefore, the listing of a course or program in this catalog does not constitute a guarantee or contract that the particular course or program will be offered during a given year.



Muhlenberg College was named in 1867 in honor of the patriarch of the Evangelical Lutheran Church in America, Henry Melchior Muhlenberg. His three sons made important contributions to the early life of our country. **General Peter Muhlenberg** wintered at Valley Forge with George Washington; Frederick Augustus Muhlenberg was the first speaker of the United States House of Representatives; **Henry Ernst Muhlenberg** was one of the most eminent early American scientists and the first president of Franklin College, now Franklin and Marshall College.

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Purposes and Resources



Founded in 1848 to provide a liberal arts education in the Judeo-Christian humanistic tradition, Muhlenberg College is committed to the highest standards of academic integrity and excellence. It is an independent, undergraduate, coeducational institution related to the Evangelical Lutheran Church in America.

The College is located in Allentown, Pennsylvania, in the residential "west end" neighborhood, approximately 55 miles north of Philadelphia and 90 miles west of New York City. The College benefits by being situated next to Allentown's famous park system.

Mission Statement

Muhlenberg College aims to develop independent critical thinkers who are intellectually agile, characterized by a zest for reasoned and civil debate, committed to understanding the diversity of the human experience, able to express ideas with clarity and grace, committed to life-long learning, equipped with ethical and civic values, and prepared for lives of leadership and service.

The College is committed to providing an intellectually rigorous undergraduate education within the context of a supportive, diverse residential community. Our curriculum integrates the traditional liberal arts with selected preprofessional studies. Our faculty are passionate about teaching, value close relationships with students, and are committed to the pedagogical and intellectual importance of research. All members of our community are committed to educating the whole person through experiences within and beyond the classroom.

Honoring its historical heritage from the Lutheran Church and its continuing connection with the Evangelical Lutheran Church in America, Muhlenberg encourages, welcomes, and celebrates a variety of faith traditions and spiritual perspectives.

Muhlenberg Academic Learning Goals

Muhlenberg Graduates:

Intellectual Practices

- Communicate clearly and cogently
- Write and discuss as means of learning and discovery
- Read texts critically
- · Reason effectively with words, numbers, and symbols
- Locate, analyze, evaluate, and share information using emerging and established technologies
- Create and interpret ideas using various modes of representation
- Seek intellectual risks and grapple with ambiguity and uncertainty

Exploration, Discovery, and Integration

- Cultivate curiosity
- Explore and experience various modes of creative expression
- Build a broad disciplinary and inter-disciplinary knowledge base
- Understand that knowledge is embedded in multiple contexts (e.g., social, historical, cultural, scientific, ethical, etc.)
- Develop and apply different modes of inquiry to pose questions and address problems

Engagement and Social Responsibility

- Understand the multiple contexts (e.g., cultural, ethnic, racial, national, socioeconomic, religious, biological, etc.) that shape construction of human differences
- Recognize how hierarchies and disparities shape and are shaped by institutions and social relations
- Make principled decisions as individuals and citizens of local, national, and global communities
- Develop a capacity to act on the basis of one's own reasoned beliefs

The Faculty

The College's most important resource in the fulfillment of its purposes is its faculty, drawn from the major universities of the United States and several other nations. Although more than three-quarters of the full-time teaching faculty at Muhlenberg hold the Ph.D. degree, research and scholarship are undertaken with special regard to their relationship to teaching and learning. Every effort is made to encourage a community of productive scholars and artists who share a passion for effective teaching.

The faculty have developed an academic program that endeavors to resolve the rich complexities inherent in the liberal arts tradition: breadth versus depth, discipline versus flexibility, continuity versus change. As a liberal arts college, Muhlenberg offers programs in the arts, the humanities, the natural and social sciences, and in professional areas such as business, education, pre-medical and pre-theological studies, and pre-law. Flexibility is provided with sensitivity to the individual needs of the student through course options and opportunities for independent study, research, and internships, as well as through a plan for self-designed majors. Through a process of long-range planning and constant review, the College strives to keep its curriculum vital and current with the rapidly changing intellectual world. The excellence and integrity of the Muhlenberg program have been recognized by Phi Beta Kappa and by some 14 additional national honoraries.

The Muhlenberg Tradition

Another important resource of the College is its inheritance of traditional values developed over one and one-half centuries of institutional life. Significant in its tradition are the historic ties between the College and the Lutheran Church. The name Muhlenberg College was adopted in 1867 - 19 years after the College was founded - in honor of the patriarch of the Lutheran Church in America, Henry Melchior Muhlenberg. The sons of Henry Melchior Muhlenberg made important contributions to the early life of our country. General John Peter Gabriel Muhlenberg wintered at Valley Forge with George Washington; Frederick Muhlenberg was the first speaker of the United States House of Representatives; Henry Ernst Muhlenberg was one of the most eminent early American scientists and the first president of Franklin College, now Franklin and Marshall College. All of these men were clergymen who symbolized the relationship of the church to the life of the mind and the life of public service.

Muhlenberg owes much of the distinctiveness of its character and the quality of its life to the historic and continuing relationship with the church. The College believes that its religious background enhances the community of learning within which the search for beauty and truth may flourish. These associations serve to remind us that truly liberating education is not merely a quest for salable answers in the marketplace of ideas but a process through which people acquire self-understanding, a sensitivity to the values inherent in our Western heritage and in other cultures, and an ability to improve the quality of human life.

Diversity Within Community

The College is committed not only to nurturing a sense of oneness and community but also to developing a greater diversity among its members and has initiated special strategies to recruit students, faculty, and staff which will result in a greater diversity in the College community. The development of additions to the curriculum and student life programs as well as the presence of persons from varied ethnic and geographic backgrounds enriches and reforms the tradition of the College.

Muhlenberg enjoys the benefits of extraordinary religious diversity within its community. This provides opportunities for dialogue and understanding truly unique among church-related institutions.

As a further sign of its commitment to fruitful interaction between diverse traditions, the College established the Institute for Jewish-Christian Understanding in 1989. Building on the College's Christian heritage and also acknowledging the significant Jewish presence that has long marked its life, the Institute is devoted to fostering deeper understanding between the two communities.

Lehigh Valley Association of Independent Colleges

The extensive network of colleges in the Lehigh Valley is another significant resource for Muhlenberg. Five other liberal arts institutions are located within a few miles of the campus: Cedar Crest College, DeSales University, Lafayette College, Lehigh University, and Moravian College. Muhlenberg and these institutions form a nationally recognized cooperative organization, the Lehigh Valley Association of Independent Colleges (LVAIC). Through faculty exchanges, cross-registration, joint sessions locally and overseas, cooperative cultural programs, and other kinds of inter-institutional cooperation, LVAIC expands opportunities for Muhlenberg students. (See "LVAIC Cross-Registration.")

Accreditation

Muhlenberg's academic program is accredited by all of the important and appropriate agencies, including the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104, 267-282-5000, the Department of Education of the Commonwealth of Pennsylvania, and the New York State Board of Regents. The College is on the approved list of the American Chemical Society. It is also a member of the Council for the Advancement and Support of Education, the American Association of Colleges of Teacher Education, the College Entrance Examination Board, the Pennsylvania Association of Colleges and Universities, and the National Collegiate Honors Council.

Non-Discrimination Policy

Muhlenberg College does not discriminate on the basis of race, color, religion, national or ethnic origin, sex, sexual orientation, disability, or age in the administration of any of its programs or activities, including admissions, financial aid, and employment.

All inquiries regarding this policy and complaints of discrimination in violation of this policy may be directed to:

Vice President, Human Resources Third Floor, The Haas College Center 484-664-3166

Complaints will be handled in accordance with the appropriate procedures established for resolving such complaints as set forth in student, faculty, and staff handbooks. In addition, inquiries concerning the application of Title IX of the Education Amendments of 1972 (prohibiting discrimination on the basis of sex) may be directed to the Assistant Secretary for Civil Rights, U.S. Department of Education.

Admission Policy



Muhlenberg College is committed to the ideal of excellent standards of scholarship. The College selects students who give evidence of ability and scholastic achievement, seriousness of purpose, quality of character, and the capacity to make constructive contributions to the College community. Evidence of integrity and ethical behavior is important in the admission decision. Careful consideration is given to each applicant as a scholar and as a person with the object being to assemble a class that is academically talented and diversified.

Admission Requirements

Admission to Muhlenberg is based upon a thorough review of each candidate's scholastic performance records and personal qualities. There is no precise admissions "formula;" various factors are carefully considered in each decision made by the Admission Committee. The following credentials are of primary importance:

Secondary School Record

The minimum requirement is the satisfactory completion of a secondary school college preparatory program of at least 16 Carnegie units. These units should include four of English, two (preferably three) of one foreign language, three of mathematics, two (preferably three) of science, two of history, and major academic electives. Exceptions to these requirements will be considered on an individual basis in cases of documented learning disability, home schooling, or other exceptional situations.

The Admission Committee recognizes and encourages secondary school enrollment in accelerated and advanced placement courses. The strength of an applicant's four year secondary school program and achievement is of utmost importance in each admissions decision.

Standardized Tests

Results of the SAT-I or ACT (with writing) and SAT-II Subject Tests are evaluated in conjunction with the applicant's secondary school record. Test results are requested as an additional indication of potential for academic success at the college level. Non-U.S. citizens for whom English is not the first language should submit results of the Test of English as a Foreign Language (TOEFL).

In the spring of 1996, the Muhlenberg faculty and Board of Trustees voted to make the SAT and ACT an optional part of the admissions process. Students choosing not to submit the SAT or ACT are required instead to provide a graded paper with the teacher's grade and comments on it. Such students also are required to interview with a member of the Admission staff. Students wishing to be considered for non-need merit awards and/or honors programs at Muhlenberg must submit the results of SAT or ACT testing. Additional details regarding Muhlenberg's optional standardized testing policy are available from the Office of Admission and are included in each application packet.

Personal Qualities

While the strength of an applicant's academic preparation is of primary consideration, the Admission Committee is also very interested in each applicant as an individual. Muhlenberg College is a small community which thrives upon the variety of contributions made by its members on all levels. The College, therefore, seeks students who will contribute to the campus personally as well as academically. Evidence of an applicant's personal qualities is considered through the breadth and depth of extracurricular pursuits, the personal essay, and the recommendations from the student's school advisor and two teachers of major academic classes. A personal interview with a member of the Admission staff is also helpful in this regard.

Application Procedures

As a charter member, Muhlenberg College participates in the Common Application program along with over 300 other selective colleges and universities across the country. Muhlenberg uses this form exclusively as the required application for admission.

Candidates should begin their applications during the fall of their senior year in secondary school. The complete application file must include the following:

Application for Admission (Common Application Form), completed in detail by the applicant and accompanied by the non-refundable \$50 application fee;

Secondary School Transcript, including seven semesters (10 trimesters) and showing rank in class (if available);

School Report, completed by the applicant's guidance counselor, college advisor, or headmaster;

Teacher References, completed by two instructors who have taught the applicant in major academic subjects; and

Standardized Test results, forwarded to the College from the College Entrance Examination Board or American College Testing Agency. All candidates are encouraged to take the SAT-I or ACT (with writing). Additional subject tests are encouraged as a supplement to a student's high school record and other standardized test scores. These other tests should be chosen with academic experience and interest in mind and may be helpful in placing students into advanced levels of Muhlenberg work. Some students may also wish to be considered for admission under Muhlenberg's optional standardized testing policy (see "Standardized Tests"). Details of that program are available from the Office of Admission and are included in each application packet.

The SAT or ACT normally should be taken at least twice - in the junior year and again in November or December of the senior year.

It is the applicant's responsibility to see that the above-listed credentials are received by the College. *The preferred deadline for applications is FEBRUARY 15*.

Inquiries concerning admission and application procedures should be directed to the Dean of Admission and Financial Aid, Muhlenberg College, 2400 Chew Street, Allentown, PA 18104-5586.

Personal Interview

Muhlenberg believes that an interview with a member of the Admission staff is of value both to the applicant and to the College. A personal interview is strongly recommended for all applicants and <u>required for students who choose</u> <u>not to submit the SAT or ACT</u>. Arrangements for all appointments should be made well in advance of the intended visit by calling the Office of Admission at 484-664-3200. Interviews are conducted for seniors until February 15; juniors may plan their visits after April 1.

Campus tours are available in conjunction with the interview appointment or separately. Arrangements may be made by calling the above listed number.

Early Decision

The Admission Committee will make a formal early commitment of acceptance to candidates whose qualifications indicate strong promise for successful college performance. Muhlenberg subscribes to the "first choice" option of the Early Decision Plan Agreement of the College Entrance Examination Board. This agreement stipulates that Early Decision candidates may file regular decision applications at other colleges with the understanding that they must be withdrawn if accepted under the Early Decision Plan at Muhlenberg. When filing an application for Early Decision, applicants must sign the Early Decision commitment form (included in the application packet) stating that they will abide by the provisions of the Early Decision agreement. It is strongly recommended that students wishing to be considered for Early Decision make arrangements for a personal interview with a member of the Admission staff by January 15.

The Early Decision application deadline is February 15. Notification will be sent from the Admission Committee between December 1 and March 1 provided all application materials are received by the February 15 deadline. Those candidates not accepted under the Early Decision plan but whose credentials warrant further consideration will be deferred to the regular decision applicant group where **full** review will again be made at a later date when additional information is available.

For the class entering in Fall 2016, 323 seats were filled via Early Decision.

Notice of Admission

Muhlenberg grants admission to regular decision candidates by April 1, contingent upon the successful completion of their senior year. The College subscribes to the National Candidate's Reply Date of May 1 for confirmation of enrollment.

Enrollment Confirmation

In order to confirm their enrollment, students accepting the College's offer of admission must submit a non-refundable \$400 reservation deposit (to be credited to the first semester's tuition) by the May 1 Reply Date. Students must also return a signed honor pledge indicating their commitment to abide by Muhlenberg's Academic Integrity Code. This code, which embraces all areas and activities of the academic life of the College, stands as an emblem of the personal integrity and honest dealing which Muhlenberg expects from each of its students. In addition, students must return a signed pledge indicating their commitment to abide by the College's Social Code. Both of these codes are mailed to students at the point of acceptance. Students wishing to obtain copies of the codes in advance of acceptance can do so by requesting copies from the Office of Admission.

Advanced Placement

Students who obtain an Advanced Placement (AP) score of 4 (well qualified) or 5 (extremely well qualified) will receive a course unit credit in the appropriate discipline that will apply toward one of the 34 course units required for graduation and satisfy the corresponding general academic requirement at Muhlenberg. Some departments apply AP credits toward their major requirements; some do not. Students who later choose to or are required to register for the equivalent course will lose the AP credit.

Students who obtain an AP score of 3 (qualified) on the following tests may be exempted from an introductory course and may opt to enter an advanced course (if available), but no course units are earned: Biology and Physics (A.B. degree candidates only). Subject to departmental review, students who obtain an Advanced Placement score of 3 (qualified) on other AP tests may in some circumstances receive a course unit credit or course exemption.

International Baccalaureate Program (IB)

Muhlenberg College will award course units and the fulfillment of general academic requirements for courses and exams taken through the International Baccalaureate Program as follows:

Anthropology: 1 course unit equivalent to ATH 112 - Cultural Anthropology for a score of 6 or 7 on the higher

level exam.

2 course units equivalent to BIO 150 - Principles of Biology I: Organisms & Populations and

Biology: BIO 151 - Principles of Biology II: Cells & Organisms for a score of 6 or 7 on the higher level

exam.

Business: 1 course unit for a score of 6 or 7 on the higher level exam.

Chemistry:

1 course unit equivalent to CHM 100 - Introductory Chemistry for a score of 6 or 7 on the

higher level exam.

Economics: 1 course unit for a score of 6 or 7 on the higher level exam; students must consult the

department chair about equivalent course and about enrollment in additional economic courses.

English: 1 course unit for a grade of 5 or better on the higher level exam.

Foreign Language A1: 1 course unit equivalent to Language 204 for a score of 6 or better on the higher

Languages: level exam.

Physics:

Language B: 1 course unit for Language 204 for a score of 6 or better on the higher level exam.

History: 1 course unit for a score of 6 or 7 on the higher level exam.

Mathematics: 1 course unit equivalent to MTH 121 - Calculus I for a score of 6 or 7 on the higher level exam.

Music: 1 course unit equivalent to MUS 111 - Music Theory I for a score of 6 or 7 on the higher level

exam.

Philosophy:

1 course unit for a score of 5 or better on the higher level exam; 1 course unit for a score of 6 or

better on the standard level exam.

2 course units equivalent to PHY 121 - General Physics I and PHY 122 - General Physics II for

a score of 6 or 7 on the higher level exam; 1 course unit equivalent to PHY 100-110 - Physics

for Life for a score of 5 on the higher level exam.

Psychology: 1 course unit equivalent to PSY 101 - Introductory Psychology for a score of 6 or 7 on the

higher level exam.

Theatre: 1 course unit for a score of 6 or 7 on the higher level exam.

Some departments count IB credit toward their major requirements; some do not. Please consult with the appropriate department chair. Students who later chose to or are required to register for the equivalent course will lose the IB credit.

Admission of Transfer Students

The College accepts a limited number of transfer students for entrance in both semesters of the academic year. Transfer candidates must submit a formal application, a transcript of previous college work, a statement of honorable dismissal from their previous institution, a complete secondary school record, two teacher references, and results from all College Entrance Examination Board tests previously taken. All appropriate forms are included with the application materials. In addition, an interview is required of all transfer applicants and must be completed by the appropriate application deadline.

A minimum of 17 courses must be successfully completed through Muhlenberg toward the 34 course units required for a degree from the College. Each course completed at another institution is evaluated individually as to its transferability.

Applications for transfer must be filed by the preceding June 15 for fall semester entrance and by December 10 for spring semester entrance. Decisions regarding transfer applications are usually announced during the months of May/June and December/January. If the current semester's grades are required for evaluation, the applicant will be so informed and the admission decision will be made as soon as possible after receipt of the grade report or transcript.

Community Colleges

Agreements with Lehigh Carbon Community College and Northampton Community College allow students to apply for admission to Muhlenberg at the time of admission to the community college. Upon completion of their work at the community college, students accepted into this program who have earned a grade point average of 3.00 or greater and who meet all other requirements, may enroll at Muhlenberg to pursue a bachelor's degree. The completion of degree requirements is facilitated through the joint counseling provided. Regulations governing transfer work apply (see "Transfer Courses").

Expenses



Muhlenberg endeavors, within the limits of available funds, to offer its educational opportunities to all who qualify for admission regardless of economic circumstances. Through the income from its endowment and through annual contributions from its alumni and friends, the College has been able to keep its fees well below the actual cost of educating each student.

Expenses, Tuition, and Fees

Charges For Students Enrolling During Academic Year 2016-2017 (Fall 2016, Spring 2017)

St Te	udent Activity a echnology Fee . otal Comprehen	Feesive Feef payable in July and the other half in January)	\$47,825 285 200 48,310
Ro	oom:	Standard	6,025 6,995 6,825 8,020
	oard: laneous F	Cardinal (70 Meal Plan + \$50) Traditional (19 Meal Plan) Bronze (150 Meal Plan + \$300) Silver (175 Meal Plan + \$350) Gold (210 Meal Plan + \$400) Platinum (Unlimited + \$300) Tees and Deposits*	1,310 4,405 3,985 4,405 4,945 5,065
Fe (F Se In	ees Per Course lor for students enro ee Course Load dividual Applie	Unit	5,625 540
(13 forty-five minute lessons per semester) Class Applied Music Fees			270 5 Records .) 400

Audit - Day (per course unit)	2,812.50
Audit - Evening (per course unit)	787.50
Application (not refundable)	50
Penalty Fee (failure to make payment as required)	100
Orientation fee	120
Overload charge per ½ unit	2.812.50

^{*} The College reserves the right to adjust fees at any time without notice.

Meal Plans

The dining experience at Muhlenberg College offers students variety, convenience, and flexibility.

The meal plans were designed with valuable input from our students to meet the changing needs of life both on campus and off. Six unique meal plans offer every student a choice. Whether you're looking for three square meals a day or a snack between meals, there is a meal plan to meet your needs.

Student housing options define required meal plan selection choices. First-year students must select the Platinum, Gold, or Traditional membership. Students residing in the Village, MILE properties, 2201 Chew Street, and off campus are not required to be on a meal plan but may if they so choose. Other meal plans include the Silver, Bronze, and Cardinal memberships. Please see the Dining website at www.muhlenberg.edu/dining or any dining location for details of each plan.

Non-participation in the College meal plan due to medical reasons must be approved by the Director of Student Health Services before the start of each semester. If confirmation is not received before the start of classes for each semester, students will be billed for the meals on a daily basis until such approval is received.

Each student who is a member of the meal plan will use their BergID in the campus dining venues. BergID cards are non-transferable, and use of the card by a person other than the one to whom it is issued is not permitted. If the card is lost, it must be reported immediately to Campus Safety.

Refund Policy

The College has adopted the following regulations with respect to refunds and rebates due to the withdrawal, suspension, or expulsion of a student during the semester that a student is studying on Muhlenberg's campus. Where voluntary withdrawal from Muhlenberg College occurs, \$200 of the comprehensive fee will be retained. In addition and in cases of suspension or expulsion, the College is entitled to a portion of the remaining comprehensive fee in accordance with the following schedule:

- 20 percent if withdrawal occurs during first week;
- 40 percent if withdrawal occurs during second week;
- 60 percent if withdrawal occurs during third week;
- 80 percent if withdrawal occurs during fourth week;
- 100 percent if withdrawal occurs after the fourth week.

Note: Student aid, which must be returned to the awarding agency, cannot be used to satisfy amounts owed to the College.

If a student is scheduled to spend the semester attending an off-campus or study abroad program, the host institution withdrawal policies and deadlines will apply and supersede Muhlenberg's refund policy. The student will be responsible for any withdrawal or penalty fees owed to the host institution.

Withdrawal due to medical reasons approved by the Director of Student Health Services may entitle a student to a pro rata refund of the comprehensive fee. The amount to be refunded, if any, will be decided based upon merit. The following fees and deposits are not refundable: application fee, matriculation fee, orientation fee, reservation deposit for admission, room fees, and charges for tuition, room and board of study abroad or off-campus programs, including host institution withdrawal penalties.

Board Fee: In all cases of withdrawal, a refund of the contract portion of the board fee will be made in proportion to the number of unexpired days remaining, provided the refund is applied for at the time of withdrawal from the College and the student meal plan is surrendered.

Berg Bucks: Unused Berg Bucks will be refunded to a withdrawn student less a service fee of \$25.

Room Fee: A student withdrawing from the College during the semester will receive a refund of room fees only if a replacement, not already residing in the College residential system, is obtained for the room.

The Financial Aid Office is required by federal statute to recalculate federal financial aid eligibility for students who withdraw, drop out, are dismissed, or take a leave of absence prior to completing 60% of a payment period or semester. The federal Title IV financial aid programs must be recalculated in these situations.

If a student leaves the institution prior to completing 60% of a payment period or semester, the financial aid office recalculates eligibility for Title IV funds. Recalculation is based on the percentage of earned aid using the following Federal Return of the Title IV funds formula:

Percentage of payment period or semester completed = the number of days completed up to the withdrawal date divided by the total days in the payment period or semester. (Any break of five or more days is not counted as part of the days in the semester.) This percentage is also the percentage of earned aid.

Funds are returned to the appropriate federal program based on the percentage of unearned aid using the following formula:

Aid to be returned = (100% of the aid that could not be disbursed minus the percentage of earned aid) multiplied by the total amount of aid that could have been disbursed during the payment period or semester.

If a student earned less aid than was disbursed, the institution would be required to return a portion of the funds and the student would be required to return a portion of the funds. Keep in mind that when Title IV funds are returned, the student borrower may owe a debit balance to the institution.

If a student earned more aid than was disbursed to him/her, the institution would owe the student a post-withdrawal disbursement which must be paid within 120 days of the student's withdrawal.

Refunds are allocated in the following order:

- Federal Direct Unsubsidized Student Loan
- Federal Direct Subsidized Student Loan
- Federal Perkins Loans
- Federal Direct Parent (PLUS) Loans
- Federal Pell Grants for which a Return of funds is required
- Federal Supplemental Opportunity Grants for which a Return of funds is required
- Other assistance under the Title for which a Return of funds is required (e.g., LEAP)

Financial Obligations

The comprehensive fee, room and board, and other charges incurred by the student, regardless of nature, must be paid consistent with established due dates. Students with outstanding obligations will not be permitted to register, change enrollment status, release transcripts, or participate in commencement exercises until all commitments are met.

Student Payroll Checks and Check Cashing

For proper identification students must present their BergID Card prior to receiving a student payroll check or cashing a check through the College. If the BergID does not reflect the student's legal name, a second form of identification that reflects the student's legal name will be required such as a state driver's license or passport.

Insurance

The College does not carry fire, burglary, theft, or other kinds of insurance to cover the personal possessions of students. It is suggested that such coverage be included in policies carried by parents or be purchased through a separate insurance policy.

All students are required to have health insurance while attending Muhlenberg College. A secondary accident insurance policy is provided for full-time students. A brochure explaining the accident plan is made available to each student.

Financial Aid



Muhlenberg College believes that the primary responsibility for financing a college education rests with the parents and the student. Consequently, the majority of assistance is awarded on the basis of financial need together with demonstrated and potential academic and nonacademic achievement.

The primary purpose of Muhlenberg's financial aid program is to provide counseling and assistance to those students who, without such aid, would be unable to attend the College. The program assists full-time students (those enrolled for a minimum of 3 course units per semester) in meeting their costs through institutional scholarships, grants, student employment, and the three campus-based federal programs: Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Perkins Loans, and Federal Work Study (FWS). The program also distributes information on and processes all outside federal programs, state grants, and other scholarships. Candidates for financial aid will be considered for any form or combination of forms of assistance. Consideration follows Muhlenberg College's policy of nondiscrimination on the basis of race, color, religion, national or ethnic origin, sex, sexual orientation, disability, or age as defined by law.

Basis for Financial Aid

Because each family's financial situation is unique, for determining eligibility for Muhlenberg College need-based aid, the Office of Financial Aid carefully studies the need analysis that it receives from the College Scholarship Service and the Federal Processor. It begins by determining a reasonable student budget that includes expenses to cover tuition, room and board, books and supplies, personal expenses, and travel. Next, it compares this budget with the family's income, assets, and the student's earnings and savings contribution. The difference between college costs and the amount that the whole family can reasonably afford equals the financial need.

If financial need is established, the Office of Financial Aid awards aid to the extent that funds are available. The aid package usually includes a combination of grant, loan, and employment opportunity. The office will also assess the student's eligibility to receive funds from such outside sources as federal and state grants, loans, and private scholarship or grant programs. Early in the senior year, high school students should ask their school guidance counselor about the various applications for these programs.

Financial Aid awards are given out for each academic year. Students must reapply each year by the stated deadlines in order to receive need-based awards in subsequent academic years. Renewals are based upon financial need from the FAFSA and other required documents, academic performance, positive contributions to the College and surrounding community, standing within the College's Social Judicial System, and the availability of funds. Students who have a negative impact on the campus community through their behavior may jeopardize their institutional grant awards. Need-based financial aid is subject to change each year due to changes in the family's financial circumstances. (See "Important Facts" on our website.)

Financial Aid Application Procedures

Prospective Students: A candidate for the first-year class who desires Muhlenberg College need-based grant financial assistance should complete the College Scholarship Service (CSS) financial aid PROFILE form and Free

Application for Federal Student Aid (FAFSA) no later than February 15. A Muhlenberg College Application for Financial Aid must be submitted on the Financial Aid portal by March 1. A signed copy of the parents' and student's 2015 IRS 1040 Tax Return and W2 Form(s) must be submitted to IDOC by March 1. Late applications will be considered only if funds are available. The financial aid PROFILE form and FAFSA are on the financial aid section of the Muhlenberg website. If all forms are received on time, first-year students will be informed of their aid decision by early April. These decisions are made only after affirmative admissions decisions have been reached.

Transfer Students: Transfer candidates are placed on a wait list for Muhlenberg College need-based grant financial aid. Only after returning upperclass students and incoming first-year students are awarded will financial aid transfer candidates be considered for institutional grant aid. Transfer candidates for institutional grant aid must complete the financial aid PROFILE form and FAFSA by March 15. A Muhlenberg College Application for Financial Aid must be submitted on the Financial aid portal by March 1. A signed copy of the parents' and student's 2015 IRS 1040 Tax Return and W2 Form(s) must be submitted to IDOC by April 15.

Continuing Students: Upperclass students applying for Muhlenberg College need-based grant aid should obtain a packet of renewal aid forms before the mid-year break from the Office of Financial Aid. The Free Application for Federal Student Aid (FAFSA) and CSS financial aid PROFILE must be completed by April 15. A Muhlenberg College Application for Financial Aid must be submitted on the Financial Aid portal by April 15. A signed copy of the parents' and student's 2015 IRS 1040 Tax Return and W2 Form(s) must be submitted to the Office of Financial Aid, also by April 15. If all forms are received on time, upperclass students should be informed of their aid decisions in early June. Students may contact the Office of Financial Aid for the penalties regarding filing forms late.

All students wishing to be considered <u>only</u> for Federal grants and loans must only file the FAFSA and if selected for verification, the appropriate documentation.

Independent Students: Students wishing to apply as independents must first consult with the Director of Financial Aid to see if they qualify for that status.

Study Abroad Programs: Students participating in the Muhlenberg International Student Exchange Program (ISEP) or a Lehigh Valley Association of Independent Colleges program may receive federal and Muhlenberg financial aid and should adhere to the requirements and deadlines for upperclass students. Muhlenberg offers grants to students in other approved programs on a competitive basis. In addition, if the courses taken elsewhere are offered through Muhlenberg College, eligible students may also qualify for federal grants and loans.

Types of Aid Awarded by the College

Muhlenberg College Grants: Grant or scholarship funds awarded by the College are gifts that do not have to be repaid. Recipients must demonstrate a financial need, continue to make satisfactory academic progress, and show promise in the areas of campus contributions and college citizenship.

Campus Employment: Priority for on-campus employment goes to students with financial need and is awarded as part of the financial aid package. The Office of Financial Aid manages the program, but students are responsible for obtaining the positions for themselves. The student is paid by check on a monthly basis.

Merit Scholarships: The College also awards various merit scholarships to selected first-year students who demonstrate the potential for outstanding academic achievement. Recipients are to be notified of their selection by April of each year. The awards will be without regard to financial need and will be renewed provided that a 3.00 grade point average is achieved by the end of the second and third years. Students must also achieve a 2.50 cumulative grade point average by the end of their first year.

Ministerial Grants: Regardless of need, dependent sons and daughters of Lutheran pastors of the ELCA and clergy of other denominations with whom the ELCA shares full communion and who are under call for service to the church are eligible for ministerial grants. The College requires eligible students to file the appropriate financial aid applications. Deadlines and procedures for filing are the same as outlined for financial aid applicants. If a student is awarded a Ministerial Grant and also receives federal assistance, the Ministerial Grant may have to be reduced if the

total aid received results in an over award of aid. The minimum grant a student can receive is \$2,000. If the student demonstrates need, the student will receive grant assistance up to half tuition.

Honors Programs: Students with a combined SAT score of 1350 (Critical Reading and Math) or above or ACT of 29 Composite or above and who rank in the top 10 percent of their class are considered for one of three honors programs - Muhlenberg Scholar, Dana Scholars, or RJ Fellows.

Each program provides an enriched academic experience with special seminars and research opportunities. Students receive an annual \$4,000 stipend for each program.

Federal Supplemental Educational Opportunity Grants (FSEOG): The Supplemental Educational Opportunity Grant is a federal grant awarded through Muhlenberg College. It is reserved for students who receive Pell Grants and may range from \$100 - \$4,000 per year.

Federal College Work-Study Program (FWS): This federal program provides students with jobs on campus. Within limitations established by federal guidelines, the College determines weekly hours and wages. Placement is similar to the Muhlenberg campus employment program but is reserved for students with financial need.

Outside Assistance From Federal, State, or Private Sources

Pell Grant: This is a federal grant made available to eligible students with financial need. The application process takes place through the FAFSA. After filing the FAFSA, the student will receive a Student Aid Report (SAR). This SAR will be used by the Office of Financial Aid for determination of the award. This application must be renewed each year.

State Grant Programs: Consult your secondary school counselor to determine the extent of grant support furnished by your state. Residents of Pennsylvania may qualify for grant funds from the Pennsylvania Higher Education Assistance Agency (PHEAA). Other states have similar programs. Some states allow you to apply for state grant assistance using the FAFSA and others utilize a separate application. Be sure to complete the correct application for state grant assistance.

Federal Direct Student Loans: Students may borrow from \$5,500 to \$7,500 annually with low interest and deferred repayment. The maximum you can borrow for undergraduate study is \$31,000. Application instructions are available from the Office of Financial Aid. Independent students may also borrow up to an additional \$4,000-\$5,000 unsubsidized Direct Student Loan.

Restricted Scholarships: Students may also qualify for some of the need-based restricted scholarships administered through the Office of Financial Aid.

Other Sources of Aid: In addition to the programs mentioned above, students should investigate other grant and scholarship programs sponsored by a variety of private organizations, including business corporations, foundations, civic clubs, etc. Check with your high school guidance counselor for a list of local organizations.

Sources of Assistance Not Based on Need

FEDERAL DIRECT PLUS: These loans are meant to provide additional funds for educational expenses. Parents of dependent students may borrow up to the cost of attendance minus all financial aid. Payments may be deferred for the 4 years the student is enrolled at Muhlenberg College.

Army ROTC Scholarships: Muhlenberg students are able to participate in this program at Lehigh University. Students enrolled in the Army program can apply for scholarships that could cover some or all of the comprehensive fee, an allowance for books and supplies, and a monthly stipend for personal expenses. Information on the program may be obtained by contacting your guidance counselor or the Department of Military Science at Lehigh University (http://www.lehigh.edu/~inmil/index.shtml).

Payment plans: The College also offers a 10-month payment plan. Contact the Controller's Office for further information.

Regulations Governing Aid

- 1. To provide for the fullest use of the College's resources, students are required to apply for all outside awards for which they may be eligible.
- 2. Muhlenberg College students on financial aid, including merit scholarship recipients, are required to report their outside awards to the Office of Financial Aid as soon as they are notified of them. No amount of aid, including outside awards and merit scholarships, can ever exceed Muhlenberg's cost of attendance. If necessary, adjustments to Muhlenberg financial aid awards will occur only to the self help portion (federal loans, student employment) for the first \$6,000 a student receives in outside scholarships. Once a student exceeds a total of \$6,000 in outside scholarships, a dollar for dollar reduction in need based Muhlenberg College Grant will occur.
- 3. Students receiving federal or Muhlenberg College financial aid must make *satisfactory academic progress* to retain their awards. (Federal funds include Pell Grants, Federal Supplemental Grants [FSEOG], Work-Study Program [FWS], Federal Perkins Loans, the Federal Direct Student Loan Program, and the Federal Direct Parent Loan for Undergraduate Students [PLUS]). If the student fails to maintain the institutional standards outlined in this section, the student is considered to not be making *satisfactory academic progress* and will lose aid until the standards are met.

First-year students will have a full academic year to meet the minimum standards for satisfactory academic progress. However, should they fail to meet the standards after their first semester, a warning letter will be sent to them explaining the consequences should they fail to meet the minimum standards after their second semester.

Upon formal petition to the Committee on Financial Aid, exceptions may be granted for unusual circumstances. These standards relate only to the awarding of financial aid. (See Academic Difficulty.)

Should circumstances warrant that students need additional time to complete their college requirements beyond the four years, financial aid <u>may</u> be available provided that satisfactory academic progress is being made. Students should contact the Office of Financial Aid for more information. Be aware, however, Muhlenberg College will only provide institutional aid for eight semesters.

- 4. Some families may be selected for a process called Verification. Once notified of this selection, the family has 30 days to complete the verification process. Until the process is completed, <u>no aid</u> can officially be deducted from the student's bill.
- 5. Muhlenberg College funds are awarded only to traditional full-time day degree students for a maximum of eight semesters.
- 6. Muhlenberg College aid may be cancelled as a result of disciplinary suspension or expulsion, academic dismissal, or withdrawal. Any aid recipient wishing to withdraw from a course(s) or from the College should review the impact of the withdrawal on awards with the Director of Financial Aid.
- 7. The Tax Reform Act of 1986 states that financial aid grant awards (money that does not have to be repaid) in excess of the cost of tuition, fees, books, and equipment are subject to federal income tax.
- 8. More detailed information regarding financial aid may be found on our website and all policies are available in our office.

Satisfactory Academic Progress Standards

All students are expected to maintain satisfactory academic progress defined as the minimum cumulative GPA shown in the chart below. Students who fall below these standards are reviewed by the Academic Progress Committee to determine academic standing and extenuating circumstances.

Eligibility for federal/state aid may also be affected by academic progress. Aid will be reinstated once the student has achieved satisfactory academic progress per the Academic Progress Committee and has submitted the required documents for financial aid consideration.

Appeals: Any student who has been denied financial aid may appeal the decision. Request for reconsideration must be submitted in writing to the Director of Financial Aid and include supporting documentation. Reconsideration will be based on the merit of the appeal and is subject to availability of funds and a GPA comparable to the all-College average.

More detailed information may be found on our financial aid website.

Courses Attempted (includes transfer courses)	Minimum Graduation Units	Minimum GPA
4	3	1.50
8	6	1.80
13	10	2.00
17	14	2.00
20	17	2.00
25	21	2.00
29	25	2.00
34	30	2.00

Additional Services Available

Students who have demonstrated exceptional need at Muhlenberg may request the Director of Financial Aid to write an application fee waiver letter to various graduate or professional schools.

Waivers of Graduate Record Examination (GRE) fees are available for students whose FAFSA calculated parental contribution towards their Muhlenberg education is \$1,500 or less.

Student Affairs and Campus Life



College years are a great opportunity for student growth and development. Students learn about themselves and others, including how to relate to individuals and groups with vastly different backgrounds, interests, beliefs, attitudes, and values. Not only is the tolerance of differences expected, but an appreciation and a celebration of these differences is an important outcome of the student's experience. In addition, the student must progress toward self-reliance and independence tempered by a concern for social responsibility.

Efforts to establish and promote such growth and development may be direct or indirect. Counseling and programming serve as clear examples of the direct influences designed to enhance the developmental process while the general social and intellectual atmosphere of a campus, spurred by the role modeling of faculty, staff, and campus student leaders, serve as examples of the indirect influences. Importantly, individuals must seek opportunities to really learn about themselves and others.

The student affairs staff provides students with the opportunity to face the challenge of growth and development. This is done in the residence halls, in athletics, in the health and counseling centers, in student activities, and across the campus.

Academic Resource Center (ARC)

The Academic Resource Center (ARC) provides support for students' academic transition, engagement, growth, and achievement through a holistic, community-based approach.

In helping students to successfully navigate the rigors of a competitive academic environment and become lifelong learners, ARC provides opportunities for students to:

- Strengthen commitment to academic pursuits;
- Improve planning and organization skills;
- Learn to study more efficiently and effectively;
- Cultivate critical thinking and problem solving;
- Acquire knowledge and skills important to the practice of their discipline.

To these ends, ARC offers individual peer tutoring, academic coaching with a professional learning strategist, facilitated study sessions, transition workshops and mentoring, and ESL support. More information regarding ARC services is available at www.muhlenberg.edu/arc.

Athletics and Recreation

Physical development is an important part of a liberal arts education. Muhlenberg has a vibrant athletic program on the intercollegiate, intramural, and recreational levels. These programs emphasize the lifelong value of sports and fitness/wellness and the thrill of competition.

All students develop a greater understanding of optimal well-being through a core physical education course entitled Principles of Fitness and Wellness.

The Life Sports Center is the hub of athletic and recreational activity. Facilities include a six-lane, 25-meter swimming pool, racquetball courts, and wrestling room and feature a large, multi-use field house for indoor tennis, track, basketball, and volleyball. A 47,000 square foot health and fitness center includes state-of-the-art weight training and cardio fitness areas available to all students as well as locker room facilities for varsity athletes, training and equipment issue rooms, and athletics offices. The facility overlooks a lighted artificial turf stadium with 8-lane track and lighted practice and playing fields, all of which support intercollegiate athletics and recreational programming.

Muhlenberg boasts 22 varsity sports, including eleven for men (football, soccer, cross-country, basketball, wrestling, baseball, indoor and outdoor track, golf, tennis, and lacrosse) and eleven for women (field hockey, soccer, volleyball, cross-country, basketball, softball, lacrosse, indoor and outdoor track, tennis, and golf). Men's, women's, and co-educational intramural and recreational programming are available throughout the year. Muhlenberg's varsity teams compete in the Centennial Conference which includes Bryn Mawr, Dickinson, Franklin and Marshall, Gettysburg, Haverford, Johns Hopkins, McDaniel, Swarthmore, Ursinus, and Washington. Non-conference opponents include Drew, Messiah, Susquehanna, U.S.M.M.A. (King's Point), Vassar, and Washington & Lee.

Campus Safety/Police

The Department of Campus Safety/Police provides service to the Campus Community twenty-four hours a day, every day of the year. The Department seeks to provide an educational environment which ensures the safety of students, faculty, staff, and guests within the available resources and through adherence of rules and regulations consistent with the educational mission of the College. Campus Safety Officers are sworn police officers through Lehigh County Court of Common Pleas and have arrest powers per Title 22, Act 501. They perform their duties in a courteous, professional, consistent, and fair manner.

The Career Center

The Career Center promotes career development by encouraging students to integrate their academic and cocurricular experiences and inspiring them to:

EXPLORE - increase awareness of interests, skills, and values; gather information and experience to assist with informed decision making; promote curiosity about the world in anticipation of lives of leadership and service.

PREPARE - develop tools, strategies, skills, and knowledge related to goals; improve ability to understand and communicate the value of an aggregate Muhlenberg experience; consider the challenges of college to career transition and plan for lifelong learning to proactively manage a successful career path.

CONNECT - network with and obtain information from professionals, organizations, alumni, and other resources that will help students meet career goals; confidently demonstrate the ability to connect the campus and classroom experiences to the world beyond Muhlenberg.

To support its mission, the Center offers numerous programs and services for students and the entire Muhlenberg Community.

The Career Center targets first-year students for many of its programs since exploration and planning are recommended over a four-year timeline. Students are encouraged to visit the Center as early as possible and meet with a career counselor. In these sessions, students may choose to discuss topics such as selecting a major, determining career goals, or finding a summer internship.

Among the programs offered are those that expose students to alumni and the world beyond college. Discussions with alumni guest speakers during events, such as Alumni Career Panels, give students the chance to learn about a variety of career fields. Students may participate in the Muhlenberg Shadow Program which links students with alumni or other professionals for an on-site visit over the winter break.

The Career Center holds workshops and special events on topics such as career decision-making, choosing a major, resume writing, developing job search strategies, finding summer internships, networking, LinkedIn, and college-to-

career transition. A comprehensive "Gearing Up for Graduate School" series provides students with expert advice on how to be competitive in the application process.

Internships are available for students seeking experience related to their career interests. These are listed in Berg Career Vault, the Center's online database to which all students have an account. The Career Center takes an active approach to helping students identify potential employers and connect with alumni. Each year, representatives from a variety of fields come to campus to interview students for full-time employment and internships. Hundreds of positions are entered into the "Berg Career Vault" database each year for students to access. For more information on Career Center programs and offerings, please visit www.muhlenberg.edu/careercenter.

Community Engagement

The Office of Community Engagement engages students, employees, and local communities through partnerships intended to catalyze personal, institutional, and community change.

Through the Office, students work with local communities achieving mutual goals. Regular weekly programs and student-led clubs allow students the opportunity to become a consistent part of local communities. Monthly commitments and events encourage students to get to create shorter-term connections both on and off campus. Through courses with community-based components, students connect lessons from community and classroom in meaningful ways. Students organize one-time events, lead weekly programs, advocate for change, tutor, form relationships, coordinate voter registration campaigns, and much more through the Office of Community Engagement.

Counseling Services

Counseling Services at Muhlenberg is designed to meet the needs of individual students for therapy for normal developmental issues, such as homesickness or relationship problems, and for reactive concerns, such as depression or anxiety. Counseling may take the form of individual or group sessions or informative prevention programming on such topics as stress management, relationships, or building self-confidence. Counseling Services also provides alcohol and other drug assessments, treatment, and prevention programming. All staff members are licensed professionals.

Counseling staff members are also available to provide consultations regarding issues or concerns that may be presenting problems for a student or a friend. Consultations are available in person or by telephone on a formal or informal basis to full-time (day) students.

Counseling Services at Muhlenberg College is governed by legal and ethical standards regarding confidentiality. Any and all participation at Counseling Services is strictly confidential; any student wishing information to be released to parents, administrators, etc. must sign a release of information form indicating this intent and authorizing the release. All services provided to full-time day students are of no cost to the student or to the family. Sessions are by appointment which can be scheduled by calling 484-664-3178. Counseling Services is open Monday through Friday 8:30 a.m. to 4:30 p.m. and a counselor is "on call" to handle emergency/crisis situations when the office is closed.

Dining Services

Food plays an important role in nourishing both students and campus life at Muhlenberg College. A vibrant dining experience is vital to creating an environment where all members of the campus community are eager to gather around the same table. Muhlenberg Dining fulfills this need with restaurant quality food made fresh from the best available local ingredients served by friendly and welcoming staff. Whether you choose to relax in the Wood Dining Commons, grab a latte at Java Joe, sample sushi at the GQ, or recharge with a smoothie at the LSC Café, we can offer a dining option to fit your mood and, most importantly, your lifestyle here at Muhlenberg College.

Muhlenberg Dining Services has made a commitment to sustainable practices that include buying local whenever possible, using eco-friendly cleaning products and packaging, and serving fair-trade coffee at every location. We support all campus green initiatives and proudly serve as a member of Muhlenberg's Greening Committee.

Students on a meal plan have access to several different venues on campus:

The **Wood Dining Commons** is a renaissance resulting from years of planning and places Muhlenberg at the top of the list for premier dining facilities.

Students at Muhlenberg carry a full plate of academics, activities, and athletics that keeps them busy from morning to evening. They want to know that there will always be a nutritious meal option available regardless of what time they decide to have lunch or dinner. This ultimate dining experience will offer a variety of options, including traditional comfort foods, international specialties, fresh items hot off the grill, unique salads with the freshest produce, hand tossed pizzas and Italian classics, fresh baked breads for New York style sandwiches, and a fully integrated kosher facility - The Noshery - with separate meat and dairy kitchens! You will always find vegan and vegetarian options at each of our platforms.

The **General's Quarters** or "the GQ" provides a food court atmosphere and features several choices, including customizable sandwiches and hoagies, international cuisines, made to order authentic sushi, fresh hot grill creations, and convenient grab and go options prepared fresh. The GQ is open for breakfast, lunch, dinner, and late night with an extensive selection of organic and all natural products.

Java Joe features a full complement of Starbucks coffee, including hot and cold espresso drinks and organic options. In addition, it offers fresh bakery items made right here on campus as well as a variety of unique sandwiches that can only be found at Java Joe.

LSC Café includes two popular brands -- Cyclone Salads and Freshens Smoothies. Cyclone Salads features made to order salads with the option to choose from a variety of fresh ingredients. Each Cyclone Salad is tossed fresh right in front of you. Freshens offers a menu that is enriched with antioxidants, fresh fruits, invigorating vitamins, healthy Omegas, and high energy ingredients. Conveniently located adjacent to the gym, it is the perfect compliment to a hard work out!

All dining locations accept dining dollars, cash, credit cards, and Berg bucks.

Please visit www.muhlenberg.edu/dining for more information. Find us on facebook and twitter. Download our iPhone app to stay connected.

Environmental Literacy

Muhlenberg College is a member of the association of University Leaders for a Sustainable Future (ULSF), an international organization of signatories to the Talloires Declaration that is committed to higher education leadership for the advancement of global environmental literacy. Carrying out the principles of action in education to promote environmental stewardship, Muhlenberg College strives to unite management, faculty, staff, and students in a collaborative effort to create a sustainable institution. As a member of this global movement, Muhlenberg College fosters sustainable development through environmental literacy by integrating ecosystem and human health principles and concepts and environmental responsibility across its curricula, research, operations, and partnerships.

Fraternity and Sorority Life (FSL)

Fraternity and sorority life at Muhlenberg College consists of eight nationally or internationally affiliated Greek-letter social organizations. Each chapter traditionally holds membership recruitment and education programs in the fall of each year. Students interested in becoming members must meet or exceed certain standards, both behaviorally and academically.

Being a member of a fraternity or sorority provides a host of benefits, including the opportunity to develop and refine leadership skills, participate in local community service and national philanthropic projects, and form lifelong

friendships within an international brotherhood or sisterhood. Members of the FSL community can boast of involvement in practically every facet of campus life and support many campus initiatives. Chapters strive to provide members with growth-oriented opportunities and experiences that are consistent with the mission of the College. *Contact: The Director of Student Leadership Programs, Lower Level, Seegers Union, 484-664-3733*

Health Services

The Health Center is a primary care facility offering health care to full-time (day) students of the Muhlenberg College community. Health care is provided by qualified professionals who have completed state approved educational programs and are licensed to practice their profession in the Commonwealth of Pennsylvania. The Health Center provides a listing of consulting physicians for specialty treatment when this expertise becomes necessary. Students are assisted in securing consultations as appropriate.

The primary services offered by the Center include health promotion and disease prevention, health counseling, selected care during acute phases of illness, and referrals to health care sites outside the College setting as deemed necessary by the student's needs. The staff of the Health Center is committed to serve as educators; students are assisted with concepts of self-care and encouraged to become educated consumers of health care.

All students must submit a completed medical form to the Health Center in accordance with the College's stated deadline. In addition, enrolled students must complete a tuberculosis screening and demonstrate immunization against rubeola, rubella, tetanus, diptheria, mumps, and poliomyelitis. Proof of varicella is required with two properly spaced doses of varicella vaccine, laboratory evidence of immunity, or a reliable history of varicella. It is also required that the Hepatitis B vaccine series be initiated or completed with three doses. Laboratory evidence of Hepatitis B immunity is acceptable. Students residing in college-owned housing are required to have at least one dose of the meningococcal A/C/Y/W-135 vaccine administered after the 16th birthday or a signed waiver declining the vaccine after being given literature on the vaccine and the disease.

The College supports the immunization recommendations of the Pennsylvania Department of Health - Bureau of Communicable Diseases Division. Submission of completed health forms, including proof of immunizations, is required to move-in to the residence halls.

The College provides a limited secondary insurance policy (for accidents only) on all full-time (day) students for services provided outside the Health Center. It is required that students have primary health insurance inclusive of sickness/hospitalization. Students are responsible for any and all charges associated with care, treatment, laboratory studies, and medications. Students are responsible for understanding all terms of their health insurance policy and notifying Health Center personnel of participating providers within their health insurance network.

Housing

Muhlenberg College is a residential campus and all students are required to live on campus unless they are commuting from a parent or guardian's home within the Lehigh Valley. First-year student assignments are made by the Residential Services Staff. Rooms are designated, for the most part, on a first-come, first-served basis according to the date the commitment card and deposit are received by the Office of Admission. Roommates are assigned based on information provided by the student through the Online Housing Application for Incoming Students form.

Upperclass students, in compliance with lottery processes, may apply to live in on-campus housing or in their fraternity or sorority. Junior and senior students wishing to live off-campus must apply according to the Off Campus Policy and Off Campus application process. Students admitted as commuters may live on campus if space is available.

Housing for students consists of six traditional residence halls, group interest housing, Greek housing, the MILE (Muhlenberg Independent Living Experience) program, the Village apartment complex, and the suite-styled Benfer, Robertson, and South Halls. Brown Hall houses women exclusively while Benfer, East, Martin Luther, Prosser, Robertson, South, Walz, and Kathryn P. Taylor halls are coeducational residences. Brown, Prosser, and Walz Halls house first-year students.

Judicial Affairs

Muhlenberg College seeks to educate creative and responsible individuals equipped for lifelong learning and grounded in ethical and civic values that prepare them for lives of leadership and service. The challenges of leadership and service in the twenty-first century are local, national, and international. Our students must be capable of learning from diverse cultures and synthesizing that learning into worthy aspirations pursued with disciplined intelligence, self-insight, honesty, diligence, courage, empathy, and reciprocity.

Muhlenberg College students are members of a community of responsibility. They have a duty to foster and preserve a collegiate environment that encourages the maximum development of themselves, their fellow students, and the larger society. They adhere to the highest standards of good citizenship. They conduct themselves with honesty, integrity, and due regard for the rights and property of others.

The Muhlenberg College Social Code, along with the laws of the city of Allentown, the Commonwealth of Pennsylvania, and the United States, guide actions and are expected to be followed. Students are held accountable for their actions and Muhlenberg College reserves the right to deal with infractions of the Social Code; such infractions may be dealt with through administrative and/or judicial channels. Parents may be notified when a student has gone through the Judicial Process and is found in violation of the Alcohol Policy or other offenses. This notification will be done at the discretion of the Dean of Students and in compliance with the Family Educational Rights and Privacy Act (FERPA).

The most current and updated version of the Social code can be viewed in its entirety by visiting the College's website.

Religious Life

The religious life of the Muhlenberg College community represents the backgrounds and interests of our students. A church-related college of Lutheran heritage, it has a full-time Chaplain as pastor to the community and coordinator of the team of campus ministry staff persons representing various faith traditions. Chapel offices are located in Egner Memorial Chapel. The Roman Catholic Chaplain's office is located at the Newman Center, and the Jewish Chaplain has an office at the Hillel House. The beautiful neo-Gothic Egner Chapel is open regularly for private meditation and many public events. Sunday worship services are conducted in the Chapel: 5:00 p.m. is a Protestant Word and Sacrament worship service; 9:00 p.m. is a Roman Catholic mass. Friday night Shabbat dinner and services are offered at the Hillel House.

A variety of student religious fellowship groups are active on campus including: Chapel (Protestant Christian); Catholic Campus Ministry (Roman Catholic); Hillel (Jewish); DiscipleMakers Christian Fellowship (Christian); Muslim Students Association; Rejoice! Gospel Choir; and Interfaith Leadership Council.

These groups provide regularly scheduled and special event programs in the areas of social activities, meals, education, and community service.

The Hillel House for Jewish Life is found at 2238 Chew Street. It maintains a kosher kitchen, hosts weekly Shabbat dinners and services on Friday nights, and sponsors educational, religious, and cultural events. Hillel also sponsors several off-campus events throughout the academic year and serves as a drop-in center for students.

Located at 2339 Liberty Street is the Newman Center where weekly fellowship dinners and study groups are offered for the Roman Catholic community.

For more information go to www.muhlenberg.edu/religiouslife

Residential Services

The Residential Services program is committed to quality of life in the residence halls, MILE program, and Greek houses. We encourage self-responsibility, facilitate development, and provide an environment conducive to academic success.

Our undergraduate staff includes nine head residents, upperclass students with responsibility for the general administration and maintenance of a residence hall, and over 60 Resident Advisors and Resident Liaisons who take responsibility for each of the floors in the halls, complementing and supplementing the formal education process.

Our professional staff includes a Director of Residential Services, a Senior Associate Director, an Associate Director, an Office Manager, and a Presidential Assistant. Additionally, there is one Assistant Director and one Residence Coordinator who live in campus housing and supervise the undergraduate staff.

Student Activities

The Office of Student Activities plans, supports, and promotes diverse cultural, educational, social, and recreational programs which enhance the quality of campus life and community spirit. The student activities program is student initiated and supports a broad array of experiences (concerts, dances, speakers, comedians, musicians, etc.). The Muhlenberg Activities Council (MAC) is the student organization which works closely with the Office of Student Activities and recommends activities in areas affecting Muhlenberg student life. In addition to working with MAC, this office assists recognized student clubs and organizations in providing special interest programming for Muhlenberg students and provides guidance to groups of students wishing to create new clubs and organizations.

Highlighting the activities calendar at Muhlenberg are a major concert and a performance by a well-known comedian presented each year by the Student Activities Office. Student performers are also provided opportunities to showcase their talents as part of our regular weekend activities. Students frequently perform at various venues on campus as well as during specially designated Talent Shows and theme weekends. Numerous *a capella* groups, theater and dance groups, acoustic musicians, comedians, and student bands take advantage of these opportunities.

Students with Disabilities

Muhlenberg College is committed to ensuring that all qualified students with disabilities are provided reasonable accommodations, auxiliary aids, and services to ensure full access to programs, services, and activities. Students with disabilities who are the most successful at the post-secondary level are those who are appropriately qualified and prepared for independent academic study, have full knowledge of the impact of their disability, who use the accommodations and services they have been approved to receive, and who demonstrate well-developed self-advocacy skills.

Under the ADA (as amended in 2008), a disability is defined as "a physical or mental impairment that substantially limits one or more major life activities, having a record of such an impairment, or being regarded as having such an impairment". Disability documentation submitted to determine eligibility at the postsecondary level must identify the disability and provide a history of the disorder and evidence of the disorder's impact on a major life activity.

At the postsecondary level, it is the student's responsibility to disclose his/her disability and to follow established procedures for requesting services. Muhlenberg College students with documented disorders that rise to the level of a disability who will be requesting accommodations, auxiliary aids, and services are encouraged to identify these needs to the Office of Disability Services as soon as possible after their application to the College has been accepted and their decision to attend has been confirmed. Submission of current, detailed documentation of the student's disability with a completed Disability Disclosure Document is required in order to initiate the process (preferably submitted before the advising period in June). The Office of Disability Services reviews submitted documentation and makes a determination of disability. Once this determination has been made, the Office will discuss the formulation of reasonable, appropriate accommodations, auxiliary aids, and services with the student and may refer the student to other campus departments, as appropriate, for further dialogue and assistance. Accommodations are determined on a case-per-case basis and must be requested by the student each semester.

After the point of disclosure, documentation submission, and determination, it is the student's responsibility to begin a working relationship with his/her instructors by providing Accommodation Plans from the Office of Disability Services. The student should then meet with each of his/her faculty members to discuss accommodations. Faculty members are a valuable resource to help students navigate course requirements more efficiently.

For further information please go to www.muhlenberg.edu/main/aboutus/disabilities.

Graduation Requirements



Because of the rapid pace of cultural and technological change in our society, there is no guarantee that highly specialized training will provide the student with the preparation and knowledge required to respond to the future. A broadly based liberal arts education, however, offers the student the intellectual perspective, problem-solving experience, and communication skills necessary to adapt to a changing world.

Muhlenberg College general academic requirements are designed to furnish the student with the theoretical and practical knowledge that an educated person should possess, regardless of personal career goals. Such knowledge includes an understanding of the major fields of learning, an ability to express oneself clearly and cogently, an understanding of the values found in religious traditions and philosophical reflection, an understanding of epochs, languages, and cultures other than one's own, and above all, an ability to see issues from many sides, to question what is taken for granted, and to view particular events in relation to their larger contexts. The Muhlenberg College curriculum provides opportunities for exploring and integrating ideas while challenging students to question, discuss, and think critically about their own beliefs and values. By fostering such skills and perspectives, a Muhlenberg education seeks to provide the student with the insight and flexibility needed to meet the challenges of the future.

General Academic Requirements

The following academic requirements apply to all liberal arts degree candidates.

I. Academic Skills

Effective writing, speaking, and reasoning are important in all academic disciplines and are hallmarks of the educated person. The development and utilization of these skills will be evident in courses throughout the curriculum. Students are also required to have some knowledge of a language other than English - a skill which helps in understanding the structure of language as well as providing access to another culture. Requirements have been established so that all students may have the opportunity to achieve competency in these skills early in their college experience.

- First-Year Seminars (FY) -- small, discussion-oriented courses that focus on the development of effective
 thinking, writing, and speaking skills. In the concentration on writing, emphasis is placed on the
 formulation of thesis, critical use of evidence, and processes of revision. All students are required to
 complete a First-Year Seminar.
- 2. **Writing (W)** -- competency in writing clear and cogent expository prose. *Required: First-Year Seminar* and two additional writing intensive courses; one of these must be a course designated by the major department.

- 3. Language (FL) -- the development of the basic skills of language acquisition and usage, such as understanding grammatical structure, oral-aural ability, reading comprehension, and writing ability as well as an introduction to the cultural aspects of language study. Required: two courses in the same language OR proficiency adequate to prepare students for the Conversation & Composition course (301, 302) in the language. Students are encouraged to complete the language requirement by the end of the sophomore year.
 - Initial placement in language study is dependent upon experience and placement test results as recommended by the Department of Languages, Literatures, and Cultures.
- 4. **Reasoning (RG)** -- the ability to understand and utilize mathematical and/or logical relationships, to analyze data, to construct and assess arguments, and to make sound judgments. A course used to fulfill the Reasoning requirement may not be double counted for a distribution requirement. *Required: one course.* Students are encouraged to complete the reasoning requirement no later than the end of the sophomore year.

Departments: Computer Science, Mathematics, and Philosophy.

II. Intellectual Breadth

The following requirements provide breadth in the academic experience of all students. Courses meeting distribution designations will introduce students to the different types of assumptions, questions, ways of understanding, and results that characterize various fields of inquiry in the liberal arts. Within a distribution area each course satisfying that area requirement must have a different prefix. A maximum of two courses required for the major may be used to satisfy a distribution requirement.

Departments listed with a distribution area below will generally offer courses with that designation, although there may be certain instances where the department may offer a course in another distribution area. Interdisciplinary Programs that offer a course(s) within a distribution area are listed as well. Because the nature of interdisciplinary programs is to span several academic areas, an Interdisciplinary Program may be listed in more than one distribution area.

1. Arts (AR) one course

Students develop the technical skills, problem-solving ability, judgment, and courage necessary to create new work in the visual, performing, and literary arts, together with the knowledge of the theory, history, and social context of artistic practice.

Departments and Programs: Art, Dance, Music, and Theatre, and Creative Writing. Two 0.5 unit dance technique courses enrolled in a single semester or two 0.5 unit Individual or Class applied Music courses in the same instrument will also satisfy this requirement.

2. **Humanities (HU)** three courses with different prefixes

Students interpret and evaluate issues of human concern, experience, and expression by means of analysis, critical reasoning, and historical reflection. They cultivate knowledge and understanding of human activity and world views across time, geography, and cultures.

Departments and Programs: English; History; Languages, Literatures, and Cultures; Philosophy; Religion Studies; and American Studies, Film Studies, and Jewish Studies

3. Natural Sciences and Mathematics (SC) two courses with different prefixes

Students explore biological, computational, mathematical, and physical theories and paradigms. They use quantitative and scientific problem solving skills to investigate natural phenomena.

Departments and Programs: Biology, Chemistry, Mathematics and Computer Science, Neuroscience, and Physics, and Environmental Science and Sustainability Studies

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4. Social Sciences (SL) two courses with different prefixes

Students investigate how modern institutional structures and social, political, economic, and cultural practices shape and are shaped by individual choices, group behavior, and public policies. Students develop an understanding of the operations of power and ideology across social contexts, relationships, and practices.

Departments and Programs: Anthropology; Business and Economics; Education; Media and Communication; Political Science; Psychology; Sociology; and Innovation and Entrepreneurship and International Studies

III. Exploration and Integration

Muhlenberg College is committed to the interdisciplinary exploration and integration of ideas throughout the four years of undergraduate education. We strive to enable our students to make connections between various areas of knowledge and approaches to inquiry, to prepare for life as global citizens, and to integrate what they are learning in their major with their broad educational experience at Muhlenberg.

1. Cluster Courses (CL) two directly linked courses with different prefixes

Students must enroll in two courses with different prefixes that form an integrated cluster. The courses will focus on a shared area of interest, theme, or question, examining it from the perspective of each discipline. Clustered courses may double count for distribution and HDGE requirements (see below).

2. Human Difference and Global Engagement (DE) two courses

Students must take two designated courses in the areas of Human Difference and Global Engagement. HDGE courses across the curriculum aim to broaden and deepen students' understanding of human difference and to develop the intellectual and civic skills students require for participation in an increasingly diverse and interconnected world. HDGE courses may double count for distribution and cluster requirements.

3. Culminating Undergraduate Experience (CUE)

Culminating Undergraduate Experiences (CUEs) are the capstone experience in a major and provide the opportunity for students to clarify their relationship to a discipline, demonstrate their mastery of content, reflect on accumulated content and experiences, and open new paths for the future. They are required for all majors offered by departments and programs at Muhlenberg College and are the purview of the departments and programs. The CUE can be a credit-bearing course or an assignment embedded within a credit-bearing course.

IV. Physical Education

Courses in physical education are designed to promote an understanding of the elements of physical well-being. All students are required to successfully complete Principles of Fitness & Wellness which is a semester long course exploring the dimensions of wellness and the health related components of fitness. *Students are strongly encouraged to complete the physical education requirement no later than the end of the sophomore year.*

Writing Program

Muhlenberg College offers a cross-curricular writing program in which faculty from almost every department participate. In order to graduate, students are required to pass a minimum of three officially designated writing-intensive (W) courses: one First-Year Seminar, one W-course designated by the student's major, and one W-course from anywhere in the curriculum (including the student's major). Students who are double-majoring are required to

take a W course in each major. Students in self-designed majors should choose an appropriate W course from across the curriculum that is approved by their advisor to serve as the W in their major.

A writing-intensive course is a regular academic course that privileges writing as a mode of learning. Enrollment is limited to twenty students. Students complete a minimum of fifteen pages of writing broken into at least three assignments. One of these assignments should be some kind of re-thinking or extending of an earlier draft (not just cosmetic editing).

The basic premise of the writing program is that writing improves thinking and learning; it is an essential way of acquiring knowledge and of arriving at ideas about it. Another primary assumption of the program is that the ability to write well is not a skill one can acquire in a one-semester course. Instead, students are encouraged to take a number of writing-intensive courses throughout their careers at the College. The Writing Program is supported by a Writing Center that is staffed by trained peer tutors with majors in a wide range of disciplines.

In exceptional cases, students may appeal to the Writing Program Committee to receive special W-credit for a course that is not designated as a W. The fact that a student has done a significant amount of writing in a course, however, is not sufficient reason for assigning special W-credit because a writing-intensive course is a particular kind of collaborative learning experience. Independent studies do not typically count for writing-intensive credit because only regular courses can satisfy graduation requirements. Guidelines for applying for special W-credit are available in the Office of the Registrar. Questions about W-courses in general and special W-credit in particular should be directed to the Writing Program Committee (WPC@muhlenberg.edu).

Exemptions

Exemptions from general academic requirements may be granted to those students who can demonstrate the requisite level of proficiency or understanding by means of a College Board Achievement examination, an Advanced Placement (AP) examination, the International Baccalaureate (IB) program, a Muhlenberg College exemption test, or a College Level Examination Program (CLEP) test.

Fulfilling the general academic requirements through alternate means that can be demonstrated to satisfy the intent of these requirements is permitted with the approval of the Dean of Academic Life and the faculty's Curriculum Committee. Any student, after consultation with his/her advisor and the academic department(s) involved, may submit a proposal for consideration.

Degree Regulations

- 1. Candidates for a degree must earn no fewer than 34 course units, at least 17 of them in courses offered through Muhlenberg.
- Candidates must be certified in a major field of study. Normally, at least half of the courses required for a major must be Muhlenberg courses.
- 3. Candidates must earn a cumulative grade point average of not less than 2.00, based on the total number of Muhlenberg College course units attempted.
- 4. Candidates must earn a grade point average in the major field of study of not less than 2.00, based on the total number of course units required for the major.
- 5. Candidates must normally complete their final two semesters "in residence." A student is considered "in residence" when enrolled for 3 or more course units at Muhlenberg during a traditional academic (fall or spring) semester. This regulation does not apply to students who have been accepted to degree candidacy through the Wescoe School of Muhlenberg College.

- 6. Candidates must satisfy all general academic requirements with one unit courses, except in the case of dance techniques and applied music courses.
- 7. Candidates may satisfy requirements in a major or minor field of study and a general academic requirement concurrently, although only one cluster course may be counted toward a major and a maximum of two courses required for the major may be used to satisfy a distribution requirement.
- 8. Candidates must attend Commencement unless excused by the Office of the Registrar. The policy regarding participation in Commencement by students who have not yet completed all graduation requirements is available in the Office of the Registrar.

The Bachelor of Arts (A.B.) is awarded to degree candidates completing majors in the Arts, Humanities, or Social Sciences divisions. Bachelor of Science (B.S.) degrees are awarded to candidates completing majors in the Natural Sciences or Mathematics division.

Bachelor of Liberal Arts and Sciences

A student who has completed 43 or more course units and the major requirements for both the Bachelor of Arts degree and the Bachelor of Science degree may earn a Bachelor of Liberal Arts and Sciences. Interested students should contact the Office of the Registrar for additional information.

Financial Obligations

All fees - comprehensive, room and board, and other charges (including fines) - incurred by a student, regardless of nature, must be paid in a timely fashion. Students with outstanding balances will not be permitted to enroll for courses or participate in any College activities, including commencement exercises.

Final responsibility for meeting all degree requirements rests solely with the student.

Academic Policies



The course offerings, rules, regulations, and fees appearing in this catalog are announcements only and should not be construed as representing contractual obligations of Muhlenberg College. Muhlenberg College reserves the right to change its academic regulations, courses of instruction, comprehensive fee, charges for room and board or other fees, and degree requirements without notice should it be the judgment of the College that circumstances warrant such changes. Any changes in federal or state law will supersede College policies and requirements published here.

Admission to and attendance at the College are conditional upon compliance with the rules and regulations of the College as now established or hereafter revised, including the Academic Integrity Code and the Social Code. Many of the regulations are published in this catalog; others may be found in the Student Policy and Resource Guide. It is the responsibility of each Muhlenberg College student to know and abide by the regulations of the College.

Academic Integrity Code

The Academic Integrity Code is a communal expression of the importance of academic honesty and integrity. Violations of the Code are violations of community. The Code, to which all incoming students subscribe, governs all College activities, including but not limited to methods for evaluating academic achievement such as examinations, quizzes, tests, themes, reports, recitations, and laboratory exercises. The Academic Integrity Code is printed in full in the Student Policy and Resource Guide and is available on the web; students should familiarize themselves with its provisions.

Academic Difficulty (Warning, Formal Probation, and Academic Suspension)

The College endeavors to help students avoid academic difficulty. Historically, the most successful students attend class regularly, complete and submit assignments in a timely fashion, and seek assistance from instructors, advisors, the Academic Resource Center, Student Health Services, or Counseling Services at the first signs of difficulty. Moreover, students who are successful academically have learned to balance extracurricular activities with academics.

Academic performance is monitored closely by the Dean of Academic Life each semester. The Dean will contact students at the conclusion of each semester whose academic performance indicates a cause for concern. **Academic warning** may be triggered by any combination of two or more failing grades, incomplete grades, unsatisfactory grades, or course withdrawals in a semester; a semester grade point average below 1.800; or a cumulative grade point average less than the standards described in the table that follows.

Formal **academic probation** indicates that the quality of the student's work is below the level that might reasonably be expected to lead to graduation. A semester grade point average below 1.00 or a cumulative grade point average less than the standards described on the chart below identify those students eligible for formal probation. All student performance indicating an eligibility for formal probation will be reviewed by the Dean of Academic Life. After that review, students experiencing serious academic difficulties will be placed on formal probation. Students placed on formal academic probation will be strongly encouraged to meet periodically with the Dean of Academic Life to review their academic progress.

If, at the end of the first semester (five or fewer units), a first-year student has less than a 1.5 grade point average (GPA), there are two alternatives for academic status: **academic probation** or **academic suspension** (mandatory academic leave of absence for one semester).

Further, Muhlenberg College reserves the right to suspend any student after any semester for any of the following reasons: (a) significant academic deficiencies; (b) failure to gain acceptance into a major field of study due to academic performance; or (c) conduct deemed to be detrimental to the interests of the College, such as violation of the Academic Integrity Code. In such cases neither the College nor any of its officers shall be under any liability whatsoever for such dismissal or suspension. The College will not accept transfer courses from any institution earned while a student is serving a disciplinary suspension.

Student progress during the probationary period will be carefully examined. At any time during the period, typically no more than two semesters, the College may remove the student from probation, continue the student on probation, or dismiss the student from Muhlenberg. Furthermore, students on formal probation seeking to enroll additional courses beyond what is considered a "normal load", either at Muhlenberg or elsewhere, are permitted to do so only at the discretion of the Dean of Academic Life; this provision includes enrollment in any type or length of term, including summer or winter terms.

Cumulative academic performance is gauged on the number of course units attempted at Muhlenberg plus any transferred course units. Cumulative grade point averages less than the standards described in the table indicate the level of academic difficulty.

Attempted Course Units	Academic Probation or Suspension	Academic Warning
5 or less	Less than 1.50	Less than 1.80
	Academic Probation	
5.25 through 10	Less than 1.80	Less than 2.00
More than 10	Less than 2.00	

Finally, the College takes the position that any student permitted to enroll should be allowed to judge the wisdom of participating in extracurricular activities. Accordingly, a student experiencing academic difficulty may participate in such activities. Any student placed on academic probation or warning, however, is urged to give thoughtful consideration, in consultation with his or her academic advisor, to the structure of the total College program, curricular and extracurricular.

Academic Renewal

Academic renewal is extended to former Muhlenberg students who have not been enrolled at the College for at least 10 years. It allows them to remove from their cumulative GPA previously taken coursework. This option may be exercised pursuant to the following regulations:

- 1. The student must consult with the Dean of the Wescoe School and the Dean must approve course selection before the student may enroll.
- The option may be exercised only after three course units have been completed with a grade of "C" or better.
- 3. The student must initiate the procedure; it will not be automatic.
- 4. All courses and grades will remain on the student's transcript and be used for graduation honors.
- 5. Courses with grades of D or F will not be included in the calculation of cumulative GPA.
- 6. Courses in which grades of "C-" or better were earned prior to return will be counted toward degree requirements.
- 7. Courses based on credit hours will be converted to course units according to the existing course conversion procedures which apply to all Muhlenberg students.
- 8. This option can be extended only once to any individual student.

Annual FERPA Notification

The Family Education Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights include:

- 1. The right to inspect and review the student's education records within 45 days of the day the College receives a request for access. Students should submit to the office which creates and maintains the record in question a written request that identifies the record(s) they wish to inspect. The College 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 College official to whom the request was submitted, the official shall advise the student of the correct official to whom the request should be addressed.
- 2. The right to request the amendment of the student's education records that the student believes are inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA. Students may ask the College to amend a record that they believe is inaccurate or misleading. A student who wishes to ask the College to amend a record should write the College official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed. If the College decides not to amend the record as requested, the College will notify the student in writing of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
- 3. The right to provide written consent before the College discloses personally identifiable information from the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception, which permits disclosure without consent, is the disclosure to school officials with legitimate educational interests. A school official is defined as a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit

personnel and health staff); a person or company with whom the College has contracted as its agent to provide a service instead of using college employees or officials (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the College.

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

Family Policy Compliance Office U.S. Department of Education 400 Maryland Avenue, SW Washington, D.C. 20202-5920

More information can be found through the Office of the Registrar (www.muhlenberg.edu/main/aboutus/registrar).

Auditing Courses

Students in good academic standing may audit one course per semester with the approval of the instructor. Instructors must explicitly detail their expectations for students auditing their courses at the beginning of the semester, and students must seek the consent of their faculty advisor. Typically, students auditing a course are expected to complete all assignments and participate in class discussions but may not be required to submit written work or take exams. Students may change a course from audit (no course unit attempted) to a regular course unit basis or vice versa during the add/drop period with the approval of the instructor and the faculty advisor by completing an Audit Request form and submitting it to the Office of the Registrar. The student's transcript will list the audited course with a grade of "AU" if the student has satisfactorily completed the audit. If the student fails to fulfill the expectations of the audit, no notation will appear on the transcript.

Changing Courses

Students may add and/or drop courses without academic penalty through the first eight class days of the traditional semester. Enrollment in courses is closed at the conclusion of the add/drop period. The last day to add or drop is identified each semester on the College's academic calendar.

Class Attendance

Muhlenberg College recognizes that a college environment should foster student responsibility. Students are expected to attend classes regularly but are responsible for governing themselves in this matter. It is recognized that interaction in the classroom enhances learning and is usually a significant part of how students' overall performance will be evaluated.

The College recognizes the value of extracurricular experience, but the academic program has priority at Muhlenberg. Moreover, scheduled classes have priority over all other activities. In cases of unavoidable conflict, students have the responsibility of informing their instructors as soon as possible and reaching some kind of acceptable resolution. Absence from a class will not be accepted as an excuse for not mastering class material. The student is responsible for all information presented, the discussion, and the conceptual analysis that take place during classes.

Instructors should inform students in the first week of class of their policy regarding the relationship between attendance, interaction in the classroom, and evaluation in the course.

A student who does not attend the first meeting of a course may be dropped from the course in order to make room for students waiting to enroll. *Students should not assume, however, that missing the first course meeting ensures that they will be dropped from a course.* Non-attendance drops will be processed only at the instructor's request. Please note, all students are responsible for their own enrollment; failure to properly add, drop, or withdraw from a course may result in the award of no course units and/or a failing grade.

Class Standing

First-year students have earned 0 - 6 course units Sophomores have earned 7 - 15 course units Juniors have earned 16 - 24 course units Seniors have earned 25 or more course units

Course Load

A full-time degree candidate normally enrolls for 4 course units per semester. The maximum course load for students during their first semester is 4.5 course units. During all other fall or spring semesters, the maximum course load is 5.5 course units. Summer load is 2 courses at a time for a maximum combined summer load of 4 course units.

In order to maintain full-time status a student must be enrolled in at least 3 course units per semester. Students who wish to enroll for fewer than 3 course units may apply for part-time status in the Office of the Registrar. Part-time students will incur tuition charges at the current per course unit rate plus all fees.

Dean's List

Outstanding academic achievement will be recognized by the Deans of the College each fall and spring semester. Students enrolled for 3 or more course units, having a semester GPA of at least 3.50 with no grades of D, F, U, VF, or VW for the semester will be eligible for Dean's List. Students with an incomplete, in progress, or NG grade will not be eligible for inclusion on the Dean's List until the work is completed and a final grade is recorded, unless the in progress grade is for DNA 955 Dana Forum.

Directory Information

At its discretion, Muhlenberg College may provide "directory information" in accordance with the provisions of the Family Educational Rights and Privacy Act of 1974 (FERPA). Directory information is defined as that information which would not generally be considered harmful or an invasion of privacy if disclosed.

Designated directory information at Muhlenberg College includes the following: student's name, college mail box, home address, telephone listing, email address, major field of study, dates of attendance, class year, enrollment status (full-time, part-time), participation in officially recognized activities or sports, weight and height of members of athletic teams, degrees, honors and awards received. Students may block the public disclosure of directory information by notifying the Office of the Registrar in writing.

Dismissal, Expulsion, Suspension, and Readmission

Muhlenberg College reserves the right to dismiss, expel, or suspend any student for the following reasons: (a) academic deficiencies; (b) failure to gain acceptance into a major field of study; or (c) conduct deemed to be detrimental to the interests of the College. In such cases, neither the College nor any of its officers shall be under any liability whatsoever for such dismissal, expulsion, or suspension. The College will not accept transfer courses from any institution earned while a student is serving a disciplinary suspension.

Students dismissed for academic reasons may be readmitted upon formal application to the Dean of Academic Life after the lapse of at least one academic year. Such an application should give strong evidence of a student's ability to attain a degree. If the application is approved, readmission will be probationary for a period of one fall or spring semester only. A second dismissal will be final, and no application for readmission will be entertained.

Grading

Quality points assigned to each traditional letter grade by course unit:

Grade	Quality Points for 1 course unit
A+, A	4.0
A-	3.7
B+	3.3
В	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D	1.0
F	0.0

AU Successful completion of audit (no course unit awarded, no GPA calculation).

Incomplete. An incomplete may be assigned when the student presents a compelling reason for the inability to complete course requirements by the end of the term. Incompletes will not be calculated in the GPA until such time as they are converted into a traditional letter grade. Completion of the work must be arranged with the instructor and a grade submitted to the Registrar no later than 35 days after the deadline for submitting final grades for the semester. An incomplete grade not assigned a traditional letter grade in 35 days will be recorded as "F".

In Progress. An IP indicates that the course in which the student is enrolled has not ended by the time IP final course grades are due for the term. IP grades will not be calculated in the GPA until such time as they are converted to a traditional letter grade.

NG No grade issued.

Ι

- P Successful completion of pass/fail course (course unit awarded, no GPA calculation. Pass/fail courses failed will be computed in GPA.)
- S Successful completion of zero unit course (no course unit awarded, no GPA calculation).
- U Unsatisfactory performance in a zero unit course (no course unit awarded, no GPA calculation).
- VF Academic Integrity Code Violation (no course unit awarded, treated as failing for GPA calculation).
- VW Academic Integrity Code Violation Withdrawal (no course unit awarded, no GPA calculation).
- W Student withdrew (no course unit awarded, no GPA calculation).

An asterisk (*) indicates that an incomplete was initially recorded for the course then changed to the letter grade which is currently reflected.

A student's grade point average (GPA) is the sum of quality points divided by the total attempted course units.

Graduation Honors

Muhlenberg College grants degrees with honors in three categories: *cum laude*, *magna cum laude*, and *summa cum laude*, based on the cumulative average of all collegiate coursework taken through Muhlenberg. Students will only be considered for graduation honors if they achieve a cumulative GPA of 3.50 or greater in 17 or more graded (not pass/fail) course units offered through Muhlenberg. Students with a cumulative GPA of 3.50 or greater but less than 3.70 will be recognized as *cum laude* graduates; students with a cumulative GPA of 3.70 or greater but less than 3.90 will graduate *magna cum laude*; and students with a cumulative GPA of 3.90 or more will be honored as *summa cum laude* graduates.

Honor and Recognition Societies

Established in 1776 at the College of William and Mary, Phi Beta Kappa is a distinguished fellowship of scholars devoted to liberal education and intellectual pursuits. The Muhlenberg chapter was granted a charter by the national honor society in 1967. Based on national standards, election to Phi Beta Kappa represents the most outstanding academic achievement in the arts and sciences. In addition to GPA requirements, students must have completed a sufficient number of eligible courses (Phi Beta Kappa does not recognize courses focused on applied or preprofessional skills), and they must have studied a foreign language at the college intermediate level. No more than 10% of the students in a graduating class can be admitted to Phi Beta Kappa. Students who meet the strict eligibility requirements receive a letter of invitation from the chapter in the final semester of their senior year. A limited number of juniors will also be awarded early induction each year.

In 2008, Alpha Sigma Lambda, the premier Honor Society for Nontraditional Students chartered the Muhlenberg College chapter, Eta Chi. $A\Sigma\Lambda$ was established in 1945 at Northwestern University to recognize the special achievements of adults who accomplish academic excellence while facing competing interests of family, community, and work.

Muhlenberg has chapters of honor societies and recognition societies in many academic disciplines. Honor societies include Omicron Delta Epsilon (economics), Omicron Delta Kappa (leadership), Phi Alpha Theta (history), Phi Sigma Iota (romance languages), Phi Sigma Tau (philosophy), Pi Mu Epsilon (mathematics), Pi Sigma Alpha (political science), Psi Chi (psychology), and Theta Alpha Kappa (religious studies and theology). Recognition societies include Delta Phi Alpha (German) and Dobro Slovo (Slavic studies). Phi Sigma Tau, the national

philosophy honor society, was founded at Muhlenberg in 1930. Muhlenberg College also maintains a chapter of Alpha Phi Omega, a national service fraternity.

Leave of Absence

A student who wishes to take a leave of absence from the College must notify the Office of the Registrar. Requests should be submitted prior to the beginning of the semester when the leave would take effect. The BergID cards for students taking a leave of absence will be inactivated. A student requesting a leave of absence for medical or psychological reasons must consult the Director of Student Health or the Director of Counseling. A student may have no more than four semesters cumulatively of (1) any single type of leave or (2) a combination of leave(s) of absence and medical leave(s) of absence. Requests for exceptions to this policy should be directed to the Dean of Students and the Dean of Academic Life. Students who have been charged with a disciplinary infraction but who have not yet completed the Judicial process, will be unable to request a Leave of Absence until the Judicial process is complete.

Major Program

Students generally select a field of study during the fall semester of the sophomore year although major declarations may be made earlier or later in consultation with their academic advisor. In order to enter and remain in a department as a major, a student must maintain at least a 2.00 cumulative GPA in courses prescribed by the department. At the end of any semester, a department may drop a student who fails to meet the minimum GPA standard. Students in this situation may remain at the College without a major for a maximum of two semesters, during which time they may seek admission to a new department or attempt to gain re-admission to their former major.

Students must be accepted into a major prior to the senior year and must complete a major program as a part of the College degree requirements in order to graduate.

A student may change from one major to another with the approval of the appropriate department chairs/program directors. Official major declarations must be completed through the Office of the Registrar.

Minor Program

Minor programs are also available in many departments. Course work required for a minor is approximately three-fifths of that required for a major and in no case is less than 5 course units. All rules which currently apply to majors also apply to minors. Any course accepted by the College can be counted simultaneously towards the requirements of both major and minor programs.

No Show Policy

Students who register for classes for a semester but who do not come to campus, check in to housing, or attend or participate in educational activities through the eighth class day of the semester will be Unofficially Withdrawn from the College. The registered classes will be dropped with no W grade assigned, and an application for readmission must be made to the Dean of Academic Life.

Pass/Fail

Full-time, degree-seeking students who have completed at least 16 units with a cumulative GPA of 2.00 or more may elect to enroll for one course unit per semester on a pass/fail basis up to a total limit of three. One of the three pass/fail courses may be taken in the same academic division as the student's major or minor. Courses designated "pass/fail only" are exempt from the pass/fail requirements described here.

No course for which a student elects to enroll on a pass/fail basis may be used to satisfy a general academic requirement or major/minor requirement. In addition, "pass/fail only" courses offered within the student's major or minor do not meet any major or minor requirement.

Only 20 percent of the total enrollment in a course shall be open to students electing the pass/fail option unless this restriction is specifically waived by the instructor. Final grades submitted to the Registrar for these students must be either "P" or "F." A "P" should be considered the equivalent of a traditional "D" or higher.

Courses enrolled on a pass/fail basis that are awarded a grade of "P" will not be used in computing the GPA but will be counted as course units toward graduation; courses failed will be computed in the GPA. Students may change a course from pass/fail to traditional grading or vice-versa only through the add/drop period of the semester.

Program Options

Students at the college are allowed to graduate with a single major, a single major with one or two minors, or a double major. Under circumstances where a student meets the requirements for majors or minors in excess of the previously stated limits, the student must choose which majors or minors he or she wants the college to recognize at graduation. Any course accepted by the College can be counted simultaneously towards the requirements of both major and minor programs.

Repeated Courses

Courses in which the student earns a "B-" or greater cannot be repeated. No course shall be repeated after a subsequent course is taken (i.e. one for which the first is a prerequisite). If a student repeats a course, all grades for the course are calculated into the GPA and listed on the academic record; however, only the course earning the first passing grade is counted toward the 34 course units required for graduation.

Transcript Requests and Release of Information from Academic Records

Muhlenberg College complies with all federal regulations regarding the release of education records as established by the Family Educational Rights and Privacy Act (FERPA). All requests to release information from the student's academic record must include his or her legal signature. This requirement specifically prohibits telephone and e-mail requests. Faxed requests are acceptable. In addition, students may request a transcript via the web. Go to www.muhlenberg.edu/main/aboutus/registrar for more information. The student is the only person who can authorize the release of information from his/her academic record. No one else (parents, friends, spouses, employers, etc.) may do so.

All written requests should be directed to: Muhlenberg College, Office of the Registrar, 2400 Chew Street, Allentown, PA 18104-5586. An information release request should include the student's full name at time of attendance, social security number, dates of attendance, current address, address where the information should be

sent, and handling instructions, if applicable. An administrative fee is assessed for most record release services. Please contact the Office of the Registrar for more information.

Transfer Courses

Almost all courses taken elsewhere must be *transferred* to Muhlenberg College. Courses offered through the LVAIC consortium and any course specifically identified in the College catalog are the only exceptions.

No more than 17 non-Muhlenberg course units (whether transferred or awarded for test scores) may contribute to the 34 course units required to earn a bachelor's degree at Muhlenberg. The College will accept no more than 5 course units for transfer during a traditional academic semester (fall or spring) while 4 course units is the limit for any combination of summer terms. No courses taken concurrently elsewhere -- including online courses -- that exceed the course load unit of 5.5 units per semester will receive credit. Only courses for which a student has earned a "C-" or better will be considered for transfer to Muhlenberg. Courses not using traditional letter grades (A-F) will be considered for transfer only if additional documentation detailing successful completion is provided. Grades earned in transferred courses will not be included in a student's general Muhlenberg grade point average. Once courses have been transferred, they become part of the permanent record and cannot be removed.

Many institutions may not use a course unit system similar to Muhlenberg's. For the purpose of all transfer transactions, the Muhlenberg course unit should be considered equivalent to 4 semester credit hours. In all cases, Muhlenberg College can accept transfer courses only with an official academic transcript from an accredited higher education institution where courses have been successfully completed. Additional information may be obtained in the Office of the Registrar or on www.muhlenberg.edu/main/aboutus/registrar.

Withdrawal from College

A student who wishes to officially withdraw from the College must notify the Office of the Registrar. A student must complete withdrawal procedures prior to the beginning of the first semester in which he or she is not enrolled to ensure that the academic record will accurately reflect his or her intentions. All financial obligations and judicial processes must be satisfied before an official withdrawal can be granted or the academic record can be released. At the time of withdrawal, the student's BergID card will be inactivated.

Withdrawal from Courses

Students may withdraw from courses after the add/drop period until the end of the ninth week of the semester with the approval of their academic advisor. A "W" grade will be assigned indicating that the student has withdrawn from the course.

No course may be withdrawn after the ninth week of the semester except for documented medical reasons certified by the Director of Student Health or the Director of Counseling. The last day to withdraw is identified each semester on the College's academic calendar.

Students may not withdraw from courses so that their semester course load is fewer than 3 units.

All students are responsible for their own enrollment. Failure to properly add, drop, or withdraw from a course may result in no course units awarded and/or a failing grade.

Courses Of Instruction



Programs of Study

Degrees and Certification

Muhlenberg offers three degree programs: the Bachelor of Arts (A.B.), Bachelor of Science (B.S.), and a Bachelor of Liberal Arts & Sciences. A.B. majors include accounting, American studies, anthropology, art history, art studio, business administration, dance, economics, English, film studies, finance, French, history, international studies, Jewish studies, media and communication, music, philosophy, philosophy/political thought, political economy and public policy, political science, psychology, public health, religion studies, Russian studies, sociology, Spanish, and theatre. B.S. majors include biochemistry, biology, chemistry, computer science, environmental science, mathematics, natural science, neuroscience, physical science, and physics. The Bachelor of Liberal Arts & Science is a single degree of 43 or more units.

The College also offers fully accredited programs leading to certification in Pre K-4, 4-8, and secondary (7-12) education. Students must complete a major in an academic discipline together with the requirements for certification.

Academic Divisions and Departments

Presently, the College is organized into four academic divisions as follows:

Division of Arts

Art Dance Music Theatre

Division of Natural Sciences and Mathematics

Biology Chemistry Computer Science Mathematics Neuroscience Physical Education Physics

Division of Humanities

English History Languages, Literatures, and Cultures Philosophy Religion Studies

Division of Social Sciences

Accounting
Anthropology
Business Administration
Economics
Education
Finance
Media and Communication
Political Science
Psychology
Sociology

Interdisciplinary Studies

Interdisciplinary studies combine courses from more than one discipline, permitting students to explore an area of interest from several perspectives. In some cases, two fields are combined to form one major. In others, several disciplines are represented in the major or minor requirements. Where a major is not available, students may concentrate on a topic of interest as they complete the general academic requirements and choose their electives. In this way, they may elect groups of courses of special interest to them.

Interdisciplinary Majors

American Studies Film Studies

Interdisciplinary Sciences

Biochemistry

Environmental Science

Natural Science Physical science

International Studies

Jewish Studies

Philosophy/Political Thought

Political Economy and Public Policy

Public Health

Russian Studies

Interdisciplinary Minors

Africana Studies

Asian Studies

German Studies

Innovation and Entrepreneurship

Latin American and Caribbean Studies

Public Health

Russian Studies

Sustainability Studies

Women's and Gender Studies

Special Interdisciplinary Programs

Dana Scholars Program
Muhlenberg Scholars Program
RJ Fellows Program

The Wescoe School of Muhlenberg College

The mission of The Wescoe School of Muhlenberg College is to provide lifelong learners the opportunity to continue and enhance their education and to do so in ways that recognize their experience, maturity, motivation, life circumstances, and capacity for independent scholarship.

Lifelong learners are very different from traditional-age full-time students. Recognizing this, we offer innovative programs of study with distinct and specialized opportunities. We scoe students can complete a degree by enrolling in classes at night, during the day (on a limited basis), and on weekends.

Accelerated Programs

The Wescoe School offers the bachelor's degree in an accelerated format for the following majors: Business Administration; Business Administration with concentration areas in Healthcare Management, Human Resources Leadership, Financial Services, and Supply Chain Management; and Information Systems. Students learn collaboratively in a feedback-intensive program that prepares them for leadership in their chosen field and graduate level academic study. The curriculum is designed for immediate application to the workplace and develops presentation, leadership, and problem-solving skills.

Students in these programs complete 17 modules of study in a team-based experiential learning environment. They attend one four-hour class each week and meet outside of class for a weekly three- to four-hour session during which they work together on team projects and presentations. The program concludes with a culminating capstone project. This project is completed in cooperation with a local not-for- or for-profit organization whereby the students act as a consulting group to the organization. The students then present their findings to a panel of their instructors.

Liberal Arts Programs

Adult students have the option to enroll in a traditional 15-week program and 8-week weekend sessions. The weekend sessions are available only to Wescoe students and incorporate pedagogical practices appropriate to this population. While most classes feature in-classroom instruction, a limited number of courses are now offered in online and blended learning formats.

Day students may register in courses offered through The Wescoe School's 15-week session during the add/drop period, on a space-available basis, with permission from the appropriate department chair. No more than one such course may be registered in any one semester, and registration is possible only after consultation with the student's academic advisor.

The Wescoe School offers major certificates in every major offered by the College. Students pursue certificates to prepare for future graduate study or to upgrade or learn new skills. In addition to the bachelor's degree, Wescoe students may earn the associate of arts degree in selected majors or enroll in courses for their own enrichment. Additionally, the Wescoe School oversees a highly regarded Teacher Certification Program and on-site workplace learning opportunities. Go to www.muhlenberg.edu/wescoe for more information.

Summer Study

Muhlenberg College offers a variety of day and evening courses during a series of summer sessions. These courses, typically offered in an accelerated format, incorporate pedagogy appropriate for full-time undergraduate students. All course units and grades earned through summer study at Muhlenberg are attributed to the total program of the student and influence the cumulative grade point average and academic standing of the student accordingly. Summer study materials are available through The Wescoe School in early March.

Special Interdisciplinary Programs

Dana Scholars Program (DNA)

Director: Dr. Mohsin Hashim, Professor of Political Science

The Dana Scholars Program of Muhlenberg College provides a four-year experience for outstanding students. As applications for admission are received by the College, exceptional applicants are identified and invited to submit a separate Dana application. Invitees typically are near the top of their high school class, score 1350 (Critical Reading and Math) or greater on the Scholastic Aptitude Test, and, equally important, exhibit distinctive creativity, versatility, and intellectual curiosity. In addition, invitees demonstrate a potential for civic engagement and leadership.

The Dana Program emphasizes creativity and independence of thought through Independent Study and Research. After completing the Dana First-Year seminar, Dana students complete 3.0 course units: 1.0 unit of Dana Directed Studies, a Dana Internship for 1.0 unit, and the Dana Forum for a total of 1.0 unit. All Dana students must complete the Dana Forum - a capstone experience in their Senior year.

Dana Program participants may major in any field of study offered at Muhlenberg. At the discretion of the major department, certain components of the program may be applied toward the major requirements.

Dana Scholars need to maintain a GPA of at least 3.33. Those who successfully complete the Dana Scholars Program are honored by receiving the designation "Dana Scholar" on their diploma and transcript.

Courses

DNA 100-199 - Dana First-Year Seminar

The Dana Forum is designed as a senior year capstone experience to deepen a greater sense of community among Dana scholars and to enrich the intellectual climate on campus. Students register for the Forum in the Fall and Spring semesters of their Senior year. Each year the Forum helps Dana seniors develop and execute collaborative research projects that are tied to the Center for Ethic's annual theme. In the Fall semester, under the supervision of the Director of the Dana Forum, students engage academic questions related to the annual theme chosen by the Center for Ethics. They also form groups of two or three to research a topic of their choice and identify a faculty mentor for the project. The research component of the Dana Forum is completed during the spring semester of the Dana Scholar's senior year. The specific nature of each team's project depends on the students' background, interests, and goals. Because of the goals of the Dana Scholars program, projects that also serve the community are strongly encouraged.

DNA 201 - Dana Sophomore Seminar (.5 course unit)

This course is a requirement of the Dana Program and is designed for Dana students in their sophomore year. It is focused on developing an understanding of community engagement and how Danas, as leaders, can affect their communities both on campus and in society at large. We will explore themes of leadership, identity, motivation, and citizenship. Students will be required to complete assigned weekly readings focused on these themes and engage in a fieldwork component in conjunction with a community group in the Lehigh Valley.

DNA 955 & 956 - Dana Forum (0.5 units/semester course unit)

The Dana Forum is designed as a senior year capstone experience to deepen a greater sense of community among Dana scholars and to enrich the intellectual climate on campus. Students register for the Forum in the Fall and Spring semesters of their Senior year. Each year the Forum helps Dana seniors develop and execute collaborative research projects that are tied to the Center for Ethic's annual theme. In the Fall semester, under the supervision of the Director of the Dana Forum, students engage academic questions related to the annual theme chosen by the Center for Ethics. They also form groups of two or three to research a topic of their choice and identify a faculty mentor for the project. The research component of the Dana Forum is completed during the spring semester of the Dana Scholar's senior year. The specific nature of each team's project depends on the students' background, interests, and goals. Because of the goals of the Dana Scholars program, projects that also serve the community are strongly encouraged.

DNA 960 - Dana Scholars Internship (0.5 or 1.0 course unit)

Dana Internship must meet Muhlenberg College internship criteria. An internship is work experience undertaken for the purpose of applying knowledge from the classroom to a practical work environment and actively reflecting on that activity. Please refer to the College catalog for details on internship requirements.

DNA 975 - Dana Scholars Directed Studies (0.5 or 1.0 course unit)

Students will develop their Dana Scholars Directed Study with a faculty member of their choice. Students are encouraged to develop projects that emphasize creativity or original thought rather than producing summaries of previous work. Dana Scholars Directed Studies can take any form as long as it is agreeable to the student and the mentoring faculty member. The Study may culminate in a paper, performance, presentation, or any other final product deemed appropriate. Open only to Dana Scholars.

Muhlenberg Scholars Program (MBS)

Director: Dr. Daniel Doviak, Associate Professor of Philosophy

The Muhlenberg Scholars Program is designed to enhance the education of talented students by providing unique opportunities for intellectual exploration, growth, and development. Outstanding first-year students are invited to join the Scholars Program when they are admitted to the College. These individuals will normally have Scholastic Aptitude Test scores of 1350 (Critical Reading and Math) or greater, have graduated in the top tenth of their high school class, and have significant extracurricular accomplishments.

Students already studying at Muhlenberg may be admitted to the Scholars Program no later than the fall semester of the sophomore year. To be considered for the program, students should be nominated by a faculty member and have an overall grade point average of at least 3.50.

Scholars courses are small, interdisciplinary, discussion-oriented courses in which the student is encouraged to grapple creatively with problems at the forefront of current research. The emphasis is on original source materials rather than textbooks. The goal is to create a community of inquiry where professor and student reason together about topics of current interest.

Students who successfully complete the Scholars Program receive a special certificate at graduation as well as the designation "Muhlenberg Scholar" on their diploma and transcript. To be eligible for this distinguished honor, a student must have an overall grade point average of at least 3.50 and have achieved at least a 3.250 grade point average in the following Scholars courses:

Required Courses

Scholars First-Year Seminar
Scholars course in the Arts and Humanities
Scholars course in the Social Sciences
Scholars course in the Natural Sciences and Mathematics
Senior Scholar Capstone Seminar
Senior Scholars Project

RJ Fellows Program (RJF)

Director: Dr. Richard Niesenbaum, Professor of Biology, Director of Sustainability Studies, and Rita and Joseph Scheller Endowed Chair

The RJ Fellows Program is an honors community established at Muhlenberg College with support from the Scheller Family Foundation to foster and strengthen the decision-making and leadership competencies of liberal arts students whose intellectual curiosity is matched by a commitment to ethical change. Outstanding applicants to Muhlenberg College who exhibit these qualities in their applications are invited to join the RJ Fellows Program. As well as being among the top graduates of their high school class with Scholastic Aptitude Test scores of 1350 or higher (Critical Reading and Math), individuals invited to participate in the RJ Fellows community demonstrate a passion for leadership and change in their academic and extracurricular achievements, including community service.

RJ Fellows may pursue studies in any field offered at Muhlenberg. Participation in the RJ Fellows Program enhances students' major coursework by deepening their awareness of change and their capacity to affect change within their chosen field. The RJ Fellows community is intensely interdisciplinary. After completing the RJ Fellows First-Year Seminar, fellows take three RJ Fellows designated courses and a Capstone Seminar in the senior year. These courses (many of which satisfy other general academic requirements) are taught by faculty in a variety of disciplines and help students develop an awareness of theories, tools, processes, and practices that help explain how change happens, why change matters, and the possibilities to shape change.

Academic excellence characterizes the RJ Fellows Program, but there is no minimum GPA requirement. Continued eligibility is based on active participation in the RJ Fellows community, in both academic and extracurricular RJ Fellows events, and successful completion of all RJ Fellows Program requirements. The RJ Fellows experience culminates in a Capstone Seminar which provides Fellows an opportunity for advanced intellectual and creative exploration of change and reflection on students' own development as advocates and agents of change. Capstone projects are presented at the annual RJ Fellows Symposium in late spring.

Students who successfully complete the RJ Fellows Program requirements are honored with the "RJ Fellows" designation on their diploma and transcript. Eligibility for this distinction is based on successfully satisfying all of the program requirements:

Required Courses

RJ Fellows First-Year Seminar

Four RJ Fellows designated courses (from at least three different academic divisions)

Arts

Humanities

Natural Sciences and Mathematics

Social Sciences

RJ Fellows Capstone Seminar (Senior Year)

RJ Fellows Symposium (Senior Year)

Self-Designed Major

Highly motivated students may propose a self-designed major not falling within one of the departments, divisions, or area study programs. The proposal must include a coherent rationale for the structure, course content of the major, and the endorsement of a faculty member willing to serve as advisor. Students can find guidelines on the Provost's website in the Curriculum Committee Section. In consultation with the Curriculum Committee's Advisor to Self-Designed Majors and faculty advisor, the student submits the plan to the Curriculum Committee. The proposal must be approved by Curriculum Committee and the Dean of Academic Life, normally prior to the beginning of the junior year and never later than the end of the fifth semester. A student wishing to pursue this option should contact the Dean of Academic Life.

Cooperative Programs

Muhlenberg College has a cooperative program in **Dentistry** with the University of Pennsylvania School of Dental Medicine. Muhlenberg students who are accepted into this program attend Muhlenberg for three years and the School of Dental Medicine for four years. By completing the program, they earn a B.S. degree from Muhlenberg with a biology major (after completing year one of dental school) and a D.D.S. degree from the University of Pennsylvania. Additional information may be obtained from the Health Professions Advisor.

Muhlenberg offers a cooperative 3-2 year combined plan program in **Engineering** with Columbia University. While at Muhlenberg, the student completes the basic preparatory courses for engineering, including mathematics through differential equations, computer science, physics, chemistry, and advanced courses selected on the basis of the field of engineering interest as well as all other general academic requirements. Admission to the affiliated program is automatic upon meeting prerequisite requirements. This program involves three years at Muhlenberg and two years in the professional engineering school leading to the completion of the B.S. degree from Muhlenberg and a B.S. in engineering from Columbia. The 4-2 program involves completion of the B.S. degree in four years at Muhlenberg then continuing in the engineering program for 1½ to 2 years leading to the B.S. degree in engineering. Students interested in these programs should consult Dr. Jane Flood, Department of Physics.

Students interested in **Environmental Science** or **Forestry** may enter the 3-2 year or 4-2 year combined degree program between Muhlenberg College and the School of the Environment at Duke University. Duke University requires at least one introductory course in calculus, statistics, microeconomics, and computer science. Quantitative and analytical abilities are an essential part of this program, so math and statistics courses, beyond the minimum

prerequisites, are strongly recommended. Before attending Duke, the student must complete all Muhlenberg College graduation requirements and the requirements of a chosen major, usually biology, chemistry, environmental science, mathematics, economics, or computer science. For the 3-2 year program a student will receive a B.S. from Muhlenberg College after completing the first year at Duke. Duke University will grant a Master of Environmental Management (M.E.M.) or a Master of Forestry (M.F.) upon completion of the entire program. Areas of study include biohazard science, coastal environmental management, environmental toxicology, chemistry, risk assessment, resource ecology, resource economics and policy, water and air resources, and forest resource management. Students interested in this program should consult Dr. Jason Kelsey, Department of Chemistry.

Muhlenberg College has entered into an early assurance program with the **Lutheran Theological Seminary at Philadelphia**. Students accepted by Muhlenberg will be offered guaranteed admission to LTSP following their graduation from the College, provided that they have completed appropriate prerequisites while at Muhlenberg. For additional information, contact Muhlenberg's Office of Admission or the College Chaplain, Rev. Callista Isabelle.

Muhlenberg College also has a cooperative program with **Drexel University School of Medicine** and the Lehigh Valley Hospital. Students admitted as Lehigh Valley Hospital Scholars into the Integrated Muhlenberg College/ Drexel Program complete all academic requirements of a Muhlenberg student as per the stipulations of the program. Students must meet all program requirements of the Lehigh Valley Hospital and Drexel University School of Medicine. Additional information may be obtained from the Health Professions Advisor.

Muhlenberg College has an Early Assurance Program with **Temple University School of Medicine** and St. Luke's Hospital. A maximum of four Muhlenberg pre-med students are accepted to the medical school each year after completing six semesters of academic work at Muhlenberg. Each applicant must apply to TUSM by August 1st, just prior to beginning their final year of study at Muhlenberg College. Students must fulfill all academic requirements of a Muhlenberg student in addition to meeting all program requirements of Temple University School of Medicine and St. Luke's Hospital. Additional information may be obtained from the Health Professions Advisor.

For students wishing to obtain **Music Certification** (K-12) Muhlenberg offers a cooperative program through Moravian College's Pennsylvania Department of Education (P.D.E.) approved program. To be eligible for admission to the program, students must have completed a preliminary application to teacher certification, have a minimum cumulative GPA of 2.70, a minimum cumulative GPA in the music major of 3.00, a minimum cumulative GPA of 3.00 in all education courses at Muhlenberg, evidence of a successful field experience in EDU 104, 105 Educational Psychology: Child Learning & Development or EDU 106, 107 Educational Psychology: Adolescent Learning & Development, at least 2 units completed in both mathematics and English, and at least 12 units completed in college level courses. Interested students should consult the Department of Music.

The **Occupational Therapy** program is a cooperative agreement between Muhlenberg College and Jefferson College of Health Professions of Thomas Jefferson University (TJU). Students can earn an A.B. degree and an M.O.T. degree in five and a half years after graduation from high school. Students will spend the first three years at Muhlenberg College and then proceed to Jefferson College of Health Professions for the final two and a half years of graduate Occupational Therapy coursework. An A.B. in Psychology from Muhlenberg College will be awarded after successful completion of the first year at Jefferson College of Health Professions. A Master's in Occupational Therapy degree from Thomas Jefferson University will be awarded after successful completion of the third year at Jefferson College of Health Professions. Additional information available from the Health Professions Advisor.

Muhlenberg College has a joint program with the State University of New York (SUNY) State College of **Optometry**. This affiliation agreement allows selected students to complete an A.B. or B.S. degree from Muhlenberg and an O.D. degree from SUNY-Optometry in seven years. Students must maintain the required academic and personal interview standards set forth by the respective institutions. Additional information may be obtained from the Health Professions Advisor.

The **Physical Therapy** program is a cooperative agreement between Muhlenberg College and Jefferson College of Health Professions of Thomas Jefferson University (TJU). Students can earn both a B.S. and a D.P.T. degree in six years after graduation from high school. Students will spend the first three years at Muhlenberg College and then proceed to Jefferson College of Health Professions for the final three years of graduate Physical Therapy coursework. A B.S. in Biology or Natural Science or an A.B. in Dance, Psychology, or Sociology from Muhlenberg College will be awarded after successful completion of the first year at Jefferson College of Health Professions. A D.P.T. degree from Thomas Jefferson University will be awarded after successful completion of the third year at Jefferson College of Health Professions. Additional information may be obtained from the Health Professions Advisor.

Finally, Muhlenberg, in cooperation with Lehigh University, offers a voluntary Army Reserve Officer Training Corps (AROTC) Program within the terms of the cross-registration agreement between the two schools. Grades and course work completed in the 4-year Army ROTC program will be included in the student's academic record at Muhlenberg College. However, only the final 2 courses in the program (the 100 level MS courses) may be counted toward the 34 course unit graduation requirement. Additional information on the program is available in the Office of the Registrar.

Off-Campus and Study Abroad

Semester in Washington, D.C.

Campus Coordinator: Dr. Donna Kish-Goodling, Professor of Economics and Dean of Global Education

Muhlenberg cooperates with thirteen colleges in the Lutheran College Washington Consortium who together offer a semester in Washington. The semester (fall or spring) is designed for juniors and seniors in any major or minor with at least a 3.00 GPA. In addition to seminars drawing upon the special resources available in Washington, there are hundreds of internship possibilities in government, social service agencies, religious groups, medicine, public interest organizations, business, and the arts.

Courses

WSH 950 - Special Topics for the Washington Seminar

The course will vary considerably from semester to semester and will utilize the variety of interests and specialties of the consortium faculties. The topic for the semester will be announced in advance. Visits to offices and agencies will be included as will meetings with officials and experts in Washington. Some examples of special topic courses are Public Relations Seminar, Violence and Values, Photojournalism, and Controversy & the Supreme Court.

WSH 960 - Washington Semester Internship (2 course units)

Each student will serve 25 to 30 hours each week in an internship in an office or agency in Washington, usually in a field related to the student's major. A formal written report will be submitted to the Muhlenberg supervising faculty member at the conclusion of the internship. Pass/fail only, except for students enrolled in a practicum where letter grades A through F are assigned.

Jewish Theological Seminary

Muhlenberg students have the unique opportunity to spend a spring semester studying at List College, the undergraduate program at the Jewish Theological Seminary of America (JTS) in New York. Students will be accommodated in the JTS student housing, situated in the heart of the Upper West Side of Manhattan. This program offers a wide range of courses in all areas of Jewish studies, including the opportunity for more advanced offerings in Hebrew language and text study.

Cross-Registration: Lehigh Valley Association of Independent Colleges (LVAIC)

Full-time, degree-seeking students who have completed at least 3 course units in good academic standing may enroll for up to two courses per semester at any one of the LVAIC member institutions (Cedar Crest College, DeSales University, Lafayette College, Lehigh University, and Moravian College). The student must obtain approvals from his or her faculty advisor. Courses must not be offered regularly by Muhlenberg College and must be within the bounds of a regular course load.

Courses enrolled through the LVAIC cross-registration process are considered Muhlenberg courses for degree requirement and grade point average purposes. Further information regarding the LVAIC policy may be obtained in the Office of the Registrar.

Study Abroad Programs

In a world that is becoming increasingly interdependent, study abroad represents a significant means by which students may better prepare themselves to face challenges of the future. Muhlenberg College encourages students in all majors to study overseas at quality institutions in Europe, Oceania, Asia, Latin America, and Africa. Our list of over 150 approved programs in 60 countries enables students to engage in the academic and social life of host institutions abroad. In addition, some programs provide opportunities for experiential learning through internships and field work research projects that integrate student involvement in local communities.

Students study abroad after completing their sophomore year, for either a semester or for the academic year during their junior year. Upon receiving approval from the Dean of Academic Life for extraordinary circumstances, students may study abroad during the fall semester of their senior year. Students who study abroad on a college approved program during the academic year receive the same financial aid package that would be provided were they to remain on the Muhlenberg campus.

Opportunities for summer study are available through several Muhlenberg departments. Other summer programs must be approved by the Office of Global Education before students can apply to them.

Students interested in study abroad programs should consult with their faculty advisor and the Office of Global Education staff during the fall semester of their sophomore year. To apply for study abroad, students first complete a Muhlenberg College Study Abroad application. Once approved to study abroad by Muhlenberg, students complete host institution application materials. The Office of Global Education will forward all application materials to the overseas institution. Detailed information regarding admission procedures, transfer credit, and the fee structure are available from the Office of Global Education.

Study Abroad Withdrawal and Refund Policy

Off-campus and study abroad programs all begin at different dates than the Muhlenberg College academic calendar. In addition, the majority of host institutions have harsh withdrawal/refund policies if a student withdraws from the program before it starts. Students withdrawing within 90 days of their program start date will be responsible for any withdrawal or penalty fees the College will owe the host institution. In some cases, the entire tuition, room, and board fees charged by the program may be owed. Students are responsible for reading the withdrawal and refund policy for their program before they sign the host institution's acceptance offer. In some cases, the policy is stated in the offer letter. Otherwise, it is on the host institution's application or its website.

NOTE: Student aid, which must be returned to the awarding agency, cannot be used to satisfy amounts owed to the College in the event a student withdraws from an off-campus or study abroad program.

Maastricht University in the Netherlands

The Maastricht study abroad program is specifically designed for Accounting, Business, Economics, and Finance majors who wish to gain an international business perspective. The Maastricht program is offered at the Maastricht University in the Netherlands during the fall semester, and offers courses in business and economics, a maximum of three of which may be used to satisfy the concentration requirement (advisor approval required). Students participating in the Maastricht program are encouraged to take additional concentration area courses at Muhlenberg in consultation with their advisor.

Dublin Program

The Media and Communication Department offers a spring semester study abroad experience at Dublin City University (DCU) located in Dublin, Republic of Ireland. This study abroad program is especially designed for students majoring in Media and Communication, though it is open to all college students meeting the program prerequisites. All coursework is offered in the School of Communications at DCU. A member of the Muhlenberg Media and Communication faculty travels with students to Dublin for the semester. While at DCU, students enroll in 4 courses: The Dublin Seminar, a course in an accelerated format taught by the Muhlenberg faculty member; two Media and Communication electives taught by faculty at DCU; and COM 960 - Communication Internship in a communication related field. An outside agency will match students with their internships during the semester prior to the study abroad experience.

Students participating in the Dublin Program must have completed the following prerequisites: COM 201 - Media & Society and COM 231 - Documentary Research. Although it is not required, students are strongly encouraged to complete COM 301 - Media Theory & Methods prior to their study in Dublin. Interested students should contact the Department Chair regarding application procedures and deadlines.

Specialized Courses

First-Year Seminars (FYS)

First-Year Seminars are small, discussion-oriented courses required of all first-year students and normally limited to an enrollment of 15. Taught by faculty from across the curriculum, First-Year Seminars promote critical thinking, reading, and writing skills. Seminars vary in their subjects. Some examine a topic from an interdisciplinary perspective, others focus on particular issues or questions within a discipline, but all emphasize thinking critically about the values and assumptions underlying various approaches to knowledge.

First-Year Seminars are writing-intensive (W). Evaluation is based on students' writing rather than on examinations. The seminars teach participants how to formulate a thesis and how to collect, evaluate, and cite evidence that supports and qualifies the thesis. Students also learn how to revise their work, rethinking their ideas with the help of the instructor's comments on preliminary drafts. Every First-Year Seminar has an embedded Writing Assistant who is a trained writing tutor.

Clusters (CL)

The Cluster requirement is one of the signature elements in our general education program and must be completed by all students entering Muhlenberg Fall 2013 or later, typically during the sophomore year. Successfully completing the cluster will demonstrate that students have achieved Muhlenberg's learning goal of building a broad disciplinary and interdisciplinary knowledge base.

- 1. Cluster courses support the development of integrative learning.
 - The challenges facing us are increasingly complex and will become more so in our information rich
 environment. In order to navigate these complexities and work toward just solutions, students need the
 ability to integrate knowledge from more than one perspective or discipline in order to understand and
 solve real-world problems.
 - Cluster courses include integrated learning assignments assignments incorporating two or more disciplines as a way to develop complex and interdisciplinary thinking.
- 2. Interdisciplinary thinking and learning is a necessary skill for today's graduates as they pursue careers in multiple fields.
 - Increasingly, employers cite the ability to think creatively across different disciplines as essential to success in the modern job market.
 - Clustering provides opportunities for students to learn and use concepts, research methods, and theories of
 two related academic disciplines to inquire into common questions, problems, and themes posed by faculty
 with complementary expertise.

Classical Civilization

CLS 320, 321 - Classical Mythology

An introduction to major classical myths with particular attention given to the relationship of myth to religion, philosophy, psychology, and history. Readings are from a variety of Greek and Roman authors.

Meets general academic requirement HU (and W when offered as 321).

Special Topic Courses (X80)

Departments may offer at their discretion special topic courses not listed in this catalog. While they may be offered at different levels, all special topic courses will be numbered in the x80's. Descriptions may be found on CapStone Online or in the Office of the Registrar.

Individualized Instruction

No more than a total of 4 course units may be earned through any type of individualized instruction to meet the 34 course unit degree requirement except as required by special programs. No internship, practicum, arranged, or independent study/research course may be used to satisfy a general academic requirement. Internships do not count toward the three course pass/fail limit.

Students may enroll only one internship or practicum during a semester and only one independent study/research course may be taken concurrently with an internship or practicum. Students participating in special programs, such as the Washington Semester or study abroad, are exempt from semester based enrollment limits on internships, practica, or independent study/research courses. The approval of the appropriate department chair, the academic advisor, and a faculty sponsor are required for all individual instruction.

Internships (960) and Practica (965)

An internship is work experience undertaken for the purpose of applying knowledge from the classroom to a practical work environment and actively reflecting on that activity. Internships and practica are limited to full-time, degree-seeking students who have completed at least 16 course units in good academic standing or part-time students enrolled through the Wescoe School of Muhlenberg College.

Internships and practica must be registered prior to the end of the third week of classes in the semester in which the work occurs. For the summer semester, internships and practica must be registered no later than the date noted in the summer academic calendar. Internships taken during the summer for a Muhlenberg course unit will be subject to the tuition cost of one course unit. The deadline for submitting final grades for such courses is that semester's deadline for the final grades. Credit for internships and practica cannot be awarded retroactively.

Each internship or practicum is to be designed in consultation with a faculty sponsor and an on-site supervisor. Ordinarily, no more than one course unit is awarded for each internship or practicum, and at least 9-12 hours of work per week (Fall/Spring) or 126-168 hours per semester (Fall/Spring/Summer) are required for each course unit earned

Such courses will include an academic project to be defined by and submitted to the faculty sponsor for evaluation. This academic project may be written or presented, at the discretion of the faculty sponsor. The internship or practicum on-site supervisor will submit a written evaluation of the student's work which the faculty sponsor will take into consideration when assigning a grade. Internships will be graded pass/fail. Practica are assigned letter grades, A through F.

For all internships and practica, the faculty sponsor must explicitly detail his or her expectations for the student as early as possible in planning the experience. This learning contract describes the goals and what work will be done for each internship or practica. The faculty sponsor normally evaluates a student's work in an individualized instruction course according to standards at least as high as those used to evaluate work in traditional courses.

An internship manual with guidelines and sample learning contracts is available through the Office of the Dean of Academic Life.

Independent Study/Research (970)

An independent study/research course can vary by academic department or discipline. It may be a student-inspired and student-initiated project or a faculty-directed research project. Independent study/research courses normally do not cover the same material as or material similar to that covered in regularly offered courses.

Independent study/research courses must be registered by the add/drop deadline of the semester in which the work occurs. Credit for independent study/research courses cannot be awarded retroactively.

Each independent study/research course is to be designed in consultation with a faculty sponsor. Typically, no more than one course unit is awarded for each course, and no fewer than 9-12 hours of work per week (Fall/Spring) or 126-168 hours per semester (Fall/Spring/Summer) are required for each course unit earned.

For all such courses, a learning contract will describe the goals of the independent study/research and specify what work will be done by the student. Independent study/research courses are assigned letter grades, A through F. For student-inspired and student-initiated independent study/research courses, the student must submit a proposal to the faculty sponsor before registering for the course.

Course Units (Equivalence)

Muhlenberg College uses a course system (units) intended to emphasize the mastery of subject matter in contrast to the credit system that measures achievement in terms of time spent in class. A course as a unit of instruction may include a combination of lecture, discussion, recitation, computer work, group projects, and laboratory work and may vary in the number of scheduled classroom and laboratory meetings. Courses scheduled for 150 minutes of classroom instruction each week also include additional instructional activities (e.g., supplemental workshops, attendance at campus lectures and performances, service learning, field work). The course is the entire learning experience, not merely the time spent in the classroom. Such an approach delegates to students greater responsibility for their own education and encourages active learning.

Each course unit is of equal value and should be considered the equivalent of 4 semester hours for conversion purposes. A full-time degree candidate is typically enrolled for 4 course units during a semester.

Each course listed in this catalog should be assumed to be 1 course unit unless an alternate value is given.

Accounting (ACT)

Department Chair: Dr. Holmes Miller, Professor of Business Associate Professor and Accounting Coordinator: Irwin

Associate Professor: Knox Assistant Professor: Mazziotta

Senior Lecturer and Internship Director: Eisenberg

The Muhlenberg accounting program provides a unique opportunity for students to benefit from a strong liberal arts education while obtaining knowledge and skills in accounting, finance, economics, and business. By proper selection of accounting major and elective courses, students will be prepared to continue on with graduate study or to pursue a variety of careers in public accounting, law, the corporate world, or not-for-profit organizations.

Courses focus on broad accounting concepts and issues but also develop the teamwork, communication, technical, and interpersonal skills necessary to succeed in the professional world today. Students are encouraged to enhance their leadership skills, to develop high ethical standards, and to achieve their full potential throughout this program. A variety of options to pursue study abroad, obtain internships, or spend a semester in Washington, D.C. also exist.

Course Design

All accounting courses include written and oral communication, critical analysis of data, evaluation of ethical dilemmas, study of global issues, and use of information technology for research and presentation. Courses are designed and taught following guidelines prepared by professional organizations. Students learn in a state-of-the-art computerized classroom, using information technology as a tool for researching, analyzing, and communicating financial information. Students frequently work cooperatively and collaboratively to build teamwork and interpersonal skills as they analyze data, make decisions, and apply critical and creative thinking skills. This prepares them for changing conditions and requirements in the professional world. Active learning is achieved by utilization of case studies and financial analysis of publicly held companies.

Special Programs

Internship and Mentoring Opportunities

The Accounting, Business, Economics, and Finance Department has an extensive internship program that provides accounting majors with a wide range of opportunities to gain valuable work experience. Internships may be taken during the summer or during the students' junior or senior years and are available with Big Four professional services firms, regional CPA firms, major corporations, and local businesses. Mentoring opportunities also exist with alumni, members of local professional organizations, and Big Four firms.

Study Abroad

In addition to Muhlenberg's traditional study abroad programs, an international program has been designed especially for students in accounting, business, and economics. The program is offered through the Center for European Studies at Maastricht University in the Netherlands and would generally be enrolled during the fall semester of the junior year. In this program students attend courses in European business, economics, and politics, taught in English. Besides deepening global and cultural awareness, students have opportunities to travel to France, Belgium, and Germany and meet business and political leaders from those countries (see Study Abroad Programs).

Semester in Washington, D.C.

Students who select this program have opportunities for internships, primarily with government agencies and not-for-profit organizations. In addition to the internship experience, the program includes seminars and field trips drawing on the special cultural and political resources available in Washington. Participants also experience living and working in our capital with students from other Lutheran colleges throughout the United States. Students frequently opt for this program during their junior or senior year or during the summer months (see Semester in Washington, D.C.).

150 Semester Hour Options

Many students choose to earn their bachelor degree in accounting at Muhlenberg while simultaneously taking additional coursework to earn 150 semester hours of education. Most state boards of accountancy require 150 semester hours of education prior to licensure as a Certified Public Accountant (CPA). With this option, students graduate with an accounting major with additional course units beyond the Muhlenberg requirements for graduation.

Students who plan to complete 150 hours of coursework, study abroad, or participate in other special programs are encouraged to enroll ACT 101 - Financial Accounting during the spring semester of their first year at Muhlenberg.

In order to provide flexibility to students who choose to meet the standards set by the American Institute of Certified Public Accountants (AICPA) and many state governments for entry into the accounting profession, the accounting major at Muhlenberg can be taken in conjunction with graduate programs offered by other institutions or can be expanded to include additional coursework.

Option 1: Accounting Major and Additional Coursework

Students graduate with approximately 38 units by completing the accounting major and the bachelor degree requirements AND choosing *additional* courses above and beyond graduation requirements for an A.B. in accounting. Each state has its own specific course requirements for the CPA license, so students are encouraged to discuss their choice of additional courses with their advisors early in their accounting major.

Option 2: Accounting Major and Graduate Degree from Another Institution

Students enroll four years at Muhlenberg and one year at another institution. They graduate with an A.B. in accounting from Muhlenberg and receive a graduate degree from the other institution. We currently have an articulation agreement with Lehigh University which has a Master of Science in Accounting and Information Analysis program. This allows students who carefully plan their coursework at Muhlenberg and who have strong academic records to be admitted into Lehigh's program for a fifth year of education. Many other universities have masters programs that are similar.

Option 3: Accounting Major

Students complete the accounting major and bachelor degree requirements. At some later time, they enroll additional coursework to fulfill the 150 semester hour requirement. Choosing this option, will most likely limit job placement opportunities. Many professional services (CPA) firms require that students obtain 150 semester hours by the time they begin work.

Program Requirements

Major Requirements

In order to declare and remain an accounting major in good standing, a student must achieve and maintain a cumulative grade point average of at least 2.00 in courses applicable to the major. Major requirements must be taken at Muhlenberg unless prior written permission is obtained from the department chair or accounting coordinator. Students majoring in accounting cannot take accounting, business, economics, or finance courses on a pass/fail basis.

Because of the many special options and programs available to accounting majors, all students should carefully plan their programs in consultation with their faculty advisor to make sure that they meet graduation requirements and, if applicable, state CPA licensing or graduate program requirements.

A major in accounting must complete 12 courses as outlined below:

Required Courses:

ECN 101 - Principles of Macroeconomics

ECN 102 - Principles of Microeconomics

ACT 101 – Financial Accounting

ACT 201 – Accounting Information Systems

ACT 224 – Cost/Managerial Accounting

ACT 320 or 321 - Intermediate Accounting I

ACT 322 or 323 – Intermediate Accounting II

ACT 326 – Concepts of Federal Taxation

ACT 490 – CUE: auditing & assurance Services

MTH 119 – Statistical Analysis **OR**

MTH 331 – Mathematical Statistics I and MTH 332 Mathematical Statistics II

Elective Courses (choose two):

ACT 330 - Advanced Accounting

ACT 334 – Fraud Examination

BUS 225 - Business Law I

BUS 226 - Business Law II

BUS 236 - Management

BUS 239 – Marketing

ECN 332 or 333 – Public Finance

FIN 237 - Corporation Finance

FIN 330 – Money, Banking, & Financial Markets

FIN 490 - CUE: Advanced Topics in Financial Management

Although there are no prescribed combinations of electives, students should choose electives only after close consultation with their faculty advisor. Electives can and should be enrolled with some specific objective in mind. Certain graduate programs and career paths may require that the student take more than the 12 courses specified above to be adequately prepared to enter the program or profession. Internship opportunities are also available to accounting majors although they do not count toward the major requirements.

Courses

ACT 101 - Financial Accounting

The course will provide the student with a fundamental understanding of accounting as a means for decision making by integrating preparation of financial information and written reports for a variety of users with case discussions and oral presentations. Students will participate in analysis of a company using financial data. Further analysis of the industry with interfirm comparisons will be done in teams.

Prerequisite(s): ECN 101 Principles of Macroeconomics or ECN 102 Principles of Microeconomics.

ACT 201 - Accounting Information Systems

This course will build a broad knowledge of the principles, concepts, and internal controls that support accounting information systems. The identification, collection, processing, analysis, interpretation, and communication of the accounting information needs and requirements of an organization will be examined in relationship to the roles accountants play as designers, users, evaluators, and controllers of those systems. Accounting software, the Internet, databases, and spreadsheets will be used as vehicles for analysis and problem solving. Integrated into the course will be current issues such as electronic commerce, data security, data warehousing, and enterprise resource planning systems.

Prerequisite(s): ACT 101 Financial Accounting with a grade of 'C' or better required. 'B' or better recommended. Sophomore status or permission of the instructor is also required.

ACT 224 - Cost/Managerial Accounting

A study of cost and managerial concepts and their application to the planning and control of manufacturing and service firms. Topics include accounting for the production process (job order, process, standard, and activity based costing); performance and productivity measurement (profit planning, variance analysis, and responsibility accounting); and revenue and cost analysis for decision making (cost estimation, C-V-P analysis, and differential cost analysis).

Prerequisite(s): ACT 101 - Financial Accounting. ACT 320, 321 - Intermediate Accounting I is recommended.

ACT 320, 321 - Intermediate Accounting I

Theoretical bases for accounting practices are explored along with a detailed analysis of the financial statements and accounting principles for valuing assets. Topics include the conceptual framework of accounting, balance sheets, income statements, statements of cash flow, current and long-term assets, and International Financial Reporting Standards. Students will continue to use computers as a tool for preparation, analysis, and presentation of financial data.

Prerequisite(s): ACT 101 Financial Accounting. ACT 201 Accounting Information Systems should also be completed or enrolled concurrently.

Meets general academic requirement W when offered as 321.

ACT 322, 323 - Intermediate Accounting II

Theoretical bases of accounting practices continue to be explored as students learn valuation and reporting techniques for current and long-term liabilities, stockholders' equity, income taxes, post-employment benefits, and leases. Emphasis is placed on accounting practices for large corporations, such as earnings per share and SEC reporting, as well as International Financial Reporting Standards. Four class hours per week.

Prerequisite(s): ACT 201 Accounting Information Systems and ACT 320, 321 - Intermediate Accounting I Meets general academic requirement W when offered as 323.

ACT 326 - Concepts of Federal Taxation

An analysis of income tax fundamentals focusing on the development of tax concepts, tax planning, the Internal Revenue Code, and rulings and decisions interpreting the code. Topics covered will include tax issues, reporting requirements, required treatments, and recent developments in taxation.

Prerequisite(s): ACT 320, 321 - Intermediate Accounting I

ACT 330 - Advanced Accounting

This course will introduce corporate consolidations and mergers and show the procedure needed to prepare and present the financial statements of the consolidated entity. Partnership accounting, especially dissolution and liquidation, and accounting for government and non-profit organizations will be covered as well as international accounting issues.

Prerequisite(s): ACT 322, 323 - Intermediate Accounting II.

ACT 334 - Fraud Examination

This course helps students understand and apply the theory, terminology, and analytical techniques that are used in the investigation of financial crimes. Topics include the nature of fraud, theories of fraud, current research related to fraud, criminal statutes related to financial crimes, forensic accounting procedures, fraud examination methodology, investigative techniques used in solving financial crimes, interviewing, rules of evidence, sources of information, use of technology to detect and prevent fraud, and current issues in financial investigations. Experiential learning activities used in resolving financial crimes will be used

Prerequisite(s): ACT 320, 321 - Intermediate Accounting I

ACT 490 - CUE: Auditing & Assurance Services

This course is the Culminating Undergraduate Experience in accounting. As such, it integrates concepts and skills from earlier coursework in the major and focuses on the theory, environment, and practice of auditing and assurance services as performed primarily by public accountants, but also by internal auditors. Topics include audit planning and risk assessment, including evaluation of internal controls; collection, analysis and evaluation of audit evidence; auditing procedures, tests, and documentation, including sampling techniques; required disclosures and reports; professional standards and ethics; legal obligations of auditors; and corporate governance. Students will also analyze auditing situations through case studies, which utilize a broad base of knowledge and will culminate in both written reports and oral presentations.

*Prerequisite(s): ACT 322, 323 - Intermediate Accounting II

ACT 960 – Accounting Internship

Under close faculty supervision, students will be placed in internship positions with local business and other related organizations in order to gain experience in the application of theories and concepts learned in the classroom. Students will be required to document their experiences in a written journal, to share their experiences with others in a classroom setting, and to prepare a significant term paper or project report and oral presentation. Open to junior and senior majors or minors in good academic standing. Pass/fail only.

Africana Studies Minor (AAS)

Director: Roberta Meek, Lecturer in History and Media and Communication

The Africana Studies minor is an interdisciplinary study of the history, culture, and socio-economic experience of people of African descent living on the African continent and in Black Atlantic societies, including the United States, the Caribbean, and Latin America.

Minor Requirements

The minor in Africana Studies consists of six courses.

Required courses:

AAS 101 – Introduction to Africana Studies

ENG 229 or 232 African American Drama OR

ENG 273 – African American Literature

HST 365 or 366 - the African American Experience I: to 1896 OR

HST 367 or 368 - The African American Experience II: since 1896

SOC 224 or 225 American Ethnic Diversity OR

SOC 235 – Inequality & Power

Electives: Students must complete two electives

One general elective which may be satisfied by any course that engages topics of African American or Africana experience, including the following already existing courses:

COM 372 or 373 - Race & Representation

FRN 330 - Introduction to Francophone Studies

HST 144 – Introduction to History: Music/Civil Rights Movement

HST 369 or 370 – Jewish Latin America & the Caribbean

HST 375 or 376 - Race & Ethnicity in Latin America and the Caribbean

PSC 237 – Government & Politics of Africa

PSC 264 – Politics & Public Space

PSY 425 – Contemporary Racism

REL 363 – Islam in America

SOC 342 – Boundaries Belonging: Sociology of Diasporas

One arts elective which must be satisfied by a course engaging African American or Africana arts (art, dance, film, music, or theatre). Possible already existing courses include the following:

ARH 223 - African American Art

DNC 150 - African Dances & Cultures

FLM 336 - African American Cinema

MUS 229 - World Music

MUS 235 – History of Jazz

THR 339 or 340 - Post-Independence African Theatre

AAS 101 - Introduction to Africana Studies

This course will provide an introduction to the interdisciplinary study of major themes and topics in Africana Studies. It will familiarize students with some of the central debates and problems within the field: Is there such a thing as a "Black" experience? How African is African American culture? What kinds of theories can we advance to explain the relationship between race and a range of social and economic indicators? How have scholars traditionally understood the connections between Africa, the Caribbean, and the Americas? How do issues of gender affect issues of race? What new insights do postmodern and postcolonial theories offer on all these subjects? In addition, AAS 101 will draw on the instructor's scholarly orientations; topics of study may include economic, political, and social institutions and their developments over time; artistic, intellectual, and social movements and their contributions to cultural history; and issues of identity in relation to changing social and cultural structures in Africa and the Diaspora. Students will read major interdisciplinary works in historical and cultural studies and critical race theory. Students will explore influential theories and research methods in Africana Studies as well as the basic methods of interdisciplinary analysis and interpretation.

Meets general academic requirement DE.

AAS 201 - Black Feminist/Queer Theories

This course is designed to introduce students to the theoretical contributions of Black feminist and Black queer artists, activists, and scholars working in a variety of disciplinary fields. Special consideration is given to the interactions amongst Black Women's cultural production and activism; Black Feminist Theory; its concept of intersectionality; and its subsequent spawning of Black Queer Studies and queer of color critique. The course addresses foundational concerns of Black feminist and Black queer practitioners (i.e., reproductive health; sexual violence; homophobia and heteronormativity; the subordination of black women; and the effects of racism and colonialism on Black communities) through the critical examination of a wide range of source material from literature to cultural criticism and visual art to sociopolitical analysis. In addition to building theoretical acumen and analytical skills, the course emphasizes the need to understand the historical and political experiences of the sexual and gender alterity of all black-raced bodies. As an introduction, the course is hyper-focused upon the political and artistic activism of Black feminist and Black queer practitioners during the 1970s and 1980s and its reverberating effect upon sociohistorical analysis and cultural criticism.

Meets general academic requirement DE.

American Studies (AMS)

Director: Dr. Christopher Borick, Professor of Political Science

The discipline of American Studies is aimed at exploring American society and culture(s) from multiple disciplinary perspectives. Students are invited to shape their majors by choosing, based on their interests and strengths, among courses in a variety of fields, for example history, literature, political science, anthropology, sociology, art, music, theatre, economics, religion, philosophy, communication, and women's and gender studies.

Honors in American Studies

The honors program in American Studies is designed for majors who are interested in doing graduate work in American Studies or in another cognate field. Students must be especially motivated and committed to the interdisciplinary intellectual work that this concentrated, intensely focused experience demands. Students are invited by a faculty member during the spring semester of junior year to participate in the American Studies Honors Program. The course work includes two semesters of independent study in the senior year devoted to the development and completion of an honors thesis. Students submit a prospectus for their honors program by the end of the spring semester of junior year. The prospectus should describe a year-long independent study that engages approximately two different academic disciplines and a thesis that, in its final draft, will consist of at least 40 pages.

Major Requirements

Majors complete eleven courses, including the core requirements, the senior seminar, and six electives. To remain an American studies major, a student must maintain a 2.00 grade point average in all courses designated as meeting the major requirements.

Required Courses:

AMS 101 - Introduction to American Studies

ENG 115 - American Writers

PSC 101 - Introduction to American National Government

HST 100-149 – Introduction to History (topic with American history focus)

CUE: Senior Seminar (chosen in consultation with faculty advisor from seminars on topics in American culture(s) offered by the American Studies Program and by other participating departments).

For students seeking Pre K-4 or 4-8 teacher certification this requirement may be met through EDU 101 History & Politics of American Education.

Six electives focusing on American cultural issues in any discipline, spread over at least two different disciplinary areas with at least three of them numbered 300 or above. No 100 level courses can be counted among the electives. The program offers special topic courses, including sophomore seminars, that while not required, can be taken as electives for the major.

Major designated writing intensive courses will be determined in consultation with the Director of American Studies.

Students are encouraged (but not required) to use the courses in the elective field to build a concentration in such areas as ethnic studies, gender studies, or a field that reflects the particular student's interests, for example law and literature, art and politics, or media and society.

AMS 101 - Introduction to American Studies

This course will provide an introductory exposure to the study of American culture through the interdisciplinary methods of American Studies. It will examine a particular topic concerning American cultural and social formations from a specific set of

disciplinary perspectives that will change from semester to semester, depending on the instructor's scholarly orientations. Topics for Introduction to American Studies in different semesters would include, for example, "Representations of the American City", "American Cultural Landscapes", "The Romance of Nature in America", "Performing Class in America", "Americans Abroad", "The Veteran in American Film and Literature", and "Immigration in the Twentieth Century". The common methodology will be, first, the focus on American cultural and social formations and, second, the deployment of at least two different disciplinary perspectives that will supplement as well as complement each other in the process of framing critical investigation of the topic. Pluralizing the perspective of study is intended not only to intensify the engagement with the given topic but to emphasize that identifications of America and of American national culture are contested and changeful. The introductory course will give students the opportunity to become familiar with influential theories in the development of the field that will help prepare them for more advanced course work in American Studies in addition to offering them the chance to investigate the particular topic at issue. The course will be required for majors in American Studies and open to all students.

**Meets general academic requirement HU*.

Anthropology (ATH)

Interim Department Chair: Dr. Sue Curry Jansen, Professor of Media & Communications

Department Chair: Dr. Janine Chi, Associate Professor of Sociology

Assistant Professors: Bywater, Carter, Finkelstein

Visiting Assistant Professors: Campoamor, Cheruoff, Sadeghi

Anthropology is the study of the origins, evolution and diversity of humans as cultural and biological creatures, from our emergence millions of years ago to the present. With a perspective that is holistic, comparative, and interdisciplinary, anthropology is subdivided into specializations that explore the full range of cultural, social, archaeological, evolutionary, and biological aspects of our species, providing a broadly comprehensive assessment of the human condition. Cultural anthropologists deploy an immersive methodology, integrating themselves for an extended period of time into the everyday lives of local communities around the world, documenting the diversity of beliefs and practices associated with language, kinship, religion, politics, economics, illness and health, child-rearing, and other aspects of social life. While archaeologists are interested in the same topics, they use architectural, artifactual, and human remains to reconstruct the human past, extending our understanding of people beyond history.

Honors Program

We offer an honors program that includes conducting advanced original research through a close working relationship with a faculty member. Requirements for admission to the honors program include: 1) a 3.60 GPA in anthropology courses and an overall 3.00 at the time of application; 2) the successful completion of at least two 300 level electives in the department; 3) the successful completion of the methods course requirement; and 4) an application that includes a statement of purpose and a proposal for the research project. This application should be submitted to the candidate's faculty advisor and the department chair in the Spring semester of the junior year. For more information on the Honors Program in Anthropology, students should refer to the department website.

Career Considerations

We offer a sequence of courses designed to help students understand the central concepts, principles, issues, and methods of anthropology. Majors from the department have a strong record of successful applications to graduate programs across the country, as well as employment in academic and research institutions, cultural resource management, law, museums, national parks, civil service, social services, education, public health and policy, marketing research companies, and non-profit research organizations. International organizations such as the United Nations, World Bank, and World Health Organization regularly hire anthropologists for research and policy analysis.

Program Requirements

Major Requirements

Required Courses:

ATH 112 - Cultural Anthropology

ATH 155 - Archaeology & Prehistory

ATH 205 – Anthropological Theory

ATH 313 – Anthropological Ethnography OR

ATH 317 – Field Archaeology OR

ATH 318 - The Archaeology of Objects

Electives: (5 or more of the following courses, at least 2 must be at the 300 level or above; at least 1 elective must be in archaeology and 1 in cultural anthropology)

ATH 211 - Human Evolution

ATH 230 - Inca, Aztec, & Maya

ATH 240 - Witchcraft, Magic, & Sorcery

ATH 262 - Historical Ecology

ATH 291 – Medicine & Culture

ATH 313 - Anthropological Ethnography

ATH 315 - Archaeology of Food

ATH 317 - Field Archaeology

ATH 318 – The Archaeology of Objects

ATH 450 – CUE: Advanced Seminar in Anthropology

Culminating Undergraduate Experience: Majors will fulfill the College's requirement for a Culminating Undergraduate Experience (CUE) in Anthropology in one of two ways:

- a. With enrollment in ATH 450 CUE: Advanced Seminar in Anthropology
- b. Honors Thesis with the successful completion of a project based upon research, originating in a credit-bearing course that has been pre-arranged with a designated project advisor and the student's academic advisor.

Minor Requirements

Required Courses:

ATH 112 – Cultural Anthropology

ATH 155 – Archaeology & Prehistory

ATH 205 – Anthropological Theory

Electives: (3 or more of the following; at least 1 most be at the 300 level or above; at least 1 elective must be in archaeology and 1 in cultural anthropology)

ATH 211 – Human Evolution

ATH 230 - Inca, Aztec, & Maya

ATH 262 - Historical Ecology

ATH 291 - Medicine & Culture

ATH 313 – Anthropological Ethnography

ATH 315 - Archaeology of Food

ATH 317 - Field Archaeology

ATH 318 – The Archaeology of Objects

ATH 450 – CUE: Advanced Seminar in Anthropology

Courses

ATH 112 - Cultural Anthropology

This course introduces students to the concepts, principles, and methods used by cultural anthropologists to understand and explain the diversity of human societies throughout the world. It combines a cross-cultural analysis of different social institutions with the systematic examination of the behavior of individual societies in order to promote a rational understanding of human social and cultural diversity.

Meets general academic requirement DE.

ATH 155 - Archaeology & Prehistory

This course is an introduction to human prehistory and the archaeological techniques used to decipher it. We will examine the origins of human culture, the success of the 3-million-year-old hunting and gathering way of life, the effect of the development of farming and urban life on human health, and the rise of complex society in Africa, Asia, and the Pre-Columbian Americas. Emphasis is placed on archaeology's unique methods of understanding the human past and how this rich heritage contributes to modern society.

Meets general academic requirement DE and SL.

ATH 205 - Anthropological Theory

This course reviews the major theoretical approaches that make anthropology unique among the social sciences. These approaches include evolution, functionalism, structuralism, materialism and cultural ecology, interpretive and symbolic anthropology, and postmodernism. The course is organized historically and chronologically in order to analyze the emergence and development of theories in their broader social, historical, and theoretical contexts. The course focuses on major figures in the field and specific schools of thought, allowing students to better understand both the scientific and humanistic aspects of anthropology.

Prerequisite(s): ATH 112 Cultural Anthropology.

Meets general academic requirement W.

ATH 211 - Human Evolution

This course introduces students to the scientific concepts, principles, methods, and research pertaining to human biological evolution. The course begins with a discussion of evolutionary theory and then applies evolutionary theory to examine: (1) contemporary human biological diversity, (2) the biological and behavioral similarities and differences among human and nonhuman primates, and (3) the fossil evidence for human evolution.

Meets general academic requirement SC.

ATH 230 - Inca, Aztec, & Maya

Latin America contains two geographic regions where civilization developed independently, Mesoamerica and South America. This course focuses upon the origin, development, and expression of the Inca, Aztec, Maya, and their predecessors through time. Themes of power, trade, consumption, ritual, identity, and symbolism will be explored through the lens of archaeology. This course employs the long term perspective of archaeology and anthropology to understand controversial issues such as elite dominance, commoner resistance, warfare, auto-sacrifice, and human sacrifice.

Meets general academic requirement DE.

ATH 240 - Witchcraft, Magic, & Sorcery

This course will examine beliefs and practices of witchcraft, magic, and sorcery in both Euro-American and non-Western societies. Emphasis will be placed on comparative analysis of the dynamics and functions of magical practice in cross-cultural context. Special attention will be paid to answering the following questions: What sorts of cultural information are transmitted through acts of conjuring and witchcraft? What are the social functions of magical ritual? Why do cultures embrace notions of malevolent supernatural power? How is sorcery used to control social behavior? Topics to be addressed include the functions of ritual, shamanism, magic, sorcery, vampirism, divination, possession, sacrifice, and the use of oracles.

Prerequisite(s): ATH 112 Cultural Anthropology or permission of the instructor.

Meets general academic requirement HU

ATH 262 - Historical Ecology

Historical ecology is the study of long term interactions between people, their institutions, and their environments. We will critically evaluate arguments about the current relationship between people and the environment in popular texts using

archaeological, historical, and ethnographic evidence. Many current pressing issues can be assessed more appropriately when viewed from a long-term perspective gained from an historical or archaeological approach. We will focus on some of these issues. Some questions that will be addressed include: Where do people encourage the spread of forests into the greatest desert in the world? Where does an increase in population result in less environmental impact? Can the poor soil of the rainforest support "civilization?" We will also examine the local environment over the past 100 years.

Meets general academic requirement DE.

ATH 291 - Medicine & Culture

States of illness and health are not simply the result of biological processes. If we want to understand why people get sick and how they get better, we should also examine the social and cultural aspects of medicine and disease. This course is an introduction to medical anthropology: the study of cultural meanings, social relations, and systems of power that structure our experiences of illness and health. Students will engage with ethnographic texts and films from Western and non-Western medical settings in order to learn how health, illness, and healing practices are culturally shaped, transformed, and contested.

Prerequisite(s): ATH 112 Cultural Anthropology.

Meets general academic requirement DE.

ATH 313 - Anthropological Ethnography

This course is an introduction to ethnography, the signature method developed by cultural anthropologists for researching cultural issues in contemporary societies. In this course students will learn the fundamentals of ethnographic fieldwork (site selection, archival and documentary research, sampling, participant-observation, structured observation, interviews, survey, genealogy, case study analysis, narrative and symbolic analysis, mapping, ethnologic induction, etc.) and will prepare for field research by studying the ethics of doing anthropology, emic vs. etic perspectives, field logistics, rapport establishment, writing ethnographic fieldnotes, the politics of representation, and the concept of objectivity and reflexivity in writing culture. *Prerequisite(s): ATH 112 Cultural Anthropology.*

ATH 315 - Archaeology of Food

This course uses food as a central axis for considering issues of health/nutrition, subsistence economy, gender roles/relations, ritual/ceremonial life, social inequality, and political power in past societies. These issues will be addressed through an examination of the archaeological residues of food remains and food consumption. Thus, the course has a dual emphasis on anthropological issues and archaeological methods of "food analysis". Understanding past food practices requires consideration of a variety of archaeological evidence, including the food remains themselves, food containers and serving wares, areas of food preparation and consumption, and the human skeleton as a record of consumption. After several weeks considering the methods for analyzing these types of evidence, the course considers the above issues through case studies dealing with topics like cannibalism, feasting, luxury foods, status, gender, and ethnicity.

Prerequisite(s): ATH 155 Archaeology & Prehistory.

ATH 317 - Field Archaeology

An intensive analysis of a particular archaeological site. Utilizing the methodological and theoretical concepts of anthropological archaeology, students will be required to participate in every phase of the scientific research process.

Prerequisite(s): ATH 155 Archaeology & Prehistory or permission of the instructor.

ATH 318 - The Archaeology of Objects

This courses examines the role of material culture in the human world. Objects, especially artifacts, are more than just utilitarian background to our existence; they shape us as much as we modify them. This course provides a methodological and theoretical foundation for the analysis of archaeological and anthropological artifacts. We will examine a variety of materials, including stone, clay/ceramics, basketry, metals, wood, shell, and more. We will examine the process of transforming raw materials into material culture from technological, economic, social, political, and religious perspectives.

Prerequisite(s): ATH 155 Archaeology & Prehistory.

ATH 450 - CUE: Advanced Seminar in Anthropology

An anthropology seminar in which students participate in a collective research and/or applied project. Open only to anthropology majors and minors or by permission.

Prerequisite(s): ATH 205 Anthropological Theory and ATH 313 Anthropological Ethnography or ATH 317 Field Archaeology or ATH 318 The Archaeology of Objects.

Meets general academic requirement W.

Art (ARH, ARS)

Department Chair: Dr. Margo Hobbs Professors: Barnes, da Costa Nunes, Elliott

Assistant Professors: Jones, Orzech

Senior Lecturer: Tuttle

The Department of Art provides pathways for students to explore art, visual creativity, and their history within the liberal arts tradition. The department offers majors and minors in Art History and Studio Art. Its goals are to provide students with a fundamental understanding of art in a cultural context, to introduce them to the rudiments of visual language, to develop and strengthen their technical skills, and to acquaint them with the challenges facing artists in contemporary society. The curriculum is designed to prepare students to meet the entrance requirements of graduate programs in art history, studio art, art education, and related fields, and to prepare students for lives as arts professionals. All art majors are encouraged to participate in activities in the visual arts taking place in the local region, in particular the exhibitions held at the Martin Art Gallery, the Allentown Art Museum, and in New York and Philadelphia.

Art History

The curriculum of the art history program is designed to prepare students to describe, analyze, and interpret visual art in light of social, political, religious, racial, economic, and aesthetic issues, and to understand the fundamental methodological issues of the field. Art history classes include both general historical surveys and in-depth analyses of particular periods. The art history major consists of two introductory art history courses and seven additional courses. The majority of advanced art history courses are offered on a three-year rotating schedule. Art history majors may undertake an internship in museum or gallery studies or an independent study in research methods or intensive reading.

Art History Major Requirements

ARH 101 - Introduction to Art History I ARH 102 - Introduction to Art History II

One writing intensive course in Art History

Five additional courses in Art History or Studio Art, maximum one ARS

ARH 490 - CUE: Methods of Art History (taken in senior year)

Art History Minor Requirements

ARH 101 - Introduction to Art History I OR

ARH 102 - Introduction to Art History II

One writing intensive course in Art History

Three additional courses in Art History or Studio Art, maximum one ARS

Studio Art

The curriculum of the studio art program is designed to develop proficiency in observational drawing and proficiency in one medium resulting from concentrated study, knowledge of the history of visual conventions and issues of this medium and of studio art in general, an ability to articulate these visual issues, and to produce independent work that is informed by a broad knowledge of visual media.

Studio art classes explore the central problems of direct observation of nature and are designed to develop a personal vocabulary, creative problem-solving, and a sensitivity to the visual world. Studio majors may concentrate on any of the following media: painting, printmaking, drawing, sculpture, or photography. ARS 401 - CUE: Senior Studio Seminar: Portfolio Development is taught each fall as a culminating studio experience that introduces studio majors to aspects of the professional art world. ARS 405 - Senior Studio Seminar: Thesis Exhibition is available to highly motivated students. Student internships are available for those who wish to acquire experience in the professional art world.

Studio Art Honors Program

Selected Studio seniors are invited to enroll in ARS 405 - Senior Studio Seminar: Thesis Exhibition during the spring semester. Students enrolled in this course are invited to submit an application to the faculty for honors designation. Departmental Honors in Studio Art will be granted to majors who have met the following conditions:

- The candidate has earned a minimum graduation GPA of 3.20
- The candidate has met the expectations of ARS 401 CUE: Senior Studio Seminar: Portfolio
 Development and ARS 405 Senior Studio Seminar: Thesis Exhibition. These expectations will be clearly
 established by faculty members participating in the seminar sequence.
- The candidate has successfully participated in the Senior Art Exhibit, and the faculty has juried the exhibited work to be of superior quality. The faculty will jury the work based on concept, research and preparation, technical execution, and presentation.

Studio Art Major Requirements

ARH 101 - Introduction to Art History I

ARH 102 - Introduction to Art History II

A writing intensive course in the department, generally

ARH 218 - Modern Art 1 course OR

ARH 222 - Contemporary Art

ARS 113 - Drawing Studio

ARS 209 - Digital Foundations

One ARS sequence through the 300 level (example: ARS 120, ARS 220, ARS 320)

One additional ARS 100 level course

ARS 401 - CUE: Senior Studio Seminar: Portfolio Development

Studio Art Minor Requirements

ARH 101 - Introduction to Art History I OR

ARH 102 - Introduction to Art History II

ARS 103 - Drawing I OR

ARS 113 - Drawing Studio

One ARS sequence through the 200 level (example: ARS 120, ARS 220)

One additional ARS 100 level course

History of Art Courses (ARH)

ARH 101 - Introduction to Art History I

A survey of the major works of architecture, painting, and sculpture of Western Civilization from the pre-historic period to the Late Middle Ages. Elements of style and the relationship of the work of art to its historical era are stressed. Offered every fall semester.

Meets general academic requirement HU.

ARH 102 - Introduction to Art History II

A survey of the major works of architecture, painting, and sculpture of Western civilization from the Renaissance to the modern era. Elements of style and the relationship of the work of art to its historical era are stressed.

Offered every spring semester.

Meets general academic requirement HU.

ARH 103, 104 – History of Modern Architecture

A survey of architectural history from the eclectic historicism of the late Victorian period to the present in America and Europe; an analysis of style, materials, and the philosophy underlying the development of modern architecture.

Meets general academic requirement HU (and W when offered as 104).

ARH 201 - Ancient Art

A survey of Aegean, Greek, and Etruscan art. An analysis of stylistic modes and thematic concerns and their relationship to historical and cultural contexts.

Meets general academic requirement HU.

ARH 207, 208 - Baroque Art

A survey of painting, sculpture, and architecture from 1580 to 1680; an analysis of stylistic modes and their relationship to historical and cultural contexts.

Meets general academic requirement HU (and W when offered as 208).

ARH 209, 210 - Nineteenth Century Art

A survey of European painting from 1780 to 1880. Emphasis is placed on the development of Neo-Classicism, Romanticism, Realism, and Impressionism, stylistically and in relation to their cultural and historical contexts.

Meets general academic requirement HU (and W when offered as 210)

ARH 211, 212 - American Art

A survey of painting, sculpture, and architecture from pre-Revolutionary times to the early twentieth century. An analysis of style and subject matter, it considers the imagery from cultural, historical, political, and social perspectives.

Meets general academic requirement HU (and W when offered as 212).

ARH 215, 216 - British Art

A survey of painting and graphic art from the Renaissance to the modern era. An analysis of style and subject matter, it considers the imagery from cultural, historical, political, and social perspectives.

Meets general academic requirement HU (and W when offered as 216).

ARH 217, 218 - Modern Art

A survey of painting and sculpture in Europe and America from 1880 to the present. The evolution of style is examined in context of social, historical, and cultural issues.

Prerequisite(s): ARH 101 Introduction to Art History I or ARH 102 Introduction to Art History II.

Meets general academic requirement W.

ARH 221, 222 - Contemporary Art

A survey of painting, sculpture, and new media from 1970 to the present. New approaches to art production and exhibition are analyzed in relation to social, political, and cultural contexts.

Prerequisite(s): ARH 101 Introduction to Art History I or ARH 102 Introduction to Art History II *Meets general academic requirement W when offered as 222.*

ARH 223 - African American Art

This course surveys art produced by African Americans from the late eighteenth century to the present. The historical, political, and social conditions that shaped art production by African Americans are investigated, from slavery through the Great Migration, and the Black Power Movement to postmodernism. Themes to consider include problems of representation, including racial stereotypes, primitivism, and the audience. This course moves African American art and artists from the art historical margins to the center to account for the way race influences art's production and reception.

Meets general academic requirement HU and DE.

ARH 225 - Women & Art

This course will investigate the role of women artists in the major movements in Western art from Impressionism to Postmodernism. The course will analyze questions that feminist art historians have posed: Have there been great women artists? How has "women's work," such as the decorative arts and crafts, been evaluated? Does art by women have common style or iconography? The intersection of art and gender will be examined in the careers of women artists from the well-known (Mary Cassatt and Georgia O'Keeffe) to the less-familiar (Gabriele Münter and Harmony Hammond).

Meets general academic requirement HU.

ARH 230 - History of Photography

A survey of photography from its invention to the present. The development of a photographic aesthetic, technical advances, and the relationship between photography and the other visual arts will be considered.

Meets general academic requirement HU.

ARH 301 - Italian Renaissance Art

Survey of painting, sculpture, and architecture of Italy from the time of Giotto to the death of Michelangelo; an analysis of stylistic modes and thematic concerns in relation to historical and cultural contexts.

Meets general academic requirement HU.

ARH 490 - CUE: Methods of Art History

This course surveys art historical methodologies and culminates with an independent research project. It reinforces what advanced art history students have learned about the key practices and methods used in the study of the visual arts, and encourages them to think about how such varying approaches have shaped the discipline itself. Students will conduct research on an object or topic of their choice, using disciplinary tools (visual and textual analysis) in accordance with a methodology that offers a productive interpretive framework for their selection.

Open to senior Art History majors and minors only.

Prerequisite(s): ARH 101 Introduction to Art History I and ARH 102 Introduction to Art History II.

Studio Art Courses (ARS)

ARS 103 - Drawing I

An introduction to problems in visual perception and delineation of pictoral fundamentals, incorporating traditional and non-traditional drawing media. Students examine various theoretical perspectives. Work from the still life and the human figure will be emphasized. Four contact hours per week.

Meets general academic requirement AR.

ARS 104 - Sculpture I

An introduction to the development of awareness and control of the basic elements of the three-dimensional language. An emphasis upon the issues surrounding direct observation and the development of a personal vocabulary. Work from the human figure will be emphasized. Four contact hours per week.

Meets general academic requirement AR.

ARS 107 - Introduction to Analog Photography

An introduction to the fundamentals of black and white still photography, dealing with seeing photographically, operating the camera, and darkroom processing and printing. Emphasis is on space, form, and time through the utilization of existing light. The student must provide a 35 mm camera, however a limited number of cameras are available to check out from the department. Four contact hours per week.

Meets general academic requirement AR.

ARS 110 - Printmaking I

An introduction to print processes, specifically exploring screenprint, intaglio, and relief. This class will focus on color, pattern, and layering to generate meaning. Each student will gain an understanding of the technical processes and the visual language and possibilities of working with the multiple. Students examine historical approaches and context while exploring contemporary modes of expression. Four contact hours per week.

Meets general academic requirement AR.

ARS 113 - Drawing Studio

Drawing Studio is an accelerated introduction to drawing and two-dimensional analysis of the visual world. Based on observation and an introduction to the history of drawing, this class will explore conventions of representation within a studio context. The class may include an exhibition of work produced. This class is intended for majors and those interested in a more substantial introduction to art.

Meets general academic requirement AR.

ARS 115 - Introduction to Digital Photography

An introduction to the fundamentals of still photography in the digital environment. The course will deal with seeing photographically, operating the camera, digital image processing, and printing. Emphasis will be on space, form, and time through the use of existing light. Lectures and assignments will explore the elements of photography as practiced by significant artists in the history of the medium. Students are required to use digital single lens reflex cameras that are capable of manual mode and production of images in raw format. It is advisable that students provide their own camera, however a limited number of cameras are available to check out from the department. Four contact hours per week.

Meets general academic requirement AR.

ARS 120 - Painting I

An introduction to the problems of line, form, color, texture, and space in the painting medium. Varied levels of ability and interests are given consideration on an individual basis. Four contact hours per week.

Meets general academic requirement AR

ARS 201 - Sound Art

An exploration of sound sculpture, environmental sound, room harmonics, and field recordings. No previous experience required, just an interest in experimenting and a curiosity about the sonic world. We will build sound producing sculptures, record and manipulate sound, play with circuits, and map the audible environment. Four contact hours per week. *Meets general academic requirement AR*.

ARS 203 - Drawing II

An introduction to a broad range of compositional problems, subject matter, and life drawing, allowing the exploration of expressive potential of drawing in a variety of media. Four contact hours per week.

Prerequisite(s): ARS 103 Drawing I, or ARS 113 Drawing Studio, or ARS 213 Drawing from Nature.

ARS 204 - Sculpture II

A continued study of three-dimensional art forms with an emphasis on material and techniques within the context of individual projects and investigations. Four contact hours per week.

Prerequisite(s): ARS 104 Sculpture I.

ARS 207 - Intermediate Analog Photography

This course concentrates on classic darkroom-based photographic practice; 35mm and medium format cameras are used. Advanced darkroom skills are emphasized, including controlled film development, large format fiber-based printing, toning, and professional mounting techniques. Students refine and focus their intentions through the study of important practitioners and the development of personal projects.

Prerequisite(s): ARS 107 Introduction to Analog Photography or ARS 115 Introduction to Digital Photography.

ARS 209 - Digital Foundations

This course will provide students with a practical and conceptual foundation in the formal elements that underlie all visual art, within a fully digital imaging environment. We will apply the principles of visual organization as they relate to both decorative and illusionary space. Utilizing the latest Adobe CS software, students will become conversant with the elements of shape, line, value, texture, and color. They will make art in response to assigned exercises, as well as in response to their own imaginative resources. Media may include digital electronic display of still or moving images, digital print media, and hybrid forms. Students will be introduced to the history of foundation design, will build a working vocabulary of art terms, and participate in class critiques. Four contact hours per week.

Prerequisite(s): Any 100 level studio course.

ARS 210 - Printmaking II

A continued study of printmaking processes. Students will explore the intersection of drawn and digitally based print processes such as intaglio and photo-intaglio. This class will focus on drawn line and narrative/sequence. Each student will gain an understanding of the technical processes, visual language and possibilities of working with the multiple. Students examine historical approaches and context while exploring contemporary modes of expression. Four contact hours per week. *Prerequisite(s): ARS 110 Printmaking 1*.

ARS 213 - Drawing from Nature

Referring exclusively to a series of natural objects, including mineral, plant, animal, and human specimens, the course includes a variety of media and aims to develop both analytic and expressive skills of drawing. It focuses on the studio experience but includes the study of significant historical examples of drawing from nature. Work from natural forms, including the human figure, is emphasized. Four contact hours per week.

Meets general academic requirement AR.

ARS 215 - Intermediate Digital Photography

Continued study of photography in the digital environment. The course will emphasize greater technical control of the medium, with an emphasis on studio work, artificial lighting, advanced digital processing and manipulation, and large format printing. Students will refine and focus their intentions through the study of practitioners of the medium and the development of personal projects.

Prerequisite(s): ARS 107 Introduction to Analog Photography or ARS 115 Introduction to Digital Photography.

ARS 220 - Painting II

A continued experience in oil painting or other media with an emphasis on composition and content. Four contact hours per week.

Prerequisite(s): ARS 120 Painting I.

ARS 234 - Figure Studio

The work of the course will consist of an intensive/extensive study of the human figure from a live model. The consequences of compositional choices will be fully explored using a variety of media in both 2D and 3D structures. There will be an examination of art historical concepts of the human figure and art historical settings of the figure. The course will be conducted as an atelier, in which the instructor will work alongside the students. In this method instruction and interactions are based on mutual and individual discoveries. There will be outside projects and a weekly critique/seminar.

Prerequisite(s): Any 100 level studio course or permission of the instructor

ARS 240 - Field Studio

This course provides an opportunity for an intense living-working studio experience in a field setting. The course will be situated in an off-campus location, either within the US or abroad, depending on the focus of the class. Preparatory work will include study of the geography and culture of the location, including historical and contemporary art practice. Work will be possible in any medium, depending on the background of students enrolled in the class. Enrollment by permission of instructor. *Prerequisite(s): Any 100 level ARS course or any production class in Film Studies or Media and Communication.*

ARS 303 - Drawing III

An advanced course in drawing designed to fulfill the need for personalized expression. Four contact hours per week. Prerequisite(s): ARS 203 Drawing II.

ARS 304 - Sculpture III

An advanced course focusing on the refinement of concepts, materials, and techniques. Emphasis will be placed on individual development. Four contact hours per week.

Pre requisite (s): ARS~204~Sculpture~II~.

ARS 307 - Advanced Photography

An advanced course emphasizing a semester-length independent project that combines research of precedents with personal exploration of a photographically-based theme. Both analog and digital media may be used.

Prerequisite(s): ARS 207 Intermediate Analog Photography or ARS 215 Intermediate Digital Photography .

ARS 310 - Printmaking III

An advanced course in printmaking techniques. Students will develop editioned colored images which utilize multiple color and plate prints and explore one process as an area of concentration. Four contact hours per week.

*Prerequisite(s): ARS 210 Printmaking II.

ARS 320 - Painting III

An advanced studio course in a variety of media with an emphasis on the development of a personal expression. Four contact hours per week.

Prerequisite(s): ARS 220 Painting II.

ARS 401 - CUE: Senior Studio Seminar: Portfolio Development

The course is taught collectively by the studio art faculty. Students focus on understanding and articulating their own interests and vision through research, written work, creation of new works of art, and critique. After the final critique, students who have demonstrated strong, sustained, and productive engagement with their work will be invited to join ARS 405 Senior Studio Seminar: Thesis Exhibition for the spring semester. *Required of all senior studio art majors*.

Open to art minors with permission of faculty.

Prerequisite(s): Any 300 level art course.

ARS 405 - Senior Studio Seminar: Thesis Exhibition

Offered every spring semester, this course will require students to continue development of independent work begun during the fall semester. Regular critiques with studio faculty and guest critics will be the basis for evaluation. Emphasis will be on portfolio development and preparation for the senior art exhibition in the Martin Art Gallery. Students will plan and design the exhibition, design announcements, prepare their work for hanging, and install and light the exhibit.

By Department invitation only.

Prerequisite(s): ARS 401 CUE: Senior Studio Seminar: Portfolio Development

Asian Studies Minor (AST)

Director: Dr. Kammie Takahashi, Assistant Professor of Religion Studies

Contributing Faculty: Cartelli, Chatzidimitriou, Chi, Chien, Collings, Coutinho, Croskey, Finkelstein, Hashim, Herrick, McEwan, and Stein

The Asian Studies Program at Muhlenberg College offers students the opportunity for multidisciplinary study of Asia, integrating the perspectives of fields across the humanities, social science, and fine arts. Asian countries and cultures play an increasingly influential role both in international affairs and in our own local communities. Through coursework and independent study at Muhlenberg, as well as via co-curricular activities and study abroad experiences, students gain a more nuanced understanding of the continuing contributions of Asian cultures globally.

Minor Requirements

Students must choose six courses from at least three different departments, one of which may be a Senior Capstone Project. The courses also may be chosen from Special Topic courses as approved by the Minor Program Director and from among the regular College offerings listed below. One semester of Asian Language study may be counted toward the minor. See the Program Director for official approval of any course not listed below. Students are also encouraged to supplement regular course offerings with language study offered on LVAIC campuses and study abroad opportunities.

Chinese Courses:

CHN 101 - Elementary Chinese I CHN 102 - Elementary Chinese II

English Course:

ENG 217 - Reading India

Film Studies Courses:

FLM 330 - New Asian Cinemas

FLM 334 - Bollywood: Indian Popular Cinema

History Courses:

HST 267 - Introduction to Traditional Japan

HST 269 - Introduction to Traditional China

HST 271 - Modern China

HST 273 - Modern Japan

HST 391 - The Mongol Legacy

Philosophy Courses:

PHL 250 - Philosophies of India

PHL 251 - Philosophies of China

PHL 351 - Daoist Philosophies

Political Science Course:

PSC 232 - Governments & Politics of East Asia

Religion Studies Courses:

REL 203 - Religions of India

REL 207 - Religions of China

REL 208 - Religions of Japan

REL 225 - Buddhist Traditions

REL 314 - Death and Desire in Tibetan Buddhism

Sociology Course:

SOC 325 - Imagined Communities: The Sociology of Nations & States

Sustainability Studies Course:

SUS 355 - Climate Change & Sustainable Development in Bangladesh

AST 950 - CUE: Senior Capstone Project

Students may roster a Senior Capstone Project designed in consultation with the Program Director.

Biochemistry (BCM)

Directors: Dr. Amy Hark, Associate Professor of Biology

Dr. Keri Colabroy, Associate Professor of Chemistry

Professors: Anderson, Baar, Edwards, Ingersoll, Wightman

Associate Professor: Teissere

Assistant Professors: Sparks, Young

Often referred to as the chemistry of life, biochemistry is the study of organisms, cells, and cellular components at the chemical and molecular level. The biochemistry major draws from a balanced selection of courses from both the biology and chemistry departments organized into foundation, core, and elective courses. There are three core courses: BIO 220 - Biochemistry provides the introduction to the field; BCM 341 – Experimental Biochemistry explores the intellectual and experimental processes of doing biochemistry; and BCM 441 - CUE: Advanced Biochemistry provides a Culminating Undergraduate Experience through exploring advanced topics. A major in biochemistry gives students essential skills for understanding and contributing to the study of chemistry in living organisms.

Students who complete the program are prepared for positions in basic and applied research, admission to graduate schools in biochemistry, molecular biology, pharmacology, and other biochemically-oriented disciplines, and for admission to health profession schools.

Honors Program

Any major who is interested in working towards honors in biochemistry is expected to initiate planning and discussion of possible honors research projects with a faculty mentor no later than his/her junior year or the following summer. Acceptance into the honors program is selective and is based on the following criteria:

- 1. Availability of research positions and funds in the laboratory of the selected faculty mentor.
- 2. Approval of an honors proposal prior to the beginning of the student's senior year (or last full year of undergraduate study). The proposal must be submitted to the faculty mentor and an honors committee by August 1 prior to the senior year.
- 3. Minimum GPA of 3.30 in courses counting toward the biochemistry major.

Acceptance into the honors program does not guarantee that honors will be awarded. In order for biochemistry honors to be granted at commencement, the following conditions must be met:

- 1. The student has achieved a minimum GPA of 3.30 in courses counting toward the biochemistry major.
- 2. The student has conducted, at a minimum, the equivalent of 1.5 course units of research during the senior year and has met the expectations established by the faculty mentor.
- 3. The student has presented his/her research in a public seminar and discussed the work in an oral examination with honors committee members.
- 4. The student has submitted a thesis that has been approved by the honors committee.
- 5. The student has regularly attended the Biology or Chemistry seminar series throughout the senior year or is otherwise engaged in programs in the Natural Sciences Division.

The honors committee will evaluate the quality of oral and written presentations of the project as well as the research undertaken and the merit of the science. In addition, the quality of all biochemistry course work and the involvement in a seminar series or other engagement will be considered in determining the degree of honors awarded (none, honors, high honors, or highest honors, with highest honors being rarely awarded).

Major Requirements

To declare and remain a major in biochemistry, a student must maintain a 2.00 grade point average for all courses applicable to the major.

Required Courses:

1. Seven foundation courses in science:

BIO 150 - Principles of Biology I: Organisms & Populations

BIO 151 - Principles of Biology II: Cells & Organisms

BIO 152 - Principles of Biology III: Molecules & Cells

CHM 103 - General Chemistry I

CHM 104 - General Chemistry II

MTH 121 - Calculus I

MTH 122 - Calculus II

2. Three core courses in chemistry:

CHM 203, 205 - Organic Chemistry IA OR

CHM 201 - Organic Chemistry I

CHM 204, 206 - Organic Chemistry IIA OR

CHM 202 - Organic Chemistry II

CHM 321 - Physical Chemistry I

3. Three core courses in biochemistry:

BIO 220 - Biochemistry

BCM 341 - Experimental Biochemistry

BCM 441 - CUE: Advanced Biochemistry

4. Two electives in biology and chemistry: Two lists must be represented.

List A

BIO 205 - Cell Biology BIO 215 - Genetics BIO 225 - Microbiology

List B

CHM 311 - Analytical Chemistry I CHM 322 - Physical Chemistry II

List C

BIO 405 - CUE: Cell Biology of Human Disease

BIO 412 - CUE: Molecular Biology

BIO 472 - CUE: Genomes & Gene Evolution

NSC 304 - Receptors & Channels

In addition to these requirements, students interested in graduate study in biochemistry or the health professions are strongly advised to complete a year of general physics.

For information on Independent Study/Research see page 50.

Courses

BCM 341 - Experimental Biochemistry

A laboratory based course concerned with modern experimentation in biochemistry. In the first module students use recombinant DNA technology to overexpress an enzyme, then purify and characterize it. Theory and biochemical context is discussed throughout. The second module covers modern biochemical experimentation, including mass spectrometry of proteins and proteomic methods for analysis of cell states. Students also design and execute an original research project. Four hours laboratory and two hours of lecture per week.

Prerequisite(s): CHM 202 Organic Chemistry II or CHM 204, 206 Organic Chemistry IIA. Meets general academic requirement W.

BCM 441 - CUE: Advanced Biochemistry

An advanced, lecture based Culminating Undergraduate Experience that takes a mechanistic perspective on enzymology, enzymopathy, and bioinformatics within cellular metabolism. While studying the central concept of metabolism, students learn to evaluate original research articles and apply the findings to biochemical problems. Topics also include the relevance and application of cellular metabolism to medicine and biotechnology. Three hours lecture per week.

Prerequisite(s): BIO 220 Biochemistry and CHM 202 Organic Chemistry II or CHM 204, 206 Organic Chemistry IIA.

Biology (BIO)

Department Chair: Dr. Bruce Wightman

Professors: Edwards, Klem, McCain, Niesenbaum Associate Professors: Hark, Iyengar, Meier, Sprayberry

Lecturers: Byrne, Dowd, Heiman, Walther

The biology curriculum is designed to provide students with an opportunity to study the principles governing life processes within the broader context of the liberal arts. Students investigate the science of life at all levels, from molecular biology to population ecology. Courses are designed to develop each student's ability to acquire and

interpret data, pose questions, and critically evaluate facts and theories. By proper selection of biology and other science courses, students will be prepared for graduate school in the life sciences, for admission to medical, dental, veterinary, and other health profession schools, and for positions in government or industry.

Special Programs

Teacher Certification

Students seeking certification for the teaching of biology in the secondary schools should contact the department chair.

Honors Program

Students are encouraged to initiate planning and discussion of their honors research project with their honors mentor during the summer before or fall semester of their junior year. Acceptance into the honors program is selective and based on the following criteria:

- A minimum overall GPA of 3.20 at the time of proposal submission, typically March of the junior year;
- Availability of research positions with a particular Biology Department faculty member. Projects
 conducted entirely off-campus or internships are not suitable. However, this does not prohibit collaborative
 research that may include an interdepartmental or off-campus component.
- Approval by an Honors Committee of the student's research proposal which was developed in consultation with the honors mentor.

Department honors will be granted at commencement to majors who have fulfilled the following conditions:

- The candidate has met the expectations of two course units of research by conducting research with a
 faculty member for two semesters or one semester and the summer immediately prior to graduation. For
 those students with a January graduation date, the research units can also be accomplished the spring
 semester and summer before graduation. These expectations will be clearly established by the faculty
 member:
- The candidate has presented a 50-minute seminar to the College community on his/her research project.
 Typically this is done approximately a month before the candidate graduates.
- The candidate has written a thesis according to thesis guidelines and submitted it to the Honors Committee by the Friday before the last day of the candidate's final semester. The Committee will judge the thesis based on the research performed, scientific merit of the work, and quality of writing. The honors mentor has voice but no vote, while the three other members of the Honors Committee will have a silent vote to either award honors or not.
- Together, all of the Honors Committees for that year will meet to discuss the theses and determine the degree of honors to be awarded (none, honors, high honors, or highest honors) for each honors candidate.

For more information about the Honors Program, please consult the Biology Department webpage.

Major Requirements

To declare and be retained as a biology major, a student must maintain a 2.00 grade point average based on the courses attempted which satisfy the biology major's requirements. No courses numbered below 204 except BIO 150 - Principles of Biology I: Organisms & Populations, BIO 151 - Principles of Biology II: Cells & Organisms, and BIO 152 - Principles of Biology III: Molecules & Cells can be used to fulfill the biology major requirements. In many biology courses a student is expected to devote more time than scheduled in laboratory and field investigations.

Required Courses:

Biology majors must complete 14 courses, nine in biology and five cognate courses.

I. Biology courses

- a. Three introductory courses must be completed before end of the third year.
 - BIO 150 Principles of Biology I: Organisms & Populations
 - BIO 151 Principles of Biology II: Cells & Organisms
 - BIO 152 Principles of Biology III: Molecules & Cells
- b. Five biology electives numbered 204 or above (except BIO 960 Biology Internship and cluster courses) and may include ESC 312 CUE: Toxicology, NSC 311 Neurons & Networks, SUS 350 Community Sustainability in Costa Rica, and up to one credit of BIO 970 Independent Study/Research. At least one course must be from each of three areas of biological organization:
 - **Area 1 Molecules and Cells.** Courses explore structural and functional relationships from the molecular to cellular level of organization:
 - BIO 205 Cell Biology
 - BIO 215 Genetics
 - BIO 220 Biochemistry
 - BIO 225 Microbiology
 - **Area 2 Cells and Organisms**. Courses explore structural and functional relationships from the cellular to organism level of organization:
 - BIO 240 Developmental Biology
 - BIO 242 Entomology
 - BIO 245 Comparative Anatomy
 - BIO 250 General Physiology
 - **Area 3 Organisms and Populations.** Courses explore the interactions of individuals and populations with their physical and biological environments:
 - BIO 204 Invertebrate Zoology
 - BIO 255 Ornithology
 - BIO 260 Field Botany & Plant Ecology
 - BIO 262 Cultural & Economic Botany
 - BIO 265 Behavior
 - BIO 268 Freshwater Ecology
 - BIO 270 Ecology
 - BIO 272 Field Marine Biology
 - BIO 275-279 Field Investigations in Biology
- c. Culminating Undergraduate Experience (CUE): One of the biology courses numbered between 400 and 499. This is an advanced, seminar style course that incorporates inquiry-oriented student projects.

II. Cognate courses

- MTH 121 Calculus I
- MTH 122 Calculus II
- MTH 223 Calculus III
- CHM 103 General Chemistry I
- CHM 104 General Chemistry II
- CHM 201 Organic Chemistry I OR
- CHM 203, 205 Organic Chemistry IA
- PHY 121 General Physics I

Students are strongly encouraged to complete CHM 202 - Organic Chemistry II or CHM 204, 206 - Organic Chemistry IIA and PHY 122 - General Physics II because a full year of each are required by virtually all graduate programs in the biological sciences or health professions.

Courses

BIO 100-149 - Concepts of Biology

Concepts of Biology is a collection of courses that vary in topic but are similarly designed to introduce students to the scientific way of knowing. They are designed for students who do not intend to pursue a career in the biological sciences or related field. The courses are not usually open to students who have completed BIO 150 Principles of Biology I: Organisms & Populations , BIO 151 Principles of Biology II: Cells & Organisms , or BIO 152 Principles of Biology III: Molecules & Cells .

BIO 101 - Human Biology, Science, & Society

This course covers topics in human structure and function, human genetics, and human ecology. A scientific and bio-ethical approach is used to study issues related to society as a whole as well as to an individual. The overall goal of the course is to help students become more scientifically literate so that they can make informed decisions.

Prerequisite(s): Students who have taken BIO 150, BIO 151, or BIO 152 need permission of the instructor to enroll. Meets general academic requirement SC.

BIO 102 - Biology of Movement

This course covers topics related to the science of movement. The structure and function of the skeletal and muscular systems, the nervous system, cardiovascular, and respiratory systems will be studied. In addition, students will explore exercise physiology. This course is especially designed for dance majors and others who have a particular interest in the biology of movement.

Prerequisite(s): Students who have taken BIO 150, BIO 151, or BIO 152 need permission of the instructor to enroll. Meets general academic requirement SC.

BIO 104 - Biology of Birds

A general overview of the study of avian natural history. Special attention is given to field techniques to identify, describe, and record the biology of birds in their natural habitat. Four class hours per week and field trips.

Prerequisite(s): Students who have taken BIO 150, BIO 151, or BIO 152 need permission of the instructor to enroll. Meets general academic requirement SC.

BIO 106 - The Biotech Century

So much of the news concerns biotechnology: cloning, gene therapy, cancer treatments, assisted reproductive technologies, genetically modified foods, the human genome project, and bioterrorism. Perhaps high school biology never covered such topics. Using newspaper articles, an excellent genetic textbook for non-science majors, and Internet resources, this course is designed to allow the student to explore "the new biology". Most of the students who have taken this course find immediate applications of the course knowledge to their own lives. Perhaps you will too.

Prerequisite(s): Students who have taken BIO 150, BIO 151, or BIO 152 need permission of the instructor to enroll. Meets general academic requirement SC.

BIO 107 - From DNA to Cancer

This course covers the biology of cancer, from the changes in DNA and cells that lead to cancer to treatment and prevention strategies. We will address the following questions: What is cancer? What causes cancer? How can cancer be treated? Specific topics to be covered include hallmarks of cancer cells, causes of cancer (including environmental and hereditary factors, as well as infectious agents), and cancer genes, with a special focus on current topics in Cancer Biology.

Prerequisite(s): Students who have taken BIO 150, BIO 151, or BIO 152 need permission of the instructor to enroll. Meets general academic requirement SC.

BIO 108 - Plants & People

This course is a survey of the diversity of plants and their relationship with people. We will focus on the uses of plants from historical, contemporary, and multicultural perspectives. We will explore how plants serve as our foods, medicines, fibers, fuels, and the other ways that they impact our lives and influence our cultures. The scientific process, ethnobotanical study, agricultural

and environmental issues, and ethical considerations will be closely examined. This course will include hands-on, field and laboratory study of plants.

Prerequisite(s): Students who have taken BIO 150, BIO 151, or BIO 152 need permission of the instructor to enroll. Meets general academic requirement SC.

BIO 109 - Bubonic Plague to AIDS: The Influence of Infectious Disease on the Human Species & Environment

Infectious disease has and continues to have a profound influence on humans and the environment in which they live. Bubonic plague, smallpox, syphilis, malaria, and AIDS, as well as other emerging viruses, will be studied as specific examples of infectious disease. The biology of the microbes involved, their epidemiology, resulting pathology, and control will be discussed. Emphasis will be placed on the historical, political, and social consequences of infectious disease.

Offered as a course designed for Muhlenberg Scholars.

Prerequisite(s): Students who have taken BIO 150, BIO 151, or BIO 152 need permission of the instructor to enroll. Meets general academic requirement SC.

BIO 111 - Crisis Earth: Causes, Consequences, & Solutions for a Changing Planet

With a growing human population and society's increasing demands on the planet's natural resources, we are entering an era of ecological crisis on Earth. This class will explore some of the major crises facing our planet from a scientific and social perspective. Students will develop an understanding of the science needed to appreciate, diagnose, and tackle environmental crises such as global warming, habitat destruction, invasive species, and pollution. The class will also explore some causes of and solutions to these ecological catastrophes from social, political, and management perspectives. This course is an introduction to many environmental topics and is designed to engage students from different disciplines in the increasingly important hunt for solutions to Earth's environmental crises.

Prerequisite(s): Students who have taken BIO 150, BIO 151, or BIO 152 need permission of the instructor to enroll. Meets general academic requirement SC.

BIO 113 - The Ecology of Marine Organisms

An introduction to marine biology, including marine ecology, organismal diversity, physiological adaptations, behavior, physical science of the sea, human uses, threats to and conservation efforts in the marine realm. We will emphasize invertebrate animals and their interactions with their local invironments, but algae and vertebrates will also be covered. World-wide oceans will be examined, with a comparative eye to the different ecology of each location. Examination of the basic principles and processes of science will also be examined. The course is predominantly lecture-based, but numerous external video viewings will be required. There may be a required field trip.

Prerequisite(s): Students who have taken BIO 150, or BIO 151 need permission of the instructor to enroll. Meets general academic requirement SC.

BIO 114 - Humanity & the Biological World

The primary focus of this course is to examine the origin and nature of the life forms that exist today and the effect of human activity on those organisms. As a background for understanding those changes, the role of the environment and genetics in the evolution of living species will be studied. Review of biological, geological, and meteorological concepts will support the study. *Prerequisite(s): Students who have taken BIO 150, BIO 151, or BIO 152 need permission of the instructor to enroll.*Meets general academic requirement SC.

BIO 116 - Animal Behavior

Why do the cardinals on campus perch at the tops of trees and chirp so loudly? Why do some killer whales hunt in packs and others hunt singly? This course is designed to help students better understand the mechanisms, evolution, and consequences of animal (including human) behavior. Topics such as communication, foraging, orientation, reproduction, and social behavior will be covered. In addition to gaining insight into animal behavior, students will also obtain a broader understanding of science, the scientific method, and some of the unanswered questions in the study of animal behavior. Four class hours per week. Prerequisite(s): Students who have taken BIO 150, BIO 151, or BIO 152 need permission of the instructor to enroll. Meets general academic requirement SC.

BIO 118 - Genes, Genomes, & Society

Students will consider the impact of genetic information on both individuals and various aspects of society with a particular focus on human health and disease. The course begins with an introduction to human genetics which will serve as background for

discussion of aspects of the human condition that have a genetic basis as well as uses of genome sequence information. In addition to learning the underlying biology, discussions will include related societal, ethical, and policy topics. *Prerequisite(s): Students who have taken BIO 150, BIO 151, or BIO 152 need permission of the instructor to enroll.*Meets general academic requirement SC.

BIO 120 - Emerging Infectious Diseases

In 1976 when dozens of Legionnaires fell dead with a "mysterious and terrifying disease," it came as quite a shock to many that "new" diseases remained to be discovered. In this course, we will explore emerging and re-emerging diseases such as SARS, influenza, and anthrax (as well as many others) by looking at the transmission, pathology, and genetic engineering techniques that are used to identify, treat, and study these infectious organisms.

Prerequisite(s): Students who have taken BIO 150, BIO 151, or BIO 152 need permission of the instructor to enroll. Meets general academic requirement SC.

BIO 121 - Biology of Running

Running is part of human nature. Our bodies are built for running, and training for long-distance running results in multiple health benefits. In this course we will explore how our bodies are built for running and look at evidence supporting barefoot running. We will also explore the potential physiological and psychological benefits that result from running and how to train to achieve those benefits.

Prerequisite(s): Students who have taken BIO 150, BIO 151, or BIO 152 need permission of the instructor to enroll. Meets general academic requirement SC.

BIO 150 - Principles of Biology I: Organisms & Populations

The first course in the introductory biology sequence for intended majors and for those interested in a more substantial introduction to biology is an introduction to the core themes of biology, emphasizing the scientific method, evolution, the diversity of life, and how organisms interact with their environment. Three class hours per week and weekly recitations. *Meets general academic requirement SC*.

BIO 151 - Principles of Biology II: Cells & Organisms

The second course in the introductory biology sequence for majors is a study of the relationship of structure and function in plants and animals. Laboratories emphasize the scientific method as a way of knowing. Three class hours and three laboratory hours per week.

Prerequisite(s): BIO 150 Principles of Biology I: Organisms & Populations. Meets general academic requirement SC.

BIO 152 - Principles of Biology III: Molecules & Cells

The third course in the introductory biology sequence is a study of the relationship of structure and function at the molecular and cellular level, molecular and Mendelian genetics, and microbiology. Three class hours and three laboratory hours per week. *Prerequisite(s): BIO 151 Principles of Biology II: Cells & Organisms and CHM 104 General Chemistry II.*

BIO 204 - Invertebrate Zoology

Study of the diversity of animal phyla, emphasizing similarities and differences among groups, adaptations to their respective environments, and potential evolutionary pathways for various organ systems. Laboratories emphasize structure and function of invertebrate anatomy through observation and dissection of living and preserved specimens. A required weekend trip to an aquarium or the ocean should be anticipated. Three hours of lecture plus three hours of laboratory per week. *Prerequisite(s): BIO 151 Principles of Biology II: Cells & Organisms.*

BIO 205 - Cell Biology

The structure and function of eukaryotic cells will be explored at the molecular, biochemical, and organelle levels. Topics include protein targeting, the cytoskeleton, motor proteins, cell signaling, membranes, energetics, the cell cycle, cancer, cell death and renewal. Students are introduced to the primary. Laboratory provides experience in data analysis, methods of microscopy, cell measurements, and cell culture. Self-designed investigations test hypotheses using fluorescent microscopy of cultured eukaryotic cells. Three lecture hours and three laboratory hours per week.

Prerequisite(s): BIO 152 Principles of Biology III: Molecules & Cells.

BIO 215 - Genetics

Genetics includes coverage of the four main branches of modern genetic study: classical genetics, molecular genetics, population genetics, and genomics. Experimental approaches, human genetics, and model systems are emphasized. Topics include mutations, gene interactions, chromosomes, quantitative and evolutionary genetics, gene mapping, gene cloning, genetic engineering, and applications of genetics to the study of development, cancer, and behavior. Three class hours and three laboratory hours per week.

Prerequisite(s): BIO 152 Principles of Biology III: Molecules & Cells.

BIO 220 - Biochemistry

Study of organisms, cells, and cellular components at the chemical and molecular levels. Structure and function of nucleic acids and proteins, including enzyme kinetics as well as aspects of carbohydrate and lipid metabolism, including regulatory signaling pathways will be covered. Applications to basic research and human health will also be included. Three class hours and three laboratory hours per week.

Prerequisite(s): BIO 152 Principles of Biology III: Molecules & Cells and CHM 104 General Chemistry II. CHM 201 Organic Chemistry I or CHM 203, 205 Organic Chemistry IA should be completed or enrolled concurrently.

BIO 225 - Microbiology

Study of the morphology, physiology, and genetics of bacteria as well as the structure and replication of viruses. Relationship of these microbes to human disease is emphasized. Laboratories stress aseptic technique, microscopic observation, bacterial physiology, and identification. Three class hours plus three laboratory hours per week.

Prerequisite(s): BIO 152 Principles of Biology III: Molecules & Cells.

BIO 240 - Developmental Biology

An overview of the cellular, molecular, and developmental mechanisms that control embryogenesis from fertilization through organogenesis. Laboratories include the study of live embryos from sea urchins to chickens as well as preserved embryo slides. Three class hours plus three laboratory hours per week.

Prerequisite(s): BIO 152 Principles of Biology III: Molecules & Cells.

BIO 242 - Entomology

The diversity of insects will be studied from the physiological perspectives, such as how insects reproduce, sense their environment and protect themselves from microbes. Adaptations that are unique to insects, such as flight and metamorphosis will be covered in depth. Humans and insect interactions will be investigated with respect to sustainable agriculture, pollination, conservation, and medicine. Analysis of primary literature will be introduced. The laboratory component of the course will focus on how to identify insects and imaging methods such as digital photography and electron microscopy. Three lecture hours and three laboratory hours per week.

Prerequisite(s): BIO 151 Principles of Biology II: Cells & Organisms.

BIO 245 - Comparative Anatomy

Study of the evolution and morphology of vertebrates. Emphasis is given to the comparative study of vertebrate homology and the adaptive value of structure. Laboratories consist of detailed dissection of representative taxa with emphasis on shark, cat, and human anatomy. Three class hours plus three laboratory hours per week.

Prerequisite(s): BIO 151 Principles of Biology II: Cells & Organisms.

BIO 250 - General Physiology

Study of the concepts and principles that form the basis for understanding the mechanisms of animal physiology. The emphasis of the course is on the interrelationship of physiological processes and how they relate to the biological needs of animals. Three class hours, three laboratory hours.

Prerequisite(s): BIO 151 Principles of Biology II: Cells & Organisms.

BIO 255 - Ornithology

A detailed and in-depth study of avian natural history. Emphasis is given to population ecology, behavioral ecology, and conservation biology of birds. Laboratories are exercises and field trips to develop and practice techniques to identify, describe, and record the biology of birds in their natural habitat. Three lecture hours plus three laboratory hours per week.

Prerequisite(s): BIO 151 Principles of Biology II: Cells & Organisms.

BIO 260 - Field Botany & Plant Ecology

A field research oriented course emphasizing plants. The focus is on articulating and quantitatively answering relevant research questions on the diversity, ecology, and evolution of plants. Special emphasis is given to hypothesis development, data collection and analysis, and interpretation and presentation of results. Three class hours plus three laboratory hours per week with extensive field work.

Prerequisite(s): BIO 151 Principles of Biology II: Cells & Organisms.

Meets general academic requirement W.

BIO 262 - Cultural & Economic Botany

Study of the ecological relationship between plants and humans and the implications for local and global conservation. Topics covered include medicinal plant use, agroecology, plant ecology, tropical ecology, and community-based conservation. Three lecture hours plus three laboratory/field hours per week.

Prerequisite(s): BIO 151 Principles of Biology II: Cells & Organisms.

BIO 265 - Behavior

The biological study of behavior. Emphasis is given to the comparative study of genetics, morphology and physiology, ecology, and evolution of animal behavior. Laboratories are exercises or field trips to observe, describe, and interpret the actions of animals in their natural habitat; special emphasis is given to hypothesis development and study design and the collection, analysis, interpretation, and presentation of research results. Three class hours plus three laboratory hours per week.

Prerequisite(s): BIO 151 Principles of Biology II: Cells & Organisms.

Meets general academic requirement W.

BIO 268 - Freshwater Ecology

An examination of biotic and abiotic interactions occurring in the full range of freshwater systems, including streams, ponds, and lakes. Content includes interactions among living organisms, energy flow within and among living communities, survival strategies, water chemistry, adaptations of organisms for survival in water, and current human impacts on aquatic environments. Investigative methods in aquatic ecology will also be examined, especially through the laboratory component of the course. Three lectures and one laboratory meeting weekly.

Prerequisite(s): BIO 151 Principles of Biology II: Cells & Organisms.

BIO 270 - Ecology

Ecology is the study of the interactions between organisms and their environment at the individual, community, and ecosystem levels of organization. Terrestrial and aquatic ecology and plant and animal studies are discussed. A major emphasis of the course is experimental design and analysis, including statistical analyses and presenting results. Most laboratories are outside; one required weekend field trip.

Prerequisite(s): BIO 151 Principles of Biology II: Cells & Organisms.

BIO 272 - Field Marine Biology

This field course is conducted at a marine laboratory field station and takes advantage of the opportunity to study the diversity of marine organisms, microhabitats, and their interactions in the natural setting. Topics investigated through fieldwork, laboratory investigation, and lectures include organismal diversity, adaptations, zonation, competition, life history strategies, and larval ecology. Students gain experience in experimental design which culminates in a small self-designed project. The course is conducted over 10-12 days, usually in August and rarely in May, with paper writing and a final exam administered on campus in the fall. There is a supplementary fee to cover the cost of housing and laboratory fees.

Prerequisite(s): BIO 151 Principles of Biology II: Cells & Organisms or permission of the instructor.

BIO 275-279 - Field Investigations in Biology (0.5 or 1.0 course unit)

Field investigations focusing on a particular site or theme in Ecology. Examples include Marine Ecology in Bermuda and Tropical Ecology in Peru, Guatemala, and Costa Rica. May be enrolled more than once.

Prerequisite(s): BIO 151 Principles of Biology II: Cells & Organisms.

BIO 334, 335 - Immunology

Study of the immune system and its role in maintaining the physiological integrity of multicellular organisms against infection, malignancy, and transplantation. Specifically, the following concepts are studied: structure and function of antibodies and

antigens, biology of lymphocytes and their interaction, immunoregulation, and immunopathology. Three class hours plus two recitation hours per week.

Prerequisite(s): BIO 152 Principles of Biology III: Molecules & Cells and any 200 level course in Area 1.

Meets general academic requirement W when offered as 335.

BIO 350 - Applied Physiology

Advanced topics in physiology, including cardiovascular biology, respiratory biology, neurobiology, immunology, and endocrinology will be studied. Students will apply and extend their understanding of basic and clinical physiology to the analysis of case studies presented to the class by health professionals.

Prerequisite(s): BIO 250 General Physiology.

Meets general academic requirement W.

BIO 360 - Histology

Study of the microscopic anatomy of vertebrate tissues and organs with a detailed consideration of the relation of structure to function. Three class hours plus three laboratory hours per week.

Prerequisite(s): BIO 205 Cell Biology or BIO 245 Comparative Anatomy or BIO 250 General Physiology.

BIO 405 - CUE: Cell Biology of Human Disease

This CUE course covers selected topics in basic cell biology as it relates to human disease. These topics will be explored in depth using contempory primary cell biology literature as the principal resource. The analysis of experimental design, methodology, interpretation of data and the ethics of research and writing will be emphasized. As a writing intensive course, students will critically analyze current questions in the cell biology literature.

Prerequisite(s): Any 200 level course in Area 1 or permission of instructor.

Meets general academic requirement W.

BIO 412 - CUE: Molecular Biology

A topical course investigating the techniques and applications of recombinant DNA, with a focus on their application to cancer research. This course provides a detailed treatment of recombinant DNA methodologies, including gene cloning strategies and analytical molecular techniques. Topics covered include gene regulation, genomics, and the molecular mechanisms of cancer, viewed through an historical lens. Discussions and writing assignments focus on the analysis of the classic and contemporary primary literature and the relationship between biomedical research and society. Three class hours per week.

Prerequisite(s): Any 200 level course in Area 1 or permission of instructor.

Meets general academic requirement W.

BIO 423 - CUE: Scanning Electron Microscopy

Students learn how to prepare specimens for scanning electron microscopy; instruction includes fixation procedures, critical point drying, sputter coating, and operation of the microscope. Students design and complete an independent research project, analyze and discuss scientific literature, and learn how to write a scientific paper. Three class hours plus three laboratory hours per week. Prerequisite(s): BIO 152 Principles of Biology III: Molecules & Cells and any two biology courses from Area 1, 2, or 3. PHY 121 General Physics I and CHM 201 Organic Chemistry I or CHM 203, 205 Organic Chemistry IA should also be previously completed or concurrently enrolled.

Meets general academic requirement W.

BIO 460 - CUE: Behavioral Ecology

Behavioral ecology is the study of how behavior is influenced by natural selection. The major theories of behavioral ecology of sexual selection, kin section, honesty and deceit, and game theory are applied to gain understanding of the adaptive value of the social behavior of animals including humans. Emphasis is placed on reading, discussing and writing on case studies in the primary literature. Three class hours per week.

Prerequisite(s): Any two biology courses from Area 1, 2, or 3.

Meets general academic requirement W.

BIO 465, 466 - CUE: Conservation Biology

This course will draw on the various disciplines within biology as they are applied in the very rapidly changing field of conservation biology. Topics will include conservation genetics, geographical information systems (GIS), sustainable agriculture and forestry, integrated land-use management, and restoration ecology. This project-based seminar course includes three class

hours and three lab/field hours per week. The course will be offered in alternate years, depending on student demand.

Prerequisite(s): Any two biology courses from Area 1, 2, or 3.

Meets general academic requirement W when offered as 466.

BIO 470 - CUE: Evolution

The study of the processes of evolution from macromolecules to the genesis of major groups of life. Examination of Neo-Darwinian theories of adaptation and natural selection as well as competing explanations of evolutionary change. Assessment of contemporary criticism of Darwinian theory. Three class hours per week in seminar format with emphasis on reading of primary literature, discussion, and writing.

Prerequisite(s): Any two biology courses from Area 1, 2, or 3.

Meets general academic requirement W.

BIO 472 - CUE: Genomes & Gene Evolution

A central question that remains in biology is the relationship between genetic changes at the DNA level and evolution of organismal form and function. This capstone course focuses on modern comparative and regulatory genomic approaches primarily through the lens of the evolution of animal genes. Lectures feature review of primary literature and use of bioinformatics tools; laboratories emphasize genomic approaches. Discussions and writing assignments will be centered on student projects in distinct areas of genome science. Three hours per week.

Prerequisite(s): BIO 152 Principles of Biology III: Molecules & Cells and BIO 205 Cell Biology or BIO 215 Genetics or BIO 220 Biochemistry or BIO 225 Microbiology or BIO 240 Developmental Biology.

Meets general academic requirement W.

BIO 960 - Biology Internship

Majors are eligible for internship programs with approval of the department chair. Internships do not count as one of the nine biology courses required for the biology major. (For more information see College Courses, Independent Study/Research (970) Majors are eligible for internship programs with approval of the department chair. Internships do not count as one of the nine biology courses required for the biology major.

Business Administration (BUS)

Department Chair: Dr. Holmes Miller

Professor: Heitmann

Associate Professor: Bergenstock Associate Professors: Kushner, London

Senior Lecturer and Internship Director: Eisenberg

Visiting Lecturer: Stehlin

Entrepreneur in Residence: Simonnet

The business program at Muhlenberg is nurtured by the liberal arts tradition of the institution and provides students with an excellent preparation for both a career and graduate school. Business majors have successfully launched their careers in a wide range of fields and activities, including the non-profit, arts, media, healthcare, and financial services industries. Some students combine a business major with accounting and have been especially successful in finding positions with "Big Four" accounting firms. Business is often the major of choice for students who wish to apply for law school. Many students, regardless of major, will eventually pursue a Master's degree in Business Administration (MBA). A business major provides an excellent foundation for MBA studies.

The business program offered at Muhlenberg is especially appropriate for liberal arts students who want to understand more fully the international society in which we live and its aspirations. It emphasizes critical thinking, effective communication, and collaborative effort. The international, environmental, and ethical dimensions of business decisions are interwoven throughout the business curriculum, and there is a deep faculty commitment to instilling a love of learning and an appreciation of learning as a lifetime activity. The business program offers students four areas of concentration, plus a study abroad alternative, that build upon a commonly shared

combination of foundation and core courses. In addition, all business majors, regardless of their concentration, enroll in BUS 475 - CUE: Business Policy & Strategy. This culminating undergraduate experience, taken in spring of the senior year, integrates all earlier work in the major and exposes students to the interaction between the various functional areas within an organization.

Special Programs

Concentrations are available in the following areas: Arts Administration, Management and Organization Studies, and Marketing. In addition, participation in a department approved study abroad program may be substituted for, or used to complement, a concentration in meeting the requirements of the business major. In consultation with their advisors, students also may "self-design" a concentration. Students who are business majors or minors cannot take accounting, business, economics, or finance courses on a pass/fail basis.

International Business and Study Abroad

For students with international business interests, the Maastricht study abroad program is especially attractive. The program was developed in cooperation with the Maastricht University in The Netherlands and is fully integrated with the business major. Courses are offered by Maastricht University faculty to participating Muhlenberg students during the fall semester of their junior year. Students attend courses in international business, economics, and politics, taught in English. Besides deepening global and cultural awareness, students have opportunities to travel to France, Belgium, and Germany, all of which are less than thirty minutes away, and meet business and political leaders from those countries. The program offers a global perspective and international experience that students will find advantageous in both finding a first job and in subsequent career advancement.

Other department approved study abroad programs are also available for the student with international business interests. Students who wish to participate in the Maastricht program or any other department approved study abroad opportunity should consult with their faculty advisor as soon as such an interest is evidenced.

Areas of Concentration

Business majors receive a Bachelor of Arts degree with a major in Business Administration. All majors are required to select a concentration, or alternatively, participate in a department approved study abroad program.

Management and organization, some would claim, are what distinguish today's world from earlier times. Certainly, an appreciative knowledge of organizations, their structure and functions and how they are managed is essential to an understanding of the world in which we live. The concentration in management and organization offers courses in organizational behavior, leadership, non-profit management, arts administration, and small business management. It provides an excellent foundation for those who aspire to positions of high responsibility in the business, government, and nonprofit worlds.

Marketing is a philosophy that guides the entire business organization. Its goal is to create customer satisfaction profitability by building value-laden relationships with customers. The marketing department cannot accomplish this by itself and must therefore team-up with other departments in the company and create partnerships with other organizations worldwide to deliver exceptional value to all customer groups. To prepare students for this challenge, Muhlenberg's marketing concentration offers an interdisciplinary and global perspective, along with the opportunity to develop research techniques to assist firms with pricing, product distribution, and promotion decisions. Courses include marketing management, globalization and marketing, nonprofit marketing, electronic commerce, and marketing research.

The arts administration concentration allows students to combine an interest in art disciplines such as theatre, dance, music, and the fine arts, with an in-depth study of business. While it is rooted in the business disciplines of

management, marketing, finance, and accounting, its focus is on the creative industries, and it is designed specifically to help students who anticipate working in the arts in either for-profit or not-for-profit arts organizations.

Internship Opportunities

The department has an extensive internship program that provides the business major with a wide range of opportunities to gain valuable work experience. Supervised paid and unpaid internships, which can contribute to the degree, are available during the traditional school year. In addition, the department offers assistance in obtaining summer internships that may also contribute to the degree at Muhlenberg.

Career Development and Course Work

In the business administration major, students are encouraged to explore their career interests, develop their skills, and work toward their career goals as part of their work in the Core courses of the program. In BUS 233 Operations & Information Systems students research career opportunities and create a career plan. In BUS 236 Management, they enhance their abilities to write a resume and cover letter and receive feedback in applying for an internship. In BUS 239 Marketing, they learn to do informational interviews, create a Linkedin account and explore the process of getting an internship. And, in BUS 475 CUE: Business Policy & Strategy, students work on their interview skills.

ePortfolios

Students majoring in business administration are required to construct an ePortfolio as part of their course work. The ePortfolio is an important web-based tool in helping students to showcase their skills and think ahead toward their careers. In the process, students demonstrate what they have learned through samples of their work, descriptions of key experiences, and their own thoughtful reflections. The ePortfolio enhances the student's ability to obtain internships and jobs and provides a developmental forum for advising and planning.

The ePortfolio process begins in *Operations & Information Systems*, where students get training on how to construct their site and begin to post artifacts of their work, writing reflective statements, and descriptions of their skills and experiences. Students add to their ePortfolio as they learn from courses in the major and elsewhere and engage in extracurricular activities. Work is completed and graded as part of the CUE course, BUS 475 - CUE: Business Policy & Strategy.

Honors Program in Business Administration

An honors program is available on an application basis to students who have completed the business core and have attained a grade point average of 3.70 or higher both in the major program and overall. Interested students should discuss the requirements and rewards of the honors program with their faculty advisor before the end of their junior year. The honors program requires the completion of a one unit senior honors thesis and encourages independent studies.

Program Requirements

Major Requirements

In order to declare and remain a major in good standing in business administration, a student must achieve and maintain a cumulative grade point average of at least 2.00 in all courses applicable to the major. Once enrolled at Muhlenberg College, excluding AP credits (e.g., for microeconomics or macroeconomics) and off-campus courses that are approved by the department chair or business coordinator, students generally meet the major requirements by enrolling Muhlenberg courses.

A major in business administration must complete 12 courses which consist of the following three components:

I. Foundations (4 courses):

Foundation courses will ordinarily be completed during the first two years.

ECN 101 - Principles of Macroeconomics

ECN 102 - Principles of Microeconomics

ACT 101 - Financial Accounting

MTH 119 - Statistical Analysis OR

MTH 331 - Mathematical Statistics I AND

MTH 332 - Mathematical Statistics II

II. Core (4 courses):

Business administration majors are expected to complete all four foundation courses before enrolling in any core courses. Typically, the four core courses are taken during two consecutive semesters and students will not begin to take them before the spring semester of their sophomore year, although exceptions are possible for students who have completed their foundation requirements in their first year and for students who wish to complete their core requirements prior to studying abroad in their junior year.

BUS 233 - Operations & Information Systems

BUS 236 - Management

BUS 239 - Marketing

FIN 237 - Corporation Finance

III. Concentration (4 courses):

Business Administration majors are expected to have completed all four core courses before enrolling in any concentration courses or department approved study abroad program. Ordinarily, concentration courses will be enrolled during the junior and senior years. Participation in a department approved study abroad program is ordinarily done during the junior year.

International Business — Maastricht Study Abroad Program

The Maastricht study abroad program is specifically designed for department majors who wish to gain an international business perspective. The Maastricht program offers courses in business and economics, a maximum of three of which may be used to satisfy the concentration requirement (advisor approval required). Students participating in the Maastricht program are encouraged to take additional concentration area courses at Muhlenberg in consultation with their advisor.

BUS 475 - CUE: Business Policy & Strategy

Management and Organization Studies

Students must complete the following two courses:

BUS 360 - Organizational Behavior

BUS 475 - CUE: Business Policy & Strategy

In addition, students must choose two of the following:

BUS 263, 264 - Sustainability in Business

BUS 311 - Arts Administration

BUS 315 - Management of Not-for-Profit Organizations

BUS 352 - Small Business Management

BUS 365, 366 - Leadership

PHL 245 - Business Ethics

Marketing

Students must complete the following three courses:

BUS 341 - Globalization & Marketing

BUS 347 - Marketing Research

BUS 475 - CUE: Business Policy & Strategy

In addition, students must choose one of the following:

BUS 260 - Marketing in Not-for-Profit Organizations

BUS 304 - Electronic Commerce & the Internet

BUS 345, 346 - Marketing Management

Arts Administration

Students must complete the following two courses:

BUS 311 - Arts Administration

BUS 475 - CUE: Business Policy & Strategy

In addition, students must choose one of the following two courses:

BUS 260 - Marketing in Not-for-Profit Organizations

BUS 315 - Management of Not-for-Profit Organizations

In addition, students must choose one of the following:

BUS 260 - Marketing in Not-for-Profit Organizations

BUS 315 - Management of Not-for-Profit Organizations

COM 312 - Media Industries

ENG 373, 374 - The Literary Marketplace

PHL 236 - Philosophy & the Arts

THR 164 - Stage Management

Minor Requirements

A minor in Business Administration consists of seven courses as listed below:

ACT 101 - Financial Accounting

BUS 236 - Management

BUS 239 - Marketing

ECN 101 - Principles of Macroeconomics

ECN 102 - Principles of Microeconomics

FIN 237 - Corporation Finance

MTH 119 - Statistical Analysis

MTH 331 - Mathematical Statistics I

MTH 332 - Mathematical Statistics II

One elective, with a BUS prefix that also is an elective for a concentration, chosen in consultation with the faculty advisor

Courses

BUS 125, 126 - Business & Society

This course introduces the student to the role of commercial enterprise in society. Business organizations exert powerful social, economic and political forces in a constantly changing environment. This course will evaluate the positive and negative effects these forces have on individuals, groups, and social institutions. Evaluation will include both legal and ethical considerations related to wealth creation, social responsibility, philanthropy, environmental action, and governmental regulation. Students will learn and practice key skills of research, critical analysis, and business communication.

Meets general academic requirement SL (and when offered as 125 it is also a Cluster Course).

BUS 225 - Business Law I

The course provides a basic introduction to the legal aspect of business as it relates to the evolution of business structures, contracts, personal property, wills, and real property. Emphasis is given to legal terminology and problem-solving which can be useful for professional certification and entrance examinations.

BUS 226 - Business Law II

A basic introduction to the legal aspects of business organizations and their commercial relationships and structures as such relate to corporations, partnerships, agency, commercial sales, and paper and secured transactions. Emphasis is placed on legal terminology and problem-solving which can be useful for professional certification and entrance examinations.

BUS 233 - Operations & Information Systems

The course introduces students to the operations function and to related information systems issues. Students will explore concepts (along with quantitative and qualitative decision methodologies) in supply chain management, manufacturing and service processes, lean production, quality, aggregate planning, inventory management, forecasting, capacity management, and global sourcing. The role of information technology, sustainability, and ethical analysis is integrated throughout the course. *Prerequisite(s): ECN 102 Principles of Microeconomics*, and *MTH 119 Statistical Analysis* or *MTH 331 Mathematical Statistics II*.

BUS 236 - Management

As a field of study, management extends from the decision-making thought process of the manager to dynamic human interactions within the organization to relationships between business and society. We will explore the art of management and build our understanding of what managers do, the issues they face, and who they are as people. And, we'll develop management skills and practice them both in class and in the context of our daily lives. Critical thinking will be developed through case studies and research, and awareness will be enhanced through survey instruments, learning teams, and class discussion.

Prerequisite(s): ACT 101 Financial Accounting, ECN 102 Principles of Microeconomics, or INE 201 Business Plan Development.

Meets general academic requirement W.

BUS 239 - Marketing

This course introduces students to the principles of marketing within the context of a dynamic business environment and expands upon the concept of marketing as a value creating function. Students will learn marketing theories and examine the methods marketers use to provide value to customers, business enterprises, non-profit organizations, and society in an ethical and socially responsible manner. Ethical decision-making is emphasized. Specific topics include strategic planning, marketing research, consumer behavior, targeting, segmentation, product development, distribution, pricing, and advertising/promotion.

Prerequisite(s): ECN 101 Principles of Macroeconomics, ECN 102 Principles of Microeconomics, or INE 201 Business Plan Development.

BUS 260 - Marketing in Not-for-Profit Organizations

Marketing in Not-for-Profit Organizations is a service-learning course that builds upon what the students have studied in Marketing. Other marketing courses primarily refer to for-profit organizations. In this course, the students learn about the non-profit sector; read about pertinent philosophical, religious, and historical underpinnings behind philanthropy, volunteerism, and the non-profit sector; study marketing concepts and how they are applied at non-profits; and perform a hands-on service learning marketing project with a non-profit organization.

Offered spring semester

Prerequisite(s): BUS 239 Marketing or permission of instructor.

BUS 263, 264 - Sustainability in Business

The course introduces students to sustainability in business environments. Students will explore how economic, market, and governmental forces influence business decisions regarding sustainability. Issues examined will include: Making value chains sustainable, economic aspects of sustainability, designing sustainable products and services, strategic approaches to sustainability, and developing business models.

Prerequisite(s): BUS 233 Operations & Information Systems. Meets general academic requirement W when offered as 264

BUS 304 - Electronic Commerce & the Internet

This course examines the technical, managerial, and strategic issues pertaining to the Internet and to electronic commerce. Included are issues related to internet infrastructure, business strategy, digital products, marketing, social networking, mobile commerce, intellectual property, security and privacy, and legal and ethical issues.

Prerequisite(s): BUS 233 Operations & Information Systems and BUS 239 Marketing.

BUS 311 - Arts Administration

The creative industries include the individuals, businesses, and nonprofit organizations that create, present, and preserve vital elements of culture. Some key creative industries include live and recorded music, theatre, dance, and film, along with visual arts and literature. This course examines the economic and management realities facing artists and managers in those industries. Some key issues include the place of the arts in the economic landscape, labor markets for artists, the roles and functions of nonprofit arts organizations, arts gatekeepers and agents, government policy as it relates to arts and culture, and collaboration and competition in the arts industries.

Prerequisite(s): BUS 236 Management.

BUS 315 - Management of Not-for-Profit Organizations

Nonprofit organizations are critically important to our society, providing services in the arts, historic preservation, public advocacy, environmental action, health, research, education, and social service. The course surveys the historical, social, and legal contexts of the nonprofit sector in the U.S. The main focus is how they are managed, including structure, administration, leadership, marketing, finance, and resource development. Special attention is given to common nonprofit sector activities such as management of volunteers, trusteeship, and fundraising.

Prerequisite(s): BUS 236 Management.

BUS 341 - Globalization & Marketing

Globalization & Marketing exposes students to concepts, practices, and theories of international marketing and global trade and introduces them to the global interdependence of consumers and corporations. Students assess how international influences, such as culture, social structure, politics, monetary systems, and legal issues, affect the firm's management decision making process and marketing decisions and also influence consumer behavior. The realistic Export Plan project, where students introduce a new product to a country, requires extensive research. Students immerse themselves in the culture and economy of a country of their choice and then plan a global marketing strategy for their product. Offered spring semester.

Prerequisite(s): BUS 239 Marketing.

BUS 345, 346 - Marketing Management

Marketing Management expands student knowledge of basic marketing principles by merging the theoretical foundations of the discipline with actual business situations presented in a case study format, thus providing insight into complex marketing issues. The course will help develop students' decision-making skills by focusing on the major decisions that marketing managers and top management face in their efforts to integrate organizational capabilities and resources with marketplace needs and opportunities. Students will work in teams to develop a marketing plan for existing and hypothetical organizations.

Prerequisite(s): BUS 239 Marketing.

Meets general academic requirement W when offered as 346

BUS 347 - Marketing Research

Marketing Research examines the use of information to improve marketing management decision making. Students will have exposure to qualitative and quantitative research techniques. Building upon the students' marketing and statistics knowledge and using a systems approach, the class discusses the identification of data needs, methods of data collection, and analysis and interpretation of findings. Attention is given to identifying the many sources of error that occur when conducting research and the importance of minimizing total error. Typically, teams of students conduct a marketing research project for a client. Fall semester.

Prerequisite(s): BUS 239 Marketing.

BUS 352 - Small Business Management

This course is designed to answer the "now what?" questions that face entrepreneurs once a new venture is launched and operating. Issues include financial management, human resource issues, legal and regulatory concerns, ethical issues, operations, control of growth, distribution and sales, and successful exit strategies.

Prerequisite(s): BUS 236 Management or INE 201 Business Plan Development.

BUS 360 - Organizational Behavior

This course is a general introduction to the key concepts and theories in the fields of Organizational Behavior and Industrial/Organizational psychology. The teaching model involves experiential learning, reflective observation, abstract thinking, and experimentation. Students inquire into why people behave as they do with an emphasis on the human processes that occur in groups and organizations. They also engage in a team service-learning project in which they experience organizational issues first hand and learn about being a catalyst for change. Students are active participants in group exercises, role-plays, oral presentations, and simulations.

Prerequisite(s): BUS 236 Management.

BUS 365, 366 - Leadership

In this course we will explore the nature of leadership, and we will read relevant theory, work on case studies, take diagnostic instruments, and apply this knowledge in class simulations and exercises. Students will conduct a leadership project outside of the classroom and will be supported along the way. They will also learn to add value as a "Leadership Coach" and to use assessment data to spark reflection, growth, and practice. Finally, students will explore their own purposes in answering the "what" of leadership. What is it that is really worth doing and worth taking risks?

Prerequisite(s): BUS 236 Management.

Meets general academic requirement W when offered as 366

BUS 475 - CUE: Business Policy & Strategy

The CUE: Business Policy & Strategy course integrates all earlier work in the major. In this course, the student will develop the ability to consider an enterprise as an integrated entity, to use the concepts of policy and strategy, and to understand the environmental constraints and ethical considerations facing an organization. Each year students will conduct a research project designed to address a current issue or problem in the field and present their findings at a capstone poster session. The CUE requires students to submit an ePortfolio that is begun upon major declaration and developed in consultation with the directors of the ePortfolio program in business.

Prerequisite(s): BUS 233 Operations & Information Systems, BUS 236 Management, BUS 239 Marketing, and FIN 237 Corporation Finance.

BUS 960 - Business Administration Internship

Under faculty supervision, students have the opportunity to learn by interning about ten hours per week in an organization. This gives students the opportunity to try out possible careers, apply classroom knowledge to "real world" situations, and establish contacts with professionals in their field of interest. Students are required to keep a professional journal, attend group meetings, and give a formal oral presentation about their internship experience. *Pass/fail only*.

Chemistry (CHM)

Department Chair: Dr. Christine Ingersoll Professors: Anderson, Baar, Kelsey Associate Professors: Colabroy, Keane Assistant Professors: Sparks, Young Visiting Assistant Professor: Gooch

Lecturers: Gannon, Herrera

The major program in chemistry provides a curriculum that accommodates and encourages students with various interests. The major program is organized around a required core of courses in the traditional areas of chemistry. Each course in the core curriculum involves a laboratory component that promotes (1) hands-on knowledge of scientific experimentation, (2) the capacity to interpret experimental data, (3) an ability to analyze data statistically, and (4) the skill to communicate results. The major also includes elective courses which broaden students' exposure to related areas of science. The chemistry department is accredited by the American Chemical Society.

Special Programs

Students planning to pursue graduate studies in chemistry or employment in a research position with a chemical or pharmaceutical firm will need to take the General Physics I, II sequence listed as electives. Individuals planning to pursue graduate studies are strongly advised to complete additional advanced courses in the sciences and math. To achieve ACS certification students will need to complete additional courses beyond those required.

Students who wish to combine a chemistry major with other programs of study and who may be interested in pursuing careers in areas where a chemistry background may be useful, such as government service, law, sales, library science, or technical writing, should consult with their chemistry advisor when choosing electives.

Students interested in the health professions should consult with the health professions office. Candidates for teacher certification should consult with the Education Department at Muhlenberg College.

Honors Program

Students who wish to receive honors in chemistry must announce their intention prior to the senior year and must fulfill the following requirements:

- 1. The candidate must attain a minimum gpa of 3.30 in all chemistry courses.
- 2. The candidate must submit an independent study/research paper no later than April 15 of the senior year. This paper must be based on a minimum of one course unit of research and must be approved by the Muhlenberg College faculty member who is directing his/her research.
- 3. The candidate must roster and complete CHM 090 and 490 CUE: Chemistry Capstone Seminar.
- 4. The candidate must pass an oral examination conducted by members of the Chemistry department.

Program Requirements

Major Requirements

To declare and remain a major in chemistry, a student must maintain at least a 2.00 grade point average for all courses applicable to the major.

Required Courses:

CHM 103 - General Chemistry I

CHM 104 - General Chemistry II

CHM 203, 205 - Organic Chemistry IA OR

CHM 201 - Organic Chemistry I

CHM 204, 206 - Organic Chemistry IIA OR

CHM 202 - Organic Chemistry II

CHM 311 - Analytical Chemistry I

CHM 312 - Analytical Chemistry II

CHM 321 - Physical Chemistry I

CHM 322 - Physical Chemistry II

CHM 331 - Inorganic Chemistry

CHM 090 and 490 - CUE: Chemistry Capstone Seminar

MTH 121 - Calculus I

MTH 122 - Calculus II

Two courses numbered between 400 and 479:

CHM 403 - Chiral Synthesis

CHM 406 - NMR Spectroscopy

CHM 410 - Laboratory Robotics & Automation

CHM 420 - Laser Chemistry

CHM 430 - Organometallic Chemistry

Or other advanced courses approved by the department

Electives. Two additional courses selected from:

BIO 152 - Principles of Biology III: Molecules & Cells

BIO 220 - Biochemistry

ESC 310 - CUE: Environmental Chemistry OR

ESC 312 - CUE: Toxicology

MTH 119 - Statistical Analysis OR

MTH 223 - Calculus III OR

MTH 226 - Linear Algebra **OR**

MTH 227 - Differential Equations

PHY 121 - General Physics I

PHY 122 - General Physics II

Chemistry Minor

A minor in chemistry consists of a total of seven course units in chemistry chosen from courses numbered 103 and above, including at least three course units numbered 300 or selected from the list under Chemistry Major Requirements.

Courses

CHM 100 - Introductory Chemistry

An introduction to the basic principles of chemistry with considerable attention given to reading and computational skills, problem solving skills, study skills, and good learning techniques in general. Designed for science students needing additional preparation for the General Chemistry courses (103 and 104). Three hours of lecture and recitation per week. Does not satisfy a major/minor or pre-professional requirement.

Meets general academic requirement SC.

CHM 101 - Chemistry of the Environment

Designed for students majoring in social sciences, humanities, or arts. A qualitative study of basic chemistry principles applied to current environmental systems and issues, with reference to both historical and future development of the science. Topics and case studies include global chemical cycles and spheres, energy sources and alternatives, natural and man-made materials, industrial chemistry, climate change, ozone depletion, air and water pollution, toxicology, and "green" initiatives. No previous work in chemistry is required. Three hours (lecture-demonstrations) per week.

Meets general academic requirement SC.

CHM 103 - General Chemistry I

Designed as an introductory course for students majoring in the physical or biological sciences. Topics covered include: atomic structure, bonding, stoichiometry, gases, thermochemistry, and types of reactions. Three hours of lecture, one hour of recitation, and one three hour laboratory per week.

Prerequisite(s): High School chemistry.

Meets general academic requirement SC.

CHM 104 - General Chemistry II

A continuation of CHM 103. Topics covered include: solids, liquids, solutions, kinetics, equilibrium, acids and bases, electrochemistry, and thermodynamics. Three hours of lecture, one hour of recitation, and one three hour laboratory per week. *Prerequisite(s): CHM 103 General Chemistry I.*

Meets general academic requirement SC.

CHM 113 - Kitchen Chemistry

Kitchen Chemistry is a course designed for non-majors to engage, reason with, and practice scientific principles in a familiar setting - the kitchen. The food we eat is made of atoms joined into molecules by bonds, and the processes we use to cook that food are physical and chemical manipulations of molecular interactions. Using this context, students will derive basic scientific principles from the fields of chemistry, biology, and biochemistry to not only understand the process of cooking, but also to predict outcomes and design recipes of their own. Three hours of lecture and three hours of laboratory weekly. This course is intended for non-science majors only.

Meets general academic requirement SC.

CHM 201 - Organic Chemistry I

Designed for students majoring in biology and natural science. Structure, preparation, and properties of organic compounds with an emphasis on stereoisomerism, synthetic methods, and reaction mechanisms. Laboratory work involves an introduction to preparative and analytical techniques. Weekly recitations provide a setting for discussions and problem solving. Three hours of lecture, one hour of recitation, and one three hour laboratory per week.

Prerequisite(s): CHM 104 General Chemistry II.

CHM 202 - Organic Chemistry II

A continuation of CHM 201. Three hours of lecture, one hour of recitation, and one three hour laboratory per week. *Prerequisite(s): CHM 201 Organic Chemistry I.*

CHM 203, 205 - Organic Chemistry IA

An investigation of the structure, properties, and reactivity of organic compounds. Topics emphasized include nomenclature, stereochemistry, spectroscopy, reaction mechanisms, and synthesis. Classroom and laboratory work are closely integrated. Laboratory work includes both collaborative efforts and individual investigations. Preparative and analytical techniques utilized in the synthesis of organic compounds are featured, as well as structure determination, molecular modeling, and investigation of reaction mechanisms. Hands-on use of a variety of instrumentation is emphasized. A total of seven hours lecture, discussion, and laboratory per week.

Prerequisite(s): CHM 104 General Chemistry II.

Meets general academic requirement W when offered as 205.

CHM 204, 206 - Organic Chemistry IIA

A continuation of CHM 203, 205.

Prerequisite(s): CHM 203, 205 - Organic Chemistry IA Meets general academic requirement W when offered as 206.

CHM 311 - Analytical Chemistry I

Data analysis, chemical equilibria, classical methods of analysis, and electroanalytical chemistry are explored. Data analysis and statistics, including error propagation, confidence intervals, and analytical calibration methods are examined. Acid-base, oxidation-reduction, complex and multiple simultaneous equilibria are applied to analytical problems. Classical analytical methods, such as gravimetric and volumetric analysis, as well as electrochemical methods (ion selective electrodes, potentiometry, and voltammetry) are also discussed. Laboratory work involves the application of a variety of these methods to quantitative chemical analysis and experimental design and implementation. Three hours of lecture and one three hour laboratory per week.

Prerequisite(s): CHM 202 - Organic Chemistry II or CHM 204, 206 - Organic Chemistry IIA.

CHM 312 - Analytical Chemistry II

Theory, instrumentation, and applications of instrumental methods of analysis involving separations and interaction of electromagnetic radiation with matter. Principles of analytical separation methods are explored, including gas, liquid and supercritical fluid chromatographies, and capillary electrophoresis and electrochromatography. Topics on atomic and molecular spectroscopy include atomic absorption, emission and fluorescence, ultraviolet-visible, molecular fluorescence and phosphorescence, Fourier transform infrared, and mass spectrometry. In addition, techniques are reinforced through practical experience in a well-equipped instrumentation laboratory. Three hours of lecture and one three hour laboratory per week. *Prerequisite(s): CHM 311 - Analytical Chemistry I.*

Meets general academic requirement W.

CHM 321 - Physical Chemistry I

The basic principles of quantum mechanics and their applications to problems of chemical interest are discussed. Topics include atomic and molecular structure, chemical bonding, and molecular spectroscopy. In addition, the fundamentals of chemical kinetics, reaction rate theories, and reaction mechanisms are investigated. Three hours of lecture and one three hour laboratory per week.

Prerequisite(s): CHM 202 Organic Chemistry II or CHM 204, 206 Organic Chemistry IIA and MTH 122 Calculus II.

CHM 322 - Physical Chemistry II

Principles and applications of chemical thermodynamics are explored, including the concepts of internal energy, enthalpy, entropy, free energy, and chemical potential. Concepts are interpreted on a molecular level and applied to a variety of problems: chemical reactions, chemical equilibria, phase changes, solution chemistry, and bioenergetics. Statistical mechanics is introduced to demonstrate the connection between properties of individual molecules and the thermodynamic properties of macroscopic systems. Three hours of lecture and one three hour laboratory per week.

Prerequisite(s): CHM 202 Organic Chemistry II or CHM 204, 206 Organic Chemistry IIA and MTH 122 Calculus II.

CHM 331 - Inorganic Chemistry

Modern theories of atomic and molecular structure are covered at an advanced level. Particular emphasis is given to symmetry, ligand field theory, coordination chemistry, and applications of inorganic systems. Three hours of lecture and four hours of laboratory per week.

Prerequisite(s): CHM 202 Organic Chemistry II or CHM 204, 206 Organic Chemistry IIA. Meets general academic requirement W.

CHM 403 - Chiral Synthesis (0.5 course unit)

Methods for achieving asymmetric synthesis and resolving racemic mixtures will be explored. This will include classical enantiomeric resolution, the use of chiral auxiliaries, chiral reagents, chiral starting materials, and the employment of stereoselective reactions. Key syntheses from primary literature that utilize these methods will serve as a framework to illustrate the chiral strategies. Students will present articles from primary literature. Two 75 minute lecture/presentations per week. *Prerequisite(s): CHM 202 Organic Chemistry II or CHM 204, 206 Organic Chemistry IIA*.

CHM 406 - NMR Spectroscopy (0.5 course unit)

Students will study modern techniques of nuclear magnetic resonance (NMR) spectroscopy and apply them to problems in structure determination and analysis of organic compounds and biomolecules. Operation of a modern high field multinuclear NMR spectrometer will be featured with an emphasis on what information different NMR experiments can provide and how to interpret the results. Sufficient theoretical background will be included to allow students to optimize instrument parameters for specific experiments. Topics will include a thorough coverage of one-dimensional 1H NMR spectroscopy, various types of 13C NMR (DEPT, APT, etc.), other NMR-active nuclei such as 31P, and various homonuclear and heteronuclear two-dimensional NMR experiments (COSY, HSQC, HMBC, etc.). Two class hours per week.

Prerequisite(s): CHM 202 Organic Chemistry II or CHM 204, 206 Organic Chemistry IIA or permission of instructor.

CHM 410 - Laboratory Robotics & Automation (0.5 course unit)

Automated techniques and philosophies, as applied to the modern analytical laboratory, will be discussed. Automated analytical sample preparation, data acquisition, and data analysis methods will be explored both as reported in the primary literature and through hands-on experimentation in the laboratory. Robotic workstations for liquid handling and experimental design approaches will be used to systematically study sample preparation variables in the automated laboratory. Contemporary analytical separations will be used for sample analysis with an emphasis on pharmaceutical applications.

Pre- or co-requisite: CHM 312 Analytical Chemistry II or permission of instructor

CHM 420 - Laser Chemistry (0.5 course unit)

Students will explore the workings of lasers and how chemists take advantage of their properties to probe the dynamics and energies of chemical reactions. The course will begin with some commercial applications of lasers and progress rapidly to the discussion of femtosecond spectroscopy and how it is being used to investigate the breaking of bonds in real time. *Prerequisite(s): CHM 321 Physical Chemistry I or permission of instructor.*

CHM 430 - Organometallic Chemistry (0.5 course unit)

The chemistry of compounds containing metal-carbon bonds will be explored. Topics will include the structure and bonding of organometallic compounds, their reactions and reaction mechanisms, spectroscopy, and their use in industrial processes and organic synthesis.

Pre- or co-requisite: CHM 331 Inorganic Chemistry

CHM 090 and 490 - CUE: Chemistry Capstone Seminar (0 and .5 course unit)

Students will complete a culminating experience, submit a written report of their work, and orally present the results as well. Students must enroll in both semesters of the course. The course includes searching the chemical literature, interacting with visiting seminar speakers, attendance at all Departmental seminars, and the presentation of the student's culminating experience.

CHM 960 - Chemistry Internship

Majors are eligible for internship programs with the approval of the department.

Computer Science (CSI)

Department Chair: Dr. Elyn Rykken, Professor of Mathematics

Associate Professors: Benjamin, Kussmaul Assistant Professor: Reyes-Silveyra

Computer science encompasses the study of computation and information processing in both hardware and software. The curriculum combines a rigorous foundation in programming and core CS topics with a variety of advanced electives. The CS major will prepare students for graduate work or employment in a variety of roles, including as analysts, software designers and developers, and systems administrators.

Honors Program

At commencement honors in computer science are awarded to qualified students. The requirements for honors are: (a) a grade point average in the computer science major of at least 3.50, (b) an overall grade point average of at least 3.30, and (c) successful completion of a significant research project approved by the CS faculty.

Program Requirements

Major Requirements

Introductory Course: Only one may count as a major requirement or for a course unit.

CSI 102 - Computer Science I: Introduction to Game Programming

CSI 104 - Computer Science I: Introduction to Robotics

CSI 106 - Computer Science I: Introduction to Multimedia Computing

Required Courses:

CSI 111 - Computer Science II

CSI 210 - Software Engineering

CSI 220 - Data Structures & Algorithms

CSI 240 - Computer Organization

CSI 370 - CUE: Computer Science Seminar

MTH 121 - Calculus I

MTH 119 - Statistical Analysis OR

MTH 122 - Calculus II

Three Electives: chosen from

CSI 305 - Database Systems

CSI 310 - Programming Languages

CSI 326 - Artificial Intelligence

CSI 345 - Web Software Development

CSI 350 - Operating Systems

CSI 355 - Computer Networks

Computer Science Culminating Undergraduate Experience (CUE)

The computer science CUE engages each student in an intellectually rigorous experience that draws upon knowledge acquired within the major. This is normally done by completing CSI 370 - CUE: Computer Science Seminar. With faculty approval, an independent study or other project may also be counted as the CUE.

Minor Requirements

Introductory Course: Only one may count as a minor requirement or for a course unit.

CSI 102 - Computer Science I: Introduction to Game Programming

CSI 104 - Computer Science I: Introduction to Robotics

CSI 106 - Computer Science I: Introduction to Multimedia Computing

Required Courses:

CSI 111 - Computer Science II

CSI 220 - Data Structures & Algorithms

MTH 121 - Calculus I

Two Electives: chosen from

CSI 210 - Software Engineering

CSI 240 - Computer Organization

CSI 305 - Database Systems

CSI 310 - Programming Languages

CSI 326 - Artificial Intelligence

CSI 345 - Web Software Development

CSI 355 - Computer Networks

CSI 370 - CUE: Computer Science Seminar

Courses

CSI 102 - Computer Science I: Introduction to Game Programming

An introduction to Computer Science through the programming of games. Emphasis is given to the creation of arcade style games incorporating animation, user interaction, and sound effects. Students learn to use game development, audio, and image manipulation software in designing and constructing their games. The course is intended for those with no prior experience in computer science but with a desire to hone problem solving and computing skills with a focus on game programming. *Meets general academic requirement RG*.

CSI 104 - Computer Science I: Introduction to Robotics

An introduction to Computer Science through the programming of robots. Mobile robots controlled over wireless communications links are used to investigate basic concepts in both robotics and computing. Students will learn how to control the movement of a robot through its world. This includes sensing surroundings and making decisions on how to modify behaviors to attain prescribed goals. The course is intended for those with no prior experience in computer science, but with a desire to hone problem solving and computing skills with a focus on robotics.

 $Meets\ general\ academic\ requirement\ RG.$

CSI 106 - Computer Science I: Introduction to Multimedia Computing

An introduction to Computer Science through multimedia computing. Students will learn to create and use software to manipulate multimedia, including images, sounds, and web sites. Topics also include algorithm design and development, control

structures, data types, and testing. Topics may vary from year to year depending on student interests, but will likely include filtering (e.g. color shifting, posterizing, and pitch shifting), music synthesis techniques, reading and writing files, and developing simple graphical user interfaces (GUI's). This course is intended for those with no prior experience in computer science but with a desire to hone problem solving and computing skills with a focus on multimedia.

Meets general academic requirement RG.

CSI 111 - Computer Science II

Reviews basic programming language features and introduces advanced features such as inheritance, interfaces, exceptions, and recursion. Explores fundamental data structures and algorithms, including vectors, linked lists, stacks, and queues as well as algorithms for searching and sorting. Students will study, design, and develop programs with multiple files, classes, and objects. *Prerequisite(s): Any Computer Science I course with a grade of C- or above.*

Meets general academic requirement RG.

CSI 210 - Software Engineering

A project-based study of the theory, practice, processes, and tools used to design, build, and maintain large software systems. Topics include requirements analysis, system architecture, design, testing, maintenance, and project maintenance, as well as professional practice, risks, intellectual property, and social impact of computing.

Prerequisite(s): CSI 111 Computer Science II.

Meets general academic requirement SC and W.

CSI 220 - Data Structures & Algorithms

A study of data structures and algorithms, their practical applications, and key techniques for designing, analyzing, and reasoning about them. Topics include lists, hash tables, trees, and graphs. Students will study, design, and develop programs that use, implement, and extend classic and novel data structures and algorithms.

Prerequisite(s): CSI 111 Computer Science II.

Meets general academic requirement SC.

CSI 240 - Computer Organization

An introduction to the architecture and operation of a computer system. Topics include data representation, assembly language programming, boolean algebra, digital logic, and combinational and sequential circuits.

Prerequisite(s): CSI III Computer Science II.

Meets general academic requirement SC.

CSI 305 - Database Systems

An introduction to relational database systems. Topics covered include ER diagrams, relational algebra, structured query language (SQL), and fundamental data structures. Modern database management system software is used to implement course projects. Offered in alternate years.

Prerequisite(s): CSI 220 Data Structures & Algorithms.

CSI 310 - Programming Languages

A study of the principles that govern the design and implementation of contemporary programming languages. Topics include lexical properties, compilers, interpreters, data structures, control structures, parameter passage, and run-time environments. Procedural, functional, object oriented, and logic programming languages will be considered. Offered in alternate years. *Prerequisite(s): CSI 220 Data Structures & Algorithms*.

CSI 326 - Artificial Intelligence

An introduction and survey of the opportunities and challenges in solving problems often thought to require human intelligence. Topics may include intelligent agents, searching, learning, planning, natural language processing, machine vision, and robotics. Offered in alternate years.

 $\label{eq:continuous} Prerequisite(s): CSI~220~Data~Structures~\&~Algorithms~and~MTH~121~Calculus~I.$

CSI 345 - Web Software Development

The tools and techniques used to create computer programs having graphical user interfaces (GUIs) making use of the World Wide Web. Topics will include XHTML, Javascript, CGI programming, and AJAX. Course projects will use two and three-tiered network architectures and utilize programming environments such as Java servlets or PHP. Offered in alternate years.

Prerequisite(s): CSI 111 Computer Science II.

CSI 350 - Operating Systems

Introduction to the management of processes, memory, and I/0 devices in a multiprogramming environment. Topics include file systems, resource sharing, scheduling, interrupts, and concurrency. Offered in alternate years.

Prerequisite(s): CSI 220 Data Structures & Algorithms and CSI 240 Computer Organization.

CSI 355 - Computer Networks

The concepts and techniques used to implement communications using computer networks. Topics include the ISO network model, sockets, and the internet protocols of TCP/IP. Link layer protocols such as Ethernet and wireless are also covered. Offered in alternate years.

Prerequisite(s): CSI 220 Data Structures & Algorithms and CSI 240 Computer Organization.

CSI 370 - CUE: Computer Science Seminar

Advanced study of selected topics. Students work in teams on a significant software project.

Prerequisite(s): CSI 210 Software Engineering, CSI 220 Data Structures & Algorithms, and CSI 240 Computer Organization. Meets general academic requirement W.

Dance (DNC)

Dance Chair: Professor Karen Dearborn

Professors: Averill, Dretsch

Assistant Professors: Flynn, Peterson, Smith

Lecturers: Byrne, Cowart, Oliver, VanDanend Sorge

The dance program is designed to provide a solid background in the history and theory of the art in conjunction with intensive study in a variety of dance techniques. In addition to the full-time faculty, the department employs eight professional artists, each a specialist within a specific dance style, as well as four professional musicians to play for classes and performances. The curriculum, based in the liberal arts tradition, serves as an excellent preparation for graduate study programs and careers in dance. Careers that dance majors and minors typically pursue include teaching, dance therapy, choreography, performance, physical therapy, and arts management.

Special Programs

Dance at Muhlenberg is joined with the theatre program to form the Department of Theatre and Dance. The faculty, staff, and students in both areas work closely together in the department's performance program which annually features five to seven major dance concerts, a musical theatre production, and several plays. In addition, the department sponsors several off-campus touring ensembles in dance. All students, regardless of major, are eligible to participate in the performance program and work on production crews. Students with a serious interest in musical theatre performance can study acting and dance within the department and receive vocal training in the Department of Music.

The Baker Artist-in-Residence Program brings nationally distinguished professional guest artists to Muhlenberg each year to teach and participate in the performance programs of dance, music, and theatre. Recent semester-long residencies have included Robert LaFosse, Danny Buraczeski, Doug Varone and Dancers, David Dorfman Dance, and Urban Bush Women.

Program Requirements

Major Requirements

Eleven course units satisfy the dance major; however, in order to maintain proficiency, it is recommended that dance majors study dance technique throughout their college career.

Required Core Courses: (4.5 units)

DNC 115 - Dance Technique & Performance I

DNC 170 - Dance & Society

DNC 201 - Dance History

DNC 215 - Dance Technique & Performance II 0.5 course unit

DNC 490 - CUE: Advanced Research in Dance

One required cognate course: (1 unit)

BIO 102 - Biology of Movement OR

BIO 151 - Principles of Biology II: Cells & Organisms

Completion of a Concentration: (5.5 units)

Performance Concentration

Required Courses: (2.5 units)

DNC 160 - Movement Workshop for Dancers & Actors 0.5 course unit

DNC 260 - Dance Composition

DNC 275 - Anatomy & Kinesiology for Dancers

Advanced training in two (2) of the following techniques: (1 unit)

DNC 410, 411 - Ballet IV 0.5 course unit

DNC 420, 421 - Jazz Dance IV 0.5 course unit

DNC 430, 431 - Jazztap IV 0.5 course unit

DNC 440, 441 - Modern Dance IV 0.5 course unit

DNC 470, 471 - Ballet V 0.5 course unit

DNC 472, 473 - Modern Dance V 0.5 course unit

Choose two course units from the following: (2 units)

DNC 125 - Aerial Acrobatics I 0.5 course unit

DNC 150 - African Dances & Cultures

DNC 235 - Dance Partnering 0.5 course unit

DNC 250 - Experiential Anatomy & Somatic Practice for Dancers 0.5 course unit

DNC 345 - Pointe & Variations 0.5 course unit

Any Level III, IV, or V technique courses in Ballet, Modern, Jazz, Tap (0.5)

DNC 950 - Community Performance Ensemble 0.5 course unit

Choreography Concentration Required Courses: (3.5 units)

DNC 160 - Movement Workshop for Dancers & Actors 0.5 course unit

DNC 260 - Dance Composition

DNC 360 - Advanced Dance Composition

THR 165 - Stagecraft: Aesthetics & Lighting 0.5 course unit

THR 167 - Stagecraft: Costume Techniques 0.5 course unit

Choose two course units from the following: (2 units)

DNC 125 - Aerial Acrobatics I 0.5 course unit

DNC 150 - African Dances & Cultures

DNC 235 - Dance Partnering 0.5 course unit

DNC 250 - Experiential Anatomy & Somatic Practice for Dancers 0.5 course unit

DNC 265 - Screen Dance

DNC 345 - Pointe & Variations 0.5 course unit

Any Level III, IV, or V technique courses in Ballet, Modern, Jazz, Tap (0.5)

DNC 950 - Community Performance Ensemble 0.5 course unit

Dance Education Concentration

Required Courses: (3.5 units)

DNC 160 - Movement Workshop for Dancers & Actors 0.5 course unit

DNC 260 - Dance Composition

DNC 275 - Anatomy & Kinesiology for Dancers

DNC 350 - Teaching Dance: Theory & Methods

Choose two course units from the following: (2 units)

DNC 150 - African Dances & Cultures

DNC 250 - Experiential Anatomy & Somatic Practice for Dancers 0.5 course unit

DNC 360 - Advanced Dance Composition

DNC 965 - Teaching Dance Practicum 0.5 course unit

Any Level III, IV, or V technique courses in Ballet, Modern, Jazz, Tap (0.5)

THR 165 - Stagecraft: Aesthetics & Lighting 0.5 course unit

THR 166 - Stagecraft: Scenic Techniques 0.5 course unit

THR 167 - Stagecraft: Costume Techniques 0.5 course unit

Dance Science Concentration

Students planning to pursue graduate studies in dance science related fields such as physical therapy or dance movement therapy should work closely with their dance faculty advisor to select required cognates for admission to graduate programs.

Required Courses: (3.5 units)

DNC 250 - Experiential Anatomy & Somatic Practice for Dancers 0.5 course unit

DNC 275 - Anatomy & Kinesiology for Dancers

DNC 375 - Advanced Topics in Dance Science

Two (.5) Level III, IV, or V technique courses in Ballet, Modern, Jazz, Tap

Choose two of the following: (2 units)

BIO 151 - Principles of Biology II: Cells & Organisms

BIO 245 - Comparative Anatomy

BIO 250 - General Physiology

PSY 101 - Introductory Psychology

PSY 230 - Child Development

PSY 231 - Adolescent Development

PSY 240 - Abnormal Psychology

PHY 121 - General Physics I

PHY 122 - General Physics II

Minor Requirements (7 units)

Required Courses: (6 units)

DNC 115 - Dance Technique & Performance I

DNC 170 - Dance & Society

DNC 201 - Dance History

DNC 215 - Dance Technique & Performance II 0.5 course unit

Five 0.5 unit courses in dance technique including:

DNC 160 - Movement Workshop for Dancers & Actors 0.5 course unit OR

DNC 250 - Experiential Anatomy & Somatic Practice for Dancers 0.5 course unit

Choose one of the following:

DNC 260 - Dance Composition 1 course unit

DNC 275 - Anatomy & Kinesiology for Dancers 1 course unit

Courses

DNC 115 - Dance Technique & Performance I

This is the foundation course for first year students considering a dance major or minor. The course is primarily a studio experience focused on exploring the theoretical basis of concert dance via practice of dance technique and performance. Included are investigations of the anatomical and biomechanical principles of movement as well as the cognitive processes of learning and performing dance. Students must be at the intermediate or advanced level in either ballet, modern, or jazz dance. *Meets general academic requirement AR*.

DNC 125 - Aerial Acrobatics I (0.5 units)

This course introduces aerial movement techniques on a variety of aerial equipment. Areas covered will include the fundamentals of aerial movement: climbing, inversions, drops, and partnering. The course will also cover cross training on the ground for the development of strength, flexibility, and safety precautions when working in the air. This course will be supplemented by a study of circus history and theory

DNC 150 - African Dances & Cultures

This course is designed to introduce the student to African and African-derived dance forms. The cultural contexts of secular and religious dance forms are emphasized. Students are involved in physical training, the perfection of style, integration of music and dance, and an appreciation of the diverse values that are embodied in movement. The course includes lecture, video presentations, discussion, singing, drumming, and dancing.

Meets general academic requirement DE.

DNC 160 - Movement Workshop for Dancers & Actors (0.5 units)

Studio work to expand one's range of expression by crossing borders between dance/theatre/sound. Elements include Modern Dance, Sound and Movement Improvisation, Contact Improvisation, Body Therapies, Yoga, and Theatre Studies.

DNC 170 - Dance & Society

A global survey of dance in various cultural, historical, and social contexts. Students will explore how dance communicates human history and experience. Course work includes dance viewing, reading, critical analysis, and movement exploration.

DNC 201 - Dance History

A lecture/discussion course devoted to the study of nineteenth and twentieth century dance in its social-political and cultural context. Focus on American theatrical dance forms (ballet, modern, jazz) and their origins in French, Russian, German, and African societies. Films, video, and field trips will be used to supplement class discussion.

Prerequisite(s): DNC 170 Dance & Society.

Meets general academic requirement HU and W.

DNC 215 - Dance Technique & Performance II (0.5 units)

Rooted in embodied practice, this course seeks to deepen a dancer's self-awareness and performance skills through a lens of global dance. Studio work includes focus on Black Vernacular Dance techniques, as well as a variety of global forms, repertory, and performance practice. Students will develop physical rhythmic skills, including polyrhythm and polycentrism, while exploring music notation and various rhythms. The course seeks to reveal the dynamic intersections of race, culture, gendered expression, and our unique dancing bodies.

Prerequisite(s): DNC 115 Dance Technique & Performance I.

Limited to Dance majors and minors.

DNC 225 - Aerial Acrobatics II

This course is designed to further the student's knowledge of aerial work and circus theory. Through sequencing, choreography, and more advanced strength training, participants will gain stamina and the tools to create transitions between movements in the air. More advanced partnering will be explored as well as how to interact with the apparatus on the ground as a theatrical tool. Students will develop a solo work presented at the end of the semester. The course will be supplemented by studies in international circus history and theory on the role of circus in our current society.

Prerequisite(s): DNC 125 Aerial Acrobatics I or instructor approval.

DNC 235 - Dance Partnering (0.5 units)

This course is an introduction to and elaboration upon the foundational elements of various dance partnering techniques for trained dancers. An experiential survey course, this class covers Contact Improvisation, Ballroom, Ballet, and other contemporary partnering idioms. Manipulation, lifts, supports, and the development of a kinetic relationship are explored and integrated in a non-gender specific manner in this course through shared transfer of weight, momentum, leverage, counterbalancing, and moving in harmony. This physical work is supported by theoretical readings and video, offering historical and/or cultural context. The course culminates in a creative lab synthesizing the techniques learned.

Prerequisite(s): DNC 160 - Movement Workshop for Dancers & Actors and DNC 310 - Ballet III or higher <u>or</u> DNC 340 - Modern Dance III or higher.

DNC 250 - Experiential Anatomy & Somatic Practice for Dancers (0.5 units)

This course is designed to provide a studio experience for investigation of applied anatomy and kinesiology with particular emphasis on movement re-patterning. Readings focus on the historical development and practical applications of a variety of somatic practices whose purpose is to change mental and physical action to produce a healthier and more balanced moving body. Studio work emphasizes participation in at least one form of somatic practice and how it enhances study in the traditional dance technique class. Written work investigates the connections between theory, science, and functionality.

DNC 260 - Dance Composition

Theory and experience in structuring movement from simple phrases to complex organizational units. The student will explore in solo, duet, or group forms various devices and motivations used in creating dances. Reading, writing, and critical analysis included.

Prerequisite(s): DNC 160 Movement Workshop for Dancers & Actors and DNC 115 Dance Technique & Performance I or DNC 240 Modern Dance II or DNC 340 Modern Dance III.

DNC 265 - Screen Dance

Visual Images of the moving body have never been more prominent, and the ability to present one's choreography globally has never been more accessible. This course examines screen dance as a hybrid art form and a cultural phenomenon, combining a theoretical examination of screen dance with the practical experience of creating original dance videos. An exploration of dance's history on screen from Hollywood's movie musicals, music videos, avant-garde explorations, and YouTube will be examined. This course will introduce students to the tools for creating dance in today's digital environment, as well as exploring topics of representation and kinesthetic possibilities for filmed bodies.

Prerequisite(s): DNC 115 Dance Technique & Performance I.

DNC 275 - Anatomy & Kinesiology for Dancers

This course examines the science of human motion with particular emphasis on the biomechanics of dance. Course content covers the human skeletal system; joint biomechanics relevant to dance; muscle origin, insertion, and action; and the role gravity plays in muscle action. Analysis of physical structure, function, and dynamic alignment as they relate to performance enhancement and injury prevention are investigated.

Prerequisite(s): BIO 102 Biology of Movement or BIO 151 Principles of Biology II: Cells & Organisms.

DNC 350 - Teaching Dance: Theory & Methods

This course introduces various theories of dance/movement education and how they apply in a variety of populations in diverse settings (pre-school, K-12, special populations, community crossovers, private studios, and older adults). Course work includes lecture, class discussion, guest speakers, reading, observation, written analysis, peer teaching, and fieldwork.

Prerequisite(s): DNC 115 Dance Technique & Performance I.

DNC 360 - Advanced Dance Composition

Advanced theory and experience in creating dances. Studio work in movement exploration and compositional structure are complemented by films, video, trips to see dance, critical analysis, and reading and writing assignments. *Prerequisite(s): DNC 260 Dance Composition.*

DNC 375 - Advanced Topics in Dance Science

Through this course students will explore and expand their understanding of anatomy, biomechanics, and the physics of movement. Correct alignment, both static and active, will be a primary focus. Upon completion the students will be able to

conduct a complex biomechanical and motor analysis of dynamic motion common in dance. Principles of exercise physiology and dance and sport psychology will be explored. Lab work will focus on developmental experiences, applying and reinforcing effective movement analysis, teaching, and coaching methods.

Prerequisite(s): DNC 275 Anatomy & Kinesiology for Dancers or permission of instructor.

DNC 490 - CUE: Advanced Research in Dance

This course serves as a Culminating Undergraduate Experience in which students apply and integrate skills and knowledge from previous dance courses they have taken. The course emphasizes critical thinking, creativity, writing, and presentation skills. Faculty and students work together to develop appropriate research projects and venues for presentation based upon area of dance major concentration.

Prerequisite(s): DNC 201 - Dance History and DNC 375 - Advanced Topics in Dance Science if dance science concentration, DNC 360 - Advanced Dance Composition if choreography concentration, DNC 350 - Teaching Dance: Theory & Methods if dance education concentration.

DNC 950 - Community Performance Ensemble (0.5 units)

Members of the Community Performance Ensembles in dance and theatre develop, rehearse, and tour programs (dance performances, plays, and interactive dramatic pieces) for presentation at schools, community centers, and senior citizen residences. In addition to participation in the touring ensemble, students will be expected to submit a journal about their experience in mounting the production and touring to diverse audiences. Audition may be required for participation. May be repeated for credit.

DNC 960 - Dance Internship

Each internship is to be designed in consultation with a faculty sponsor and an on-site supervisor, and will include an academic project to be defined by and submitted to the faculty sponsor for evaluation. Will be graded pass/fail.

DNC 965 - Teaching Dance Practicum (0.5 units)

Gives students an opportunity to assist a professional teacher, engage in lesson plan building, and writing a teaching philosophy. Will be assigned a letter grade, A through F.

Dance Technique

Dance technique courses meet for three to five hours a week and are worth 0.5 course units. The Arts (AR) requirement may be met when two dance idioms are completed in the same semester. Technique courses at all levels are repeatable for credit.

Placement at the appropriate level is determined by level of expertise in the dance idiom. Beginning classes are designed for students with very little or not prior experience in the dance form. Intermediate classes are for those with several years of prior training while advanced classes are for those with significant professional training and demonstrated advanced skills.

DNC 110 - Ballet I (0.5 units)

Introduction to the fundamentals of classical ballet. Areas covered will include the understanding of correct body placement; positions of the feet, head, and arms; musicality; and the development of the elementary habits of movement applicable to the form

DNC 120 - Jazz Dance I (0.5 units)

Introduction to fundamentals of jazz dance technique. Areas covered include polyrhythms, body isolations, movement analysis, and syncopation. Performance of simple dance phrases using fundamental forms.

DNC 130 - Jazztap I (0.5 units)

This course will cover the fundamentals of tap dance technique, composition, and beginning improvisation. There will be an emphasis on the musical component of jazztap with jazz piano accompaniment and rhythm workshops. Flat tap shoes required

DNC 140 - Modern Dance I (0.5 units)

Introduction to the basic principles of dance movement. Areas covered will include body alignment, coordination, strength and flexibility, and basic forms of locomotion

DNC 145 - Hip Hop I (0.5 units)

This course is an introduction to the fundamentals and basics of Hip Hop dance, its history and cultures. Musicality, Funk, and Groove will be explored and performed throughout the semester as well as a variety of Hip Hop styles.

DNC 210 - Ballet II (0.5 units)

A continued elaboration of classical ballet technique through barre and center practice with emphasis on body placement, flexibility, strength, and the application of these principles to movement. Increased vocabulary and development of performance quality and styles.

DNC 220 - Jazz Dance II (0.5 units)

A further examination of jazz dance principles of polyrhythms, syncopation, and body isolations with an emphasis on more extended movement phrases and musicality. Focus on clarity of style and presentation.

DNC 230 - Jazztap II 0.5 units)

Concentration on expanding tap vocabulary, creating choreography, and practice on improvisation with live music. The emphasis will be on performance and the development of each student's personal style.

DNC 240 - Modern Dance II (0.5 units)

Concentration on specific techniques fundamental to modern dance: mobilizing weight, articulating joints, increasing range, and incorporating strength. Additional attention to movement expression: phrasing, dynamics, and rhythm.

DNC 245 - Hip Hop II (0.5 units)

Further examination and concentration on the techniques of Hip Hop dance with a focus on the styles of the Hip Hop families: Old School, Trendy/New Age, Funk, Lockin, Breakin Basics, Poppin Basics, Dance Hall, House, and Commercial Video Hip Hop.

Prerequisite(s): DNC 145 - Hip Hop I or permission of the instructor.

DNC 310 - Ballet III (0.5 units)

For the intermediate student.

DNC 320 - Jazz Dance III (0.5 units)

For the intermediate student.

DNC 330 - Jazztap III (0.5 units)

For the intermediate student.

DNC 340 - Modern Dance III (0.5 units)

For the intermediate student

DNC 345 - Pointe & Variations (0.5 units)

This course focuses on the development of strength, stamina, and artistry of dancing en pointe in a variety of balletic styles from an array of artistic eras. Musicality, dynamic range, and the physical techniques of expressive dancing en pointe provide the foundational emphasis of the course. Concurrent registration in ballet technique strongly recommended.

Prerequisite(s): DNC 310 Ballet III or DNC 410, 411 Ballet IV or permission of instructor.

DNC 410. 411 - Ballet IV (0.5 units)

Concentration on specific techniques fundamental to expertise in classical ballet. Increasingly complex combinations at the barre and in center work. Further development of performance technique and personal style in the classical genre. Composition and pointe work included.

411 is open to students who have taken 410

Prerequisite(s): Permission of instructor required for 410.

DNC 420, 421 - Jazz Dance IV (0.5 units)

Advanced principles of jazz dancing: complex rhythmic analysis, extended movement phrases, development of individual jazz dance style. Compositional studies in jazz dance.

421 is open to students who have taken 420.

Prerequisite(s): Permission of instructor required for 420.

DNC 430, 431 - Jazztap IV (0.5 units)

Advanced principles of tap dance, including improvisation, choreography, complex rhythmic analysis, and development of individual style.

431 is open to students who have taken 430.

Prerequisite(s): Permission of instructor required for 430.

DNC 440, 441 - Modern Dance IV (0,5 units)

Refinement of technical clarity, performance skills, and composition. Musicality, interpretation, and learning longer movement sequences

441 is open to students who have taken 440.

Prerequisite(s): Permission of instructor required for 440.

DNC 470, 471 - Ballet V (0.5 units)

For the advanced ballet dancer.

471 is open to students who have taken 470.

Prerequisite(s): Permission of instructor required for 470.

DNC 472, 473 - Modern Dance V (0.5 units)

For the advanced modern dancer.

473 is open to students who have taken 472,

Prerequisite(s): Permission of instructor required for 472.

Economics (ECN)

Department Chair: Dr. Holmes Miller, Professor of Business *Professors:* Heitmann, Kish-Goodling, Marshall, Raymond

Associate Professor: Knox

Assistant Professors: Fadlon, Nagy, Ray-Chaudhuri Senior Lecturer and Internship Director: Eisenberg

Visiting Lecturer: Slane

The economics major provides students with a comprehensive understanding of the fundamental principles that underlie the functioning of the market system and the national and international economy and the analytical and quantitative skills needed for a thoughtful assessment of current economic issues and policies. Additionally, the major prepares students for graduate work in business and economics and careers with business and government. The department houses a chapter of Omicron Delta Epsilon, the international honor society in economics.

Special Programs

Study Abroad

Besides Muhlenberg's traditional study abroad programs, an international program has been designed especially for students in the Accounting, Business, and Economics Department. The program is offered through the Center for European Studies at the Maastricht University in the Netherlands and would generally be taken during the fall semester of the junior year, but fall semester enrollment during the senior year is possible. In this program, students attend courses in European business, economics, and politics, taught in English. Besides deepening global and cultural awareness, students have opportunities to travel to France, Belgium, and Germany, and meet business and political leaders from those countries.

Participating students take four courses. All business or economics courses enrolled by participating students may be used to satisfy major requirements. Early consultation with the faculty advisor is encouraged.

Honors Program

A departmental honors program is available on an application basis to students who establish outstanding academic records (minimum College GPA of 3.700). Interested students should discuss the requirements and rewards of this program with their faculty advisor before the end of their junior year.

Internship Opportunities

The department has an extensive internship program that provides the economics major with a wide range of opportunities to gain valuable work experience. Supervised paid and unpaid internships, which contribute to the Muhlenberg degree, are available during the regular school year. In addition, the department offers assistance obtaining paid summer internships that may also contribute to the degree.

Program Requirements

Major Requirements

The economics curriculum balances the academic interests and career intentions of its majors. The program outlined below emphasizes analytical and quantitative skills. In order to declare and remain a major in good standing, a student must achieve and maintain a cumulative grade point average of at least 2.00 in all courses applicable to the major. Students majoring/minoring in economics cannot take accounting, business, economics, or finance courses on a pass/fail basis.

A major in economics must complete eleven courses as outlined below:

Foundations:

ECN 101 - Principles of Macroeconomics

ECN 102 - Principles of Microeconomics

MTH 121 - Calculus I

MTH 119 - Statistical Analysis OR

MTH 331 - Mathematical Statistics I AND

MTH 332 - Mathematical Statistics II

Core:

ECN 220 - Intermediate Microeconomic Theory

ECN 222, 223 - Intermediate Macroeconomic Theory

ECN 350 - Econometrics

Culminating Undergraduate Experience:

ECN 490 - CUE: History of Economic Thought

Elective Courses: (choose three)

ECN 243 - Health Care Economics

ECN 245, 246 - Environmental Economics

ECN 247, 248 - Economics of Men & Women at Work

ECN 251, 252 - Development Economics

ECN 332, 333 - Public Finance

ECN 334, 335 - International Trade & Globalization

ECN 338, 339 - Labor Economics

ECN 348 - Game Theory & Applications

HST 325, 326 - American Economic History

In addition to the above courses, students may choose to take *no more than two finance courses numbered 200 or above to meet the requirements of the major*.

Advice for Economics Majors

- 1. ECN 101 Principles of Macroeconomics and ECN 102 Principles of Microeconomics can be taken in any order in either the first or second years.
- 2. Students are well advised to enroll in ECN 220 Intermediate Microeconomic Theory and ECN 222, 223 Intermediate Macroeconomic Theory before or simultaneous with enrolling in any economics course numbered 300 or greater.
- 3. MTH 121 Calculus I should be completed during the first year.
- 4. Students planning on going on to graduate school in economics or finance are encouraged to take MTH 122 Calculus II, MTH 223 Calculus III, MTH 226 Linear Algebra, and MTH 227 Differential Equations.

Minor Requirements

A minor in economics must complete seven courses of work as outlined below:

Required Courses:

ECN 101 - Principles of Macroeconomics

ECN 102 - Principles of Microeconomics

ECN 220 - Intermediate Microeconomic Theory

ECN 222, 223 - Intermediate Macroeconomic Theory

MTH 121 - Calculus I

Elective Courses: (choose two)

ECN 243 - Health Care Economics

ECN 245, 246 - Environmental Economics

ECN 247, 248 - Economics of Men & Women at Work

ECN 251, 252 - Development Economics

ECN 332, 333 - Public Finance

ECN 334, 335 - International Trade & Globalization

ECN 338, 339 - Labor Economics

ECN 348 - Game Theory & Applications

ECN 490 - CUE: History of Economic Thought

Students pursuing a minor in economics must choose electives with the close consultation of their advisor. There are some courses not included in the list of electives for the minor that may be deemed appropriate by the student and advisor.

Courses

ECN 101 - Principles of Macroeconomics

The fundamental determinants of economic activity, inflation, depression, international finance, and development. Monetary, banking, and fiscal institutions are considered in relation to their role in contemporary public policies designed to cope with these problems.

Meets general academic requirement SL.

ECN 102 - Principles of Microeconomics

The operation of the price mechanism in modern enterprise economies. Allocation of resources and distribution of income in competitive and monopolistic markets for products, labor, and other resources. Contemporary issues in microeconomic theory and policy are examined.

Meets general academic requirement SL.

ECN 220 - Intermediate Microeconomic Theory

A specialized examination of certain aspects of price analysis, such as the consumer, the firm, market structures, price determination, and income distribution.

Prerequisite(s): ECN 102 Principles of Microeconomics and MTH 121 Calculus I.

ECN 222, 223 - Intermediate Macroeconomic Theory

An advanced treatment of the concepts of national income growth and fluctuations in the light of both Keynesian and post-Keynesian income theories.

Prerequisite(s): ECN 101 Principles of Macroeconomics and ECN 102 Principles of Microeconomics.

Meets general academic requirement W when offered as 223.

ECN 243 - Health Care Economics

The purpose of this course is to study the facts, concepts, and analyses necessary to understand national health care. The emphasis of the course will be on the economic arguments for or against alternative public policy initiatives in health care and public and private health care systems.

Prerequisite(s): ECN 101 Principles of Macroeconomics or ECN 102 Principles of Microeconomics.

ECN 245, 246 - Environmental Economics

This course explores the relationship between the economy and the environment. Mainstream economic theories and policies will be analyzed from a critical and American policy perspective. The impact of externalities, social costs, property rights, market controls, government regulations, economic development on environmental protection will be analyzed. Other topics covered will include accounting for pollution and resource depletion in GDP statistics, cost-benefit analysis, population, and sustainable development. Offered in the spring semesters of odd numbered years.

Prerequisite(s): ECN 101 Principles of Macroeconomics or ECN 102 Principles of Microeconomics.

Meets general academic requirement W when offered as 246.

ECN 247, 248 - Economics of Men & Women at Work

An examination and comparison of the behavior and problems of men and women in the economy as workers, consumers, and household members. Economic institutions and outcomes will be analyzed using neoclassical or mainstream economic theories contrasted with newly emerging feminist economic research and theoretical perspectives.

Offered in fall semesters of odd numbered years.

Prerequisite(s): ECN 101 Principles of Macroeconomics or ECN 102 Principles of Microeconomics.

Meets general academic requirement W when offered as 248.

ECN 251, 252 - Development Economics

The course begins with an introduction of the concept and measurement of economic growth and development. Models of growth and development processes are then analyzed. Problems in areas such as population, education, savings and capital formation, natural resources, foreign trade, foreign aid, etc. are examined, and possible policy measures are explored.

Prerequisite(s): ECN 101 Principles of Macroeconomics or ECN 102 Principles of Microeconomics.

Meets general academic requirement W when offered as 252.

ECN 332, 333 - Public Finance

Analysis of government's role in a mixed economy. Principles of government expenditure and taxation and structure of the U.S. tax system, with emphasis on tax incidence and the effect of tax and spending policies on economic efficiency. The effects of the public debt and deficit are analyzed.

Offered in the spring semesters of even numbered years.

Prerequisite(s): ECN 220 Intermediate Microeconomic Theory or 221 Intermediate Microeconomic Theory.

Meets general academic requirement W when offered as 333.

ECN 334, 335 - International Trade & Globalization

An economic analysis of international trade, including the national gains and losses from trade, the effect of trade on the distribution of income within and across nations, the effect of trade barriers on national welfare, and the effect of trade agreements on participating nations. Public policy implications will be emphasized..

Prerequisite(s): ECN 101 Principles of Macroeconomics and ECN 102 Principles of Microeconomics.

 ${\it Meets general academic requirement W when offered as 335}.$

ECN 338, 339 - Labor Economics

Labor market analysis both in micro as well as in macro contexts. In microanalysis, subjects such as wage determination, wage differentials, labor mobility, etc. will be discussed. The macroanalysis covers, among other topics, the relationship between wages, prices, and employment; general unemployment and its cures; labor productivity; and labor share in national income. Prerequisite(s): ECN 101 Principles of Macroeconomics and ECN 102 Principles of Microeconomics. ECN 220 Intermediate Microeconomic Theory or 221 Intermediate Microeconomic Theory and ECN 222, 223 Intermediate Macroeconomic Theory recommended.

Meets general academic requirement W when offered as 339.

ECN 348 - Game Theory & Applications

This course will introduce the student to game theory and its applications in describing the behavior of firms and individuals. We shall examine market structure and its effect on firm behavior and apply modern analytic techniques to develop a thorough understanding of strategic decisions.

Prerequisite(s): ECN 220 Intermediate Microeconomic Theory or 221 Intermediate Microeconomic Theory or permission of instructor.

ECN 350 - Econometrics

An introduction to ordinary least squares regression with an emphasis on the relevant statistical tests of the properties of the regression equation. Students will be required to complete a project that estimates and tests an econometric model of a relationship in economics or finance.

Prerequisite(s): ECN 220 Intermediate Microeconomic Theory or 221 Intermediate Microeconomic Theory and ECN 222, 223 Intermediate Macroeconomic Theory and MTH 121 Calculus I and MTH 119 Statistical Analysis or MTH 331 - Mathematical Statistics I and MTH 332 Mathematical Statistics II.

ECN 490 - CUE: History of Economic Thought

This course traces the development of systematic economic reasoning from the pre-Mercantilist period to modern times. Attention is given to the influence of changing economic conditions and institutions on the progress of economic thought. The seminal ideas of Smith, Malthus, Ricardo, Marx, Walras, Marshall, Keynes, and others are examined. The schools of economic thinking that grew out of the work of these major contributors are studied, including Classical, Marginalist, Neo-Classical, Institutionalist, Keynesian, and Radical economics. The evolution of mainstream economics from its early beginnings as laissez-faire political economy to its contemporary scientific approach is considered. The role of scientific methodology in economic inquiry is examined. The historical roots of current economic issues and debates are studied.

Prerequisite(s): ECN 220 Intermediate Microeconomic Theory or 221 Intermediate Microeconomic Theory and ECN 222, 223 Intermediate Macroeconomic Theory.

Meets general academic requirement W.

ECN 960 - Economics Internship

Under faculty supervision, students will be placed in internship positions with local business and other related organizations in order to gain experience in the application of the theories and concepts learned in the classroom. Students will be required to document their experiences in a written journal, to share their experiences with others in a classroom setting, and to prepare a significant term paper or project report.

Open to juniors and seniors only. Pass/fail only.

Education (EDU)

Department Chair: Professor Michael J. Carbone

Professor: Ramsay

Associate Professor: Rosenberg

Coordinator of Professional Programs and Senior Lecturer: Kim Director of Student Teaching Programs and Lecturer: Rohrbach Director of Fieldwork Programs and Senior Lecturer: Richwine

Student Teacher Supervisors: Heavener, McClain

Muhlenberg College provides programs leading to certification for teaching in Pre K-4, 4-8, and secondary (7-12). In all cases, the student is required to complete a subject major in addition to the requirements of the certification program. The College's teacher certification programs are approved by the Pennsylvania Department of Education. Muhlenberg offers programs leading to secondary school teaching certification in biology, chemistry, English, French, Spanish, mathematics, physics, and social studies. 4-8 certification is available in mathematics, English, and social studies. Details regarding specific requirements are available from the Education Department. Students in these programs have at least two faculty advisors: a member of the department offering the subject major and a member of the Education Department. The Education Department sets standards for and supervises all preprofessional aspects of the program. Its policies are clearly outlined in the *Education Department Handbook*, published every year. **All students are responsible for familiarizing themselves with this document and following its procedures and guidelines.**

The aim of the department is to provide a curriculum leading to teacher certification and professional competence. In order that the student may pursue these programs in the best possible sequence and meet the Pennsylvania certification requirements, it is important that he or she have a personal conference with an advisor in the Education Department early in the first semester; otherwise, there may be some difficulty in completing a certification program within eight semesters. Students wishing to take courses beyond EDU 101 - History & Politics of American Education must apply for provisional admission to the teacher certification program.

Program Admission

In order to be formally admitted to and continue in the teacher certification program applicants must have a minimum 3.00 cumulative grade point average. Formal admission to a teacher certification program also requires the completion of 12 course units, two of which must be college level mathematics courses and one of which must be either an American or British literature course. As well, the student must pass or have earned exemption from the first three state mandated pre-professional tests by the end of the sophomore year. Prior to formal admission to the teacher certification program, a student may be provisionally admitted as early as the first year. In addition to the overall GPA of at least 3.00, admission to student teaching requires a minimum 2.50 grade point average in the major* and a minimum 2.75 grade point average in all education courses.

* Students with a major in language must have a minimum 3.00 grade point average in the major for admission to the professional semester.

Program Requirements

Please note that most requirements for teacher certification are set by the Pennsylvania Department of Education and are subject to change.

Pre K-4 Certification Program

The following are the requirements for the Pre K-4 Program:

Cognate Courses:

A biology course and a physical science course A literature course, either British or American GEO 101, 102 - World Geography THR 190 - Foundations of the Creative Arts

A course with an environmental studies perspective. The requirements for environmental studies can be met by completing courses in other disciplines which include this perspective. For example, a biology or

physical science course with an environmental perspective or an economics or philosophy course with an environmental perspective.

Two college level mathematics courses: (one must be)

MTH 114 - Fundamentals of Mathematics OR

MTH 116 - Symmetry & Shape: Introduction to Geometry

Courses in the Pre K-4 Program: (14 course units)

EDU 101 - History & Politics of American Education

EDU 104, 105 - Educational Psychology: Child Learning & Development

EDU 201 - Introduction to Special Education: Diverse Learners & Inclusive Classrooms

EDU 202 - Introduction to Early Childhood Education

EDU 204 - Integrating Curriculum & Instruction for Young Learners

EDU 212 - Theory & Practice of Teaching English Language Learners

EDU 326 - Language & Early Literacy

EDU 327, 328 - Literacy & Social Studies Education

EDU 334 - Mathematics Education for Young Learners

EDU 344 - Science Education for Young Learners

EDU 410 - Seminar in Assessment & Evaluation

EDU 420 - Seminar in Professional Studies & Community Education

EDU 950 - Student Teaching I

EDU 951 - Student Teaching II

Note: This applies to Psychology majors only

Students who are accepted into the Pre K-4 program may count EDU 201 - Introduction to Special Education: Diverse Learners & Inclusive Classrooms to satisfy one of the courses in the Advanced Course and Seminar requirement, and they may count EDU 104, 105 - Educational Psychology: Child Learning & Development or EDU 105 - Educational Psychology: Child Learning & Development as an elective in the Psychology major.

4-8 Certification Program

The following are the requirements for the 4-8 Program:

Cognate Courses:

A biology course and a physical science course

A literature course, either British or American

GEO 101, 102 - World Geography

PSC 101 - Introduction to American National Government

A course with an environmental studies perspective. The requirements for environmental studies can be met by completing courses in other disciplines which include this perspective. For example, a biology or physical science course with an environmental perspective or an economics or philosophy course with an environmental perspective.

Two college level mathematics courses: (one must be)

MTH 114 - Fundamentals of Mathematics **OR**

MTH 116 - Symmetry & Shape: Introduction to Geometry

Courses in the 4-8 Program: (13 course units)

EDU 101 - History & Politics of American Education

EDU 106, 107 - Educational Psychology: Adolescent Learning & Development

EDU 201 - Introduction to Special Education: Diverse Learners & Inclusive Classrooms

EDU 206 - Integrating Curriculum & Instruction for Adolescent Learners

EDU 212 - Theory & Practice of Teaching English Language Learners

- EDU 327, 328 Literacy & Social Studies Education
- EDU 330 Social Studies Education for Adolescent Learners (American Studies majors)
- EDU 334 Mathematics Education for Young Learners
- EDU 336 Mathematics Education for Adolescent Learners (Mathematics majors)
- EDU 344 Science Education for Young Learners
- EDU 363 English Education for Adolescent Learners (English majors)
- EDU 410 Seminar in Assessment & Evaluation
- EDU 420 Seminar in Professional Studies & Community Education
- EDU 950 Student Teaching I
- EDU 951 Student Teaching II

Secondary (7-12) Education Certification Program

Cognate Courses:

Two college level mathematics courses

A literature course, either British or American

Courses in the Secondary (7-12) Program: (10 course units)

- EDU 101 History & Politics of American Education
- EDU 106, 107 Educational Psychology: Adolescent Learning & Development
- EDU 201 Introduction to Special Education: Diverse Learners & Inclusive Classrooms
- EDU 206 Integrating Curriculum & Instruction for Adolescent Learners
- EDU 212 Theory & Practice of Teaching English Language Learners
- EDU 330 Social Studies Education for Adolescent Learners (History majors)
- EDU 336 Mathematics Education for Adolescent Learners (Mathematics majors)
- EDU 346 Science Education for Adolescent Learners (Science majors)
- EDU 362 Languages Education (Language majors)
- EDU 363 English Education for Adolescent Learners (English majors)
- EDU 410 Seminar in Assessment & Evaluation
- EDU 420 Seminar in Professional Studies & Community Education
- EDU 950 Student Teaching I
- EDU 951 Student Teaching II

Students enrolled in the teacher certification program will receive priority placement in courses that are part of the program. The department expects all pre-service teacher candidates to exhibit professional behavior in all education course and field settings. Students who fail to complete the required field work hours or receive an unsatisfactory evaluation for any education course may be subject to a grade reduction. The department requires students to student teach through Muhlenberg College in order to be certified by Muhlenberg College. Additionally, the Education Department may not accept education courses transferred from other institutions which do not include an appropriate and comparable field work component.

Fees

A **non-refundable** fee of \$35.00 will be charged for each course in which a student is enrolled in a course or courses requiring fieldwork. Students enrolling in EDU 950 - Student Teaching I and EDU 951 - Student Teaching II will pay a special fee of \$400.00. This fee is **non-refundable** and due when the student applies for student teaching in January of the junior year.

Foundational Courses

EDU 101 - History & Politics of American Education

This course examines the larger historical and sociopolitical forces that have shaped the rise and development of the institutional school in America. Beginning with Jeffersonian America through the late industrial period to the present day, the course traces changes in the political economy and how these changes have influenced educational policy and practice, such as rise of the common school and educational policy debates regarding the appropriate role of education in a democratic industrial and plural society. The course also addresses how schools interpret, translate, and transfer American culture through the overt and covert curriculum as well as public policy by studying the various conflicting aims of education in a democracy. The purpose of the course is to develop the students' potential for thinking critically about American education and its institutions in preparation for ethical citizenship and/or educational leadership.

Meets general academic requirement SL.

EDU 104, 105 - Educational Psychology: Child Learning & Development

This course reflects knowledge derived from theory, research, and professional practice as it covers the physical, cognitive, and socio-emotional development of infants and children (birth-9 years old) and the impact of this study for teaching and learning. In addition to classic developmental theorists (Piaget, Vygotsky, and Erikson among others), students will explore a variety of topics that impact the child as learner at these stages of development, including but not limited to attachment, brain development, memory, fantasy and the imagination, the arts as a way of knowing, play behavior, friendship, the development of empathy, early understandings of justice, the use of public and private space, transition from home to school, and children in relation to authority. Fieldwork is required.

Prerequisite(s): Provisional admission to the program or permission of the instructor. Meets general academic requirement SL (and W when offered as 105).

EDU 106, 107 - Educational Psychology: Adolescent Learning & Development

This course reflects knowledge derived from theory, research, and professional practice as it covers cognitive, social, and personal development and the psychology of teaching and learning. We will use our classroom as an "experiment" in methods of teaching, learning, and educating ourselves about the sociopolitical contexts for development and learning in American classrooms. The focus of this course is on the developmental changes and challenges that occur approaching and during the adolescent years. We will explore both what is understood as "typical" adolescent development as well as the ways in which individual adolescent experience may be unique. We will view the adolescent in a range of social contexts (e.g., family, peer group, school, culture) as we consider how issues of diversity (i.e., race, culture, class, gender, sexual identity) impact learning, and development. Fieldwork is required.

Prerequisite(s): Provisional admission to the program or permission of the instructor. Meets general academic requirement SL (and W when offered as 107).

EDU 201 - Introduction to Special Education: Diverse Learners & Inclusive Classrooms

This course is designed to broaden knowledge and understanding about students with disabilities and how they develop and learn. Emphasis is placed on the roles and responsibilities of regular education teachers in meeting the needs of these students in order to create positive inclusive learning environments as informed by relevant research. The course introduces the preservice teachers to topics including health impairments, intellectual disabilities, learning disabilities, ADHD, emotional disturbance, autism, sensory impairments, physical disabilities, and giftedness. These topics are examined from the perspective of causation, diagnosis, cognitive and social-emotional characteristics, learning styles, early intervention, and differentiated instructional strategies with a focus on meeting the needs of students in the context of the regular classroom. The role of the regular classroom teacher in the referral/evaluation process and working with appropriate school personnel and families is emphasized. Also examined are multicultural and bilingual issues as they pertain to special education. Fieldwork is required.

Prerequisite(s): Provisional admission to the program or permission of the instructor. Meets general academic requirement SL.

EDU 202 - Introduction to Early Childhood Education

This course presents the history, philosophy, and theory of early childhood education and surveys major models and programs that educate young children, including Bank Street (traditional nursery), Montessori (child-centered), and DISTAR (direct instruction) among others. It focuses on the role of the teacher in designing, organizing, and implementing educational programs for children in preschools, kindergartens, and early elementary grades as informed by the recommendation of professional

organizations such as the National Association for the Education of Young Children (NAEYC). Fieldwork is required. *Prerequisite(s): Provisional admission to the program.*

Methods Courses

EDU 204 - Integrating Curriculum & Instruction for Young Learners

This course focuses on understanding educational research, theory, and reflective practice in planning for and implementing content- and age-appropriate instructional strategies resulting in the effective teaching of diverse young learners (ages 4-9). This includes an investigation of a range of the essential teaching skills, including the planning, implementation, and adaptation of meaningful instruction and the development of a supportive learning environment. Students are introduced to a broad range of research-based teaching methodologies, classroom management strategies, and fair assessment techniques. Focusing on the conceptual understanding of big ideas, students will use national, state, and district standards to plan, implement, and adapt lessons and units in early grades. Fieldwork is required.

Prerequisite(s): EDU 104, 105 - Educational Psychology: Child Learning & Development or EDU 105 - Educational Psychology: Child Learning & Development and provisional admission to the program.

EDU 206 - Integrating Curriculum & Instruction for Adolescent Learners

This course focuses on understanding educational research, theory, and reflective practice in planning for and implementing content- and age-appropriate instructional strategies resulting in the effective teaching of diverse adolescent learners (ages 9-18). This includes an investigation of a range of the essential teaching skills, including the planning, implementation, and adaptation of meaningful instruction and the development of a supportive learning environment. Students are introduced to a broad range of research-based teaching methodologies, classroom management strategies, and fair assessment techniques. Focusing on the conceptual understanding of big ideas, students will use national, state, and district standards to plan, implement, and adapt lessons and units in their content areas. Fieldwork is required.

Prerequisite(s): EDU 106, 107 - Educational Psychology: Adolescent Learning & Development and provisional admission to the program.

EDU 212 - Theory & Practice of Teaching English Language Learners

This course is designed to prepare pre-service teachers to face the multifaceted issues of teaching the diverse group which makes up English language learners. Course topics include cultural awareness and sensitivity as it applies to teaching language acquisition theory and instructional strategies with an emphasis on practical knowledge and skills required to simultaneously teach language, culture, and academic content to non-native speakers of English. Instructional strategies and pedagogical approaches such as SIOP (Structured Instruction Observation Protocol) and CALLA (Cognitive Academic Language Learning Approach) will be explained, analyzed, evaluated, and applied to develop and present lessons appropriate to ELLs. Course readings will cover cultural awareness, language and identity, theories of language acquisition, and current approaches in instructing ELLs. Fieldwork is required.

Prerequisite(s): Provisional admission to the program.

Meets general academic requirement DE.

EDU 326 - Language & Early Literacy

This course aims to provide an understanding of language and early literacy development of diverse young children (birth to age 9). Theories of first language acquisition provide a framework for understanding stages of oral language development and functions of oral language. The relationship between language acquisition and reading and writing processes are explored through the emergent literacy perspective. Topics in early literacy development include print awareness, phonemic/phonological awareness, phonics instruction, decoding and oral reading fluency, and developmental writing. These theoretical backgrounds inform various instructional approaches to early literacy instruction such as constructivism/whole language, balanced literacy program, and guided reading. This course also offers an overview of children's literature, including an introduction to the genres, notable books and authors, and resources for incorporating children's literature in literacy education programs. Fieldwork is required.

Prerequisite(s): EDU 204 - Integrating Curriculum & Instruction for Young Learners and formal admission to the Education Certification Program.

Meets general academic requirement W.

EDU 327, 328 - Literacy & Social Studies Education

This course focuses on literacy development and instruction in grades 3-8, particularly on construction of meaning during the reading and writing processes. Topics of study in this course include reader response theories, theories of comprehension, comprehension strategies (such as inferring and summarizing), and vocabulary development and instruction. The course has an emphasis on content area literacy with an introduction to instructional strategies and activities to promote content area learning. Writing theories and instruction are presented through model frameworks and programs. In addition, this course will provide perspectives, methodologies, and philosophies of teaching social studies as a content area subject in the elementary and middle schools. Fieldwork is required.

Prerequisite(s): EDU 204 - Integrating Curriculum & Instruction for Young Learners or EDU 206 - Integrating Curriculum & Instruction for Adolescent Learners and formal admission to the Education Certification Program.

Meets general academic requirement W when offered as 328.

EDU 330 - Social Studies Education for Adolescent Learners

This course presents the history and development of social studies in middle and high schools. It provides both an historical and political context to study the best teaching practices in the disciplines at the heart of social studies: American and Pennsylvania history, world history, civics, economics, and geography. With a focus on state and national standards in these disciplines, including the themes from the National Council for the Social Studies, students will develop lesson plans, instructional strategies, and assessments for diverse learners and will learn to supplement the textbook with primary sources, newspapers, websites, and curricula developed by professional national organizations. Relevant to content certification. Fieldwork is required. *Prerequisite(s): EDU 206 - Integrating Curriculum & Instruction for Adolescent Learners and formal admission to the Education Certification Program.*

EDU 334 - Mathematics Education for Young Learners

This course will analyze the content, pedagogy, and management of the Pre-K to grade 4 mathematics curricula in diverse classrooms. Emphasis will be placed on how young children learn mathematics, problem solving, reasoning and proof; communication; making connections within mathematics and with the world outside the classroom; multiple representations; and research based instructional strategies, all within the context of developing number sense, operations, patterns and functions, geometric shapes, data analysis and probability, and measurement. Students will use national, state, and district standards to plan, implement, and adapt lessons for the early grades. Fieldwork is required.

Prerequisite(s): EDU 204 - Integrating Curriculum & Instruction for Young Learners and formal admission to the Education Certification Program.

EDU 336 - Mathematics Education for Adolescent Learners

This course presents theories and practices of teaching mathematics in middle and high school classrooms with focus on 1) discrete and integrated mathematics knowledge such as algebra, geometry, statistics, and probability; 2) pedagogy; and 3) curriculum design. Course content includes learning theories, national and state standards for the mathematics school curriculum, planning and material development skills, assessment, use of appropriate technology, and classroom management. Relevant to content certification. Fieldwork is required.

Prerequisite(s): EDU 206 - Integrating Curriculum & Instruction for Adolescent Learners and formal admission to the Education Certification Program.

EDU 344 - Science Education for Young Learners

This course will enable the student to develop a professional practice as a science educator based on the best current knowledge about how young children learn science, the nature of science, and research-based methods of science teaching. Emphasis will be placed on developing inquiry oriented pedagogical strategies that foster children's natural curiosity; building an understanding of the nature of science; creating curricula, materials, and resources for instruction in diverse classrooms; devising authentic experiences with scientific questions and phenomena, and using assessment in the service of instruction, all within the framework of the PA Academic Standards for Science & Technology and for Environment & Ecology. Fieldwork is required. *Prerequisite(s): EDU 204 - Integrating Curriculum & Instruction for Young Learners and formal admission to the Education Certification Program.*

EDU 346 - Science Education for Adolescent Learners

This course will enable the student to develop a professional practice as a science educator based on the best current knowledge about how adolescents learn science, the nature of science, and research-based methods of science teaching. Emphasis will be

placed on incorporating inquiry oriented pedagogical strategies that encourage student-generated scientific questions; developing basic and integrated process skills to answer scientific questions; building an understanding of the nature of science; creating curricula, materials, and resources for instruction in diverse classrooms, devising hands-on experiences with scientific questions and phenomena, focusing on collecting and interpreting authentic data, and using assessment in the service of instruction, all within the framework of the PA Academic Standards for Science and Technology and for Environment and Ecology. Fieldwork is required.

Prerequisite(s): EDU 206 - Integrating Curriculum & Instruction for Adolescent Learners and formal admission to the Education Certification Program.

EDU 362 - Languages Education

This course will prepare students to be a teacher of foreign languages in grades K-12. Topics include school contexts for language learning, processes of secondary language acquisition, exemplary instructional strategies, and professional resources for curriculum and instruction. Students will be actively engaged in fieldwork placements to put the knowledge gained in the course into effective practice. By the end of the course, students will develop a philosophy of teaching languages and gain a repertoire of strategies that will make them effective teachers of languages. Fieldwork is required.

Prerequisite(s): EDU 206 - Integrating Curriculum & Instruction for Adolescent Learners and formal admission to the Education Certification Program.

EDU 363 - English Education for Adolescent Learners

This course is designed to provide advanced instruction in preparation for a teaching career by focusing on providing theoretical background and practical guidance specifically targeted to secondary English teachers. Based on the understanding that learning is more concurrent than sequential, the course examines effective strategies to prepare, execute, and continually reflect on lessons used in the teaching of English. Students will have an opportunity to articulate their vision as English teachers, to develop a working knowledge of the various teaching theories and strategies, and to apply and evaluate instructional practices and theories to determine those which will best facilitate attainment of their vision. Relevant to content certification. Fieldwork is required. *Prerequisite(s): EDU 206 - Integrating Curriculum & Instruction for Adolescent Learners and formal admission to the Education Certification Program.*

EDU 370 - Urban Ethnography

The focus of this interdisciplinary course is on the relevance of the qualitative research method of Ethnography for exploring issues pertaining to youth in urban contexts. We will explore the complex relationships among schooling, social structure, and culture through research projects conducted by course participants. Students will be taught methods of data collection and analysis, including how to examine research subjectivities, "gain entry" in the field, manage data, frame assertions, seek confirming and disconfirming evidence, consider diverse audiences for reporting, and try out various narrative styles and voices in their interpretive writing. This course has been relevant to students interested in youth and urban issues across a variety of majors, including Art, Theatre, Dance, Media and Communication, English, Sociology, Psychology, Spanish, and American Studies.

Meets general academic requirement W.

EDU 410 - Seminar in Assessment & Evaluation

This course is designed to provide an overview of developmentally appropriate assessment/evaluation issues, techniques, and practices. Both on-going informal and formal assessment as integral to the teaching and learning process are emphasized. The course examines topics including formative and summative assessment, teacher made tests, standardized testing, alternative/authentic assessment techniques, grading practices, and parent conferences. The course introduces ways in which technology can be integrated into the assessment and evaluation process. Throughout the course, students are encouraged to think critically about the issues surrounding assessment within the context of educational practices and political realities. *Prerequisite(s): Admission to professional semester.*

EDU 420 - Seminar in Professional Studies & Community Education

As part of the Professional Semester, this course will provide teacher candidates an overview of the education profession with an emphasis on studies and experiences connected with individual teacher professionalism and ethical practice. The course will investigate issues confronting the professional educational community, such as standardized testing, school reorganization, and appropriate school/community/family relationships in the context of the rights and responsibilities of the professional teacher. Other topics of exploration will include Pennsylvania school law (i.e. Chapter 4: Academic Standards and Assessment; Chapter

11: Student Attendance; and Chapter 12: Students and Student Services) and national professional organizations and standards. Prerequisite(s): Admission to professional semester.

EDU 550 - Practicum in Education I

These courses are designed to provide an in-depth study of contemporary educational issues in public schools through a full-time classroom experience. The topics of study will include curriculum, standards, planning, assessment, and classroom management. These courses do not meet the requirements for PA certification. The courses are open only to students with permission from the Education Department.

Prerequisite(s): EDU 204 - Integrating Curriculum & Instruction for Young Learners or EDU 206 - Integrating Curriculum & Instruction for Adolescent Learners and EDU 201 - Introduction to Special Education: Diverse Learners & Inclusive Classrooms

EDU 551 - Practicum in Education II

These courses are designed to provide an in-depth study of contemporary educational issues in public schools through a full-time classroom experience. The topics of study will include curriculum, standards, planning, assessment, and classroom management. These courses do not meet the requirements for PA certification. The courses are open only to students with permission from the Education Department.

Prerequisite(s): Prerequisites: EDU 204 Integrating Curriculum & Instruction for Young Learners or EDU 206 Integrating Curriculum & Instruction for Adolescent Learners and EDU 201 Introduction to Special Education: Diverse Learners & Inclusive Classrooms

EDU 950 - Student Teaching I

Student teaching is the core component of the professional semester. As interns in the public schools, students have the opportunity to apply the content knowledge and pedagogical skills gained in their academic preparation to actual classroom situations. Lesson and unit planning as well as assessment and classroom management skills are honed with the support of a mentor teacher and a college supervisor. Daily seminars prior to student teaching focus on differentiated instruction, questioning strategies, lesson planning, meeting the needs of a diverse public school population, and strategies to enhance student motivation. Weekly seminar sessions during the semester provide the student teachers with a forum to reflect analytically on their classroom experiences as they develop their professional skills and voice. This semester consists of two full-time teaching experiences in grade levels appropriate to the area of certification.

Prerequisite(s): Admission to the professional semester.

EDU 951 - Student Teaching II

Student teaching is the core component of the professional semester. As interns in the public schools, students have the opportunity to apply the content knowledge and pedagogical skills gained in their academic preparation to actual classroom situations. Lesson and unit planning as well as assessment and classroom management skills are honed with the support of a mentor teacher and a college supervisor. Daily seminars prior to student teaching focus on differentiated instruction, questioning strategies, lesson planning, meeting the needs of a diverse public school population, and strategies to enhance student motivation. Weekly seminar sessions during the semester provide the student teachers with a forum to reflect analytically on their classroom experiences as they develop their professional skills and voice. This semester consists of two full-time teaching experiences in grade levels appropriate to the area of certification.

Prerequisite(s): Admission to the professional semester.

English, Writing (ENG)

Department Chair: Dr. Barri J. Gold

Professors: Bloom, Cartelli, Coppa, Marsh, Rosenwasser, Scott, Stephen

Associate Professor: Miller

Assistant Professors: Lonsinger, Staidum

The major in English at Muhlenberg offers an exciting and flexible curriculum for the study of diverse literatures written in the English language. We offer an array of courses in British, U.S., Caribbean, and Postcolonial literatures across written, dramatic, filmic, and visual "texts." From "Reading *Alice in Wonderland*" to "Energy,

Ecology & the Victorian Novel," there is something to pique every intellectual curiosity. English majors develop into nuanced thinkers, astute readers, and adept writers who are able to reflect on complex problems and see them in new ways.

Careers that English majors characteristically pursue include law, teaching, journalism and publishing, sales and marketing, advertising and public relations, digital media, management and administration, public service, religion, and research. The program in English is designed to prepare students for a lifetime of attentive and articulate civic and cultural engagement.

General Academic Requirements

200-level ENG courses have no prerequisites and satisfy either the HU (for literature classes) or the AR (for creative writing) general academic requirements. 200-level courses are designed for both majors and non-majors. Students seeking literature courses specifically designed for the non-major may wish to choose among: ENG 113 - British Writers and ENG 115 - American Writers which *do not count towards the major or minor*. Students interested in more focused thematic or writing courses and/or majoring in English should consider beginning with ENG 275 - Theory & Methods of English Studies or any of those 200 level courses listed below under Reading X, Genres, Connections, and Ethnic & Regional Literatures.

Special Programs

Honors Program

The English Honors program is designed for students of demonstrated critical ability and commitment. Students in the English Honors Program spend the senior year working closely with a faculty advisor in order to research and write an Honors Thesis, a scholarly essay of about 60-70 pages. Graduates with Honors degrees in English are well prepared for a number of post-graduate careers including not only graduate study in English, but also working in publishing, journalism, advertising, the law and anywhere else where analytic ability and strong writing skills are valued.

Honors Program Requirements:

- Students wishing to enter the honors program must maintain a cumulative GPA of at least 3.3, and a major GPA of at least 3.5, and will take a minimum of eleven courses in the English department (including the two independent studies devoted to thesis work).
- By May 1 of the junior year, the student must submit a preliminary proposal endorsed by a faculty mentor, to Dr. Alec Marsh, the Director of the Honors Program. This proposal should be roughly 3-5 doublespaced pages and must include a working bibliography of primary and secondary resources.
- A more detailed prospectus and bibliography, developed during the fall semester of independent study,
 must be submitted by November 15 to the Honors Committee, who will decide whether the student may
 proceed with the Honors Program. Students who are not cleared to pursue honors instead finish out the fall
 semester as a simple independent study with no further commitment.
- Honors students present their work at a public forum, usually in mid to late April, submit their work to their
 advisors and two additional faculty readers by May 1 of the senior year, and defend it in a year-end
 conversation with these three faculty members, who determine the degree of honors to be awarded (none,
 honors, high, or highest).

English Teacher Certification

Students seeking certification for the teaching of English in secondary schools are required to take the following nine courses in fulfillment of their English major. A student who chooses ENG 336, 337 Transcendentalism &

Abolition: American Literature in the Crucible of Freedom & Slavery or ENG 338, 339 - City, Frontier, & Empire in American Literature to fulfill both the nineteenth century and American literature requirements must enroll for an additional course numbered 300 or greater to fulfill the nine-course minimum. Students must also select courses that fulfill the three approaches requirements for the English program.

ENG 275 - Theory & Methods of English Studies

ENG 247, 248 – Shakespeare **OR**

ENG 321, 322 - Shakespeare Reproduced

ENG 295, 296 - The English Language

ENG 400-449 - CUE: Seminar in English

One elective in American literature drawn from:

ENG 271, 272 - Ethnicity in US Literature

ENG 273 - African American Literature

ENG 336, 337 - Transcendentalism & Abolition: American Lit in the Crucible of Freedom & Slavery

ENG 338, 339 - City, Frontier, & Empire in American Literature

ENG 349, 350 - Modern American Fiction

One course in Nineteenth Century literature drawn from:

ENG 202 - Reading Emily Dickinson

ENG 206 - Reading Austen

ENG 212 - Reading Frankenstein

ENG 329, 330 - Nineteenth Century British Fiction: The Marriage Plot

ENG 331, 333 - English Romanticism

ENG 336, 337 - Transcendentalism & Abolition: American Lit in the Crucible of Freedom & Slavery

ENG 338, 339 - City, Frontier, & Empire in American Literature

ENG 378, 379 - The Death of the Sun: Problems in Victorian Fiction

ENG 391, 392 - Decadence: The Literature of the 1890s

One writing process or theory course:

ENG 240, 241 - The Nature of Narrative

ENG 245, 246 - Poetry & the Imaginative Process

ENG 297, 298 - Writing Theory

One additional Genealogies course drawn from:

ENG 313, 314 - Medieval Literature

ENG 315, 316 - The Renaissance Imagination

ENG 323, 324 - Renaissance Plays in Process

ENG 325, 326 - Milton & the Age of Revolution

One course in a literature other than British or American:

ENG 340, 341 - European Novel in Translation

ENG 343, 344 - Irish Literature

ENG 345, 346 - Contemporary Irish Drama

ENG 375 - Postcolonial Literature

Or a comparable course offered by the Department of Languages, Literatures, and Cultures

Program Requirements

Major Requirements

English majors must complete a minimum of nine courses in the department; five of these (including the Senior Seminar) must be taken at the 300 level or above. We strongly advise that ENG 275 - Theory & Methods of English Studies be completed early in the major sequence. Students should also take one of each type of Approach course -

Genealogies, Texts/Contexts, and Transformations as early in the major program as possible. Approach courses may be taken at either the 200 or 300 level. Students *may not count* any of the ENG 100 level courses toward their requirements in the major or minor.

Requirements:

ENG 275 - Theory & Methods of English Studies

At least one course in each Approach: Genealogies, Texts/Contexts, and Transformations
A minimum of four courses at the 300 level. Prerequisite for 300 level literature courses is any 200 level literature course

ENG 400-449 - CUE: Seminar in English taken in the senior year

A total of at least nine courses in English.

Note: Students may count up to two creative writing courses toward the 9 courses required for the major. Students may also take one 300 level or higher literature course offered by the Department of Languages, Literatures, and Cultures.

Courses in Study Abroad, Summer School, and the Wescoe School

Typically, students may count no more than *two* Summer School and/or Study Abroad courses toward the major. These courses must be approved in advance by the Department Chair. Day students may count courses taken through the Wescoe School toward the major *only* with permission of the Department Chair. Students should plan on satisfying required upper-level and Approach courses with the regular Muhlenberg English faculty.

Majors must maintain a 2.00 GPA in English courses to remain in the department. A 3.30 GPA in the major is expected of those who desire unconditional recommendations for graduate schools or for teaching positions. Students who are planning to attend graduate school in English would do well to enroll several courses in excess of the minimum course requirement for majors and should seek the advice of their faculty advisor as early in their undergraduate career as possible.

Reading X

A set of offerings at the 200 level, the "Reading X" series, is designed for fledgling English majors and minors. These courses are also appropriate for students seeking their HU requirement who may desire greater focus than a typical survey course provides. The "Reading X" courses immerse students in a specific author, text, or literary topic, focusing on areas of controversy and debate in contemporary literary and cultural studies. With the senior seminar, the "Reading X" courses will bookend the major with experiences of depth. They will be taught as writing intensive and will be concerned less with literary theory and criticism than with the experience of reading widely in an author or topic and learning a set of basic close-reading skills. In addition to teaching modes of analysis, these offerings will often make classic works of literature relevant to our time by studying them in relation to their modern adaptations.

Approaches

As students develop their majors, they should incorporate at least one course in each of the three approaches: *Genealogies, Transformations*, and *Texts/Contexts*. These courses model different approaches to literary history and are intended to heighten student awareness of literary traditions of the past, of the continuities between and among literary epochs, and of the variety of methodological and theoretical modes used to understand both literary and nonliterary texts. Approaches courses should be taken as early as possible in the major sequence.

It is important to bear in mind that although many twentieth and twenty-first century courses are not listed under a specific approach, they still count as essential experiences in the major/minor. Students are encouraged to take courses from various genres (poetry, fiction, drama, etc.) and various time periods.

Genealogies: Foundational texts and periods.

These courses consider foundational periods in English literary history that are crucial to the development and study of British and American literatures. These courses trace lines of descent of thinking *within* literature over a continuous period.

ENG 247, 248 - Shakespeare

ENG 313, 314 - Medieval Literature

ENG 315, 316 - The Renaissance Imagination

ENG 317, 318 - Lyric Traditions

ENG 325, 326 - Milton & the Age of Revolution

ENG 329, 330 - Nineteenth Century British Fiction: The Marriage Plot

ENG 331, 333 - English Romanticism

ENG 336, 337 - Transcendentalism & Abolition: American Lit in the Crucible of Freedom & Slavery

ENG 352, 353 - Modern Poetry I: 1889-1945

Transformations: Readings and rewritings.

These courses focus on literary texts and movements that are responsive to earlier texts, movements, and moments but that are produced under changed conditions of production. Transformation courses explore lines of influence and interaction, and the repurposing and remediation of works produced under one dispensation in the altered conditions of another. They study remixes of tracks laid down in the past.

ENG 206 - Reading Austen

ENG 208 - Reading Alice in Wonderland

ENG 212 - Reading Frankenstein

ENG 271, 272 - Ethnicity in US Literature

ENG 321, 322 - Shakespeare Reproduced

ENG 328 - Staging the Restoration

ENG 340, 341 - European Novel in Translation

ENG 343, 344 - Irish Literature

ENG 345, 346 - Contemporary Irish Drama

ENG 375 - Postcolonial Literature

ENG 397, 398 - Gender, Sensation, & the Novel

Texts/Contexts: Interdisciplinary approaches.

These courses explore literary and non-literary texts in terms of their historical and expressive relationships with work produced in other fields and with other reasons in mind (photography, the visual arts, the physical sciences, politics, psychology, religion, commerce). Such courses read literature in close relation to the conditions of its production; they combine the study of texts with the study of their historical and cultural ecosystems.

ENG 202 - Reading Emily Dickinson

ENG 218 - Reading the South

ENG 257, 258 - Literature & Evolution

ENG 263, 264 - Postwar British Theatre & Film

ENG 269, 270 - Literature & Mass Media

ENG 323, 324 - Renaissance Plays in Process

ENG 338, 339 - City, Frontier, & Empire in American Literature

ENG 349, 350 - Modern American Fiction

ENG 354, 355 - Modern Poetry II: 1945-2000

ENG 373, 374 - The Literary Marketplace

ENG 378, 379 - The Death of the Sun: Problems in Victorian Fiction

ENG 391, 392 - Decadence: The Literature of the 1890s

ENG 395, 396 - Literature & Film of the Cold War

English Minor Requirements (5 courses)

English minors must complete a minimum of five courses in the department. These include ENG 275 - Theory & Methods of English Studies, two courses that treat approaches - one Genealogies and either a Texts/Contexts or Transformations - and two additional courses, one of which may be in creative writing. A minimum of 2 courses in the minor must be taken at the 300 level or above. Students may not count 100 level English courses toward the minor.

Creative Writing Minor Requirements (six courses)

The Creative Writing Minor is directed and administered by the Chair of the English Department, and students are advised by full-time creative writing faculty. Students may major in English and minor in Creative Writing and are permitted to double-count specific courses toward fulfillment of the requirements in both programs.

Introductory Courses in Writing: at least two courses, each one in a different genre:

ENG 205 - Introduction to Creative Nonfiction Writing

ENG 207 - Introduction to Playwriting

ENG 221 - Introduction to Poetry Writing

ENG 245, 246 - Poetry & the Imaginative Process

ENG 226 - Introduction to Screenwriting

ENG 227 - Introduction to Fiction Writing

ENG 240, 241 - The Nature of Narrative

Note: A 200-level Special Topic writing course might also substitute for the Introductory Courses in Writing requirement.

Advanced Writing Courses: At least two courses from the following list:

COM 321, 322 - Writing for the Media

ENG 303 - Advanced Creative Nonfiction Workshop

ENG 305 - Advanced Fiction Workshop

ENG 307 - Advanced Playwriting Workshop

ENG 309 - Advanced Poetry Workshop

ENG 364 - Advanced Screenwriting Workshop

ENG 370 - Living Writers Workshop

NOTE: A 300-level or higher Special Topics writing course, Independent Study or Internship might also substitute for the Advance Writing Course.

Elective in Writing Course: One additional course chosen from Introductory or Advanced writing courses listed above.

Literature: At least one 300 level or higher literature course offered in the English or Languages, Literatures, and Cultures Departments, or ENG 293 - Living Writers 1 course unit

English Courses

General Literature

Note: 100 level courses may NOT be counted toward the English major or minor.

ENG 113 - British Writers

A concentrated survey of the work of some of the most influential British writers and of the development of British literary traditions; intended to help non-majors become close and informed readers of literature. Focus will vary from semester to semester.

Meets general academic requirement HU.

ENG 115 - American Writers

A concentrated survey of the work of some of the most influential American writers and of the development of American literary traditions; intended to help non-majors become close and informed readers of literature. Focus will vary from semester to semester.

Meets general academic requirement HU.

Foundation Course for Majors and Minors

ENG 275 - Theory & Methods of English Studies

Intended primarily as a foundations course for current and prospective English majors and minors, *Theory & Methods of English Studies* develops a common language and shared ideas about the enterprise called English Studies. It requires close readings of works in three different genres — poetry, plays, and fiction — focusing on various crisis points in literary history: the Renaissance, the Romantic revolution, and the Modernist moment. We consider, of course, the theory and methods of English studies as these have evolved over time, but especially since the 1970s to the present. We examine the history of English as a discipline, what it means to call something "literary," as well as questions of why and how people go about analyzing literary texts and how literary and critical practices change over time.

Current and prospective English majors and minors only.

Meets general academic requirements HU and W.

Reading X

ENG 202 - Reading Emily Dickinson

Emily Dickinson's life, letters, and poems have attracted an unusually diverse set of "labels." She is variously described as Romantic, Modern, Post-Modern, Puritan, anti-Puritan, feminist, anti-feminist, a victim of psychological disorders (agoraphobia, anorexia, depression), a victim of patriarchal oppression, a genius, a great ironist, and more. So Dickinson's poetry offers us much to negotiate in the course, ways of reading as well as readings of individual poems. We will also study poems by two twentieth century women writers, Elizabeth Bishop and Adrienne Rich, in light of Dickinson's legacy, and try to trace Dickinson's particular kind of "nature" poetry back to a seventeenth-century religious tradition she admired.

Meets departmental Texts/Contexts approach.

Meets general academic requirements HU and W.

ENG 206 - Reading Austen

This course explores the novels of Jane Austen and their contemporary revisions. Roughly half of the course consists of an intensive, critically, and historically-contextualized study of four of Austen's novels. The other half consists of a cultural materialist study of the revisions, sequels, and film adaptations of Austen produced predominantly in the 1940s and since the1990s. In this way, we explore the evolving importance of Austen to her readers as well as the ways such adaptations reflect and shape the meanings of her novels under changed conditions of production.

Meets departmental Transformations approach.

Meets general academic requirements HU and W.

ENG 208 - Reading Alice in Wonderland

This course investigates Lewis Carroll's *Alice books - Alice's Adventures in Wonderland and Through the Looking Glass* - in themselves and as they are transformed into a larger cultural "Alice Myth" with a life of its own. The course examines these texts in a variety of cultural and aesthetic frames. These are primarily British and Victorian, considering the *Alice* books as children's stories, as dream-texts, and as complexly *comic* representations of gender, class, and childhood. In addition, the course will consider the relation between the texts and their author, who led a triple life as Charles Dodgson, Oxford don in mathematics, as the writer Lewis Carroll, whom Dodgson never acknowledged, and as one of the fathers of photography, a famous portrait photographer. In the latter part of the course we will pursue the afterlife of the Alice Myth up to the present day. We will look at adaptations of the books, film versions by the surrealist Svankmajer and by Disney, and perhaps the video game based on the Alice books.

Meets departmental Transformations approach.

Meets general academic requirements HU and W.

ENG 212 - Reading Frankenstein

Students will examine the three distinct versions of Mary Shelley's novel (1818, 1823, 1831), read selected criticism and biographical material, and then focus on various literary, film, and theatrical adaptations, including H.G. Wells' *The Island of Dr. Moreau* (1896), Lynd Ward's woodcut adaptation of the novel (1934), the original Boris Karloff film (1931), Ridley Scott's *Blade Runner* (1982), and *The Rocky Horror Picture Show* (1975). The course will begin by examining *Frankenstein's* important progenitors: The Book of Genesis, the Pygmalion and Prometheus myths, and selections from Milton's *Paradise Lost*. Meets departmental Transformations approach.

Meets general academic requirements HU and W.

ENG 218 - Reading the South

This course will study how novelists, poets, and playwrights have treated the American South, and the extent to which they have challenged or fostered prevailing popular representations in songs and movies and political rhetoric (e.g. Dixie, down-home, Jim Crow, "a civilization gone with the wind,"). We will consider how their work addresses what ideologues and historians have characterized as the "peculiar" political and social conditions that have made the South distinctive: slavery and its Jim Crow aftermath.

Meets departmental Text/Contexts approach.

Meets general academic requirements HU and W.

Genres

ENG 231 - Modern Drama

This course will examine the emergence of a realistic and naturalistic "modern drama" out of its nineteenth century theatrical melodramatic roots. We will pay particular attention to late nineteenth and early twentieth century plays about gender conflict and "The New Woman," which emerged out of the suffragette movement, and to the evolution of theatrical forms. Students will be expected to distinguish between melodrama, the well-made play, the realist play, the naturalistic play, and expressionism. The first half of the course will establish how these forms were created and expanded by famous male European dramatists; in the second half, we will explore how these themes and forms were adopted and used by female playwrights.

Meets general academic requirement HU.

ENG 235, 236 - Contemporary Drama & Performance Art

In this class, we will examine several intertwined strands of contemporary theatre practice: postmodern theatre, political and documentary theatre, and performance art. We will be using postmodernism as our primary theoretical lens; in particular, we will look at how contemporary art questions traditional dramatic narratives and problematizes not only theatre history but history itself. This course will focus both on dramatic texts and performance art; we will examine the way in which the body, as well as the word, carries meaning and how dramatic meaning can change over time and through performance.

Meets general academic requirement HU (and W when offered as 236).

ENG 237, 294 - Postwar Drama

An exploration of the ways in which theatre and representational practice were challenged and changed by the Second World War and its political, cultural, and social aftermath. We will examine British, American, and German plays by writers such as Osborne, Pinter, Weiss, Handke, Bond, and Griffiths.

Meets general academic requirement HU (and W when offered as 294).

ENG 238, 239 - Plays on Film

Plays on Film is a study of the (all too few) aesthetically successful films made from stage plays, approached in the context of why adaptations of plays to film typically do not in fact, work. In addition to studying a canon of plays and films, this course will also engage (and contrast) textual, performance-based and image-based methodologies, and students will be asked to write papers demonstrating proficiency in all three theoretical approaches.

Meets general academic requirement HU (and W when offered as 239).

ENG 240, 241 - The Nature of Narrative

This course will explore the forms and functions of primarily prose narratives with particular attention to structure, point of view, and narrative conventions of time, space, plot, character, and "realism". Different versions of the course will vary in focus and emphasis: some may survey a variety of forms and genres (short story, novel, memoir, autobiography) while others may

concentrate on one or two of these.

Meets general academic requirement HU (and W when offered as 241).

ENG 243, 244 - Genres of Popular Fiction

A study of the nineteenth century genesis and twentieth century development of three of the major genres of popular writing: mystery, horror, and science fiction. We will be reading not only particular works from these categories but theoretical essays on the nature of the genre itself. Authors may include Poe, Lovecraft, Conan Doyle, Hammett, Chandler, Shelley, Le Guin, and others. This course will not only focus on reading popular literature and writing standard literary critical papers but will also examine literary genre as a category and ask students to write creatively within the specific literary genres - mystery, horror, romance, adventure, science fiction - studied by the course. In this way, the course will provide a thorough exploration (i.e. historical, theoretical, and practical) of the various modes of popular literary expression.

Meets general academic requirement HU (and W when offered as 244).

ENG 245, 246 - Poetry & the Imaginative Process

What is poetry? How is it made or constructed? Is it the product of sudden inspiration or of something more mundane? This course will address such questions by examining the work of poets who, in addition to their poems, have left behind letters, journals, and notebooks that allow us to reconstruct the processes through which their poems develop and progress to completion. Students will be encouraged to write and chart the development of their own poems in process.

Meets general academic requirement HU (and W when offered as 246).

ENG 249, 250 - Science Fiction & Fantasy

This course undertakes an in-depth and literary exploration of a few representative texts in the vast genre of Science Fiction/Fantasy. We pay special attention to the particular ways in which science fiction and fantasy engage with the concerns of the terrestrial present which produces them or in which they are read. We will consider science fiction as a literary exploration of historical, scientific, social, political, and personal issues under consideration by actual humans in the here (or near here) and now (or not so long ago). In particular, our syllabus highlights texts that think about ecology and bodily identity. We also consider Science Fiction/Fantasy as a literary form - a discourse with its own rules, methods, and history. Readings may include such works as "Bloodchild" by Octavia Butler, *The War of the Worlds* by H.G. Wells, *The Female Man* by Joanna Russ, *Dune* by Frank Herbert, *The Left Hand of Darkness* by Ursula K. Le Guin.

Meets general academic requirement HU (and W when offered as 250).

ENG 251, 252 - Contemporary Fiction

A study of representative late twentieth and twenty-first century English language novels and stories. *Meets general academic requirement HU (and W when offered as 252).*

Connections

ENG 255 - Literature & Film

This course examines the relationship between novels and plays and their film-adaptations, concentrating on the different ways we read and interpret these narrative forms. It will attend closely to the variety of decisions that inform the translation of literary works into a different medium with different conventions for a different audience. Emphases and subject matter will change. *Meets general academic requirement HU*.

ENG 257, 258 - Literature & Evolution

This course considers how evolutionary narrative shapes and is shaped by nineteenth century British conceptions of the individual, species, race, nation, sexuality, and nature. We will read Darwin in the original, as well as some of his influences, including Malthus and Paley, and much of the poetry, fiction, and popular science that helped build and disseminate evolutionary thinking, including Alfred Lord Tennyson, Robert Browning, Robert Louis Stevenson, and H.G. Wells.

Meets departmental Texts/Contexts approach.

Meets general academic requirement HU.

ENG 259, 260 - Literature & Ecology

"Nature is perhaps the most complex word in the language," says Raymond Williams in his influential book *Keywords*. This course explores the many meanings of "nature" as well as the assumptions, anxieties and aspirations attached to such terms as

"environment," "ecology," "conservation," resource," "climate," and "sustainability." This is not a course in environmental literature *per se*, but rather an exploration of how literature, especially the poetry and fiction of the nineteenth century, engages with and shapes our relations to and within the natural world, and serves as a basis for contemporary ecological thinking. We further explore how literary study may help us to better meet the environmental crises we currently face.

Meets general academic requirement HU (and W when offered as 259).

ENG 261 - Literature & The Visual Arts

The course will explore the multiple relationships between word and image in a variety of interdisciplinary texts. We will examine the genres of illustration (poem and novel), composite text, ekphrasis, children's story, concrete and imagist poetry, the graphic novel, and film. Historically, the scope of the course is broad, reaching from the classical period to last year. We'll move from The Iliad to a comic strip, from a children's picture book to the revolutionary poetics of Blake's dynamic art. The course will trace the increasing sophistication and partnership of the word/image relationship as we move deeper into the digital age. Texts may include William Blake, Songs of Innocence and of Experience (1794); W. C. Williams, *Pictures from Brueghel* (1960); Richard McGuire's graphic novel, "Here" (2014); and Jonathan Safron Foer's "Tree of Codes" (2010). The course will also consider Tennyson's "Lady of Shalott" along with its Pre-Raphaelite illustrations and critical works such as Scott McCloud's *Understanding Comics* (1993) and W. J. T. Mitchell's *Picture Theory* (1993).

**Meets general academic requirement HU.

ENG 267 - Literature & Sexuality

An exploration of the way literature reflects and shapes understandings, attitudes toward, and representations of, sexual identities and practices.

Meets general academic requirement HU.

ENG 269, 270 - Literature & Mass Media

A study of the relationship between ostensibly literary writing and mass entertainment (movies, rock-and-roll, TV) as sometimes competing yet symbiotic constellations of cultural practices that trace their modern institutional form to the eighteenth and nineteenth centuries, to the emergence of "Grub Street" and the Romantic idealization of the artist-hero.

Meets departmental Texts/Contexts approach.

Meets general academic requirement HU (and W when offered as 270).

ENG 279 - Literature as Politics

Students in this class will approach narratives, poems, and plays as rhetorical acts and sites of ideological struggle and will address and question widespread arguments that, on the one hand, *reduce*, literary works to the politics of writers and their times and, on the other hand, claim that as "art," literary works "transcend" politics. Writers studied are likely to include Shakespeare, Edmund Burke, William Blake, Nathaniel Hawthorne, Herman Melville, W. B. Yeats, W. E. B. DuBois, W. H. Auden, Langston Hughes, George Orwell, Muriel Rukeyser, John Steinbeck, Richard Wright, Joan Didion, Mohsin Hamid, etc. *Meets general academic requirement HU and W*.

Ethnic and Regional Literatures

ENG 229, 232 - African American Drama

A study of nineteenth and twentieth century plays addressing the cultural impact of the African Diaspora. In addition to plays, the syllabus incorporates theoretical and historical writing exploring Africanisms in the work of writers like Suzan-Lori Parks and August Wilson and the efforts of African American playwrights to remember often unrecorded histories.

Meets general academic requirement DE and HU (and W when offered as 229).

ENG 271, 272 - Ethnicity in US Literature

A study of the construction and representation of ethnic heritages, affiliations, differences, and commonalities in narratives, poetry, and plays by American writers from a variety of ethnic backgrounds, writing in English and adapting and revising established literary practices.

Meets departmental Transformation approach.

Meets general academic requirements DE and HU (and W when offered as 272).

ENG 273 - African American Literature

Explores important literary works for what they reveal about the ever-changing status of the Black condition and blackness in the United States and about the unique aesthetic, formal, and ideological innovations developed by African and African descendant writers in the U.S. Some of the major questions that guide our study include: What does a work reveal about its historical and social context—e.g., slavery, colonization, reconstruction, Jim Crow, civil rights, and beyond? How do power relations and class struggle intersect with aesthetic choice and composition? How do gender and sexuality shape the production of African American literature? The course may also consider interactions between African American literary production and the cultural movements of the greater African diaspora, Europe, and the Americas.

Meets general academic requirement DE and HU.

ENG 291, 292 - Caribbean Writing

Nobel-prize laureate Derek Walcott has called Port-of-Spain, the capital of Trinidad, a "babel of shop signs and streets, mongrelized, polyglot, a ferment without a history, and a writer's heaven." Martinican writer, Edouard Glissant, speaks of the Caribbean itself as "a multiple series of relationships, a sea that exists within us with its weight of now revealed islands." This course will explore this range of differences and relationships as they are represented in the work of English, French, and Spanish-language writers from St. Lucia, Jamaica, Trinidad, Haiti, Antigua, Cuba, Dominica, Grenada, and Martinique, concentrating on the work of Walcott, V.S. Naipaul, Jean Rhys, Aimé Césaire, Patrick Chamoiseau, Michelle Cliff, and Jamaica Kincaid, among others.

Meets general academic requirements DE and HU (and W when offered as 292).

ENG 295, 296 - The English Language

Today English is the international language of commerce, government, science, and journalism, but do all English users speak and write the same language? Where and when did English begin? How has our language changed, and why is it still changing? Hundreds of English dialects exist today; perhaps thousands have come and gone since our language was born in 449 A.D. Was Standard English just another dialect that happened to be in the right place (London) at the right time (1400)? To answer these and many other questions, we will examine the phonology, derivational and inflectional morphology, syntax, and semantics of English. As we understand our language more deeply, we will become more sensitive readers, writers, speakers, and listeners, more aware of the shaping effects of culture on language and of language on cultures.

Meets the English language requirement for teacher certification in English.

Meets general academic requirement W when offered as 296.

Medieval and Early Modern Literatures

Note: all 300-level courses require the prerequisite of a 200-level ENG course.

ENG 247, 248 - Shakespeare

A study of Shakespeare's work in different genres drawn from the full range of his career as poet and playwright and, occasionally, of one or two plays by his contemporaries. Plays are treated both as literary texts requiring close reading and as scripts designed for theatrical performance in public playhouses of Elizabethan and Jacobean England. Attention paid throughout to questions of gender and sexuality, authority in family and state, and drama as social expression.

Meets departmental Genealogies approach.

Meets general academic requirement HU (and W when offered as 248).

ENG 313, 314 - Medieval Literature

A broad-based study of the literature of the European Middle Ages. Readings will include selections from the romances of Chretien de Troyes, the *lais* of Marie de France, Dante's *Inferno*, Boccaccio's *Decameron*, *Sir Gawain and the Green Knight*, and a representative sampling of Chaucer's *Canterbury Tales* that highlights Chaucer's transformation of romance conventions in the context of emerging bourgeois and mercantile social values.

Meets departmental Genealogies approach.

Meets general academic requirement W when offered as 314.

ENG 315, 316 - The Renaissance Imagination

A study of the writing and other popular art forms of Renaissance England with attention to the newly articulated stress on self and the emergence of Tudor England as a world power. Texts include at least one Shakespeare play and plays by some of Shakespeare's contemporaries, such as Christopher Marlowe and Ben Jonson, poems and songs from the courts of Henry VIII

and Queen Elizabeth I, and selections from Spenser's epic poem, The *Faerie Queene*. We also give attention to sixteenth-century developments in music and the visual arts.

Meets departmental Genealogies approach.

Meets general academic requirement W when offered as 316.

ENG 317, 318 - Lyric Traditions

The course starts with forms and kinds of lyric poetry written before 1800 and then invites class members to consider how selected poets of the nineteenth, twentieth, and twenty-first centuries rework and reinvent these traditions. We will learn about various lyric traditions by experimenting with writing as well as reading them. Students can expect to read poems by John Donne, Shakespeare, George Herbert, and Andrew Marvell, and poems by Emily Dickinson, Allen Ginsberg, Hart Crane, Adrienne Rich, and others.

Meets departmental Genealogies approach.

Meets general academic requirement W when offered as 318.

ENG 321, 322 - Shakespeare Reproduced

A study of the reproduction of Shakespeare's plays on film and television and of the appropriation of Shakespeare's plays by modern playwrights, concentrating on the most adventurous recent work in these genres. Particular emphasis throughout on strategies of adaptation, substitution, and transformation.

Meets departmental Transformations approach.

Prerequisite(s): THR 100 Theatre & Society: Historical Introduction or any 200 level ENG course or permission of instructor. Meets general academic requirement W when offered as 322.

ENG 323, 324 - Renaissance Plays in Process

This course will involve students in intensive semester-long research projects focused on the social, political, literary, and cultural conditions that informed the composition, structure, and production of one or two plays of the Elizabethan and Jacobean periods. It will require students to perform hands-on research on subjects such as the status of women in Elizabethan England; established and evolving views on marriage; legal statutes and judicial practices; crime and punishment; the licensing and censorship of plays; attitudes toward homosexual practices; social mobility; and the legal and social standing of citizens, apprentices, foreigners, and masterless men. The focus will be on plays that are topically or historically oriented, either drawn from the annals of English history, from the news of the day, or from pronounced social anxieties of the time, such as the fear of witches. Students will be required to develop a broad range of interpretive skills and encouraged to bring their enriched understanding of the plays into the present in the form of research papers, study guides, production histories, black-box performances, set-designs, and video projects.

Meets departmental Genealogies approach.

Prerequisite(s): THR 100 Theatre & Society: Historical Introduction or any 200-level ENG course or permission of instructor. Meets general academic requirement W when offered as 324.

ENG 325, 326 - Milton & the Age of Revolution

A study of Milton's major works, especially *Paradise Lost*, and his impact on later poets, most notably the visionary and revolutionary strain in English Romanticism. Other readings will focus on contexts for understanding this impact, such as the Bible, epic traditions, civil war, and sectarian strife in seventeenth century England, colonialism, gender, and psychology. Meets departmental Genealogies approach.

Meets general academic requirement W when offered as 326.

ENG 328 - Staging the Restoration

This course examines stagings of Restoration England. The first half of the course investigates Restoration Comedy in historical and theatrical context. Likely themes include the relationship between theatre and politics, the intersection of nationality and sexuality, and the shift from aristocratic to bourgeois cultural forms. The second half of the course examines recent theatrical and cinematic representations of the Restoration era. We will look at contemporary productions of Restoration plays, new plays set in the Restoration era, and feature films. The Restoration emerges as a period of sex, fashion, class struggle, and nascent imperialism. What is at stake in these representations for our own historical moment? Why stage the past to address the present? Meets departmental Transformations approach.

Prerequisite(s): THR 100 Theatre & Society: Historical Introduction or any 200 level ENG course or permission of instructor. Meets general academic requirement W.

Nineteenth Century

Note: All 300-level courses require the prerequisite of a 200-level ENG course

ENG 329, 330 - Nineteenth Century British Fiction: The Marriage Plot

This course will examine how novels in Britain represent and are constructed around the so-called marriage plot: the progression from courtship, through obstacles, to arrive at the altar- or not! This plot has always been popular for providing a scaffold for novels - witness the proliferation of shoddy romance novels on the shelves of supermarkets today. In this course, we will concentrate on how the marriage plot is figured during the nineteenth century in Britain, commonly thought of as the great age of the novel. We will be assuming that marriage is an institution that not only legitimizes and controls heterosexual desire but also guarantees the smooth transference of property and wealth from one generation to the next, the very cornerstone of patriarchal continuity. Texts may include Austen, *Pride & Prejudice*; Bronte, *Villette*; Dickens, *Great Expectations*; Eliot, *Mill on the Floss*; Hardy, *Jude the Obscure*; and a range of secondary readings by Mary Poovey, Nancy Armstrong, David Lodge, Eve Kosofsky Sedgewick, and others.

Meets departmental Genealogies approach.

Meets general academic requirement W when offered as 330.

ENG 331, 333 - English Romanticism

Explores the English Romantic movement as it develops in the work of William and Dorothy Wordsworth, Coleridge, Blake, Keats, Felicia Hemans, and the Shelleys. Among other works, readings will include *Visions of the Daughters of Albion*, "The Rime of the Ancient Mariner," *Frankenstein*, and a more contemporary novel influenced by the Romantic writers. The course may also include dramatic readings and performances by guest artists. Attention will be paid to the relationship between the visual and verbal arts in poets like Blake and Keats.

Meets departmental Genealogies approach.

Meets general academic requirement W when offered as 333.

ENG 336, 337 - Transcendentalism & Abolition: American Literature in the Crucible of Freedom & Slavery

A survey of American literature in the run-up to the Civil War, reading Emerson, Thoreau, Hawthorne, Melville, Dickinson, Douglass, Stowe, and Whitman among others, with some consideration of legal and state documents. What is the meaning of liberty in the land of slavery? What — and who — is American? How can we live? How can we be free? Meets departmental Genealogies approach.

Meets general academic requirement W when offered as 337.

ENG 338, 339 - City, Frontier, & Empire in American Literature

The course will focus on U.S. literature produced in the late nineteenth and early twentieth centuries, from the post-civil war era to the years shortly after World War I and the enactment of the eighteenth and nineteenth amendments to the Constitution. Texts studied will include work by such writers as William Dean Howells, Theodore Dreiser, Rebecca Harding Davis, Abraham Cahan, Charlotte Perkins Gilman, Mark Twain, Willa Cather, Henry James, Edith Wharton, Charles Chesnutt, Kate Chopin, Paul Laurence Dunbar, Frank Norris, Stephen Crane, and others. Contexts considered will include changes in American identity, and U.S. literary practices in response to immigration, urbanization, the "closing of the frontier," the triumph of Jim Crow, and U.S. imperial expansion.

Meets departmental Texts/Contexts approach.

Meets general academic requirement W when offered as 339.

ENG 378, 379 - The Death of the Sun: Problems in Victorian Fiction

The Victorian social and cultural imagination was charged by the advent of two new sciences: energy physics and evolutionary biology. Together, these formed the basis of modern ecology, but among Victorians, they fueled and were shaped by the hopes and fears of a nation coping with change. Fears regarding the death of the sun competed with deeply held beliefs about conservation as well as with the hope for unlimited progress. This course explores the ways Victorian literature wrestled with and helped shape the way we understand ourselves and the natural world, evolving modern conceptions of energy, conservation, and entropy, from the roots of the term "energy" in Romantic poetry and in social thought to the late century fixation on inevitable decay. Authors read include Tennyson, Wells, Dickens, Hopkins, Gaskell, Stoker, and others.

Meets general academic requirement W when offered as 379.

ENG 391, 392 - Decadence: The Literature of the 1890s

England in the 1890s was a place of great anxiety about a number of explosive issues. The power of the old imperial regime - and the stability of the Victorian ethos - were increasingly threatened by colonial insurrections; advancements in science, technology, and psychology; the collapse of a puritanical sexual order and the emergence of new sexualities; the political and social empowerment of women; various social and economic uncertainties; and the radically new aesthetic politics of the "art for art's sake" movement. The course will focus on cultural texts such as Max Nordau's Degeneration and various tracts about the "New Woman," popular novels like Grant Allen's *The Woman Who Did*, as well as more canonical literature like Conrad's *Heart of Darkness*; Robert Louis Stevenson's *The Strange Case of Dr. Jekyll and Mr. Hyde*; H. G. Wells' *The War of the Worlds*; and Oscar Wilde's *The Picture of Dorian Gray* and *Salomé*.

Meets departmental Texts/Contexts approach.

Meets general academic requirement W when offered as 392.

ENG 397, 398 - Gender, Sensation, & the Novel

The 1860s saw the widespread circulation of the "sensation novel" — a widely popular and somewhat scandalous genre whose common themes included kidnapping, theft, adultery, insanity, bigamy, forgery, seduction, and murder. These novels were "sensational" both in their extreme popularity and their appeal to the senses — their habit, as one Victorian reviewer put it, of "preaching to the nerves." As these novels fictionalized the seamy underside of Victorian life, they often engaged with some of the most disturbing social issues of the day. The first part of our course will investigate five such novels in their Victorian context: Oliver Twist, The Woman in White, Lady Audley's Secret, East Lynne, and The Moonstone. The second will consider the remaking of sensation fiction in the film and fiction of the 1940s and from the 1990s onward.

Meets departmental Transformations approach.

Meets general academic requirement W when offered as 398.

Twentieth and Twenty-First Century

Note: All 300-level courses require the prerequisite of a 200 level ENG course.

ENG 263, 264 - Postwar British Theatre & Film

This course explores what has been called the "second renaissance" of British drama - "the new drama" of 1956 and after - and the parallel British New Wave of cinema. We will begin by examining the cultural and social influences leading up to the "annus mirabilis" of 1956. We will then trace the emergence of John Osborne and other "Angry Young Men" and the development of a drama overtly engaged with issues of class, gender, and sexuality. We will then look at the ways these plays helped to revitalize the British cinema of the postwar era, creating a cinematic scene in which the free cinema and "kitchen sink" films of the 1950s gave way to the bold, taboo-breaking movies of the 1960s. Playwrights may include John Osborne, Arnold Wesker, Ann Jellicoe, Harold Pinter, Joe Orton, Edward Bond, and Shelagh Delaney. Films are likely to include Billy Liar, The Loneliness of the Long Distance Runner, Alfie, Tom Jones, The Servant, The Knack and How To Get It, and A Hard Day's Night. Meets department Text/Contexts approach.

Meets general academic requirement HU (and W when offered as 264).

ENG 293 - Living Writers

This team-taught course focuses on the work of six well-known writers (of fiction, nonfiction, or poetry) who visit Muhlenberg to discuss their work, meet with students, and give a public reading. The class meets as one group on a weekly basis, either for a lecture or for a presentation by one of the visiting writers, and again in sections for discussions of each writer's work. Writers who have participated in this course include Peter Carey, Jonathan Franzen, Galway Kinnell, Philip Levine, Andrea Barrett, Robert Pinsky, Carolyn Forche, Paul Muldoon, David Bradley, Alice Fulton, and Jay Wright.

Offered every three years.

Meets general academic requirement HU.

ENG 340, 341 - European Novel in Translation

A study in the development of the modern European novel that ranges from the groundbreaking work of such nineteenth-century writers as Balzac, and Flaubert, to the later formal experiments of twentieth century authors like Kafka, Duras, and Kundera. Texts in question are assembled arond the unifying focus of "parables of authority and desire."

Meets departmental Transformations approach.

Meets general academic requirement W when offered as 341.

ENG 343, 344 - Irish Literature

An exploration of representative works in Irish literature by Catholic and Protestant, nationalist and Anglo-Irish, and canonical and non-canonical writers. Selection of texts will vary from semester to semester, sometimes sampling works, sometimes concentrating in a single genre. Topics will include the impact of British colonialism, nationalism and its appropriation of Irish myth, representations of gender, and colliding definitions of "Irishness."

Meets departmental Transformations approach.

Meets general academic requirement W when offered as 344.

ENG 345, 346 - Contemporary Irish Drama

This course focuses on contemporary Irish playwrights such as Brian Friel, Conor McPherson, Marina Carr, and Martin McDonagh in the context of the history of Irish drama as a vital national cultural tradition. From the Celtic Revivalists' plays at the founding of the Abbey Theatre, drama in Ireland has exerted shaping influence on the state as it has also provided a sensitive respondent to tumultuous events in Irish history. More than many cultures, the Irish are haunted by the past, and so we will be viewing the contemporary works as conversations that Irish writers today are staging with their own historical and more specifically their own theatrical ghosts (Yeats, Synge, O'Casey, and Beckett at the least).

Meets departmental Transformations approach.

Prerequisite(s): THR 100 Theatre & Society: An Historical Introduction or any 200 level ENG course or permission of instructor.

Meets general academic requirement W when offered as 346.

ENG 347, 348 - Modern British Fiction

A study of British modernist fiction and formal experimentation from 1900 to 1950: stream of consciousness, open form, mythic plot patterns, poetic prose, alienation, and self-conscious and fragmented narration. Texts may include Conrad's *Heart of Darkness*; Ford Madox Ford's *The Good Soldier*; Virginia Woolf's *To the Lighthouse*; E. M. Forster's *A Passage to India*; and D. H. Lawrence's *Women in Love*.

Meets general academic requirement W when offered as 348.

ENG 349, 350 - Modern American Fiction

A study of representative fiction published in the United States between the World Wars, including works by Willa Cather, Sherwood Anderson, Ernest Hemingway, Gertrude Stein, F. Scott Fitzgerald, Richard Wright, William Faulkner, Zora Neale Hurston, and William Attaway. Contextual questions will focus on legends of "the Lost Generation," the Depression-era radicalization of cultural production, the impact of immigration and Nativism, and relations between European and American modernisms in various arts.

Meets departmental Texts/Contexts approach.

Meets general academic requirement W when offered as 350.

ENG 352, 353 - Modern Poetry I: 1889-1945

The Modernist turn in poetry parallels that in the other arts — the change from Yeats' *Wind in the Reeds* to Eliot's *The Waste Land* and Pound's *Pisan Cantos* is a sea-change in the forms, rhythms, and narrative techniques in poetry. But what is "modernism" — is it truly new, or is it a shift within the larger movement called Romanticism to a 'harder" rhetoric? What is "the occult" in poetry? The emergence of women's poetry? Poets may include Yeats, Pound, Eliot, H.D., William Carlos Williams, Marianne Moore, and others publishing poetry in English between 1889-1945.

Meets departmental Genealogies approach.

Meets general academic requirement W when offered as 353.

ENG 354, 355 - Modern Poetry II: 1945-2000

This course will look closely at some poets who began to publish in the 1950's and came of age later - after the passing of the generation of heroic modernists, Pound, Williams, Moore, Stevens, HD, Eliot - in the 1960's and 70's. Most of the class work will consist of intense discussion and close reading of poems and will tackle such themes as the function of poetry in the contemporary world, public and private language, formalism and "free" verse, poetic voice and its relation to the self, issues of gender, and sexual politics. Poetry will be considered as a special kind of thinking. Poets read might include Elizabeth Bishop, Robert Lowell, John Berryman, Sylvia Plath, Adrienne Rich, Amiri Baraka, Jay Wright, Philip Levine, and Carolyn Forche. Meets departmental Texts/Contexts approach.

Meets general academic requirement W when offered as 355.

ENG 365, 366 - Contemporary Poetry

The American poets and poetry of now, its various directions, transformations of previous work, and its diverse nature from the last decades of the twentieth century to the present.

Meets general academic requirement W when offered as 366.

ENG 373, 374 - The Literary Marketplace

This course examines literary texts as a form of mass media and considers their circulation in the marketplace. We will trace how and why fiction was commodified in the nineteenth century and book publishing exploded in profitability and prestige in the twentieth. Lastly, we will look at the exciting (and terrifying) developments of the twenty-first century, which are continuing to unfold every day. Will the book as we know it survive?

Meets departmental Texts/Contexts approach.

Meets general academic requirement W when offered as 374.

ENG 375 - Postcolonial Literature

A study of English language literatures in former British colonies - in Africa, the Caribbean, Australia, and the Indian subcontinent and its Diaspora - and of literature in translation from former French colonies in Africa and the Caribbean, focusing on the work of such writers as Assia Djebar, V. S. Naipaul, J. M. Coetzee, Nadine Gordimer, Salman Rushdie, Arundhati Roy, Ben Okri, and Wole Soyinka, among others. The course is variously taught as a survey of these literatures or as a more concentrated study of the literature of one or two nations or regions. Alternate years.

Meets departmental Transformations approach.

Meets general academic requirement DE.

ENG 395, 396 - Literature & Film of the Cold War

The course focuses on how fiction, poetry, plays, and movies produced in the seond half of the twentieth century responded to sometimes promoting, sometimes resisting - the global ideological, diplomatic (and occasionally military) conflict that came to be known as "the Cold War." Writers likely to be studied include Ralph Ellison, Sylvia Plath, John Le Carré, Philip Roth, Mary McCarthy, Graham Greene, Jack Kerouac, J. D. Salinger, Arthur Miller, Allen Ginsberg, Don Delillo, E. L. Doctorow, and James Baldwin, along with movies such as *On the Waterfront, Rebel Without a Cause, North by Northwest*, and *Dr. Strangelove*. Meets departmental Texts/Contexts approach.

Meets general academic requirement W when offered as 396.

Tutorials and Seminars

Admission to these courses requires prior arrangement, instructor permission, or advanced class standing.

ENG 297, 298 - Writing Theory

A required course open only to students who have been selected to serve as Writing Center tutors and Writing Assistants. The course will focus (1) on writing, reading, and evaluating analytic and literary essays and (2) on theoretical essays in the field and how these theories translate into classroom and one-on-one tutorial practice. In addition, students will spend an hour a week in the Writing Center, first observing tutorial sessions, then co-tutoring, and finally tutoring students one-on-one.

Prerequisite(s): Instructor permission.

Meets general academic requirement W when offered as 298.

ENG 400-449 - CUE: Seminar in English

English Department seminars are offered once or twice a semester by different members of the department on a rotating basis. They are required of all senior English majors and may also be taken by juniors with instructor permission. *Meets general academic requirement W.*

Introductory Writing Courses

ENG 205 - Introduction to Creative Nonfiction Writing

The course will focus on creative nonfiction writing. Students will spend an equal amount of time writing and reading essays and longer works of nonfiction. Class discussion will focus on craft and rhetorical issues, such as narrative voice, story, exposition, scene, imagery, and dialogue.

Meets general academic requirement AR.

ENG 207 - Introduction to Playwriting

Students will learn the rudiments of dramatic writing through lecture, readings, and weekly assignments dealing with structure, characterizations, dialogue, and other areas of the playwright's art. Students' works will be shared and critiqued by the class, operating as a playwrights group. Each student will complete at least a ten-minute play and a 30-minute one-act play during the semester.

Meets general academic requirement AR.

ENG 221 - Introduction to Poetry Writing

In this introductory course students will learn to create, shape, and hone their own poetry, and in the process learn to savor the pleasure of poetry and interrogate how and why it affects us. The focus will be on the process of writing, including finding inspiration, experimentation with form and content, drafting, active de-familiarization, imaginative play, and the re-envisioning of one's ideas. By studying the modus operandi of great writers, students will discover multiple ways of poetically expressing themselves. There will be weekly reading and writing assignments that focus on various aspects of poetic craft, such as imagery, figurative language, lineation, and rhythm. One goal of the course is to teach students to foster a writing practice: keeping a writer's journal, engaging seriously with contemporary poetry, giving and receiving articulate peer feedback, and talking "shop" (i.e., about stylistic, technical, and philosophical considerations). This course will build up to and culminate in a final portfolio. *Meet general academic requirement AR*.

ENG 226 - Introduction to Screenwriting

Examination of screenwriting fundamentals: story structure (theme and plot), character, dialogue, scene description and development, and script formats. Students will prepare character profiles, treatments, and at least one screenplay. *Meets general academic requirement AR*.

ENG 227 - Introduction to Fiction Writing

In this course students will be introduced to the art of writing short fiction. The focus will be on the process of writing, and students will be encouraged to explore new terrain, to experiment with narrative form, and play with words, sentences and paragraphs. By studying great writers, students will create a 'tool box' of techniques which they will use in their own work. There will be weekly reading and writing assignments that focus on various aspects of craft, such as character and scene development, imagery, psychic distance, point-of-view, and dialogue. The goal of the course is to create a writer's community where students are actively engaged in the writer's project: writing fiction, sharing their work with their peers, receiving helpful peer feedback, always talking about issues of craft and aesthetics. The course will culminate in a final portfolio. *Meets general academic requirement AR*.

Advanced Writing Courses

ENG 303 - Advanced Creative Nonfiction Workshop

An intensive course in creative nonfiction. This upper level workshop will focus on the personal essay, such as memoir, travel writing, and portrait, and students will read examples. Writers will comment on each other's work in a workshop setting. Issues of linguistic theory, the form of the essay, and other conventions of nonfiction will be discussed. It will culminate in a portfolio, final project, and/or student reading.

Prerequisite(s): ENG 205 - Introduction to Creative Nonfiction Writing, ENG 221 - Introduction to Poetry Writing, or ENG 227 - Introduction to Fiction Writing, or ENG 240, 241 - The Nature of Narrative

Meets general academic requirement AR.

ENG 305 - Advanced Fiction Workshop

An intensive course in the craft of the short story. Fiction writers will comment on each other's work in a workshop setting. Issues of linguistic theory, the literary tradition, and aesthetics will inform our discussions. The course will culminate in a public reading and submission of a portfolio.

Prerequisite(s): ENG 205 - Introduction to Creative Nonfiction Writing, ENG 227 - Introduction to Fiction Writing or ENG 240, 241 The Nature of Narrative.

Meets general academic requirement AR.

ENG 307 - Advanced Playwriting Workshop

An intensive course in the craft of playwriting in which writers comment on each other's work, focusing on the elements and structure of a play (character, action, spectacle, diction, "music", thought), dramatic forms and conventions (monologue, farce, melodrama, comedy, tragedy), selected published plays, and attending theatrical performances, all culminating in staged readings of selected student work and submission of a portfolio.

Prerequisite(s): ENG 207 - Introduction to Playwriting or THR 250 Acting I: Process.

ENG 309 - Advanced Poetry Workshop

An intensive course in the craft of poetry. Poets will comment on each other's work in a workshop setting. The problem of poetic form and its relation to the tradition and the issue of the self and self expression will be explored in terms of linguistic theory, poetic tradition, and poetics. The course will culminate in a portfolio submission.

Prerequisite(s): ENG 221 - Introduction to Poetry Writing or ENG 245, 246 Poetry & the Imaginative Process Meets general academic requirement AR.

ENG 364 - Advanced Screenwriting Workshop

Students will conceptualize, outline and write a feature-length screenplay, focusing on story structure, character development, conflict, dialogue, and resolution. Writers will comment on each other's work in a workshop setting. Students should start conceptualizing their ideas well in advance of the start of the semester.

Prerequisite(s): ENG 226 - Introduction to Screenwriting or permission of instructor.

ENG 370 - Living Writers Workshop

An advanced workshop in writing. Students will read the work of, participate in Q & A sessions with, and attend readings by the writers in our Living Writers Reading series. In class, student writers will comment on each other's work in a workshop setting and commit to the process of drafting, active de-familiarization, imaginative play, development, and serious revision. The course will culminate in the submission of a portfolio.

Prerequisite(s): ENG 293 - Living Writers or any 200-level creative writing class.

ENG 960 - Internship in Writing

Each internship is to be designed in consultation with a faculty sponsor and an on-site supervisor, and will include an academic project to be defined by and submitted to the faculty sponsor for evaluation. Will be graded pass/fail.

Environmental Science (ESC)

Director: Dr. Jason Kelsey, Professor of Environmental Science

Professors: Borick, Gambino, Herrick, Klem, Niesenbaum, Sistare, Wilson

Associate Professor: Iyengar

Lecturer: Tuerk

A major in environmental science provides students with many opportunities in industry, government, and academia. For example, graduates are well prepared for careers in environmental consulting, environmental regulation, advocacy, or education. Students can also pursue graduate studies in a wide range of fields, including environmental science, ecology, oceanography, forestry, law, medicine, and toxicology. A program with the School of Forestry and Environmental Studies at Duke University is available (see Cooperative Programs for details).

Students are encouraged to obtain internship experience in specialized fields of Environmental Science and/or participate in an environmentally oriented study abroad program during their junior year. Recently, students have served with local educational institutions, nonprofit organizations, state and federal government, and local industries. Others have spent time in Australia, Ecuador, Costa Rica, Canada, and other countries.

Special Programs

Teacher Certification Requirements

Students seeking certification for the teaching of environmental education must take BIO 260 - Field Botany & Plant Ecology, BIO 270 - Ecology, and BIO 465, 466 - CUE: Conservation Biology within the elective science courses in addition to education courses. Contact the Director of Environmental Science for details.

Honors Program

Students approved by the Environmental Science Honors Committee may register for honors work which requires completing a research project, presenting results orally, and writing a formal scientific report. Based on student performance as judged by the quality of the honors work and by maintaining at least a 3.50 grade point average in all environmental science and sustainability studies courses, environmental science faculty will determine if honors will be granted.

Major Requirements

To be retained as a major, a student must maintain a 2.00 grade point average for all biology, chemistry, mathematics, environmental science, and environmental studies courses attempted. Requirements for graduate and professional schools vary. Students are strongly encouraged to consult with an academic advisor on their choices for mathematics and elective science courses.

A major in Environmental Science must complete fourteen courses as outlined below.

Required Science Courses:

BIO 150 - Principles of Biology I: Organisms & Populations

BIO 151 - Principles of Biology II: Cells & Organisms

CHM 103 - General Chemistry I

CHM 104 - General Chemistry II

ESC 113 - Environmental Science I

ESC 114 - Environmental Science II

ESC 201 - Environmental Geology

ESC 310 - CUE: Environmental Chemistry **OR**

ESC 312 - CUE: Toxicology

MTH 119 - Statistical Analysis OR

MTH 121 - Calculus I

Elective Science Courses: (Choose at least 3 from list or other courses as approved)

BIO 242 - Entomology

BIO 255 - Ornithology

BIO 260 - Field Botany & Plant Ecology

BIO 262 - Cultural & Economic Botany

BIO 268 - Freshwater Ecology OR

BIO 270 - Ecology

BIO 272 - Field Marine Biology

BIO 275-279 - Field Investigations in Biology

BIO 460 - CUE: Behavioral Ecology

BIO 465, 466 - CUE: Conservation Biology

CHM 201 - Organic Chemistry I OR

CHM 203, 205 - Organic Chemistry IA

CHM 202 - Organic Chemistry II OR

CHM 204, 206 - Organic Chemistry IIA

CHM 311 - Analytical Chemistry I

ESC 310 - CUE: Environmental Chemistry

ESC 312 - CUE: Toxicology

PHY 121 - General Physics I

PHY 122 - General Physics II

Elective Environmental Studies Courses: (Choose at least 1 from list or other courses as approved)

COM 336, 337 - Environmental Communication

ECN 245, 246 - Environmental Economics

HST 341 - Environmental History of the United States

HST 373 - Environmental History of Latin America

PHL 246 - Environmental Philosophy

PSC 216 - Environmental Politics & Policymaking

PSC 330, 331 - Comparative & International Environmental Policies

SUS 350 - Community Sustainability in Costa Rica

Courses

ESC 111 - Topics in Environmental Science

Environmental science is an interdisciplinary subject area that draws on biology, chemistry, geology, and ecology to study the earth's natural systems. Students learn how science is conducted and study the earth's natural environments, interactions of organisms with each other as well as their physical surroundings, and the sources and effects of environmental stress. Three hours of lecture/discussion each week.

This course is open to non-science majors only.

Prerequisite(s): Science majors wishing to enroll require permission of the instructor.

Meets general academic requirement SC.

ESC 113 - Environmental Science I

An introductory environmental science course that investigates the functioning of earth's natural systems. Topics include the cycling and flow of water, energy, and nutrients; biodiversity; the basic principles of ecology; and the interrelationships between organisms and their environments. The causes and effects of, as well as possible solutions to, several environmental problems are also covered. Human population growth, agriculture, and energy utilization are discussed in detail. Laboratory exercises and field trips teach basic techniques for collecting and analyzing ecological and environmental data and reinforce topics discussed in the lecture. Three hours lecture/discussion. Three hour laboratory meets every other week.

Meets general academic requirement SC.

ESC 114 - Environmental Science II

This is a continuation of ESC 113. Students study a number of human activities that can alter natural ecosystems and adversely affect human health. Topics include waste management, resource exploitation, and the behavior of pollutants in soil, air, and water. The science of controversial political issues, such as global climate change, ozone depletion, and acid rain are explored and debated. In addition, the basic principles of human and environmental toxicology, risk assessment, and environmental impact analysis are covered. Laboratory exercises and field trips reinforce topics discussed in the lecture. Three hours of lecture and three hours of laboratory per week.

Prerequisite(s): ESC 113 - Environmental Science I.

Meets general academic requirement SC.

ESC 201 - Environmental Geology

Organisms are inextricably bound to their physical environments. An understanding of the interactions between the earth's geology and biology is therefore fundamental to a study of environmental science. This course examines earth's physical environments as they relate to environmental science. Topics will include the basic principles of geology, natural hazards such as volcanoes, earthquakes, mass wasting, flooding, and the global hydrologic cycle. Global water resources will be examined with

an emphasis placed on groundwater supply, movement, and pollution. Three hours of lecture/discussion and three hours of laboratory per week. Offered alternate years.

Meets general academic requirements SC and W.

ESC 310 - CUE: Environmental Chemistry

The behavior of chemical pollutants in earth's natural systems is critical to a study of environmental science. This course will examine the chemistry of soil, air, and water; the interactions and cycles of elements among them; and the pollutants that can adversely affect these important resources. Topics will include an overview of the physical chemistry of soil's reactions and fates of pollutants in soil, reactions and movement of pollutants in water, wastewater treatment, and chemical reactions in the atmosphere, including the mechanisms of smog production, ozone depletion, and global warming. The chemistry of power generation involving fossil fuels, radioactive isotopes, solar energy, fuel cells, and other resources will also be considered. Three hours of lecture/discussion per week. Offered alternate years.

Prerequisite(s): CHM 104 - General Chemistry II or permission of the instructor.

ESC 312 - CUE: Toxicology

Toxicology is in broad terms the science of poisons. This course will provide an overview of the many branches of toxicology and examine the effects of poisons or toxins on individual organisms and ecosystems. Of specific interest will be the uptake (ingestion), metabolism, storage, and excretion of toxins and the adverse effects experienced by organisms exposed to toxic substances. The mechanisms by which substances induce cancer, birth defects, and nervous and immune system damage will be studied. Additionally, fundamental principles of toxicology, such as dose-response and selective toxicity, will be described. The sources, chemical properties, environmental fates, and regulation of toxins will be addressed. Three hours of lecture/discussion per week. Offered alternate years.

Prerequisite(s): CHM 201 Organic Chemistry I or CHM 203, 205 Organic Chemistry IA or any 200 level course in Biology or permission of the instructor.

ESC 960 - Environmental Science Internship

Film Studies (FLM)

Director: Dr. Paul McEwan, Associate Professor of Media & Communication and Film Studies

Professors: Birgel, Cartelli, Coppa, Tafler

Associate Professor: Corbin Assistant Professor: Bazaz

Film has emerged in the last 100 years as a global phenomenon with broad social, cultural, and commercial implications. National cinematic traditions have developed in virtually every corner of the world, making an understanding of film's relationship to its conditions of production and reception integral to the work of cultural historians, students of politics and communications, philosophers, and sociologists alike. Thus, film is a vital subject of intellectual inquiry that is useful to a wide range of students, not merely as vocational training for media professionals.

The film studies program at Muhlenberg offers a rigorous interdisciplinary experience that helps students understand both the technical and expressive components of the cinematic medium and gain practical experience in film production within the framework of a liberal arts education. Students will be exposed to many different forms and genres of film, including classic Hollywood cinema, but also documentary, independent, and experimental film along with the rich traditions of world cinema. The production component of the curriculum gives every student the opportunity for hands-on experience in filmmaking and allows motivated students to pursue additional work in screenwriting, acting and directing, and advanced video production. Both film studies and production tracks culminate in a senior experience course.

Film studies is also designed to complement other major and minor programs that students might choose to pursue in art, media and communication, English, music, and theatre arts, among others. The program's goal is for all

students of the discipline to extend the range and quality of their viewing experiences and to become better informed interpreters of the ways in which film both shapes and represents the world around them.

Major Requirements

To declare and be retained as a film studies major, a student must maintain a 2.00 grade point average based on all the courses required for the major.

Required Courses:

The major in Film Studies requires 9 courses, 4 of which must be at the 300 or 400 level. No more than 4 courses from any single department or major (other than FLM) can count toward the film major.

I. Three core courses:

COM 240 - Introduction to Film Analysis

FLM 201 - Film History I: 1895-1950

FLM 202, 204 - Film History II: 1950-Present

II. One course in production:

COM 251 - Introduction to Moviemaking

COM 351 - Video Production

COM 367 - Studio Workshop in Television & Film

COM 467 - CUE: Advanced Video Production

ENG 364 - Advanced Screenwriting Workshop

THR 355 - On-Camera Acting

III. One course in national and regional cinemas:

ENG 263, 264 - Postwar British Theatre & Film

FLM 325 - French New Wave Cinema

FLM 328 - Australian Cinema

FLM 330 - New Asian Cinemas

FLM 332 - Film Cultures of North Africa & the Middle East

FLM 334 - Bollywood: Indian Popular Cinema

FLM 336 - African American Cinema

GRM 316, 317 - German Cinema

IV. One course in genres, forms, and movements:

COM 346 - Exploratory Cinema

ENG 238, 239 - Plays on Film

FLM 225 - The Western Film

FLM 227 - Melodrama

FLM 229 - Travel & Cultural Encounters in Film

FLM 348 - Cinema's Altered States

FLM 354 - Film Noir

V. Culminating Undergraduate Experience:

FLM 450 - CUE: Film Studies Seminar

VI. Two Electives:

The electives can come from any of the courses in the categories "National and Regional Cinemas" and "Genres, Forms, and Movements" or from the following courses:

COM 251 - Introduction to Moviemaking

COM 351 - Video Production

COM 367 - Studio Workshop in Television & Film

COM 467 - CUE: Advanced Video Production

ENG 207 - Introduction to Playwriting

ENG 255 - Literature & Film

ENG 321, 322 - Shakespeare Reproduced

ENG 364 - Advanced Screenwriting Workshop

FLM 250 - Contemporary World Cinema

FLM 349 - Film Reviewing

FLM 360 - Major Filmmakers

THR 355 - On-Camera Acting

Minor Requirements

The minor in Film Studies consists of 6 courses, at least 2 of which must be at the 300 level or above. In addition, no more than 2 courses from any single department or major (other than FLM) can count toward the film minor.

I. Three core courses:

COM 240 - Introduction to Film Analysis

FLM 201 - Film History I: 1895-1950

FLM 202, 204 - Film History II: 1950-Present

II. One course in national and regional cinemas:

ENG 263, 264 - Postwar British Theatre & Film

FLM 325 - French New Wave Cinema

FLM 328 - Australian Cinema

FLM 330 - New Asian Cinemas

FLM 332 - Film Cultures of North Africa & the Middle East

FLM 334 - Bollywood: Indian Popular Cinema

FLM 336 - African American Cinema

GRM 316, 317 - German Cinema

III. One course in genres, forms, and movements:

COM 346 - Exploratory Cinema

ENG 238, 239 - Plays on Film

FLM 225 - The Western Film

FLM 227 - Melodrama

FLM 229 - Travel & Cultural Encounters in Film

FLM 348 - Cinema's Altered States

FLM 354 - Film Noir

IV. One Elective:

The electives can come from any of the courses in the categories "National and Regional Cinemas" and "Genres, Forms, and Movements" or from the additional electives listed under the Film Studies,

A.B. requirements.

FLM 450 - CUE: Film Studies Seminar (recommended)

Courses

FLM 201 - Film History I: 1895-1950

An exploration of the international history of film from its invention through the silent era, the rise of Hollywood, and the development of sound to 1950. The course focuses on major directors, technological developments, and the surrounding social, cultural, and commercial contexts from which film emerged. Screenings will include works from Hollywood, international cinema, documentary, and the avant-garde.

Attendance at weekly screenings is required.

Meets general academic requirement HU..

FLM 202, 204 - Film History II: 1950-Present

An exploration of the international history of film from the end of the War through important European developments (for example, the French New Wave, Italian Neo-Realism, and New German Cinema) and dramatic changes in production and viewing in the United States (through the Sixties and Seventies), as well as the recent emergence of strong national and regional cinemas in countries all over the world. The course focuses on major directors, technological developments, and the surrounding social, cultural, and commercial contexts within which film continues to flourish. Screenings will include works from Hollywood, international cinema, and the avant-garde. In addition to the historical survey, the course provides further training in film and textual analysis with an emphasis on writing and an introduction to film theory.

Attendance at weekly screenings is required.

Prerequisite(s): FLM 201 - Film History I: 1895-1950 or permission of the instructor. Meets general academic requirement HU (and W when offered as 202).

FLM 225 - The Western Film

This course will examine the Western as the American film genre *par excellence*. Numerous theoretical approaches will be used to study the rise and fall of the Western's popularity, its role in shaping popular myths about the United States, and its representation of masculine identity. By going chronologically from early classical to more contemporary films, students will learn how ideology and socio-historical conditions lead to the making of certain films at certain times. In addition to looking at the classical Western, the course will analyze how the so-called spaghetti Western and political events such as the Vietnam War have transformed the genre. Students will learn how to read and discuss films by analyzing the various cinematic codes (lighting, editing, camera angles, sets, music, the three gazes, etc.), the significance of the star system, and theories of spectatorship and scopophilia. *Attendance at weekly screenings is required*.

Meets general academic requirement HU.

FLM 227 - Melodrama

Melodrama is a form of popular storytelling that puts its characters in dramatic situations in which the stakes are nothing less than the victory of good over evil. This course will focus on the prominence of melodrama in narrative film, particularly popular American film, to reveal the flexibility of what some scholars argue is more than a genre but is actually one of the dominant modes of filmmaking from its inception. The course focuses on films that are often classified as "women's films" and "social problem films" but also includes films that could be classified as action films or "men's melodramas"? and so there will be a lot of discussion about issues of gender and race. We will also consider how these topics are illustrated through melodrama's aesthetics, such as music, dramatic editing, and symbolic use of setting. Attendance at weekly screenings is required.

Meets general academic requirement HU.

FLM 229 - Travel & Cultural Encounters in Film

This course looks at narrative and experimental films that thematize the act of travel as a trigger for cultural encounters, which often result in conflicts, power differentials, and individual senses of displacement or disorientation. The cultural encounters depicted include those in colonial Africa, India, and the Americas, as well as post-colonial encounters in new relationship configurations such as migration and tourism. The course also considers as a sub-theme the "road movie" in American culture and what it says about the relationship of dominant American culture to the land and the indigenous inhabitants. As a theoretical lens, students will consider the cinematic medium as a vehicle for virtual travel and read accounts of film spectatorship that consider particular travel experiences. Attendance at weekly screenings is required.

Meets general academic requirement DE.

FLM 250 - Contemporary World Cinema

This course offers a selective survey of some of the most cutting-edge films produced around the world in the last 10-20 years, including those that offer sustained insight into specific national cultures and those that are more global in orientation and address the worldwide mixing and mingling of people and cultures. Films explored in this course will likely include *Bad Education* (Spain), *Amores Perros* (Mexico), *Code Unknown* (Austria/France), *Chunkging Express* (Hong Kong/China), *The World* (China), *A Separation* (Iran), *Once Upon a Time in Anatolia* (Turkey), *The Best of Youth* (Italy), *Waltz with Bashir* (Israel), *The Class* (France), and *District* 9 (South Africa), among others. Special attention will be paid throughout to contemporary developments in film style, evolving cultures of film taste and reception, and film art as cultural expression. Open to all students at all levels. *Attendance at weekly film screenings is required*.

Meets general academic requirement DE and HU.

FLM 325 - French New Wave Cinema

This course explores the very rich period in French Cinema during the 1950s and 1960s that is known as the French New Wave (*La Nouvelle Vague*). Spearheaded by a group of young directors who also wrote their own screenplays (Truffaut, Godard, Malle, Chabrol, Resnais, among others), this movement gave rise to "*Le cinema d'auteur*" as an innovative and influential way to produce films. To understand this very important film movement, we will study the uses of script, image, and sound in the films themselves with special emphasis on storyline, subplot, and character. We will also pay considerable attention to the cultural and economic contexts in which the films were produced and the biographies of the directors themselves. *Attendance at weekly screenings is required.*

FLM 328 - Australian Cinema

The Australian Cinema embodies the spatial and temporal conditions of a distant, strange continent that is home to a complex relationship between the majority immigrant population (bearing the traditions and values of European, North American, and now Asian communities) and an indigenous people who date back over 50,000 years. The course will explore these issues by focusing on films made by Australian directors at home and abroad and films made in Australia by non-Australian directors. *Attendance at weekly screenings is required.*

FLM 330 - New Asian Cinemas

This course surveys contemporary cinema in Japan, China, Taiwan, Thailand, South Korea, and the Philippines. Though the course addresses seminal developments in national cinematic traditions, such as the postwar Japanese nuclear-horror film *Godzilla* and the avant-garde *Face of Another*, it concentrates on films produced in the last 10-15 years. These will likely include the cyber revenge fantasy, Tetsuo Iron Man, from Japan; Hong Kong "new wave" films such as *Chungking Express*; Jia Zhangke's *Touch of Sin* and 24 *City*, and experimental docudrama on the effects of China's rapid urban re-development; films that explore directionless Asian youth subcultures (*The Power of Kangwon Province* and *Goodbye South, Goodbye*); the pleasantly bewildering *Uncle Bonnmee Who Can Recall His Past Lives* from Thailand and the relentlessly shocking *Oldboy* from S. Korea, among others.

Attendance at weekly screenings is required. Meets general academic requirement DE and HU.

FLM 332 - Film Cultures of North Africa & the Middle East

This course will focus on the development of national cinematic traditions in Egypt, on the struggle for cultural self-definition in the former French colonies of Algeria and Tunisia, on cinematic representations of post-revolutionary Iran, and on how Arab and Israeli filmmakers address the so-called "question" of Palestine. In order to provide students with a grounding in the film cultures in question, the course will also explore literary works and the commercial, social, and political conditions that inform film production, distribution, and reception.

Attendance at weekly screenings is required. Meets general academic requirement DE.

FLM 334 - Bollywood: Indian Popular Cinema

India's Bombay/Mumbai-based cinema is one of the world's few challenges to the influence of American film. This course examines the world's largest film industry with the aim of understanding the place of popular cinema outside of the Hollywood model. We will consider the role of popular film in the development of Indian nationhood, its influence on notions of gender and caste, and its function as a binding influence on the Indian Diaspora.

Attendance at weekly screenings is required. Meets general academic requirement DE.

FLM 336 - African American Cinema

This course surveys African American filmmaking from the silent era to the present, along with a few films that represent the broader African Diaspora. In addition, readings put all the films in the context of theoretical discussions concerning what constitutes "black," "African," or "Third Cinema," politically and aesthetically. As the course proceeds chronologically, it briefly demonstrates images of African Americans in mainstream Hollywood films but focuses primarily on how filmmakers of African descent have sought to respond to mainstream representations and create their own narratives and styles. The emphasis is on narrative films, with some attention to experimental films.

Attendance at weekly screenings is required.

Meets general academic requirement DE.

FLM 348 - Cinema's Altered States

From the avant-garde to Hollywood blockbusters like *The Matrix* and *Inception*, the cinema provides a fertile ground for playing at the edge of narrative and for testing credibility by constructing alternate logic. When films provide the rules of their own reality, spectators and their surrogate characters grope for a foothold of understanding and sanity. This course explores the phenomenon of film experience within the experience of film's poetic manipulation of "reality".

Attendance at weekly screenings is required.

FLM 349 - Film Reviewing

This writing-intensive course focuses on the art of reviewing films for both popular and scholarly outlets. Students will write reviews of classic and contemporary films in a variety of lengths and formats, for different intended audiences. The course will also include extensive practice in editing and re-writing and include weekend trips to local cinemas to review films on short deadlines. Students will create an online archive of all finished work and learn about ways to develop and market their own critical voice.

Attendance at weekly screenings is required. Meets general academic requirement W.

FLM 354 - Film Noir

Dark shadows, low-key lighting, unusual camera angles, flashbacks, a sense of paranoia, and males manipulated by sultry, cigarette-smoking, seductive femme fatales characterize *film noir*, the only typically American film genre after the Western to emerge from Hollywood. Created during the 1940s and 50s, many by Jewish émigrés from Central Europe, *film noir* is usually considered a combination of German Expressionist cinematic style and the American hard-boiled detective story. This course will examine classic works of the genre within their sociopolitical context and investigate why they were so popular among audiences and were able to violate some rules of the Production Code, why certain actors are inextricably linked to the genre, and why neo-noirs are still being made.

Attendance at weekly screenings is required. Meets general academic requirement HU.

FLM 360 - Major Filmmakers

This course focuses on one or two major filmmakers and considers repeated and/or developing themes in his or her body of work. While the filmmakers under consideration vary, the course deals with similar questions each time: the validity of the auteur theory as a way of understanding film, the relationships between filmmakers and their art, and the nature of our ideas about art and artistic production.

Attendance at weekly screenings is required.

FLM 450 - CUE: Film Studies Seminar

Advanced study and analysis of selected areas in film studies designed for majors and other qualified students. Topics may include auteur studies, genre or form studies, national or regional film studies, film theory, or explorations of film and popular culture. Special emphasis is placed on advanced textual and film analysis, scholarly discussion, and writing. *Attendance at weekly screenings is required.*

Prerequisite(s): FLM 202, 204 Film History II: 1950-Present and senior film studies major or permission of the instructor. Meets general academic requirement W.

Finance (FIN)

Department Chair: Dr. Holmes Miller, Professor of Business

Professors: Kish-Goodling, Marshall, Raymond

Assistant Professor: Ray-Chaudhuri

Senior Lecturer and Internship Director: Eisenberg

Visiting Lecturer: Slane

The finance major is offered by the Accounting, Business, and Economics Department. It provides students with a comprehensive understanding of the principles that underlie the operation and functions of financial markets and the analytical and quantitative skills needed for an understanding of current financial issues, practices, and policies.

Additionally, the major prepares students for graduate work in business and finance and careers in banking, insurance, investments, and corporate financial planning.

The Accounting, Business, and Economics department supervises an endowed, student run Investment Society, through which students can earn 0.5 credit by enrolling in FIN 144 - Introduction to Portfolio Management (The Investment Society).

Special Programs

Honors Program

A departmental honors program is available on an application basis to students who establish outstanding academic records (minimum College GPA of 3.70). Interested students should discuss the requirements and rewards of this program with their faculty advisor before the end of their junior year.

Internship Opportunities

The department has an extensive internship program that provides the finance major with a wide range of opportunities to gain valuable work experience. Supervised paid and unpaid internships, which contribute to the Muhlenberg degree, are available during the regular school year. In addition, the department offers assistance in obtaining paid summer internships that may also contribute to the degree.

Major Requirements

The finance curriculum balances the academic interests and career intentions of its majors. The program outlined below emphasizes analytical and quantitative skills. In order to declare and remain a major in good standing, a student must achieve and maintain a cumulative grade point average of at least 2.00 in all courses required for the major. Students majoring in finance cannot enroll accounting, business, economics, or finance courses on a pass/fail basis.

A major in finance must complete twelve courses as outlined below:

Foundation:

ECN 101 - Principles of Macroeconomics

ECN 102 - Principles of Microeconomics

ACT 101 - Financial Accounting

MTH 121 - Calculus I

MTH 119 - Statistical Analysis OR

MTH 331 - Mathematical Statistics I AND

MTH 332 - Mathematical Statistics II

Core:

BUS 236 - Management

FIN 237 - Corporation Finance

FIN 330 - Money, Banking, & Financial Markets

Culminating Undergraduate Experience:

FIN 490 - CUE: Advanced Topics in Financial Management

Electives: (Choose three)

ACT 326 - Concepts of Federal Taxation

FIN 241 - Current Topics in Financial Markets: Investment Strategies

FIN 311 - Mathematics for Financial Analysis

FIN 344 - Investments & Portfolios

FIN 365 - Mergers & Acquisitions FIN 367 - Derivative Markets

Advice for Finance Majors

- 1. ECN 101 Principles of Macroeconomics and ECN 102 Principles of Microeconomics can be taken in any order in either the first or second years.
- 2. MTH 121 Calculus I should be completed during the first year.
- 3. Students planning on graduate study in finance are encouraged to consult with their faculty advisor for appropriate advanced courses in mathematics.

Courses

FIN 105 - Family Finance I (0.5 units)

This course will explore several broad areas of family finance: taxes, banking, money management, credit, personal loans, home mortgages, home equity loans, and insurance. Specific topics will include the Federal income tax return, checking accounts, electronic banking, money market funds, CDs, debit and credit cards, car leases, fixed rate vs. adjustable rate mortgages, refinancing, auto and homeowner's insurance, HMOs and PPOs, disability insurance, term vs. whole life insurance, and reading the financial press. Students will develop a subject mastery through assigned readings, class discussion, and completion of assigned exercises.

FIN 106 - Family Finance II (0.5 units)

This course will explore several broad areas of family finance: saving and investment, retirement planning, and estate planning. Specific topics will include risk preferences and tolerances, risk-return tradeoffs, the stock market, bonds and their features, diversification, mutual funds, open-end and closed-end funds, load vs. no-load funds, index funds, asset allocation, pension plans and vesting, the defined benefit plan, the defined contribution plan, the 401(k), traditional IRAs, Roth IRAs, wills, trusts, and gifts. Students will develop subject mastery through assigned readings, class discussion, completion of assigned exercises, and participation in workshop-style presentations.

Prerequisite(s): FIN 105 Family Finance I or permission of the instructor

FIN 144 - Introduction to Portfolio Management (The Investment Society) ().5 units)

The course offers students the opportunity to participate in the active management of a portfolio of assets which was originally funded by a loan from the College. Students will study current financial markets, lead discussions, arrange for speakers, and monitor and analyze current portfolio holdings. The primary goals are to learn how to manage a portfolio and to promote an understanding of financial assets and markets.

FIN 237 - Corporation Finance

This course develops the major propositions of modern financial theory and the guidance that they provide to the corporate financial manager. The focus is primarily on two major decision making areas: the investment decision and the financing decision. The exposition of these two areas requires that the following topics be covered: time value of money, valuation, portfolio theory, the Capital Asset Pricing Model, capital budgeting, and the cost of capital. The use of EXCEL is emphasized Prerequisite(s): ECN 101 - Principles of Macroeconomics and ECN 102 - Principles of Microeconomics and MTH 119 - Statistical Analysis or MTH 331 - Mathematical Statistics I and MTH 332 - Mathematical Statistics II; or INE 201 Business Plan Development.

FIN 241 - Current Topics in Financial Markets: Investment Strategies

This seminar course will explore the role of financial intermediaries, e.g. the Federal Reserve, institutional investors, hedge funds, private equity partners, and investment banks in domestic and foreign markets. Based on anticipated actions of these intermediaries, various investment strategies will be formulated.

Prerequisite(s): ECN 101 - Principles of Macroeconomics and ECN 102 - Principles of Microeconomics and Junior or Senior standing.

FIN 311 - Mathematics for Financial Analysis

The study and application of the mathematical tools needed for making financial decisions. Present value and future value are reviewed in preparation for more advanced topics, including mortgages, bond valuation, yields, duration, and convexity. Bond

immunization strategies are covered. Other topics include foreign currency futures, the optimal hedge ratio, gap analysis, interest rate swaps, pension funding and advanced issues in capital budgeting. Teamwork is emphasized through a team research project and team presentations. The use of Excel is integrated throughout the course.

Prerequisite(s): ECN 101 - Principles of Macroeconomics and ECN 102 - Principles of Microeconomics, and MTH 119 - Statistical Analysis or MTH 331- Mathematical Statistics I and MTH 332 - Mathematical Statistics II, and MTH 121 - Calculus I.

FIN 330 - Money, Banking, & Financial Markets

A course intended to examine the nature and functions of money and the factors determining its exchange value. Emphasis is placed on the structure of the financial system and the effect of monetary policies in light of Keynesian and Post Keynesian developments.

Prerequisite(s): ECN 101 - Principles of Macroeconomics and ECN 102 - Principles of Microeconomics and FIN 237 - Corporation Finance or permission of instructor.

FIN 344 - Investments & Portfolios

This course studies the role of domestic and foreign bonds and stocks in constructing portfolios. Much of the course analyzes the statistical and financial properties of assets and portfolios. Topics include the dividend discount model, efficient portfolios, the mutual fund separation theorem, efficient markets, and violations of the efficient market hypothesis.

Prerequisite(s): ECN 101 - Principles of Macroeconomics and ECN 102 - Principles of Microeconomics; MTH 119 - Statistical Analysis or MTH 331 - Mathematical Statistics I and MTH 332 - Mathematical Statistics II.

FIN 365 - Mergers & Acquisitions

A seminar course covering selected financial topics, focusing on acquisition, mergers, and business combinations facing senior business managers. The course will review and build upon materials presented in prior courses. Numerous readings, class discussion, presentations, and case analyses will be required.

Prerequisite(s): FIN 237 - Corporation Finance.

FIN 367 - Derivative Markets

This course will explore the economic rationale for and benefits of the derivative markets. Coverage will include stock options, commodity, financial and foreign exchange futures, as well as the investment strategies that make use of these instruments. The roles of hedgers, speculators, and arbitragers will be examined, along with risk management, portfolio insurance, program trading, the regulatory setting, and other related topics. Special emphasis will be given to issues of interest to the corporate financial manager.

Prerequisite(s): FIN 237 - Corporation Finance.

FIN 490 - CUE: Advanced Topics in Financial Management

The practical aspects of financial management are stressed. The course is a blend of applications, case studies, and theory. Topics include the bond refunding question, capital budgeting under conditions of uncertainty, the theory of capital structure, dividend policy, leasing, mergers and corporate restructuring, bankruptcy, pension funding, and international financial management. *Prerequisite(s): FIN 237 - Corporation Finance.*

FIN 960 - Finance Internship

Under faculty supervision, students will be placed in internship positions with local business and other related organizations in order to gain experience in the application of the theories and concepts learned in the classroom. Students will be required to document their experiences in a written journal, to share their experiences with others in a classroom setting, and to prepare a significant term paper or project report.

Open to juniors and seniors only. Pass/fail only.

German Studies Minor

Director: Dr. Franz Birgel, Professor of German and Film Studies

Minor Requirements

Students minoring in German Studies must successfully complete at least two language courses beyond GRM 102 - Elementary German II and any previous language courses with a grade point average of at least 2.00 or demonstrate

an equivalent command of the language. All minors must maintain a grade point average of at least 2.00 in all courses required for the minor.

Minors take six courses consisting of a least two language courses beyond GRM 102, one literature course, one course on German cinema or civilization, and two electives from the German Studies program offerings.

History (HST), Geography (GEO)

Department Chair: Dr. Mark Stein

Professors: Cragin, Croskey, Malsberger, Tighe, Wilson

Associate Professor: Ouellette

Assistant Professors: Sanchez, Yankaskas

Senior Lecturer: Clemens

Lecturer: Meek

The Department of History teaches students in the liberal arts tradition to understand and appreciate the past. The history curriculum develops students' knowledge of the political, social, cultural, economic, and institutional forces that have shaped the world and enables students to find, synthesize, and interpret historical evidence. Because the history major requires research, writing, and critical analysis, it provides an excellent foundation for careers in law, education, business, and public service.

Honors Program

A student may complete honors in either semester of the senior year. The Department of History grants honors at commencement to majors who have fulfilled the following:

- 1. A 3.75 grade point average in history and an overall 3.50 grade point average at the end of the semester before which the honors program is undertaken.
- 2. The submission and approval of an honors essay by the Monday of the final week of classes of the semester selected. This essay, which may be developed from a paper submitted in a course, must include significant use of primary source materials. (Honors candidates develop their papers by enrolling in HST 970 History Independent Study/Research).
- 3. Passing of an oral examination conducted by three members of the faculty. This examination will be given at the end of the selected semester and will cover the field of the student's honors essay.

Program Requirements

Major Requirements

To declare and remain in good standing in the History major a student must achieve and maintain at least a 2.00 grade point average in all courses required for the major.

Required Courses:

HST 400-449 - CUE: Reading Seminar in History HST 450-499 - CUE: Research Seminar in History

Seven additional courses in history, no more than one of which may be at the 100 level. Students may take courses in any of the following areas of study: Africa, East Asia, Europe, Latin America & Caribbean, Middle East, United States, but must complete at least one course in United States, one course in European, and one course in an additional world region. At least one of the seven courses must have content whose focus is primarily in the pre-Modern era.

Minor Requirements

To declare and remain in good standing in the History minor a student must achieve and maintain at least a 2.00 grade point average in all courses required for the minor.

Required Courses:

HST 400-449 - CUE: Reading Seminar in History HST 450-499 - CUE: Research Seminar in History

Four additional courses in history, no more than one of which may be at the 100 level.

Courses

Courses in History are numbered as follows:

100 - 149	Acquaint beginning students with the academic study of history.
200 - 299	Concentrate on broad chronological studies of countries or regions. Generally intended for students with one prior college level history course.
300 - 399	Examine topics or themes in history. Generally designed for students with one or more prior college level history courses.
400 - 499	Capstone courses for majors and minors: Hone students' skills and content knowledge.

Required Courses

HST 400-449 - CUE: Reading Seminar in History

A reading seminar devoted to an in depth examination of an historical topic or era. Topics of seminars will vary and will be announced prior to registration. Required of all history majors and minors. Students must register for the corresponding research seminar in the following semester to satisfy the requirements for the history major or minor.

Prerequisite(s): Any two history courses.

HST 450-499 - CUE: Research Seminar in History

A research and writing seminar, paired with a CUE: Reading Seminar in History, that provides students with the opportunity to engage in significant independent research on an aspect of the readings seminar topic. This seminar will also address different approaches to history, the nature and types of historical sources, bibliographic aids in research, general research skills, the authenticity and reliability of sources, and the techniques and processes of various types of historical writing. Required of all history majors and minors.

Prerequisite(s): Successful completion of the CUE: Reading Seminar in History paired with the CUE: Research Seminar. Meets general academic requirement W.

East Asia History

HST 267 - Introduction to Traditional Japan

This course surveys the traditional culture and history of Japan down to the beginning of modernization. Major topics are the court culture, the samurai, and the culture of the townspeople. Appropriate for students with no prior college level history. Meets Department pre-Modern Requirement

Meets general academic requirement DE and HU.

HST 269 - Introduction to Traditional China

Introduction to Traditional China surveys the culture, society, and political institutions of China before the onset of modernization. Pre-imperial China, traditional Chinese ways of thought, the development of the imperial structure of state, and the introduction of Buddhism will be covered in the course.

Meets Department pre-Modern Requirement

Meets general academic requirement DE and HU.

HST 271 - Modern China

China's last imperial dynasty, the increasing impact of Western influence, China's collapse, and the development of the Communist state will be examined through lectures, readings, and discussion.

Meets general academic requirement DE and HU.

HST 273 - Modern Japan

The Tokugawa period, the Meiji Restoration, Japan's emergence as a major power in East Asia, World War II, and Japan's postwar transformation will be examined through lectures, readings, and discussion.

Meets general academic requirement DE and HU.

European History

HST 213, 214 - Seventeenth Century Europe

A detailed treatment of political, social, cultural, and intellectual developments in Europe from 1598 to 1715. The principal focus will be on Western Europe. Themes shall include the evolution of the dynastic monarchies, the "cultural crisis" and the Scientific Revolution, and the emergence of a European state system in the Age of Louis XIV.

Meets Department pre-Modern Requirement

Meets general academic requirement HU (and W when offered as 214).

HST 215, 216 - Eighteenth Century Europe

A detailed treatment of political, social, cultural, and intellectual developments in Europe from 1715 to 1795. The principal focus will be on Western Europe. Themes shall include the political and social structure of *ancient regime* Europe, the diplomacy of the European state system, the Enlightenment, and the transition from despotism to revolution.

Meets Department pre-Modern Requirement

Meets general academic requirement HU (and W when offered as 216).

HST 217 - Revolution & the Birth of Modern Europe (c. 1787-1919)

A comparative overview of an era of violently dramatic change, one marked by an unprecedented incidence of revolution and reaction across the European continent. Monarchs were overthrown and restored, then overthrown again. Republics were founded and unmade. Liberalism and Socialism posed new challenges to the Old Order, but Conservatives found new means to preserve their political and social dominion. Millions lost their lives in these struggles. A new mass society was forming, seemingly founded on the twin pillars of growing economic prosperity for most and new respect for the rule of law, founded on political pluralism. Yet at the height of its apparent progress, Europe stood on the brink of its self-destruction.

Meets general academic requirement HU.

HST 247 - Civil War, Holocaust, Crisis: Europe 1900-1945

Though the twentieth century began with great promise for a peaceful and prosperous future for more and more Europeans, its first fifty years were instead decades of tragedy and slaughter: an era dominated by two world wars and the Holocaust. The course will examine the political, social, economic, intellectual, and cultural history of Europe from 1900-1945. Students will pay particular attention to the great conflict of ideas (Communism, Fascism, Democracy, Capitalism) that created what many Europeans consider to be a European-wide civil war stretching across the period.

Meets general academic requirement HU.

HST 249, 250 - From Cold War to Unification: Europe 1945-Present

After World War II, Europe emerged a divided continent, a series of weak states allied to two rival superpowers. The course examines the political and ideological struggle that divided Europe and the social and economic forces at work beneath the surface that brought Europeans together in the wake of the Second World War. Drawing heavily on the use of European cinema, students will pay particular attention to the development of European culture and the cultural construction of social experience. *Meets general academic requirement HU (and W when offered as 250).*

HST 251, 252 - Foundations of the British Peoples to c. 1485

This course surveys the prehistory and early history of Great Britain and Ireland. It focuses on the formation of the English and Scottish monarchies and on the interactions of the English, Irish, Scottish, and Welsh peoples from early times until the early modern period. Some emphasis will be placed on the development of government and law in England during this period. Meets Department pre-Modern Requirement

Meets general academic requirement HU (and W when offered as 252).

HST 253, 254 - From England to the United Kingdom: c. 1399-c. 1800

This course emphasizes the consolidation of national monarchies in England and Scotland, as contrasted with the politically subordinate position of Ireland, and the often conflicted interactions of their peoples. The effects of the Reformation, seventeenth century constitutional conflicts stemming from the Anglo-Scottish dynastic union of 1603, the growth of an English/British Empire, and the subordination of Scotland (1701) and Ireland (1800) to England are all principal themes, as is the impact of the American and French Revolutions.

Meets Department pre-Modern Requirement

Meets general academic requirement HU (and W when offered as 254).

HST 255, 256 - The British Empire/Commonwealth: Rise & Decline, c. 1760-c. 2000

This course focuses on Britain's period of imperial hegemony, roughly from the Napoleonic Wars to the aftermath of World War II. In addition to Britain's changing international role and influence, the course treats the reforms of the 1820s and 1830s which created the governing institutions of modern Britain and looks at the slow unraveling of the "United" Kingdom in the twentieth century and its ambivalent position in the European Union today and tomorrow.

Meets general academic requirement HU (and W when offered as 256).

HST 263 - Imperial Russia

This course surveys the history of Russia in the Imperial period, from Peter the Great to the Revolutions of 1917. The development of the Russian state and Russian society and the influence of Western Europe are major themes. *Meets general academic requirement HU*.

HST 265 - Soviet Russia

This course covers the Russian Revolution and the development of the Soviet State and its decline and fall. *Meets general academic requirement HU*.

HST 307, 308 - Orthodox Christianity: A Root of Russia

This course is a study of the history, doctrine, theology, and life of the Russian Orthodox Church and other Eastern Orthodox communities. Attention will be given to the interaction of religion and culture in these societies, the Orthodox Church, and other Eastern Orthodox communities.

Meets general academic requirement HU (and W when offered as 308).

HST 315, 316 - Renaissance

The course concentrates on the Italian Renaissance of the fourteenth and fifteenth centuries and the Northern Renaissance of the fifteenth and sixteenth centuries. Particular emphasis given to the cultural, intellectual, and religious developments of that epoch. *Meets general academic requirement HU (and W when offered as 316).*

HST 317. 318 - Reformation

Both the Protestant and Catholic Reformations are studied from primary sources. The course progresses from an examination of the origins and causes of the Reformation to a consideration of various types of Reformation which occurred in sixteenth century Europe. It concludes with an examination of the impact of the Reformation upon European states and societies down to 1600. Meets Department pre-Modern Requirement

Meets general academic requirement HU (and W when offered as 318).

HST 319 - The French Revolution & Napoleon

The French Revolution is perhaps the most important and most studied event in European history. It has been identified as the cause of the modern era's deepest troubles and greatest triumphs, the root of Europe's best and worst ideals. This course examines the figures and events of the revolution, particularly its origins, radicalization, and defeat. It explores the relationships between social and political conflict and foreign and domestic policy. Finally, by studying Romantic Nationalist, Marxist, New Social, Revisionist, and more recent interpretations of the Revolution and Napoleon, students will understand historians' differing interpretations of its most critical turning points and the meaning of historical interpretation.

Meets general academic requirement HU.

HST 337 - France from Napoleon to the Great War, 1814-1914

In the century between 1814 and 1914, France transformed itself from a land dominated by diverse agrarian traditions to Europe's most modern and unified nation. At the same time, France lost its Napoleonic mastery of Europe, declined as a great

power, and sought a new future along two different paths: Imperialism and democracy. Students will examine the fall of old France: the decline of its monarchy, the frustration of its aristocracy, and the end of peasants' rural isolation. The course gives particular attention to the rise of a new industrial France: a nation of deepening class divisions and tensions that exploded in four great revolutions.

Meets general academic requirement HU.

HST 377, 378 - Gender & Sex in European History

Over the past six hundred years, definitions of what it means to be male and female have changed remarkably. This course explores the changing nature of men's and women's identities, conditions, social status, and thought, as well as the development of their political, social, and cultural powers from the fifteenth century to our day. Special emphasis is placed on the history of gender in France, Germany, Great Britain, Italy, and Russia. The course examines gender as an analytical category, distinguishes gender from sex, and raises our consciousness of gender's variability. It exposes the forces - cultural, social, economic, and political - that have altered gender in history.

Meets general academic requirement HU (and W when offered as 378).

Latin America and Caribbean History

HST 291 - Colonial Latin America

The study of major themes of colonial Latin American history, such as the encounter between Europeans and Indigenous peoples, the biological and cultural consequences of conquest, moral questions of conquest, and the development of colonial society and institutions.

Meets Department pre-Modern Requirement

Meets general academic requirement DE and HU.

HST 293, 294 - Modern Latin America

The study of post independence Latin America, nation building, and twentieth century issues such as poverty, human rights, revolutions, and relations with the United States. The course also examines modern Latin American culture through literature, art, and religion.

Meets general academic requirement DE and HU (and W when offered as 294).

HST 369, 370 - Jewish Latin America & the Caribbean

This course studies the movement of Jewish people from Spain and Portugal to Latin America and the Caribbean, traces the adaptation of Jews and their descendents to multiple environments, and reflects upon the diversity of Jewish communities and traditions across the region. Major themes include Diaspora, Ethnicity, Race, Gender, and Memory. Topics include consolidation of Catholic Spain in 1492, expulsion of Jews from Spain and Portugal, and the Inquisition; the effect of Jews on modern Latin American national identities; and the surge of twentieth century anti-Semitism in political and cultural realms. *Meets general academic requirement DE and HU (and W when offered as 370)*.

HST 371 - The Inquisition

This course explores the origins of the Inquisition, its place in the Spanish Reconquista, and its role in Colonial Spanish and Portuguese America. The institutional dynamics influenced religious, economic, political, and socio-cultural organization - particularly in the New World - and we will trace the diverse investigations of Jews, Africans, Spanish, Portuguese, mestizos, and women. The course relies heavily on inquisitorial records and unearths the prosecution of indigenous idolatry, the persecution of Jews, and the roles of race and gender in tribunal sentencing.

Meets general academic requirement DE and HU.

HST 373 - Environmental History of Latin America

An overview of environmental issues in the region known as Latin America and the Caribbean since its "discovery" in the early sixteenth century through the present day. This course explores settlement, disease, deforestation, and social inequalities through the lenses of colonialism and the Columbian Exchange, capitalism, and globalism. A variety of topics are considered, including health care, the Amazon, ecotourism, and sexual tourism.

Meets general academic requirement DE and HU.

HST 375, 376 - Race & Ethnicity in Latin America & the Caribbean

This course examines Race and Ethnicity in Latin America and the Caribbean through the lenses of the African Diaspora and Amerindian populations from the Colonial Period to the present. Major themes include the classification of races and ethnicities during the colonial period; slavery and coerced labor; resistance to colonialism and debates over abolition; hybridity, *mestizaje*, and *indigenismo*; and discourses on race, ethnicity, gender, and class in Modern and Revolutionary Latin America and the Caribbean.

Meets general academic requirement DE and HU (and W when offered as 376).

Middle East History

HST 275 - Rise of Islam

This course will explore the period of Middle Eastern History [600-1800 CE] which witnessed the emergence of Islam as a religion, political system, and cultural tradition. Topics include the life and career of Muhammad, the basic tenets of Islam, the Arab Conquests and rise of a unitary Islamic Empire, the Umayyad and Abbasid caliphates, the development of a high Islamic culture, the Mongol invasions and the states that grew in the aftermath of those invasions, the Mamluks of Egypt and Syria, the Ottoman Empire, and the Safavid.

Meets Department pre-Modern Requirement

Meets general academic requirement DE and HU.

HST 277 - Modern Middle Eastern History

A history of the Middle East in the nineteenth and twentieth centuries. Topics covered include attempts at reform in the Ottoman Empire and Iran, the impact of developing nationalisms and European imperialism, the impact of World War I and World War II, the emergence of new states, and the Arab/Israeli conflict.

Meets general academic requirement DE and HU.

HST 391 - The Mongol Legacy

The Mongol invasions changed the societies of Eastern Europe, the Middle East, and East Asia. The Mongol armies swept away long-established states and introduced new political arrangements and ideologies. This course will investigate the rise and fall of the Mongol world empire with special emphasis on how these developments affected the states and peoples of the Middle East. The conquests of Genghis Khan in the thirteenth century followed a pattern established by earlier Eurasian steppe empires. We will also study the social, cultural, economic, and political aspects of the nomadic invasions. The period of study is bracketed by the rise of the Mongol world empire at one end and the conquests of Tamerlaine at the other.

Meets Department pre-Modern Requirement

Meets general academic requirements DE and HU.

HST 393 - The Arab-Israeli Conflict

Every day the news is filled with stories of the violent struggle between Israel and the Arabs. This course will examine the origins and development of that conflict. We will discuss a range of topics, including the emergence of Zionism, pan-Arabism and Palestinian nationalism, the wars between Israel and the Arab states, the rise of terrorist groups, the role of the world community and especially the United States, and the continuing efforts to find a peaceful settlement to the region's problems. Particular emphasis will be placed on the diversity of perspectives regarding the conflict, its history, and potential solutions. *Meets general academic requirements DE and HU*.

HST 395 - Sultans, Harems, & Slaves: The Ottoman Empire

This course will examine the history of the Ottoman Empire from its rise in the mid-fourteenth century to its demise in the early twentieth century. We will trace the development of the Ottoman state from a small warrior principality on the frontiers of Byzantium to a multi-religious world empire ruling the Middle East, Southeast Europe, and the Mediterranean. We will consider Ottoman state institutions; relations with other states, Muslim and Christian; minority rights and communal conflict; the impact of the rise of the European Great Powers; the development of nationalisms; and the emergence of national successor states in all regions of the former empire.

Meets Department pre-Modern Requirement

Meets general academic requirements DE and HU.

HST 397 - Women in the Middle East

This course surveys the history of women in the Middle East from the advent of Islam in the seventh century to the present. We will investigate the role of women in Islam as a religion and examine the range of women's experience in different periods and places in the Islamic Middle East. Topics may include the role of women in pre-Islamic Arabia, family law in Islam, the status of women in Islamic societies, Muslim women, and the effects of secularism, nationalism, socialism, and fundamentalism in the modern period.

Meets general academic requirement DE and HU.

United States History

HST 221 - Colonial America

An examination of the peoples, places, and regions of early America from 1492 to 1763. Specifically, this course focuses on the interaction of Indian, European, and African peoples, the transformation of European (Spanish, French, Dutch, and English) colonies from frontier outposts to thriving communities, and the rise and eventual cultural and economic domination of British North America.

Meets Department pre-Modern Requirement *Meets general academic requirement HU*.

HST 223 - Revolutionary America

An examination of the political, economic, and cultural causes, contexts, and outcomes of the American Revolution, 1763-1800. Specifically, this course investigates the origins of the conflict in eighteenth century colonial America, its impact upon various peoples (White, African American, Indian, male and female) and the regions (New England, Mid-Atlantic, and South), and its eventual resolution in the political and social workings of the Confederation and Constitutional eras.

Meets Department pre-Modern Requirement

Meets general academic requirement HU.

HST 225 - Nineteenth Century America

A political and social history of the United States from 1815 to the Populists. The course will emphasize the key political developments of our nation's first century and the social contexts in which they occurred.

Meets general academic requirement HU.

HST 227, 228 - Twentieth Century America to 1945

An examination of the changes in America political culture arising from the nation's transformation into an urban, industrial nation. Topics to be emphasized include the reform traditions of Progressivism and the New Deal, the rise of American internationalism, and the development of a modern American culture. The course also uses appropriate era feature films to illustrate major themes in the nation's development.

Meets general academic requirement HU (and W when offered as 228).

HST 229, 230 - Recent US History Since 1945

An analysis of post-World War II America focusing on the fragmentation of the national consensus on domestic and foreign policy. Topics to be emphasized include The Cold War, McCarthyism, the civil rights revolution, the counter-culture of the 1960s, the Vietnam War, Watergate, the Reagan years, and the 1990s and beyond. The course also relies on feature films as documents from the appropriate era to illustrate major themes in the nation's development.

Meets general academic requirement HU (and W when offered as 230).

HST 233 - American Cultural & Intellectual History Since 1900

Traces the development of American intellectual and cultural life since 1900. Using primary sources and historical monographs, the course will explore topics such as the rise of American philosophy, the flourishing of American literature, the elaboration of American political and social thought, the development of popular and mass culture, and the growth of minority cultures. *Meets general academic requirement HU*.

HST 235 - American Civil War & Reconstruction

A study of the period from the end of the Mexican War to the end of Reconstruction (1848-1877). Explores the causes of the Civil War, the course of the war, and reconstruction following the Confederate surrender. Focus will be on the campaigns,

battles, and generals of the war, as well as social, cultural, economic, and political developments of the period. *Meets general academic requirement HU*.

HST 321, 322 - America Confronts a Revolutionary World: Foreign Policy Since 1890

This course analyzes the causes and consequences of America's development as a world power. Topics to be considered include the rise of an American diplomatic tradition during the colonial/Revolutionary era, nineteenth century continental expansion, and the evolution of American internationalism in the twentieth century. Primary emphasis is given to twentieth century developments.

Meets general academic requirement HU (and W when offered as 322).

HST 323, 324 - Constitutional History of the United States

This course traces the evolution and application of constitutional theories and concepts from our English forebears to the US today. The great controversies which reached the Supreme Court are examined in light of contemporary political and cultural values and of their enduring national importance.

Meets general academic requirement HU (and W when offered as 324).

HST 325, 326 - American Economic History

This course, emphasizing the post-1860 period, examines both the roots of American economic growth and the impact that growth has had on American ideas, culture, and institutions. Topics to be considered include the rise of big business, changes in the internal structure of the business establishment, shifting attitudes of government toward business, development of a corporate culture, and the modern American economy.

Meets general academic requirement HU (and W when offered as 326).

HST 327, 328 - Women's America

Women, whether as daughters, wives, mothers, workers, scholars, or political activists, have played pivotal roles in American history. This course, an overview of American women's history from colonial times to the present, examines the variety of women's experiences through time by analyzing the myriad roles they played in the family, society, economy, and national politics. Specifically, using gender as its primary lens of analysis, this course seeks to uncover the broader contexts of American women's experience by examining the dynamic interplay of women and men, values and culture, and discussing how structures of power linked especially to gender, but also to class and race, shaped women's lives and mediated their experiences in the private and public worlds of America.

Meets general academic requirement HU (and W when offered as 328).

HST 333 - American Military History

This course will explore the role that military combat has played in American history. Its primary focus will be on the American Revolution, the Civil War, World War I and II, and Vietnam. Students will discuss the causes of America's wars, the primary military operations involved in each, and the impact each had on American society. Extensive reading and writing, independent thinking, and wide-open class discussions will be the highlights of the course.

Meets general academic requirement HU.

HST 341 - Environmental History of the United States

An environmental history of the United States from the English settlement to the present. An examination of the ideas and attitudes that shaped human impact on and interaction with the land and the environment. The course will also explore the influence of legislation, judicial decisions, and governmental policy upon the environment. In addition, it will examine land-use patterns and their significant changes over the past 400 years. The readings will emphasize relevant primary writings and recent scholarship.

Meets general academic requirement HU.

HST 345 - Disease & Medicine in American History

This course focuses on the complex interplay of disease and medicine in the context of American culture and society over the last two centuries. It will examine the changing concepts of disease, the increasing success with which medicine has healed the body, and the development of the medical professions from the late eighteenth century to the present. It will also explore the ways in which Americans have employed diseases as social and cultural metaphors.

Meets general academic requirement HU.

HST 347 - History of Public Health in America

This course will explore the history of public health in America from the late seventeenth century to the present. It will examine the history of medical crises that evoked a public health response, including the development of formal institutions of public health and the environmental, industrial, and social aspects of public health in the contexts of the changing medical, political, and social environments of the United States. Topics to be considered include epidemic diseases, environmental problems, industrial medicine, social issues such as smoking, and development of departments of public health on local, state, and national levels. *Meets general academic requirement HU*.

HST 357, 358 - Alternative America: The Losers' History of the United States

Much of the history we read is written by the winners of past conflicts. This course examines major events in America's past, such as the ratification of the Constitution, the sectional conflict of the antebellum era, and the industrialization of the late nineteenth century, from the perspective of the losers in those conflicts. We will consider the criticisms made by the losers and their alternatives to determine how different the United States might have been had they prevailed.

Meets general academic requirement HU (and W when offered as 358).

HST 365, 366 - The African American Experience I: to 1896

This course examines the history of African Americans from colonial times until 1896, the year the Supreme Court sanctioned the notion of "separate but equal." Specifically, it uses the writings of African Americans and other primary sources critical to their history to examine how events (such as the rise of slavery, the push for abolition, the Civil War, the start of Jim Crow) and cultural influences (such as race, class, gender, the law, Christianity, and family life) shaped African American lives and experiences until the end of the nineteenth century.

Meets general academic requirement DE and HU (and W when offered as 366).

HST 367, 368 - The African American Experience II: since 1896

This course examines the history of African Americans from 1896, the year the Supreme Court sanctioned the notion of "separate but equal," to the present. Specifically, it uses the writings of African Americans and other primary and secondary sources to examine how events (such as the rural exodus to urban centers after *Plessy vs. Ferguson*; the origins, progress, protest, and organizations of the modern civil and human rights movements; and urban renewal programs) and cultural influences (such as race, class, gender, the arts, the law, and the Church) shaped African American lives and experiences in the twentieth century. *Meets general academic requirement DE and HU (and W when offered as 368).*

Internship

HST 960 - History Internship

Limited number of internships available for qualified seniors in such areas as museum and archival work

Geography (GEO)

GEO 101, 102 - World Geography

This course offers an introduction to the basics of physical and cultural geography, including climate, vegetation, landforms, language, economy, and religion and the study of physical and cultural geographical features of the various regions of the earth. In addition, it examines human, theoretical, and physical geographic structures of world regions while questioning thoughts and experiences with and of geographic understandings. The course intentionally integrates investigation of educational systems and geographic curriculum into geographic inquiry.

When offered as 102, meets the cluster requirement and the general academic requirements SL and DE.

Innovation and Entrepreneurship Minor (INE)

Director: Rita Chesterton, Esq., Assistant Professor

Professors: H. Miller, Niesenbaum Associate Professors: Kushner, Kussmaul Entrepreneur-in-Residence: Simonnet

Innovation and entrepreneurial thinking are valuable across disciplines, whether the ultimate goal is a small business, a high-tech startup, a non-profit with a social mission, an art gallery, a performing organization, research lab, or a school.

A student completing a major in any discipline and the Innovation and Entrepreneurship minor will be able to:

- 1. Exhibit practical knowledge, skills, and attitudes that support innovation and entrepreneurship;
- 2. Identify and evaluate innovative or entrepreneurial developments within their areas of interest;
- 3. Connect with mentors who can help them move toward their personal goals;
- 4. Understand the entrepreneurial process of putting innovative ideas into effect.

Minor Requirements

To declare the Innovation and Entrepreneurship minor, a student must submit a written proposal that describes their area(s) of interest in innovation and entrepreneurship, and how their three chosen electives will support these interests. The proposal may include a petition to include an outside Innovation and Entrepreneurship course that is not included in the list below. The proposal will be reviewed by the Director of the minor, in consultation with other faculty in the minor and the student's area of interest.

The Innovation and Entrepreneurship minor consists of six courses: three required and three electives.

Required Courses:

INE 101 - Introduction to Innovation & Entrepreneurship

INE 201 - Business Plan Development

INE 965 - Innovation & Entrepreneurship Practicum

Electives:

The electives consist of one *area of innovation* course, one *business skills* course, and one *outside Innovation and Entrepreneurship* course. The *area of innovation* course can be any course that represents the primary area of interest and will often be a course in a student's major or other minor. The *outside Innovation and Entrepreneurship* course provides perspectives or skills not part of a student's major(s) or minor(s).

Business Skills Courses: (choose one)

ACT 101 - Financial Accounting

ACT 201 - Accounting Information Systems

BUS 125, 126 - Business & Society

BUS 233 - Operations & Information Systems

BUS 236 - Management

BUS 239 - Marketing

BUS 263, 264 - Sustainability in Business

BUS 304 - Electronic Commerce & the Internet

BUS 311 - Arts Administration

BUS 315 - Management of Not-for-Profit Organizations

BUS 345, 346 - Marketing Management

- BUS 352 Small Business Management
- ECN 245, 246 Environmental Economics
- ECN 251, 252 Development Economics
- FIN 237 Corporation Finance

INE 201 will count as a pre-requisite for the following courses:

- **ACT 101 Financial Accounting**
- BUS 233 Operations & Information Systems
- BUS 236 Management
- BUS 239 Marketing
- **BUS 352 Small Business Management**
- FIN 237 Corporation Finance

Outside Innovation and Entrepreneurship Courses: (choose one)

- ARH 223 African American Art
- ARH 230 History of Photography
- ATH 262 Historical Ecology
- BIO 106 The Biotech Century
- BIO 107 From DNA to Cancer
- BIO 108 Plants & People
- BIO 109 Bubonic Plague to AIDS: Influence of Infectious Disease on the Human Species & Environment
- BIO 111 Crisis Earth: Causes, Consequences, & Solutions for a Changing Planet
- BIO 114 Humanity & the Biological World
- BIO 118 Genes, Genomes, & Society
- BIO 120 Emerging Infectious Diseases
- CHM 101 Chemistry of the Environment
- COM 208 Global Media
- COM 212 New Information Technologies
- COM 220, 221 Free Culture
- COM 251 Introduction to Moviemaking
- COM 312 Media Industries
- COM 341 Social Media & the Self
- COM 351 Video Production
- COM 361 Radio Production
- COM 467 CUE: Advanced Video Production
- CSI 102 Computer Science I: Introduction to Game Programming
- CSI 104 Computer Science I: Introduction to Robotics
- CSI 106 Computer Science I: Introduction to Multimedia Computing
- CSI 210 Software Engineering
- CSI 345 Web Software Development
- DNC 170 Dance & Society
- EDU 101 History & Politics of American Education
- ENG 373, 374 The Literary Marketplace
- ESC 113 Environmental Science I
- ESC 114 Environmental Science II
- FLM 201 Film History I: 1895-1950
- FLM 202, 204 Film History II: 1950-Present
- FRN 310 French for the Professions
- HST 325, 326 American Economic History
- HST 341 Environmental History of the United States

HST 345 - Disease & Medicine in American History

HST 347 - History of Public Health in America

MTH 314 - Applied Mathematics & Modeling

MTH 318 - Operations Research

MUS 140 - Introduction to Electroacoustic Music

MUS 229 - World Music

NSC 115 - Drugs & Drug Abuse

PBH 200, 201 - Issues in Public Health

PBH 250 - Fundamentals of Epidemiology

PBH 252 - Occupational Health

PBH 325 - Introduction to Global Health

PBH 327 - Public Health in Panamá

PHL 241 - Biomedical Ethics

PHL 245 - Business Ethics

PHL 246 - Environmental Philosophy

PSC 213 - Public Health Policy

PSC 216 - Environmental Politics & Policymaking

PSC 221 - Government Regulation of Business

SPN 310 - Spanish for the Professions

SUS 350 - Community Sustainability in Costa Rica

SUS 355 - Climate Change & Sustainable Development in Bangladesh

SUS 365 - Local Sustainability

SUS 405 - Sustainable Solutions

THR 161 - Creativity & Collaboration

THR 164 - Stage Management

Courses

INE 101 - Introduction to Innovation & Entrepreneurship

Students explore the basic concepts in the continuing processes of creativity, innovation, and entrepreneurship. In the context of the entrepreneurship. In the context of the entrepreneurship. In the context of the entrepreneurial enterprise, some fundamental concepts from economics, accounting, budgeting, management, marketing, finance, and operations will be introduced, and students will investigate new opportunities, including client needs, sources of funding, and intellectual property. The course may include readings, speakers, videos, and entrepreneurial enterprise software simulations. Students will develop a feasibility study for a new product or service. *Meets general academic requirement SL*.

INE 201 - Business Plan Development

Student teams will identify an entrepreneurial opportunity, select a concept and develop it through the creation of a formal business plan. Students will investigate the competitive environment, conduct marketing analysis and surveys, develop requirements and/or prototypes, and consider the components of successful strategies for marketing, production, finance, publicity, distribution, etc. As a result of the business planning project, students will gain a better understanding of team building and management. The teams will formally present their plans to a panel of potential "investors".

Prerequisite(s): INE 101 Introduction to Innovation & Entrepreneurship Meets general academic requirement SL.

INE 965 - Innovation & Entrepreneurship Practicum

As juniors or seniors, students will apply their knowledge and experience in a venture of their own, or work of in the community. The experiential components of the Practicum will be augmented by lectures, presentations, and in-depth interactions between students and Practicum faculty. At completion of the Practicum, students will document and critically reflect on their Practicum experience and present these results to students, faculty, and the community.

Prerequisite(s): Completion of all other courses for the Innovation & Entrepreneurship minor

International Studies (IST)

Director: Dr. Christopher W. Herrick, Professor of Political Science

Professors: Borick, Cragin, Croskey, Hashim, Heitmann, Kish-Goodling, Marshall, Raymond, Tighe

Associate Professors: Bergenstock, Chi, Knox, Mello, Ouellette, Stein, Sullivan

Assistant Professor: Bywater, Cooper

IS Advisors: Herrick, Hashim, Mello, Ouellette

The international studies major integrates the perspectives of political science, economics, business, sociology, history and a variety of other disciplines to provide the student with a structured approach to a comprehensive understanding of the complex and interdependent nature of political, social, and economic factors that shape behavior in the international system. Seven structured concentrations are offered which permit the student to focus in a given area of interest: (1) Conflict and Peace Studies; (2) Environmental Issues; (3) Global Trade and International Business; (4) Global Interdependence; (5) Development Studies; (6) Global Public Health Studies; and (7) an Area Studies concentration. In addition, students may develop a uniquely designed specialized concentration. The major prepares the student for careers in foreign service, the intelligence community, international business, the international policy-making community, positions with international NGOs concentrating on development and public health, related research fields, as well as law and teaching.

Honors in International Studies

A student may work for Honors beginning in the spring semester of his/her junior year. Students who fulfill the following conditions will be awarded honors at Commencement:

- A 3.70 grade point average in international studies.
- Enrollment in an independent study offered by a member of the departments participating in the international studies major during the Fall semester. The submission and approval of an Honors essay as the culmination of the independent study. This essay must be of substantial length (approximately 50 pages) and be based upon an appropriate volume of primary and secondary research.
- A grade in the independent study of no less than B+.
- Passing of an oral defense of the project conducted by members of the departments participating in the International Studies major.

Recommendations for Study Away from Campus:

Students are strongly urged, in consultation with their faculty advisor, to plan their major early in their career at Muhlenberg so that space can be provided for important Study Abroad experience and/or out-of-classroom learning such as the Washington Semester and internships.

Recommended Language Courses:

International studies majors are strongly encouraged to demonstrate competence in a language other than English by double majoring or minoring in a language. Alternately, if schedules do not permit a minor, students are strongly encouraged to take courses in a language through Advanced Conversation & Composition. Students may complete one of the required writing intensive courses with one of the following:

FRN 304 - Approaches to Textual Analysis

SPN 304 - Advanced Spanish Conversation & Composition

RUS 303, 304 - Advanced Russian Conversation & Composition

In addition, students may fulfill one general academic requirement in humanities with one of the following courses:

RUS 320 - Russian Culture & Civilization

SPN 320 - Civilization of Spain

SPN 322 - Civilization of Latin America

Finally, International Studies majors may find the following courses useful:

FRN 310 - French for the Professions

SPN 310 - Spanish for the Professions

Recommended Math and Science courses:

It is strongly recommended that students in International Studies use one of the following courses toward their Reasoning requirement:

MTH 104 - Statistical Thinking **OR**

MTH 119 - Statistical Analysis

It is strongly recommended that students in International Studies use the following courses to meet their Science requirement:

BIO 101 - Human Biology, Science, & Society

BIO 106 - The Biotech Century

BIO 109 - Bubonic Plague to AIDS: Influence of Infectious Disease on the Human Species & Environment

BIO 111 - Crisis Earth: Causes, Consequences, & Solutions for a Changing Planet

CHM 101 - Chemistry of the Environment

ESC 111 - Topics in Environmental Science

ESC 113 - Environmental Science I

ESC 114 - Environmental Science II

Major Requirements

The major consists of six core courses plus six courses in any one of the seven designated concentrations or a specialized concentration.

Core Course Requirements:

ECN 102 - Principles of Microeconomics

IST 101 - Introduction to International Studies

PSC 339, 340 - Theories of International Relations

CUE Seminar:

PSC 420 - Seminar in Regimes & Regime Changes

PSC 430 - Seminar in Comparative National Security Policy

PSC 440 - Seminar in International Studies

Two (2) Area Studies Courses from the following:

HST 293, 294 - Modern Latin America

PSC 230, 231 - Government & Politics of Europe

PSC 232 - Governments & Politics of East Asia

PSC 237 - Government & Politics of Africa

PSC 248, 249 - Governments & Politics of the Middle East

Concentrations:

Optimally, students will follow one of the designated concentrations. Where there is a compelling academic reason, students may make substitutions in any concentration or design a unique concentration (such as Indigenous Peoples in International Relations) in consultation with the faculty advisor and the director of the major.

Peace and Conflict Studies

Required Courses:

PSC 242, 243 - Introduction to Conflict & Peace Studies

PSC 328, 329 - International Law & Organization

Choose four (4) of the following courses:

ECN 101 - Principles of Macroeconomics

ECN 334, 335 - International Trade & Globalization

HST 277 - Modern Middle Eastern History

HST 393 - The Arab-Israeli Conflict

PSC 246 - Developing Nations

PSC 341 - American Foreign Policy

PSC 356, 357 - War & Justice

PSC 430 - Seminar in Comparative National Security Policy

REL 102 - Religion & Violence

REL 227 - Islamic Traditions

REL 357, 358 - The Holocaust: Nazi Germany & the Jews

SOC 325 - Imagined Communities: The Sociology of Nations & States

SOC 340 - Development & Social Change

SOC 342 - Boundaries & Belonging: Sociology of Diasporas

Appropriate MILA Course with permission of the Director

Appropriate Special Topic Courses with permission of the Director

International Environmental Problems

Required Courses:

PSC 328, 329 - International Law & Organization

PSC 330, 331 - Comparative & International Environmental Policies

Choose four (4) of the following courses:

BIO 111 - Crisis Earth: Causes, Consequences, & Solutions for a Changing Planet

COM 336, 337 - Environmental Communication

ECN 245, 246 - Environmental Economics

HST 373 - Environmental History of Latin America

PSC 216 - Environmental Politics & Policymaking

PSC 246 - Developing Nations

PSC 341 - American Foreign Policy

SUS 350 - Community Sustainability in Costa Rica

SUS 355 - Climate Change & Sustainable Development in Bangladesh

Appropriate MILA Course with permission of the Director

Appropriate Special Topic Courses with permission of the Director

It is strongly recommended that students following the Environmental Issues concentration use any of the following toward their science requirement:

BIO 111 - Crisis Earth: Causes, Consequences, & Solutions for a Changing Planet

ESC 111 - Topics in Environmental Science

ESC 113 - Environmental Science I

ESC 114 - Environmental Science II

Global Interdependence

Required Courses:

ECN 101 - Principles of Macroeconomics

PSC 343 - International Political Economy

Choose four (4) of the following courses:

COM 208 - Global Media

ECN 222, 223 - Intermediate Macroeconomic Theory

ECN 251, 252 - Development Economics

ECN 334, 335 - International Trade & Globalization

PSC 246 - Developing Nations

PSC 254 - Globalization & Social Justice

PSC 328, 329 - International Law & Organization

PSC 330, 331 - Comparative & International Environmental Policies

PSC 341 - American Foreign Policy

PSC 420 - Seminar in Regimes & Regime Changes

PSC 430 - Seminar in Comparative National Security Policy

SOC 340 - Development & Social Change

SUS 355 - Climate Change & Sustainable Development in Bangladesh

Appropriate MILA Course with permission of the Director

Appropriate Special Topic Courses with permission of the Director

Global Trade and International Business

Required Courses:

ACT 101 - Financial Accounting

ECN 101 - Principles of Macroeconomics

Choose three (3) of the following courses:

BUS 236 - Management

BUS 239 - Marketing

BUS 341 - Globalization & Marketing

ECN 334, 335 - International Trade & Globalization

FIN 237 - Corporation Finance

PSC 254 - Globalization & Social Justice

PSC 328, 329 - International Law & Organization

PSC 343 - International Political Economy

Appropriate MILA Course with permission of the Director

Appropriate Special Topic Courses with permission of the Director

It is strongly urged that students following the Global Trade and International Business Concentration meet the Reasoning requirement with: MTH 119 - Statistical Analysis.

Development Studies

Required Courses:

ECN 101 - Principles of Macroeconomics

ECN 251, 252 - Development Economics

PSC 343 - International Political Economy

PSC 246 - Developing Nations

SOC 340 - Development & Social Change

Choose two (2) of the following courses:

ECN 222, 223 - Intermediate Macroeconomic Theory

HST 277 - Modern Middle Eastern History

HST 293, 294 - Modern Latin America

PSC 246 - Developing Nations

PSC 254 - Globalization & Social Justice

SOC 325 - Imagined Communities: The Sociology of Nations & States

SOC 340 - Development & Social Change

SOC 342 - Boundaries & Belonging: Sociology of Diasporas

Appropriate MILA Course with permission of the Director

Appropriate Special Topic Courses with permission of the Director

Global Public Health: Requires participation in a study abroad program.

On Campus Required Courses:

PBH 200, 201 - Issues in Public Health

BIO 101 - Human Biology, Science, & Society

BIO 109 - Bubonic Plague to AIDS: The Influence of Infectious Disease on the Human Species & Environment

Optional Courses: Choose a total of four (4) from 1 and 2

1. Optional Courses at Muhlenberg: (Choose at least 2)

COM 334 - Health Communication

ECN 243 - Health Care Economics

HST 347 - History of Public Health in America

PHL 241 - Biomedical Ethics

PSC 213 - Public Health Policy

PSC 219, 220 - Public Administration & Policy Implementation

PSC 254 - Globalization & Social Justice

PSC 330, 331 - Comparative & International Environmental Policies

SOC 317 - Sociology of Health

PBH 960 - Internship OR

PBH 970 - Independent Study/Research OR

Practicum, Internship, Independent Study/Research (with an emphasis on social, political, cultural, economic, psychological, environmental, or biological context of global public health)

Appropriate MILA Course with permission of the Director

Off-Campus Options:

Choose 1 Site and at least 2 courses from Public Health offerings at the site

A-Denmark International Studies (DIS)

B- Maastricht University

C-CIEE Botswana

D-CIEE Thailand

E-SIT Chile

F-SIT South Africa

It is strongly recommended that students following the Global Public Health concentration use one of the following courses toward their science requirement:

ESC 111 - Topics in Environmental Science

ESC 113 - Environmental Science I

ESC 114 - Environmental Science II

Area Studies: Choose one (1) of the following Area Study Combinations. All additional courses selected in consultation with the director of the major.

Europe

PSC 230, 231 - Government & Politics of Europe

HST 217 - Revolution & the Birth of Modern Europe (c. 1787-1919)

Five (5) additional courses appropriate to the geographic area chosen

Russia

PSC 234, 235 - Government & Politics of Russia

HST 263 - Imperial Russia

HST 265 - Soviet Russia

Four (4) additional courses appropriate to the geographic area chosen

East Asia

PSC 232 - Governments & Politics of East Asia

HST 271 - Modern China

HST 273 - Modern Japan

Four (4) additional courses appropriate to the geographic area chosen

Latin America

PSC 244, 245 - Government & Politics of Latin America

HST 291 - Colonial Latin America

HST 293, 294 - Modern Latin America

Four (4) additional courses appropriate to the geographic area chosen

Middle East

PSC 248, 249 - Governments & Politics of the Middle East

HST 275 - Rise of Islam

HST 277 - Modern Middle Eastern History

Four (4) additional courses appropriate to the geographic area chosen

Africa

PSC 237 - Government & Politics of Africa

Five (5) additional courses appropriate to the geographic area chosen

Self Designed Concentration

In consultation with the Director of the major, the student will develop an appropriate mix of eight (8) interrelated courses from multiple disciplines which in combination reflect a coherent sub area of the discipline of International Studies: examples of past self-designed concentrations include comparative political psychology, human rights, indigenous issues, etc.

A 2.00 grade point average in all required courses must be maintained to remain a major in the program. Majors may satisfy the writing intensive course requirement in political science; history; economics; or languages, literatures, and cultures.

IST 101 - Introduction to International Studies

This interdisciplinary course introduces students to the various approaches applied by analysts from disciplines, such as political science, sociology, history, and economics in order to understand and address issues, such as development, domestic environmental problems, public health, internal conflict, state formation and governance, human rights, facing peoples and states within the international community, and issues such as the impact of globalization, international conflict, global climate change and energy issues, the global impact of disease, etc., facing the international community as a whole.

Meets general academic requirement SL.

Italian Studies Minor (ITL)

Director: Daniel Leisawitz, Lecturer in Italian

Professors: Cartelli, Cragin, da Costa Nunes, Gambino, Roussel, Tighe

Lecturer: Viale

Italian Studies is an interdisciplinary minor in a wide-ranging field with deep connections to ancient and modern Italy, as well as to our own society and ways of understanding and experiencing the world. Students acquire a solid knowledge of the Italian language and delve deep into the study of Italian culture and history, exploring the literary, cinematic, artistic, theatrical, religious, political, and culinary traditions of Italy. A minor in Italian Studies can help prepare students for graduate work and for careers in art, banking, business, diplomacy, music, theatre, and many other fields.

Minor Requirements

The minor in Italian Studies consists of six courses. ITL 203 Intermediate Italian I and ITL 204 Intermediate Italian II (or the equivalent taken at another institution, upon approval) are required for the minor. Students with prior knowledge of Italian can place out of Italian Intermediate I and/or II, in which case they would be exempted from taking them. Students placing out of Italian Intermediate I would take Intermediate II and then complete the minor with four electives. Students placing out of Italian Intermediate II would be exempted from both Intermediate courses, and would complete the minor with five elective courses.

In addition to Intermediate Italian I and II, four culture courses are required to complete the minor. These courses include any 300- or 400-level course with the Italian Studies prefix (ITL); up to one course on the list of preapproved courses offered outside the Languages, Literatures, and Cultures Department (see below); courses approved by the program director on an *ad hoc* basis. If offered, students must participate in the "Italian section" of an ITL course for the course to count toward the minor.

The following is a list of courses which have been pre-approved to count toward the Italian Studies minor. This list is not exhaustive; it is growing year by year and does not include recent Special Topic courses, which are not listed in the catalog. Some of the courses listed below have prerequisites, so students should read the individual course descriptions carefully.

ARH 207, 208 - Baroque Art

ARH 301 - Italian Renaissance Art

ENG 313, 314 - Medieval Literature

HST 131 - Introduction to History: World War & Memory

HST 247 - Civil War, Holocaust, Crisis: Europe 1900-1945

HST 315, 316 - Renaissance

THR 351 - Commedia dell'Arte

Italian Studies Abroad

Opportunities to explore Italian Studies, in addition to many other areas of study, are available through various programs in Italy, including (but not limited to) the Accademia dell'Arte in Arezzo, Siena Italian Studies, and Florence University of the Arts. Study abroad is not a requirement for the Italian Studies minor; however, if a student chooses to study abroad, up to two courses taken in Italy can be counted toward the minor (including one through the medium of English). Students minoring in Italian who study abroad must take at least one ITL course after their return to Muhlenberg.

Jewish Studies (JST)

Director: Dr. Jessica Cooperman, Assistant Professor of Religion Studies

Assistant Professor: Nash

The Jewish Studies Program at Muhlenberg College offers students an opportunity to explore the history, literature, languages, traditions, and cultures that have comprised Jewish civilization from its Ancient Near Eastern origins to the present day. Our approach to the study of Jewish experience is inherently interdisciplinary. Our majors and minors take classes with faculty from the Departments of Religion Studies, History, Political Science, Theatre and Dance, Languages, Literatures, and Cultures, as well as many others across the College. Our program stresses the diversity within and among Jewish communities, the interaction between Jewish cultures and those of the surrounding world, and the dynamism that characterizes the historical development of both modern and pre-modern Judaism. Our courses introduce students to crucial debates within the field of Jewish Studies, and to the critical

study of classical and contemporary Jewish texts. Our students gain broad expertise in the areas of Jewish religion, literature, thought, language, and experience. Above all, they are challenged to grow as readers, thinkers, and writers, and learn to develop and pursue their own intellectual interests, through both thoughtful teaching and opportunities for independent research.

Special Programs

Jewish Studies at the Jewish Theological Seminary in New York

Muhlenberg students have the unique opportunity to spend a spring semester studying at List College, the undergraduate program at the Jewish Theological Seminary of America (JTS) in New York. Students will be accommodated in the JTS student housing, situated in the heart of the Upper West Side of Manhattan. This program offers a wide range of courses in all areas of Jewish studies, including the opportunity for more advanced offerings in Hebrew language and text study.

Jewish Studies Abroad

Up to three courses completed during a study abroad experience or through courses offered through the Philip and Muriel Berman Center for Jewish Studies at Lehigh University or Lafayette College may be applied toward program requirements.

Opportunities to explore Jewish studies abroad are available through programs with four major Israeli universities (Ben Gurion University, Haifa University, Hebrew University of Jerusalem, Tel Aviv University) as well as the CET Jewish Studies program in Prague. Individual courses taken with any of the colleges' other study abroad programs may also be approved by the program director.

Program Requirements

Major Requirements

The Jewish Studies major consists of nine courses, taken in at least three different departments or programs across the humanities, arts, and social sciences. All students will pursue an individualized program of study in consultation with their major advisor.

All majors must be familiar with Hebrew or another Jewish language. Students are required to take two semesters of Hebrew, or another Jewish language approved by their advisor, or complete Hebrew 204. Students may be exempted from this requirement on the basis of demonstrated proficiency. Not more than two of the nine credits required for the major can be fulfilled with language classes.

All majors must take both of the following required courses::

JST 109 - Jewish Experience in a Secular Age

REL 229 - Jewish Traditions

All majors must take at least two courses in the area of Jewish Religion, Literature, and Thought. The following courses fulfill this requirement:

HBW 430 - Hebrew Literature in Translation

REL 302 - Hebrew Bible (Old Testament)

REL 304 - New Testament

REL 353 - Gender & Sexuality in Judaism

REL 371 - Paths in Jewish Thought

REL 377 - God, Self, & Other in Judaism & Christianity

All majors must take at least two courses in the area of Jewish History, Experience, and Culture. The following courses fulfill this requirement:

HST 277 - Modern Middle Eastern History

HST 369, 370 - Jewish Latin America & the Caribbean

HST 393 - The Arab-Israeli Conflict

JST 201 - American Jewish Life & Culture

JST 203 - From Zion to Zionism: History of Jewish Nationalism

PSC 248, 249 - Governments & Politics of the Middle East

REL 107 - Jews & Christians in the Twenty-first Century

REL 357, 358 - The Holocaust: Nazi Germany & the Jews

Senior Capstone Seminar:

All majors must take the senior seminar and produce a culminating research project during the final semester of the major. This course will carry the "W".

Courses taken abroad, as well as through the College's exchange program with the Jewish Theological Seminary can be counted towards the major, including the Hebrew requirement. All transfer courses must be approved for credit by the program director.

Minor Requirements

The Jewish Studies minor consists of six courses approved by the program director. The six courses counted toward the minor must be taken in at least three different departments or programs. Not more than one of these credits can be fulfilled with language classes, except with permission of the program director.

List of Courses

In addition to the courses listed below, each semester "Special Topic" courses are given in many departments. Some of these may count toward the Jewish Studies major or minor. Questions about specific courses should be discussed with your advisor.

HBW 101 - Elementary Hebrew I

HBW 102 - Elementary Hebrew II

HBW 204 - Intermediate Hebrew II

HBW 430 - Hebrew Literature in Translation

HST 277 - Modern Middle Eastern History

HST 369, 370 - Jewish Latin America & the Caribbean

HST 393 - The Arab-Israeli Conflict

JST 109 - Jewish Experience in a Secular Age

JST 201 - American Jewish Life & Culture

JST 203 - From Zion to Zionism: History of Jewish Nationalism

PSC 248, 249 - Governments & Politics of the Middle East

REL 107 - Jews & Christians in the Twenty-first Century

REL 229 - Jewish Traditions

REL 302 - Hebrew Bible (Old Testament)

REL 304 - New Testament

REL 353 - Gender & Sexuality in Judaism

REL 357, 358 - The Holocaust: Nazi Germany & the Jews

REL 371 - Paths in Jewish Thought

REL 377 - God, Self, & Other in Judaism & Christianity

Courses

JST 109 - Jewish Experience in a Secular Age

This course will explore secular Jewish experiences in the modern west. We will examine how traditional Jewish society has been transformed by new ideas and new social realities by exploring the many and multifaceted ways that Jews have constructed modern, secular identities in the wake of those transformations. Using a variety of primary and secondary sources, as well as film and literature, this course will consider the ways in which Jewish identity has been defined and redefined in the modern period across Europe and the United States. Particular attention will be paid to questions of gender and the ways that men and women each experienced processes of modernization and secularization.

Meets general academic requirement HU.

JST 201 - American Jewish Life & Culture

This course will offer a history of Jewish life in the United States. It will examine the different ways that American Jews have defined Jewish life in America and consider the challenges faced by Jewish immigrants as they worked to build a distinctly American Jewish culture. The tension and balance between religious meaning and the value placed on secularism in America form a vital part of this study.

Meets general academic requirement HU.

JST 203 - From Zion to Zionism: History of Jewish Nationalism

The very words Zion and Zionist have become powerful political signifiers both within and without Jewish communities, as well as in international discourse. Why are these words so hotly contested, and what do they signify? This course examines the historical evolution of modern Zionism. It considers the different religious, political, and cultural forms that Jewish nationalist thought has taken over the course of the nineteenth and twentieth centuries and situates these ideas within their historic and geographic contexts. Students will read the works of Jewish nationalist thinkers like Theodore Herzi, Max Nordau, Ahad Ha'am, Yitzchak Baer, Simon Dubnow, and Louis Brandeis and analyze their competing visions of Jewish nationhood and the specific historical concerns that fuel the emergence of different nationalist ideologies.

Meets general academic requirement HU.

Languages, Literatures and Cultures

Department Chair: Dr. Eileen McEwan

Professors: Birgel, Marx

Professor and Director of the Language Learning Center: Iskold

Associate Professors: Olid, Sutherland Assistant Professor: Chatzidimitriou

Lecturers: Buitrago, Leisawitz, Moreno, Qualtere, Stilin, Trauger

The department offers students the opportunity to acquire or advance communication skills in the Arabic, Chinese, French, German, Hebrew, Italian, Russian, and Spanish languages. Degree programs focusing on literatures, cultures, and societies through the medium of their own language are available in French and Spanish. A degree program in Russian is provided through the interdisciplinary Russian Studies program. All courses and programs contribute to the students' general liberal education by giving it a broader, as well as an international, dimension. In addition, the department's Language Learning Center provides digital learning materials and resources in support of these programs.

Language majors and minors are uniquely situated to take on the challenges and opportunities that globalization offers, as they are able to understand, appreciate, and critically analyze the perspectives of cultures other than their own. Senior capstone experiences in Languages, Literatures, and Cultures allow students to take their understanding of the literatures and cultures of one language and apply it in a broader multicultural and international context.

The department offers a variety of capstone programs and courses. Every spring, students in the language honor societies - Delta Phi Alpha (German), Dobro Slovo (Russian), and Phi Sigma Iota (French and Spanish) - present independently produced projects based on specific issues in languages, literatures, and/or cultures. These presentations, done in English or bilingual format, are required of all senior members of the honor societies. In Spanish, the Senior Capstone Seminar is offered every semester and is required of Spanish majors and is optional for Spanish minors.

Placement and Exemption

All students must take a language placement examination before enrolling for the first semester. The results of the examination will determine the appropriate language course assignment. Students seeking exemption from the language requirement must take an exemption examination during fall semester orientation.

Students who have a native command of any language other than English may apply to the department chair for permission to use that language to satisfy the language requirement. Please note, however, that the testing of any language other than those offered through the Department is subject to the availability of qualified personnel to perform the testing and to evaluate the student's performance.

Special Programs

Study Abroad Opportunities

The department strongly encourages students to participate in a study abroad experience. Qualified students desiring to spend a junior semester or year abroad may enroll in any of the approved programs through the Office of Global Education. For specific information, please see the section "Study Abroad Programs". For further details, students should consult with the chair of the department, as well as with the Office of Global Education by December 1 of the sophomore year.

Teacher Certification

French Certification Requirements

Students seeking certification in the teaching of French in elementary or secondary schools must apply for admission to the program through their faculty advisor no later than the end of the sophomore year. They must maintain a grade point average of at least 3.00 in all courses attempted in the major at Muhlenberg and demonstrate fluent command of the spoken and written language. In addition to the requirements stated above, French secondary certification candidates are required to complete: FRN 330 - Introduction to Francophone Studies

Spanish Certification Requirements

Students seeking certification in the teaching of Spanish in elementary or secondary schools must apply for admission to the program through their faculty advisor no later than the end of the sophomore year. They must maintain a grade point average of at least 3.00 in all courses attempted in the major at Muhlenberg and demonstrate fluent command of the spoken and written language.

Candidates for certification in secondary Spanish are required to complete:

SPN 301 - Spanish Conversation & Composition

SPN 304 - Advanced Spanish Conversation & Composition

SPN 320 - Civilization of Spain

SPN 322 - Civilization of Latin America

Two courses in Spanish Peninsular literature

Two courses in Spanish American literature
One CUE: Senior Capstone Seminar in Literature

Program Requirements

French Major Requirements

To declare a major in French a student must have a grade point average of at least 2.00 in FRN 203 Intermediate French I and FRN 204 Intermediate French II, or demonstrate an equivalent mastery of the language.

Majors in French and Francophone Studies complete nine courses beyond the Intermediate I course, including:

FRN 204 - Intermediate French II

FRN 301 - Communication & Cultural Understanding

FRN 304 - Approaches to Textual Analysis

At least 4 courses at the 400-level (one of which includes a CUE project)

French and Francophone Studies majors who have completed FRN 301 Communication & Cultural Understanding or FRN 304 Approaches to Textual Analysis, may count one 300-level FRN course taught in English toward their major by reading in French (where applicable) and writing all assignments for the course in French.

All majors must maintain a grade point average of at least 2.00 in all courses required in the department.

Spanish Major Requirements

To declare a major in Spanish a student must have a grade point average of at least 2.00 in the intermediate language courses, or demonstrate an equivalent mastery of the language.

Majors in Spanish complete nine courses beyond the Intermediate II course, including:

SPN 301 - Spanish Conversation & Composition

SPN 304 - Advanced Spanish Conversation & Composition

At least 4 courses at the 400-level

One CUE

All majors must maintain a grade point average of at least 2.00 in all courses required in the department. The Advanced Conversation & Composition course (304) fulfills the College's writing intensive course requirement.

Russian Studies Major Requirements

Students majoring in Russian Studies take nine courses beyond RUS 102 Elementary Russian II and must maintain a grade point average of at least 2.00 in all courses required for the major. For program details, see Russian Studies.

Minor Requirements

French Minor

A minor in French and Francophone Studies consists of six courses beyond FRN 203 Intermediate French I , including:

FRN 204 - Intermediate French II

FRN 301 - Communication & Cultural Understanding

FRN 304 - Approaches to Textual Analysis

At least 2 courses at the 400-level

French and Francophone Studies minors who have completed FRN 301 Communication & Cultural Understanding or FRN 304 Approaches to Textual Analysis may count one 300-level FRN course taught in English toward their minor by reading in French (where applicable) and writing all assignments for the course in French. Students must maintain at least a 2.00 grade point average in all courses required for the minor.

Spanish Minor

A minor in Spanish consists of six courses beyond Intermediate II, including:

SPN 301 - Spanish Conversation & Composition

SPN 304 - Advanced Spanish Conversation & Composition

At least 2 courses at the 400-level

Students must maintain at least a 2.00 grade point average in all courses required for the minor. The Advanced Conversation & Composition course (304) fulfills the College's writing intensive requirement.

German Minor

Students minoring in German Studies must successfully complete at least two language courses beyond GRM 102 Elementary German II and any previous language courses with a grade point average of at least 2.00 or demonstrate an equivalent command of the language. All minors must maintain a grade point average of at least 2.00 in all courses required for the minor. For program details see German Studies.

Italian Minor

A minor in Italian Studies consists of six courses beyond ITL 102 Elementary Italian II, including:

ITL 203 - Intermediate Italian I

ITL 204 - Intermediate Italian II

4 elective courses

Students must maintain at least a 2.00 grade point average in all courses required for the minor. For program details see Italian Studies.

Russian Minor

Students minoring in Russian Studies take six courses beyond RUS 102 Elementary Russian II and must maintain at least a 2.00 grade point average in all courses required for the minor. The Advanced Conversation & Composition course (304) fulfills the College's writing intensive requirement. For complete program details see Russian Studies .

Arabic (ARB)

ARB 101 & 102 - Elementary Arabic I & II

An introduction to basic grammar and vocabulary as well as communication skills in Arabic within its cultural contexts. Students will use a variety of authentic text and media resources to acquire and enhance linguistic skills. The first semester is designed for students with no knowledge of or with a weak background in Arabic. The second semester is for students with limited previous exposure to Arabic. Assignment by placement test. Four class hours per week plus Language Learning Center assignments

Chinese (CHN)

CHN 101 & 102 - Elementary Chinese I & II

An introduction to basic grammar and vocabulary as well as communication skills in Chinese within its cultural contexts. Students will use a variety of authentic text and media resources to acquire and enhance linguistic skills. The first semester is designed for students with no knowledge of or with a weak background in Chinese. If a student has previous knowledge of Chinese, assignment will be determined by a placement test. Four class hours per week plus Language Learning Center assignments.

French (FRN)

FRN 101 & 102 - Elementary French I & II

An introduction to basic grammar and vocabulary as well as communication skills in French within its cultural contexts. Students will use a variety of authentic text and media resources to acquire and enhance linguistic skills. The first semester is designed for students with no knowledge of or with a weak background in French, the second for students with limited but residual previous exposure to French. Assignment by placement test. Four class hours per week.

FRN 203 & 204 - Intermediate French I & II

An accelerated review of basic French grammar through speaking, reading, writing, and other linguistically appropriate activities. The introduction of more advanced grammatical structures and a variety of authentic text and multimedia resources will enhance the students' linguistic skills and sociocultural awareness of the French speaking world. The development of functional skills and communicative ability is emphasized. Students also acquire the linguistic tools needed to continue learning French as it pertains to their fields of interest. Assignment by placement test. Three class hours per week.

FRN 301 - Communication & Cultural Understanding

This course provides intensive practice in conversational French, centered on cultural aspects of the French-speaking world. French and Francophone movies serve as the thematic backdrop for in-class discussions, oral presentations, and papers emphasizing correct usage of French linguistic and grammatical structures. This course also focuses on understanding the nuances of advanced French grammar, stylistic expressions, and conversational strategies. Students learn strategies for cultural understanding that will allow them to explore and adapt to modern Francophone cultures. Offered fall semester *Prerequisite(s): FRN 204 Intermediate French II.*

FRN 304 - Approaches to Textual Analysis

This course emphasizes formal writing skills necessary for advanced courses in French, including critical analysis, information literacy, and research techniques. Advanced grammar study, translation, and vocabulary building are additional aspects of this course, since many of the errors students at this level make in their speaking/writing stem from inaccurate translations from English. Throughout the semester, students will be reading and discussing authentic French and Francophone cultural texts in order to improve upon their ability to engage with and meaningfully respond to the different writing genres studied in the course. Offered spring semester.

Prerequisite(s): FRN 204 - Intermediate French II

FRN 310 - French for the Professions

Using applications from the real world, this course introduces students to professional uses of French in France and the francophone world. Contacts with local professionals, both inside and outside of the classroom, allow students to explore the numerous possibilities of using their French linguistic and cultural knowledge beyond the academic arena (such as working for companies with international offices, working with global agencies, providing translation services, working in international law, and so forth). Moreover students will apply the strategies they learned in their French studies to a service-learning project with the Allentown community. This course focuses on acquiring the proper writing, analytical, and oral presentational skills necessary to succeed in a career using French. In addition to linguistic training, students create an on-line portfolio that will prepare them for their future career. Taught in French. Offered in alternate spring semesters.

Prerequisite(s): FRN 204 Intermediate French II.

FRN 313 - French Theatre of Resistance

The French hold dear the notion that in times of trouble they have always summoned up the courage to resist the oppressor. That resistance may take many forms: resisting tyranny, social conformity, one's own destructive impulses, the uncertainty of our existence in the universe. French playwrights such as Corneille, Racine, Marivaux, Beaumarchais, Hugo, Jarry, Sartre, Ionesco, Beckett, and more recently, Yasmina Reza, have captured the dramatic force of this resistance in their theatre. The course surveys major moments in the history of French theatre and emphasizes literary analysis of the plays. **Taught in English.** *Meets general academic requirement HU*.

FRN 330 - Introduction to Francophone Studies

This course introduces students to the diverse cultures of the Francophone world and their relationship to France (as the former colonizer) and to each other. Each unit explores the history, culture, and prevailing societal structures of a particular

Francophone region (North Africa, the French-speaking Caribbean, Sub-Saharan Africa) while highlighting its importance within today's globalized world. In addition to short historical texts, students will also read literature, newspaper articles, listen to music, and watch films that underscore the linguistic, economic, political and cultural complexities of the French-speaking postcolonial world. Taught in French.

Prerequisite(s): FRN 204 Intermediate French II Meets general academic requirement DE and HU.

FRN 333 - France & Asia

In this course, we will focus on cultural encounters between France and Asia. In particular, we will study French and Francophone authors, directors, musicians, manga artists, etc., who have explored in their work the complex relationship between France and Asian countries such as India, China, Japan, and Vietnam from a cultural and political perspective. We will address questions of colonialism, identity formation, gender, and language and will try to situate Franco-Asian cultural exchanges within the larger context of the colonial, postcolonial, and transnational conditions. Taught in English.

Meets general academic Requirements DE and HU

FRN 335 - The Francophone Arab World

In this course, we will study the cultures, histories, religions, and arts of the francophone Arab world. We will study the history of both the Maghreb (Algeria, Morocco, Tunisia) and the francophone Mashreq (Lebanon) before, during, and after colonization. Our focus will be on cultural production in the French language and the questions it raises about the multilingual and multicultural realities of the francophone Arab world today. We will build our discussions around the following themes: negotiating plural identities (linguistic, religious, political, and other); situating one's self within the economic and political complexities of a globalized world; redefining the francophone Arab countries' relationship with France; war and terrorism; the Arab Spring. Taught in English.

Meets general academic requirements DE and HU.

FRN 337 - The French Revolutionary Spirit

French history has long been marked by revolutions of various kinds, the most famous of course being the French Revolution of 1789. What is it about the French political and cultural spirit that has sparked these revolutions? In this course, we will investigate this revolutionary spirit across the centuries, beginning in the eighteenth century and traveling through time into May 1968 and the current strikes and protests that continually appear in the news. We will analyze in particular the cultural medium in which these revolutions occur, such as theatrical presentations, novels, manifestos, pamphlets, newspapers, films, and art. Taught in English.

Meets general academic requirement HU.

FRN 341 - French & Francophone Cinema

In this course, we will explore cinema as an artistic expression of international culture. As we trace the history of French film, arriving at current French and Francophone cinema, we will analyze the historical and cultural context of these films while examining the formal and stylistic elements of this visual art - in other words, we will be exploring content and form. We will view films (subtitled in English) from France, Africa, North America, and Western Europe, presenting new voices and perspectives of the Francophone world through film. All film viewings will take place outside of class. No previous training in Film studies is required. Taught in French.

Prerequisite(s): FRN 204 Intermediate French II

FRN 343 - Family, Sexuality, & Gender in the Francophone World

This course will trace the evolution of family formations in France, Québec, francophone Africa, and the French Caribbean from the 1950s to the present day through the study of French-language films. In particular, we will be looking at the definition of what a family is as intricately linked to the larger socio-historical context within which distinct gender and sexual identities are articulated and performed. We will be reading a number of authentic cultural documents (newspaper articles, excerpts from memoirs, interviews, poetry, narrative, essays, etc.) that will help us better contextualize our understanding of the films viewed. Taught in French.

Prerequisite(s): FRN 204 Intermediate French II Meets general academic requirement HU.

FRN 345 - French & Francophone Media

This course will use various forms of French and Francophone media as its content, focusing on contemporary politics and cultural issues in the Francophone world. By reading various newspapers such as Le Monde, Le Figaro, Le Soleil, Le Devoir, *Jeune Afrique*, and others, we will discuss current issues in France and in particular France's relationship with the U.S. and the Francophone world. We will also explore the impact of communication through social media, including Twitter, texting in French, Facebook, and email. Taught in French.

Prerequisite(s): FRN 204 Intermediate French II

FRN 417 - Negotiating Identity in Contemporary France

This course examines the situation of French residents, especially youth, whose family immigrated to France from North and Sub-Saharan Africa, the French-speaking Caribbean, and Asia. They frequently find that they are caught between two worlds, struggling to be accepted as fully French, but wanting to understand their African, Caribbean, or Asian cultural heritage. Often not considered French, despite their French citizenship, they suffer from racial prejudice, whether on the streets, in the workplace, or in the education system. In addition to these difficulties are the clashes between the culture of their parents' native countries and the principles and values of the French Republic. Through an examination of novels by contemporary authors, several sociological studies, *bande dessinée* and films, students will come to understand the complexities involved in defining what it means to be "French" in France today. Taught in French.

Prerequisite(s): FRN 301 Communication & Cultural Understanding and FRN 304 Approaches to Textual Analysis *Meets general academic requirements DE, HU, and W.*

FRN 418 - Francophone Communities in North America

This course will examine the evolution of French-speaking communities in North America, beginning with the founding of Québec in 1608 and following with the subsequent migrations into New England, Louisiana, and the Midwest. By studying historical documents as well as literary texts, music, folktales, and films, students will analyze how the French have helped shape the United States and Canada. Students will also explore personal connections to the Francophone communities in New England, allowing them to better understand the importance of personal narrative within larger literary and cultural traditions. Taught in French.

Prerequisite(s): FRN 301 Communication & Cultural Understanding and FRN 304 Approaches to Textual Analysis Meets general academic requirement HU.

FRN 420 - Myth & Memory in Quebec

In this course students will explore the founding and development of Quebec, focusing particularly on the themes of memory and myth in the creation of Québec's identity. Québec's motto, "Je me souviens" (I remember) clearly establishes this pattern of relying on memory - and the myths that evolve from those memories - in order to distinguish the Québécois cultural identity from the surrounding anglophone majority. Students will explore political speeches, cultural artifacts, literary texts, films, and media within their historical and cultural context, arriving at an understanding of today's culturally vibrant and diverse Québec. Taught in French.

Prerequisite(s): FRN 301 - Communication & Cultural Understanding and FRN 304 - Approaches to Textual Analysis *Meets general academic requirements HU and W.*

FRN 422 - Popular Literature & Culture in the Francophone World

In this course we will read current best-selling novels in France or another Francophone country (focus will alternate with each rotation of the course), exploring the cultural, historical and sociological issues manifested in each author's perception of his or her society. Where available, we will compare the film adaptations of these novels with the written form, analyzing the implications of the cinematic choices made by the directors. Individual research and theoretical discussions will help students arrive at a deeper understanding of the cultural practices and perspectives of modern French or Francophone societies. Taught in French.

Prerequisite(s): FRN 301 Communication & Cultural Understanding and FRN 304 Approaches to Textual Analysis Meets general academic requirements HU.

FRN 424 - Francophone Women Writers of Africa & the Caribbean

This course examines texts written by French-speaking women writers from Africa and the Caribbean, exploring ways in which these writers seek to identify themselves in relation to their male counterparts as well as to the predominantly European literary models available to them. The degree to which these writers choose to accept or reject these literary traditions suggests certain cultural perspectives unique to the post-colonial Francophone world. Our analyses will include historical and cultural overviews of each region, and reflect upon the representation of contemporary gender issues in these literary works. Taught in French. *Prerequisite(s):* FRN 301 Communication & Cultural Understanding and FRN 304 Approaches to Textual Analysis *Meets general academic requirements DE and HU*.

FRN 426 - The Myth of Paris

This course will explore the mythic icon of Paris throughout the ages, beginning from its foundation and continuing to contemporary society. Through various media including novels, poetry, theater, film, and music, we will analyze the cultural and political importance of Paris in French society. Discussions and readings will also include Paris' relationship with the global Francophone world, investigating its role within a post-colonial context. Taught in French.

Prerequisite(s): FRN 301 Communication & Cultural Understanding and FRN 304 Approaches to Textual Analysis Meets general academic requirement HU.

FRN 428 - Globalization & the Legacy of Empire in the Francophone World

In this course, we will study the rise, fall, and legacy of the French Empire from the middle of the nineteenth century through the decolonization era to the postcolonial financial, political, and cultural institutions that govern France's relationship with francophone countries in today's globalized world. Through the study of historical, anthropological, sociological, and literary texts, film, music, and the arts, we will explore the following themes: the economic and political pressures that made the imperial project viable in the nineteenth and early twentieth centuries; the rise of anti-Semitism in France and its relevance to larger debates on Empire and race; the military, social, and cultural role French colonies played in both World Wars; post-World War II independence movements within the context of the Cold War; and finally, the specific challenges with which the processes of globalization have presented different areas of the francophone world in the last thirty years (debt, civil war, migrations, women's rights issues, etc.). Taught in French.

Prerequisite(s): FRN 301 Communication & Cultural Understanding and FRN 304 Approaches to Textual Analysis Meets general academic requirements HU and W.

FRN 430 - Strangers, Foreigners, & Others

The theme of the class is representations of Otherness, Strangeness, and Alterity in the French-speaking world from the Middle Ages to the present day. We will be looking at figures of the "Other" not only as strangers, outsiders, or outcasts, but also as the articulation of difference within ourselves as individuals or members of a community. This course will invite students to think of otherness, foreignness, and alienation in culturally and historically defined ways. It will also encourage them to think critically about rhetorical and thematic specificities as we consider otherness in texts belonging to different genres. Taught in French. Prerequisite(s): FRN 301 Communication & Cultural Understanding and FRN 304 Approaches to Textual Analysis Meets general academic requirements HU.

FRN 490 - CUE: French Research Project (0.5 units)

In their senior year, students majoring in French must complete a CUE (culminating experience) project in a 400-level class in the major. The CUE experience will include a research paper and a formal presentation. The research project should bridge the content from at least two upper-level courses in French. Students prepare a project proposal to be approved by a CUE faculty advisor and receive 0.5 credits for successful completion of their research projects.

German (GRM)

Language Courses

GRM 101 & 102 - Elementary German I & II

An introduction to basic grammar and vocabulary as well as communication skills in German within its cultural contexts. Students will use a variety of authentic text and media resources to acquire and enhance linguistic skills. The first semester is designed for students with no knowledge of or with a weak background in German, the second for students with limited but residual previous exposure to German. Assignment by placement test. Four class hours per week plus Language Learning Center assignments.

GRM 203 & 204 - Intermediate German I & II

An accelerated review of basic German grammar through speaking, reading, writing, and other linguistically appropriate activities. The introduction of more advanced grammatical structures and a variety of authentic text and multimedia resources will enhance the students' linguistic skills and sociocultural awareness of the German speaking world. The development of functional skills and communicative ability is emphasized. Students also acquire the linguistic tools needed to continue learning German as it pertains to their fields of interest. Assignment by placement test. Three class hours per week plus Language Learning Center assignments.

GRM 301 - German Conversation & Composition

Exercises in spoken and written German designed to increase accuracy and freedom and facility of expression. Topics of contemporary interest will be selected for presentation and discussion.

Prerequisite(s): GRM 204 Intermediate German II.

GRM 303 - Advanced German Conversation & Composition

Continuation of GRM 301. Advanced exercises in spoken and written German, including the study of idiomatic expressions, review of persistent grammatical difficulties, and stylistic analysis.

Prerequisite(s): GRM 301 - German Conversation & Composition.

Literature and Culture Courses

GRM 255, 256 - Berlin in Film

Taught in English. This course will examine the cinematic representation of the cosmopolitan metropolis Berlin from the 1920s to the present. Students will look at characteristic films from the Weimar Republic, the Third Reich, the Allied occupation, the divided country, and post-unification Germany. Offering a chronological overview of German film art set in Berlin, the course will explore how the mass medium of cinema reflected, influenced, and commented on the historical, cultural, and political developments in Germany. Students will investigate major cinematic movements, styles, innovations, genres, and directors. They will also be introduced to some major film theories and criticism.

Meets general academic requirement HU (and W when offered as 256).

GRM 313 - German Drama in Translation

Taught in English. This course aims to give students a background in the literary history of German drama with an emphasis on significant plays written between the 1770s and the present. Major plays of the Enlightenment, Storm and Stress, Classicism, Naturalism, fin de siècle Vienna, Expressionism, the post-war period, and the present will be discussed in their literary and historical contexts.

Meets general academic requirement HU.

GRM 316, 317 - German Cinema

Taught in English. A survey of German films from *The Cabinet of Dr. Caligari* to contemporary works with special emphasis on the Golden Age of Weimar cinema and the so-called New German Cinema (Fassbinder, Herzog, Wenders, and Sanders-Brahms). Through a close analysis of these films, the student will gain an understanding and appreciation of cinematic techniques as well as the cultural, social, and political background which shaped these works.

Meets general academic requirement HU (and W when offered as 317).

GRM 351 - German Literature in Translation I

Taught in English. Readings and discussion of selected masterpieces of German literature from the medieval period to the age of Naturalism. Concentration on major works of literature which have influenced the course of development of German literary history, thought, and culture. Introduction to the terminology as well as the methods and techniques of literary analysis. Emphasis on the development of a sense of appreciation of literature as art.

Meets general academic requirement HU.

GRM 353 - German Literature in Translation II

Taught in English. Readings and discussion of selected masterpieces of German literature from the age of Naturalism to the present. Concentration on major works of literature which have influenced the course of development of German literary history, thought, and culture. Emphasis on genres, themes, traditions, reading sensitivity, and personal response.

Meets general academic requirement HU.

Hebrew (HBW)

HBW 101 & 102 - Elementary Hebrew I & II

An introduction to basic grammar and vocabulary as well as communication skills in Hebrew within its cultural contexts. Students will use a variety of authentic text and media resources to acquire and enhance linguistic skills. The first semester is designed for students with no knowledge of or with a weak background in Hebrew; the second is for students with limited but residual previous exposure to Hebrew. Assignment by placement test. Four class hours per week plus Language Learning Center assignments.

HBW 203 & 204 - Intermediate Hebrew I & II

An accelerated review of basic Hebrew grammar through speaking, reading, writing, and other linguistically appropriate activities. The introduction of more advanced grammatical structures and a variety of authentic text and multimedia resources will enhance the students' linguistic skills and sociocultural awareness of the Hebrew speaking world. The development of functional skills and communicative ability is emphasized. Students also acquire the linguistic tools needed to continue learning Hebrew as it pertains to their fields of interest. Assignment by placement test. Three class hours per week plus Language Learning Center assignments.

HBW 430 - Hebrew Literature in Translation

A survey of Hebrew literature from the post-biblical era of the second century B.C.E. to the period of emergent modernism in the seventeenth century C.E. Readings embrace the genres of prose fiction, drama, and selections from the Talmud and medieval and religious prose, poetry, and prayers.

Meets general academic requirement HU.

Italian (ITL)

ITL 101 & 102 - Elementary Italian I & II

This course introduces students to the language and culture of modern Italy. Grammar and vocabulary are taught through a student-centered, interactive approach, enabling students to learn through communication. Since every language is inextricably linked to the culture of the people who speak it, students learn about the culture of Italy through the study of authentic artifacts of contemporary Italian culture, such as films, music, and other media. This course is designed for students with no prior knowledge of Italian. Assignment by placement test. Four class hours per week.

ITL 203 & 204 - Intermediate Italian I & II

This course is the first semester of the Intermediate Italian language sequence. Students continue to deepen and refine their knowledge and command of Italian language and culture, building upon the skills acquired in Elementary Italian. In lieu of a standard textbook, language is taught through Spunti, a program of Italian instruction uniquely designed by the Muhlenberg Italian faculty. Italian 203 uses authentic examples of Italian cultural production, such as films, songs, commercials, and literary excerpts, as the starting points (or *spunti*) for analysis of grammar and exploration of contemporary Italian culture and society. Each *spunto* provides varied activities for the improvement of students' linguistic and cultural competence in a dynamic and communicative environment. This class is designed for students with basic prior knowledge of Italian. Assignment by placement test. Three class hours per week.

Russian (RUS)

RUS 101 & 102 - Elementary Russian I & II

An introduction to basic grammar and vocabulary as well as communication skills in Russian within its cultural contexts. Students will use a variety of authentic text and media resources to acquire and enhance linguistic skills. The first semester is designed for students with no prior knowledge of Russian; the second is for students with limited background in Russian. Assignment by placement test. Four class hours per week plus Language Learning Center assignments.

RUS 203 & 204 - Intermediate Russian I & II

An accelerated review of basic Russian grammar through speaking, reading, writing, and other linguistically appropriate activities. The introduction of more advanced grammatical structures and a variety of authentic text and multimedia resources will enhance the students' linguistic skills and sociocultural awareness of the Russian speaking world. The development of functional skills and communicative ability is emphasized. Students also acquire the linguistic tools needed to continue learning Russian as it pertains to their fields of interest. Assignment by placement test. Three class hours per week plus Language Learning Center assignments.

RUS 302 - Russian Conversation & Composition

Students watch and discuss feature films produced in Russia. Extensive practice in the development of conversational and writing skills based on the analysis and synthesis of cultural information from a variety of authentic sources, including texts, film, newscasts, and TV. Increased acquisition of vocabulary, expansion of listening comprehension, stylistic analysis of

contemporary film texts.

Prerequisite(s): RUS 204 - Intermediate Russian II.

Meets general academic requirement W.

RUS 303, 304 - Advanced Russian Conversation & Composition

Students watch & discuss feature films produced in Russia. Advanced practice in the development of conversational and writing skills. In-depth study of idiomatic expressions and advanced lexical and stylistic analysis of contemporary literature and film. *Prerequisite(s): RUS 302 - Russian Conversation & Composition.*

Meets general academic requirement W when offered as 304.

RUS 305, 306 - Readings in Russian Literature

An introduction to Russian literature from Pushkin to the present with emphasis on developing the students' command of language skills. Selected readings in Russian will include poetry, prose, and drama.

Prerequisite(s): RUS 204 - Intermediate Russian II.

Meets general academic requirement HU (and W when offered as 306).

RUS 320 - Russian Culture & Civilization

Students study and discuss selected topics in Russian intellectual thought and artistic self-expression in their historical contexts and engage in cross-cultural analyses of Russia vis-à-vis the West. Readings, lectures and discussion range from early Russian social practices to today's Russia and from national identity to ethnic conflicts, injustice, violence, and crime. We will examine cultural artifacts, short stories, documentaries, scholarly articles, and up-to-date media commentary. Taught in English. Offered in alternate years.

Meets general academic requirement HU and DE.

RUS 402 - Twentieth Century Russian Literature in Translation

Students study the works of Bunin, Sholokhov, Pasternak, Solzhenitsyn, and Brodsky as well as their experiences with and relationship to the Bolshevik revolution, ethnic and religious prejudice, censorship, the GULAGs, violence, and injustice. Harshly persecuted, self-exiled, or expelled from Russia, these philosophical frontrunners earned Nobel Prizes and recognition by the West. Short stories, novels, poetry, as well as literary criticism from 1917 to the present will be analyzed and discussed. *Meets general academic requirement DE and HU*.

RUS 490 - CUE: Russia & the Near Abroad (0.5 units)

Advanced study and analysis of selected areas in Russian Studies designed for majors and other qualified students. Students complete a CUE project linked to any Russian course listed higher than 304. Students write an integrative research paper and conduct a formal presentation connecting content from at least two upper-level Russian courses. Special emphasis is placed on advanced textual analysis, scholarly discussion, and writing. Project proposals are approved by a CUE faculty advisor prior to course registration. Required for all majors in Russian Studies.

Spanish (SPN)

SPN 101 & 102 - Elementary Spanish I & II

An introduction to basic grammar and vocabulary as well as communication skills in Spanish within its cultural contexts. Students will use a variety of authentic text and media resources to acquire and enhance linguistic skills. The first semester is designed for students with no knowledge of or with a weak background in Spanish; the second is for students with limited but residual previous exposure to Spanish. Assignment by placement test. Four class hours per week plus Language Learning Center assignments.

SPN 203 & 204 - Intermediate Spanish I & II

An accelerated review of basic Spanish grammar through speaking, reading, writing, and other linguistically appropriate activities. The introduction of more advanced grammatical structures and a variety of authentic text and multimedia resources will enhance the students' linguistic skills and sociocultural awareness of the Spanish speaking world. The development of functional skills and communicative ability is emphasized. Students also acquire the linguistic tools needed to continue learning Spanish as it pertains to their fields of interest. Assignment by placement test. Three class hours per week plus Language Learning Center assignments.

SPN 301 - Spanish Conversation & Composition

Intensive practice of spoken Spanish with emphasis on techniques of oral expression, vocabulary development, and persistent grammatical difficulties. Discussions will be based on contemporary cultural readings, films, and other multi-media materials. Offered every semester.

Prerequisite(s): SPN 204 - Intermediate Spanish II.

SPN 304 - Advanced Spanish Conversation & Composition

Focused work in Spanish composition allowing students to develop creative, professional, and academic writing styles. Emphasis is placed on structure, style, and content as well as grammar. Classic and contemporary texts, films, and other multimedia resources will provide stylistic models as well as a cultural context for writings. Offered every semester.

Prerequisite(s): SPN 301 - Spanish Conversation & Composition.

Meets general academic requirement W.

SPN 307 - Spanish for the Community: Interpreting

With a rapidly growing Latino and Hispanic immigrant population, the Lehigh Valley offers Spanish students a unique opportunity to hone their spoken language skills and cultural understanding. This class blends on-campus preparation in the basic theories and methodologies of oral interpretation with community-based practical experience, investigation, exploration, and reflection. Work with community partners working closely with Spanish speaking clients is contextualized during weekly classes providing a solid introduction to local Hispanic/Latino culture and concerns. Students should expect to commit about 5 hours per week to the community service learning component of this course.

Prerequisite(s): One 400-level course in Spanish or approval of instructor.

SPN 308 - Spanish for the Community: Translation

The Lehigh Valley is undergoing demographic changes that call for new and better communication between English- and Spanish-speaking communities. This course prepares students to create effective bridges, translating written documents and other texts from English to Spanish and Spanish to English. As a service learning course it incorporates collaborative projects with organizations working closely with Spanish-speaking clients. Weekly classes will provide a solid introduction to the basic theories and methodologies of written translation with special focus on the specific needs and concerns of the local Latino and Hispanic immigrant communities. The class is conducted in Spanish, though given the special nature of English/Spanish and Spanish/English translation, class discussions may include Spanish, English, or even Spanglish. Students should expect to commit about 5 hours per week to the community service learning component of this course. **Designed to complement** SPN 307 - Spanish for the Community: Interpreting.

Prerequisite(s): One 400-level course in Spanish or approval of instructor.

SPN 310 - Spanish for the Professions

Using real-life case studies and scenarios, this course introduces students to professional practices in the Hispanic world. Contacts with local professionals, both inside and outside of the classroom, allow students to explore the numerous possibilities of using their linguistic and cultural knowledge of Spanish beyond the academic environment, such as working for companies with international offices, NGOs, and other institutions in Latin America, Spain, and in the growing Spanish-speaking communities of the United States. The specific areas explored will be based on students' own interests and majors in order to assist them in developing their future career path while incorporating Spanish within those goals. This course focuses on acquiring the proper writing, analytical, and oral presentational skills necessary for such careers. In addition to linguistic training, students learn techniques for cross-cultural analysis vital to conducting business and other professional endeavors in Spanish-speaking contexts. Taught in Spanish.

Prerequisite(s): SPN 301 - Spanish Conversation & Composition.

SPN 320 - Civilization of Spain

An introduction to contemporary Spanish life with its intellectual, economic, and social phenomena as well as its regional aspects. The course also surveys the artistic, architectural, and historical heritage of Spain. Given in Spanish. Offered every year during the fall semester.

Prerequisite(s): SPN 301 - Spanish Conversation & Composition.

Meets general academic requirement HU.

SPN 322 - Civilization of Latin America

An introduction to contemporary Latin American life with its intellectual, economic, and social phenomena as well as its regional aspects. The course also surveys the artistic, architectural, and historical heritage of Latin America. Given in Spanish. Offered every year during the spring semester.

Prerequisite(s): SPN 301 - Spanish Conversation & Composition.

Meets general academic requirement DE and HU.

SPN 327 - Public Health in Practice: Panamá

The study of public health is rooted in the notion that health is both a human right and the product of multiple and varied factors. In this course we will put that notion to the test, considering the global objectives for good health and the medical, environmental, socioeconomic, and political elements that facilitate -or hinder-achievement of those goals. In particular, we will examine the case of Panamá, preparing research projects over the course of the semester that will then be completed using data and experiences from a two-week visit to Panamá. Areas of focus include access to potable water, control of mosquito breeding areas, women's health issues, language access in areas where other languages or illiteracy dominate, intersections of institutional health and local cultural practices, and funding policies for health centers in marginal and indigenous regions. To consolidate a sustainable relationship with our Panamanian partners, we will also design and complete a service project at a rural hospital. The class is conducted in English with Spanish. The Spanish language component of the course includes an introduction to essential communication for healthcare and public health interviews; more advanced Spanish students will be introduced to the skills of oral interpreting and transcription. NOTE: This course is cross-listed with PBH 327

Prerequisite(s): SPN 301 - Spanish Conversation & Composition or approval of instructor.

SPN 410 - Medieval & Renaissance Spanish Literature

A study of representative works of Spanish literature of the Middle Ages through the Renaissance. Emphasis is placed on the literary analysis of both major and marginal genres, such as epic poetry, the fable, ballads, the miracle story, the picaresque novel, and mystic poetry. We will highlight the historical and socio-cultural context of these period texts, paying special attention to the relationships among Christian, Arabic, and Jewish cultures coexisting in the Iberian Peninsula at the time. We will also explore the way in which these different cultural products were experienced by their mainly illiterate audiences, through private performance (communal readings, moral exemplum, teaching lessons) and public performance on the stage or the street (theatrical productions, puppet shows, songs, and dances). Texts are accompanied by a number of films/videos based on the literary works and/or the historical period. *Class is conducted in Spanish*.

Prerequisite(s): SPN 304 - Advanced Spanish Conversation & Composition.

Meets general academic requirement HU.

SPN 411 - Cervantes & the Origins of the Spanish Narrative

The focus of the course on the development of the Spanish narrative by Miguel de Cervantes will alternate between the novel *Don Quijote* and Cervantes' exemplary tales. During semesters focusing on *Don Quijote*, one of the greatest and most humorous books ever written, students will examine the work as an emblem of artistic and social modernity in the West and as a multifaceted cultural icon central to the humanities, exploring issues such as the nature of reality and illusion, heroism, humor, adventure, freedom and self-fulfillment, racial tolerance, love, the consequences of reading, metafiction, games, and truth. During alternate semesters, when the focus is on the rich tradition of short stories in early modern Spain, students will investigate the transition from an oral to a written culture and the importance of printing as a driver for this and other significant cultural changes. Students will explore the problem of Spanish national identity through the emerging imperial processes of political and cultural exclusion, contextualizing the act of narrating and of reading fiction as they explore the didactic, comic, critical, and satirical roles of the exemplary tales. *Class is conducted in Spanish*.

Prerequisite(s): SPN 304 - Advanced Spanish Conversation & Composition.

Meets general academic requirement HU.

SPN 412 - Early Modern Spanish Drama & Performance

This course is an introduction to early modern Spanish drama from a performance-based approach. Students will read, analyze and interpret some of the most important plays produced during the so-called Golden Age in Spain (sixteenth-seventeenth century) by authors like Cervantes, Lope, Tirso, or Calderón. We will focus on text analysis and performance as two fundamental elements in the understanding and appreciation of Spanish theatre. Students will have access to the plays from different angles: 1) as texts to be studied analytically; 2) as cultural and historical exponents of a specific period; 3) as objects of literary and theatrical research; and 4) as would-be productions waiting to be staged. After an introductory account of early modern Spanish theater and comedia performance then and now, classes are organized around three phases resembling those of

theater production: text analysis, pre-production workshop, and staging. **Note:** By the second part of the semester students will need to schedule additional time outside the classroom to rehearse and complete the production of a short play or scenes for the stage. *Class is conducted in Spanish.*

Prerequisite(s): SPN 304 - Advanced Spanish Conversation & Composition.

Meets general academic requirement HU.

SPN 413 - From the Golden Age to the Silver Age

A study of the plays, poetry, and novels of eighteenth and nineteenth century Spain, reflecting the social, political, and ideological changes leading up to and throughout the Industrial Revolution. Special attention will be paid to the different roles of writer, narrator, and reader through textual clues. Taught in Spanish.

Prerequisite(s): SPN 304 - Advanced Spanish Conversation & Composition.

Meets general academic requirement HU.

SPN 414 - Contemporary Spanish Literature

A study of contemporary texts and development of tools with which to interpret the culture and literature of today's - and tomorrow's - Spain. Emphasis is placed on literary reflections of the changes to the concept of national identity in Spain, spanning the harrowing realization in 1898 that Spain was no longer host to an empire, through the harsh repression and massive emigration under Franco's rule, to the new reality of Spain as home to fast-growing immigrant communities. Taught in Spanish. Offered in alternate years.

Prerequisite(s): SPN 304 - Advanced Spanish Conversation & Composition.

Meets general academic requirement HU.

SPN 415 - The Literature of Conquest & Colonization in Spanish America

Reading and discussion of poetry and prose by Indoamerican writers of the Pre-Columbian era and by Spanish American writers from the fifteenth through the nineteenth centuries. Students will explore how literary components such as theme, character, and imagery represent the rise and fall of the Spanish Empire in the Americas and its resulting confluence of indigenous, African, and European cultures as they trace the development of Spanish American literature from its earliest expressions in pre-conquest cultures to the first declarations of defiance against the Spanish Crown by colonial writers. Emphasis is placed on an understanding of the technical development of various genres within each literary period as well as on the thematic content of work as it relates to the period's historical, political, social, and philosophical content.

Prerequisite(s): SPN 304 - Advanced Spanish Conversation & Composition.

Meets general academic requirement DE and HU.

SPN 416 - Postcolonial Realities in Spanish American Literature

Reading and discussion of selections by Spanish American writers from the late nineteenth through the twenty-first centuries. For many Spanish American authors, obscuring the line between reality and fantasy becomes a literary game in the search for true reality within countries racked by civil strife that underscores the postcolonial paradigm in the Americas in terms of the subaltern issues of race, gender, and social class. Thus, students will delve into the artistic subconscious as they examine the legacy of the Spanish Conquest in the prose and poetry of literary periods that include *modernismo*, *posmodernismo*, and *vanguardismo* as well as the Boom and Post-Boom with their techniques of realismo mágico and realismo crítico. Emphasis is placed on an understanding of technical development of various genres within each literary period and on thematic content of work as it relates to that period's historical, political, social, and philosophical context.

Prerequisite(s): SPN 304 - Advanced Spanish Conversation & Composition.

Meets general academic requirement or DE and HU.

SPN 417 - Contemporary Spanish American Novel

An in-depth study of the development of the novel in both the pre- and post- "boom" periods of the Spanish American narrative. Emphasis is placed on an analysis of the literary techniques and thematic aspects of the works in relation to the various artistic and philosophical movements of the twentieth and twenty-first centuries. Taught in Spanish. Offered in alternate years. *Prerequisite(s): SPN 304 - Advanced Spanish Conversation & Composition.*

Meets general academic requirement DE and HU.

SPN 418 - Hispanic Literature & Film

An analysis of the relationship between literature and film, focusing on texts from Spain and/or Spanish America and their film adaptations. Issues to be discussed include film adaptation as a cultural construct; narrative voice in literature and film; the

transformation of the written word to a visual image; and the relationship between politics, literature, and film. Taught in Spanish. Offered in alternate years.

Prerequisite(s): SPN 304 - Advanced Spanish Conversation & Composition.

Meets general academic requirement HU.

SPN 419 - Border Literature

An exploration of contemporary narratives by Latino writers in the United States who focus on the border experience, understood as both a geographical and cultural phenomenon. Emphasis will be placed on the analysis of the literary techniques employed in the development of the narrative form within its political, social, and cultural context. Topics include issues of class, ethnicity, and gender. Taught in Spanish.

Prerequisite(s): SPN 304 - Advanced Spanish Conversation & Composition.

Meets general academic requirement DE and HU.

SPN 420 - Human Rights Literature in the Americas

A literary exploration of the nature of human rights in the Americas through a close examination of representative works of various genres, such as poetry, the short story, the novel, and drama. Emphasis is placed on an understanding of literary theory and technique within the historical, political, and philosophical context of each work. In this way, students will explore thematic issues such as the legal and ethical rights inherent in citizenship within the world and specifically within the Americas with respect to ethnic and religious minorities, women, gays, and political dissidents. Areas of comparison/contrast will include Chile, Argentina, Guatemala, El Salvador, Cuba, and the United States. Taught in Spanish.

Prerequisite(s): SPN 304 - Advanced Spanish Conversation & Composition.

Meets general academic requirement DE and HU.

SPN 500-549 - CUE: Senior Capstone Seminar: Transatlantic Issues in Hispanic Literatures & Cultures

The senior Capstone Seminar is a topics-based course in Spanish that will allow students to take their understanding of Hispanic literatures and cultures and apply it to broader multicultural and international perspectives. Whether focusing specifically on literature or centering on broader social, cultural, or linguistic issues, students will examine aspects of the on-going dialogue between Spain and the Americas within their historical, social, and political contexts. The explicitly comparative approach will both broaden and consolidate students' understanding of language as a living process rooted in cultural contexts, a process essential in a pluralistic American society and in a world where nations—even those bound by a history of colonialism—are interdependent in increasingly complex ways. Students will work individually and collaboratively to design, research, and present their critical analyses and findings in a thoughtful and thought-provoking way using theoretical approaches consistent with the discipline. Taught in Spanish.

Prerequisite(s): One 400-level course in Spanish or approval of instructor.

Latin American and Caribbean Studies Minor

Director: Dr. Cathy Marie Ouellette, Associate Professor of History

The Latin American and Caribbean Studies minor is an interdisciplinary study of the history, literature, cultures, and language(s) across this region. The principal goals are to foster a comprehensive understanding of the human experience, an appreciation of the complex past and contemporary issues, and encourage proficiency through the study of language and literature on campus and abroad.

Minor Requirements

Students choose six courses taken across the divisions, with no more than two courses from any single department or major. Courses may also be selected from approved special topic courses, cluster courses, courses taken at LVAIC institutions, or study abroad.

One required core course selected from the following three options:

HST 291 - Colonial Latin America HST 293, 294 - Modern Latin America

SUS 350 - Community Sustainability in Costa Rica

Languages & Literature: At least one course from the following list required:

FRN 330 - Introduction to Francophone Studies

SPN 301 - Spanish Conversation & Composition

SPN 304 - Advanced Spanish Conversation & Composition

SPN 307 - Spanish for the Community: Interpreting

SPN 308 - Spanish for the Community: Translation

SPN 310 - Spanish for the Professions

SPN 322 - Civilization of Latin America

SPN 416 - Postcolonial Realities in Spanish American Literature

SPN 417 - Contemporary Spanish American Novel

SPN 418 - Hispanic Literature & Film

SPN 419 - Border Literature

SPN 420 - Human Rights Literature in the Americas

At least two electives from the following list required:

ATH 230 - Inca, Aztec, & Maya

ECN 251, 252 - Development Economics

ENG 291, 292 - Caribbean Writing

HST 135 - Introduction to History: Latin American History Through Women's Eyes

HST 139 - Introduction to History: Visual Culture in Latin America

HST 147 - Introduction to History: Popular Culture in Latin America

HST 291 - Colonial Latin America

HST 293, 294 - Modern Latin America

HST 369, 370 - Jewish Latin America & the Caribbean

HST 371 - The Inquisition

HST 373 - Environmental History of Latin America

HST 375, 376 - Race & Ethnicity in Latin America & the Caribbean

PSC 246 - Developing Nations

SOC 340 - Development & Social Change

SUS 350 - Community Sustainability in Costa Rica

Mathematics (MTH)

Department Chair: Dr. Elyn Rykken Professors: Fiorini, Huber, McGuire Associate Professors: Cha, Gryc

Assistant Professors: Allocca, Davidson, Russell

Mathematics courses are structured to meet the needs of students who fall into one or more of these categories: those who wish to develop their appreciation of the power and beauty of mathematics; those who intend to pursue graduate work in mathematics or related fields; those whose interests tend toward the applications of mathematics in the natural sciences, social sciences, and other quantitative areas; and those who plan to enter the teaching profession in mathematics. The curriculum is designed so that a course of study can be tailored to a student's goals and interests while at the same time exposing the student to several facets of the mathematical sciences.

In addition, we recognize our responsibility to students with other majors and offer courses designed to equip those students with the mathematical knowledge and tools required and/or useful in their chosen fields of study.

Special Programs

Honors Program in Mathematics

At commencement qualified students may receive honors in mathematics. The requirements for honors are (a) a grade point average in all courses taken for the mathematics major of at least 3.50, (b) an overall grade point average of at least 3.30, (c) successful completion of at least two of the following courses: MTH 326 - Abstract Algebra, MTH 332 - Mathematical Statistics II, or MTH 337 - Mathematical Analysis, and (d) successful completion of at least one 300 level course beyond the major requirements.

Teacher Certification

Required for certification for teaching mathematics in secondary schools:

MTH 121 - Calculus I

MTH 122 - Calculus II

MTH 223 - Calculus III

MTH 226 - Linear Algebra

MTH 240 - Transition to Abstract Mathematics

MTH 326 - Abstract Algebra

MTH 331 - Mathematical Statistics I

MTH 342 - Advanced Geometry

MTH 353 - CUE: Landmarks of Mathematics

Any 100 level Computer Science course

CUE in Mathematics (described below)

The student must maintain a 2.50 grade point average in courses for the major in order to meet teacher certification requirements.

Program Requirements

Major Requirements

Required Courses:

MTH 121 - Calculus I

MTH 122 - Calculus II

MTH 223 - Calculus III

MTH 226 - Linear Algebra

MTH 240 - Transition to Abstract Mathematics

Five additional mathematics courses chosen from courses number 200 or above with only one at the 200-level and to include:

MTH 326 - Abstract Algebra

MTH 337 - Mathematical Analysis

Any 100 level Computer Science course

CUE in Mathematics (described below)

A major must maintain a 2.00 grade point average in the courses required for the major. A student cannot simultaneously be declared as both a mathematics major and an analytics minor. However, a mathematics major can declare a concentration in analytics. Please see details in the section Mathematics Major with a Concentration in Analytics below.

Mathematics Major with a Concentration in Analytics

While a mathematics major cannot declare a minor in analytics, such a student can declare a concentration in analytics. To complete a mathematics major with a concentration in analytics, a student must complete both the requirements of the mathematics major and the requirements of the analytics minor.

Mathematics Culminating Undergraduate Experience (CUE)

The CUE in mathematics provides each student with the opportunity to engage in an intellectually rigorous experience that draws upon knowledge acquired within the major, while allowing students flexibility to select the type of experience they pursue. Each student who majors in mathematics will select one of the following options:

- a. Successfully complete one of the following three courses during the senior year: MTH 353 CUE:
 Landmarks of Mathematics, MTH 370 CUE: The Art of Problem Solving, or MTH 975 CUE: Directed Research
- b. Successfully complete MTH 353 CUE: Landmarks of Mathematics during any semester and successfully complete a certification in middle or secondary education, including completing a student teaching semester in mathematics in the senior year.

A student who takes MTH 353 - CUE: Landmarks of Mathematics or MTH 370 - CUE: The Art of Problem Solving previous to these last two semesters will not be able to count such a course as fulfilling the option (a) CUE requirement for the major.

Mathematics Minor

Required Courses:

MTH 121 - Calculus I

MTH 122 - Calculus II

MTH 226 - Linear Algebra

At least three more courses chosen from among the following, only one of which may be at the 100 level.

Any 100 level Computer Science course

MTH 119 - Statistical Analysis

Any mathematics course numbered 200 or above

The student must maintain a 2.00 grade point average in courses required for the minor. A student cannot simultaneously be declared as both a mathematics minor and an analytics minor.

Analytics Minor

Director: Dr. William Gryc, Associate Professor of Mathematics

Analytics is the application of quantitative reasoning to real-world problems. A practitioner of analytics applies mathematical, statistical, and computational theory to solve practical problems that often involve large data sets. Problems that were infeasible in the past due to the size of the data are now feasible due to the increase in computing power. Thus, analytics is quickly changing how businesses, industries and governments make decisions. A practitioner of analytics needs both a theoretical background in mathematics and statistics to approach problems, as well as computer science knowledge to implement solutions. The goal of this program is to give students a solid foundation in applied mathematics, statistics, and computer science as well as to have them practice applying these skills to problems in fields outside of the mathematical sciences. This program provides flexibility that allows for a variety of student interests and culminates in courses that apply quantitative reasoning to real-world problems.

Minor Requirements

To minor in analytics, a student must complete seven courses as given below:

Courses with Computer Science I in the title

MTH 119 - Statistical Analysis **OR**

MTH 332 - Mathematical Statistics II

MTH 122 - Calculus II OR

MTH 223 - Calculus III

MTH 226 - Linear Algebra

MTH 318 - Operations Research

One course from Group A below:

CSI 111 - Computer Science II

200-level statistics course

One course from Group B below

ACT 334 - Fraud Examination

BUS 347 - Marketing Research

CSI 326 - Artificial Intelligence

ECN 348 - Game Theory & Applications

ECN 350 - Econometrics

FIN 311 - Mathematics for Financial Analysis

MTH 314 - Applied Mathematics & Modeling

The student must maintain at 2.00 grade point average in courses required for the minor. A student cannot simultaneously be declared as both a mathematics minor and an analytics minor. Also, a student cannot simultaneously be declared as both a mathematics major and an analytics minor. However, a mathematics major can declare a concentration in analytics within the mathematics major.

Courses

MTH 101 - Topics in Mathematics

Topics selected from various areas of mathematics such as discrete mathematics, logic, number systems, geometry, probability, and graph theory. Designed to give the student an appreciation of mathematics as an integral part of our culture, this course includes applications to various other disciplines. Intended for students with no prior college-level mathematical experience. Not open to students who have completed MTH 119 or any higher numbered mathematics course. *Meets general academic requirement RG*.

MTH 104 - Statistical Thinking

An introduction to basic concepts in statistics. Emphasis is placed on the ability to interpret and critically evaluate statistical claims. Statistical inference is explored through randomization and simulation. Intended for students who want an appreciation of statistics, but who do not seek training in carrying out statistical analyses themselves. Students who have received credit for MTH 119 may not enroll in MTH 104. Department permission required for students who have been placed in MTH 119 Statistical Analysis.

Meets general academic requirement RG.

MTH 114 - Fundamentals of Mathematics

A study of fundamental mathematical principles underlying the concepts of number and shape. Topics include number systems, number theory, measurement systems, geometry, and functions with emphasis on applications and problem solving. *Meets general academic requirement RG*.

MTH 116 - Symmetry & Shape: Introduction to Geometry

An introduction to the geometric concepts underlying elementary mathematics: properties of circles, polygons and polyhedra, measurement systems and indirect measure, scale and proportion, symmetry, congruence, informal Euclidean geometry,

geometric constructions, and transformational geometry. Applications feature mathematical patterns found in art and nature: the golden ratio, Platonic solids, tessellations in the plane, frieze and wallpaper patterns, scale drawings, 3-D drawing, one- and two-point perspective, and viewing point.

Meets general academic requirement RG.

MTH 119 - Statistical Analysis

Designed for students interested in accounting, business administration, economics, finance, psychology, and the natural sciences sciences. Topics include basic probability, distributions of random variables, sampling distributions, confidence intervals, hypothesis testing, regression analysis, sampling procedures, experimental design, analysis of variance, nonparametric statistics, and research ethics. Students may not receive credit for both MTH 104 Statistical Thinking after taking MTH 119 Statistical Analysis.

Prerequisite(s): 3.5 years of high school mathematics.

Meets general academic requirement RG.

MTH 121 - Calculus I

Differentiation of algebraic and transcendental functions, application of the derivative to related rates, max-min problems, L'Hôpital's Rule, and graphing. Introduction to integration, the Fundamental Theorem of Calculus.

Prerequisite(s): 3.5 years of high school mathematics.

Meets general academic requirement RG.

MTH 122 - Calculus II

A continuation of MTH 121. Applications of the integral, integration techniques, numerical integration, infinite sequences and series, Taylor Series, and improper integrals.

Prerequisite(s): MTH 121 Calculus I.

Meets general academic requirement RG.

MTH 223 - Calculus III

Focuses on extending techniques from one-dimensional calculus to multivariable calculus - including limits, continuity, derivatives, finding maxima and minima, integrals, and finding volumes. Topics include parametric equations, vectors, vector-valued functions, curves and surfaces in space, line integrals, vector fields, divergence, curl, the fundamental theorem of line integrals, Green's theorem, and the Divergence theorem.

Prerequisite(s): MTH 122 Calculus II.

Meets general academic requirement SC.

MTH 226 - Linear Algebra

Matrices and systems of linear equations, determinants, real vector spaces and inner product spaces, linear transformations, eigenvalue problems, and applications.

Prerequisite(s): MTH 122 Calculus II.

Meets general academic requirement SC.

MTH 227 - Differential Equations

A study of the theory, methods of solution, and applications of differential equations and systems of differential equations. Topics will include the Laplace Transform, some numerical methods, and applications from the physical sciences and geometry. *Prerequisite(s): MTH 122 Calculus II.*

Meets general academic requirement SC.

MTH 240 - Transition to Abstract Mathematics

An introduction to abstract mathematical thought with emphasis on understanding and applying definitions, writing arguments to prove valid statements, and providing counterexamples to disprove invalid ones. Topics may include logic, introductory set theory, and elementary number theory, but the focus is on the process of reasoning rather than any particular subject or subdiscipline. It is strongly recommended that mathematics majors complete this course by the end of the sophomore year. *Prerequisite(s): MTH 122 Calculus II.*

Meets general academic requirement W

MTH 314 - Applied Mathematics & Modeling

Models describing physical and economic conditions will be constructed, analyzed, and tested. The computer will be used in model verification.

Prerequisite(s): Any 200-level MTH course.

MTH 318 - Operations Research

Linear programming, the transportation model, dynamic programming, decision analysis, game theory, and inventory and queuing models.

Prerequisite(s): MTH 226 Linear Algebra.

MTH 326 - Abstract Algebra

A study of the algebraic structures of groups, rings, fields, and integral domains. Offered in alternate years.

Prerequisite(s): MTH 226 Linear Algebra and MTH 240 Transition to Abstract Mathematics.

MTH 328 - Codes & Ciphers

This course is an introduction to the classical and modern methods for encoding secret messages (cryptography) and the science of breaking codes and ciphers (cryptanalysis). It blends the history of secret writing, the art of creating codes, and the mathematics underlying the theory and practice of encryption and decryption. Topics include substitution and transposition ciphers, applications of number theory to cryptanalysis, Vigenere and Hill ciphers, statistical methods in cryptanalysis, RSA encryption, and other public-key ciphers.

Prerequisite(s): Any 200-level MTH course.

MTH 331 - Mathematical Statistics I

A study of probability, discrete and continuous random variables, the binomial, normal, Poisson, chi-square, t, and F distribution. Prerequisite(s): MTH 122 Calculus II.

MTH 332 - Mathematical Statistics II

A continuation of MTH 331. Topics will include estimation, hypothesis testing, regression, correlation, and analysis of variance. Prerequisite(s): MTH 331 Mathematical Statistics I.

MTH 337 - Mathematical Analysis

Rigorous treatment of the real number system, sequence and function limits, continuity, differentiability, intermediate and mean value theorems, uniform continuity, the Riemann integral, and the Fundamental Theorem of Calculus. Offered in alternate years. *Prerequisite(s): MTH 223 Calculus III and MTH 240 Transition to Abstract Mathematics.*

MTH 342 - Advanced Geometry

An axiomatic approach to Euclidean geometry. The exploration of non-Euclidean geometries, including hyperbolic geometry. The study of transformational geometries. Offered in alternate years.

Prerequisite(s): MTH 240 Transition to Abstract Mathematics.

MTH 345 - Combinatorics & Graph Theory

An advanced course in discrete mathematics emphasizing counting and finite structures. Topics include fundamental laws of counting, generating functions, recursion, partitions, existence and optimization problems, graphs and digraphs, networks, the relationships between graphical invariants, lattices, Latin squares, design and coding theory, and Ramsey Theory.

*Prerequisite(s): MTH 240 Transition to Abstract Mathematics.

MTH 353 - CUE: Landmarks of Mathematics

This course examines major developments in mathematics of historical importance from ancient through modern times. An emphasis is placed on concepts from geometry, algebra, calculus, analysis, number theory, and modern mathematics. The course focuses on the context in which mathematical results were discovered and the lives of the discoverers/creators.

Prerequisite(s): MTH 240 Transition to Abstract Mathematics.

MTH 370 - CUE: The Art of Problem Solving

Intended for students who enjoy solving mathematical problems in a variety of areas and who want to strengthen their creative mathematical skills, as well as their ability to write and present mathematical arguments. Topics include recreational problems

(concise intellectual challenges), contest problems (precisely formulated mathematical challenges), logic problems (generally qualitative in nature), and modeling problems (quantitative and posed in a context).

Prerequisite(s): MTH 240 Transition to Abstract Mathematics and at least one 300-level mathematics course.

MTH 975 - CUE: Directed Research

Students will design, execute, and complete a mathematical research project which involves at most two students. This project will be supervised by a department faculty member. A project can involve original research initiated at Muhlenberg or it may be a follow-up independent study to extend summer work completed during a Research Experience for Undergraduates. A CUE project must be formally proposed by the student(s) and approved by the department by the end of spring semester of the junior year. Project requirements will include a paper detailing the mathematical work completed and a presentation at an appropriate local/regional/national mathematics' meeting outside of Muhlenberg, as well as any additional requirements imposed by the faculty supervisor. Open only to mathematics majors who are completing their last two semesters in which they registered for classes on campus.

Prerequisite(s): MTH 240 Transition to Abstract Mathematics, departmental and instructor approval

Media and Communication (COM)

Department Chair: Associate Professor Jefferson Pooley Professors: Jansen, Sullivan, Tafler, Taub-Pervizpour

Associate Professors: Corbin, Kahlenberg, McEwan, Nathanson

Assistant Professors: Ebrahimi Bazaz, Chien, Ranieri

Lecturer: Meek

The Media and Communication major provides a systematic scholarly approach to the analysis of media and society. Knowledge of how media and media industries function is essential for responsible citizen participation in a democratic society. Courses in the major provide students with conceptual and analytic tools to assess the social impacts of media as well as to explore media production as a form of creative expression and critical civic engagement. All courses are informed by concerns for the value-related issues and controversies raised by media practices. The major prepares students for graduate study and provides education for careers in digital media, journalism, broadcast media, publishing, advertising, public relations, political advocacy, media law, teaching, film, video, and new media production. An optional internship permits students to explore the relevance of their studies to communication practices in a professional setting.

Special Programs

The Dublin Program

The Media and Communication Department offers a spring semester study abroad experience at Dublin City University (DCU) located in Dublin, Republic of Ireland. This study abroad program is especially designed for students majoring in Media and Communication and Film Studies, though it is open to all college students meeting the program prerequisites. All coursework is offered in the School of Communications at DCU. A member of the Muhlenberg Media and Communication faculty travels with students to Dublin for the semester. While at DCU, students enroll in 4 courses: The Dublin Seminar, a course in an accelerated format taught by the Muhlenberg faculty member; two Media and Communication electives taught by faculty at DCU; and COM 960 - Communication Internship in a communication related field.

Students participating in the Dublin Program must have completed the following prerequisites: COM 201 - Media & Society and COM 231 - Documentary Research. Although it is not required, students are strongly encouraged to complete COM 301 - Media Theory & Methods prior to their study in Dublin. Interested students should contact the Department Chair regarding application procedures and deadlines.

Honors Program

The Honors Program is a two-semester sequence that allows qualified students the opportunity to enrich their experiences in communication theory, history, and practice. Honors students must participate in COM 470 - CUE: Media & Communication Honors Seminar in the fall semester and produce an original research or production project. In the spring of their senior year, Honors students enroll in a second seminar with the Honors Director to continue work on their project, which culminates in an oral defense with a faculty committee. They will also have opportunities to participate in a program of periodic lectures and field trips. To qualify, students must maintain at least a 3.70 grade point average in the major and a 3.60 grade point average overall. Participation in the Honors Program is not automatic; qualified students must prepare a written application. Applications and nominations are subject to faculty review. Interested students should contact Dr. John Sullivan, Honors Program Director, regarding application procedure and deadlines.

Program Requirements

Major Requirements

Majors will complete a minimum of nine courses including the following:

COM 201 - Media & Society

COM 231 - Documentary Research

COM 301 - Media Theory & Methods

Five electives within the major, including at least one course from each of the three distribution areas: Discovery, Structure, Practice. (201, 231, 301, and the CUE do not count towards the distribution requirement in the major. They should normally be taken in sequential semesters, with 201 and 301 completed by the end of the sophomore year.) At least two of these electives must be numbered 300 or above.

All majors must fulfill the Media and Communication CUE requirement in the senior year. There are several pathways to fulfilling the CUE and students may choose from the following:

COM 401 - CUE: Seminar in Media & Communication

COM 467 - CUE: Advanced Video Production

COM 470 - CUE: Media & Communication Honors Seminar

COM 490 - CUE: Digital Media Design Lab

COM 965 - CUE: Communication Practicum

COM 201 - Media & Society will normally be completed prior to fulfilling additional major requirements. The three required courses and the CUE do not count towards fulfillment of distribution requirements in the major.

Required Courses

COM 201 - Media & Society

Examines influences of mass media on participatory democracy and its cultural forms and the history, production, representation, and consumption of media in society. Introduces students to social science approaches to the study of communication phenomena, including the logic of inquiry, standards of evidence and grounds for making claims about communicative behaviors. Topics may include social media, images and effects, corporate media culture, organizational structures of journalism, emergence of consumer culture, the Internet and digital media environments, and audience identification and interpretation of media. *Meets general academic requirement SL*.

COM 231 - Documentary Research

Explores the American tradition of social documentary, focusing on milestone projects, including the work of James Agee and Walker Evans, Dorothea Lange, William Carlos Williams, and Robert Coles. Oral, visual, and textual modes of production are

examined. Special focus is given to new digital forms of representation and their impact on production, distribution, and consumption. Framing this investigation are the ethical issues that emerge when rendering and representing individuals' lives. Students are introduced to the fundamental skills of investigative research, interviewing, gathering and interpreting information, and using print and electronic archives and research, and produce their own multi-media documentary projects. *Required lab. Prerequisite(s): COM 201 Media & Society.*

Meets general academic requirement W.

COM 301 - Media Theory & Methods

Explores classic and contemporary media theories and research methodologies, including the historical and philosophical foundations of paradigm formation in media research, the social and institutional contexts that led to the emergence of the communication discipline, and current controversies within the field. This course builds upon principles and concepts introduced in Media & Society.

Prerequisite(s): COM 201 Media & Society and COM 231 Documentary Research.

Discovery

These introductory courses emphasize the breadth of media and communication. They provide an overview of different sub-specializations within the field.

COM 208 - Global Media

Provides a comparative analysis of the principles guiding the organization, development, and operations of media systems in different political, economic, social, and cultural contexts. Considers the global expansion of mass media and the increasing connections of world citizens in a "global community." Compares the production, distribution, reception, and effects of mass mediated messages in countries around the world. Topics explored include media systems and their social and political contexts, media and revolution, global media intersections with local audiences, and politics of international news and entertainment flows.

COM 212 - New Information Technologies

Explores the prospects and problems that surround the introduction and diffusion of new information technologies in society. Students consider the social, political, economic, and cultural impacts of new information technologies on personal privacy, self-identity, social relationships, information access, and global citizenship. Thematic focus varies from semester to semester with case studies drawn from gaming, social media, virtual communities and realities, and computers and the organization of work and learning.

COM 218 - Media & Patriotism

This course looks at the contested relationship between media and government in both historical and contemporary contexts. Students explore the representation of war in American news and entertainment media, taking an historical view of popular narratives around military interventions from conventional wars to the twenty-first century war on terror. Students will develop an understanding of the historical relationship between American foreign policy, popular history, media, and the press. Among the questions to be explored are the public's right to know, reporters' access to information, and government censorship.

COM 220, 221 - Free Culture

This course explores current debates surrounding free culture, specifically, 1) the history and development of notions of copyright in the nineteenth century and "intellectual property" in the twentieth century, 2) processes of media convergence and digitalization in today's media, 3) the development of the free, open source software (FOSS) movement in the late 1970s and the challenge to proprietary software found in the Linux operation system, 4) digital distribution of music, the Napster debate, and remix culture in the music industry, 5) Wikimedia and the new power of "crowdsourcing" in knowledge labor, 6) Net neutrality, and 7) the philosophy and development of the digital commons, enshrined in the Creative Commons license and the legal implications of such licenses for artists, musicians, audiences, and citizens. Students will use an open source computer OS (Linux) and free software tools to contribute to a class digital project on a topic related to the free culture movement. *Meets general academic requirement SL (and W when offered as 221)*.

COM 224 - Feminist Media Studies

Feminist scholars have long studied the relationship between gender and media. This course will explore how television, film, popular music, and cyber culture play a central role in representing, defining, circulating, and constructing gender. This class takes a multi-media approach; for example, we will study how cultural forms depict different gendered characters on TV shows

like Sex and the City and Modern Family, how certain genres are particularly open to queer interpretations like the musical, and how teen girls appropriate the magazine format to produce and circulate their own stories. This course will be oriented historically to examine how gender roles are constructed by media in specific historical contexts, and then how those representations change (or do not change) over time. Since much research on gender and the media has historically focused on femininity, this course will likewise focus on femininity, but we will also study the relationship between media and masculinity and sexuality, as well as how gendered identities are always also informed by other relations of power, such as race, class, ethnicity, and age.

Meets general academic requirement SL

COM 225 - Journalistic Traditions

Introduces students to the great traditions of interpretive, documentary, and advocacy journalism and photojournalism. Includes analysis of exemplary works in the tradition and provides some opportunities to develop skills through individual projects.

COM 240 - Introduction to Film Analysis

Introduces different strategies and different approaches for analyzing film and video texts, including formal, narrative, social/cultural, and feminist. Students will develop an understanding of the grammar, vocabulary, and conventions of film and video production and the factors that shape viewers' reception.

Meets general academic requirement HU.

COM 242 - Twentieth Century Media: Film, Radio, & Television

Analyzes the historical development of radio, film, and television genres, technologies, and formats and considers the cultural, economic, political, and social climates in which they evolved.

Meets general academic requirement HU

COM 251 - Introduction to Moviemaking

Introduces basic concepts of time-based visual media (film, video, digital) with an emphasis on the perception, operation, and experience of moving images, kinesics, and the structure and aesthetics of cinematic language. Students will learn how to work with cameras and audio and post-production equipment

Structure

These courses use media and communication theories and methodologies to provide in-depth exploration of significant media and communication institutions, traditions, or cultural forms.

COM 210 - Media Law

Introduces the philosophy, history, development, and current interpretations of U.S. media law; explores constitutional rights, laws, precedents, and public concerns which guide U.S. media, the public, the courts, regulatory agencies, and policymakers.

COM 244, 245 - Media & Social Movements

Examines the interrelationship between mass media and twentieth century social movements in the United States. How have actors within social movements used mass media to raise awareness, mobilize, and/or demand redress? How have various mass media portrayed those movements, actors, and events? Using an historical approach, we will explore how context-technological change, political, social, and economic climates-deeply influence how mass media and social movements interact. Primary attention will be given to social movements during the age of the Cold War (1945-1990), including the Civil Rights/Black Power, the New Right, Feminist, and Gay Rights Movements. Students will be challenged to consider local examples of present-day social change advocacy in relation to media use and representation.

Meets general academic requirement HU (and W when offered as 245).

COM 312 - Media Industries

Considers the forces (legal, political, economic, historical, and cultural) that shape what we watch on television, read in books, or hear on the radio. Explores a wide range of print and electronic media industries as well as developing media like the Internet. Economic and critical analysis is used to examine both the institutional forces and individualized decisions that ultimately shape the content and format of mass media messages. Selected topics include media conglomeration, target marketing, media integration and digital television, and globalization of media markets.

COM 314 - Audience Analysis

Examines the concept of audiences from a variety of qualitative and quantitative research perspectives: as "victims," users, subcultures, and market commodities. Television ratings, public opinion polls, and other strategies for measuring audience feedback are analyzed and assessed.

COM 316 - Propaganda & Promotional Cultures

Examines the historical development, social roles, communicative techniques, and media of propaganda. Thematic emphasis varies by semester with case studies drawn from wartime propaganda, political campaigns, advertising, and public relations. *Meets general academic requirement SL*.

COM 341 - Social Media & the Self

Explores the performance of identity on social networking sites like Facebook and Tumblr, against the backdrop of the history of consumer culture. A core theme is the tension and overlap between ideals of authenticity and self-possession. Other themes include subcultural style, emotional labor in the workplace, and self-help culture. Students explore the online self with the emergence of the internet and into the Facebook era, with an emphasis on changing definitions of public and private, algorithmic memory, gender and sexuality, and the economics of sharing.

COM 344 - Documentary Film & Social Justice

Examines documentary and other non-fiction based modes of film, video, and digital media production and the assumptions these forms make about truth and authenticity and how they shape our understandings of the world. Both historical and contemporary forms will be considered.

Meets general academic requirement AR.

COM 346 - Exploratory Cinema

Examines the origin and growth of "avant-garde" cinema. Traces the history of film and video art from the early 1920s to the present, focusing on its structural evolution, thematic shifts, coexistence with commercial cinema, and its impact on contemporary media.

Meets general academic requirement HU.

COM 370 - Popular Culture & Communication

Traces the development of popular forms with emphasis on the ways that social class has structured access, use, and creation of cultural artifacts and practices. Topics explored include both commercial and non-commercial forms of amusements, leisure, and entertainment.

Prerequisite(s): COM 201 Media & Society.

COM 372, 373 - Race & Representation

Explores the social construction of the concept of race and barriers to communication erected by prejudice, discrimination, and marginalization of minority voices. Examines topics in multicultural, cross-cultural, and interpersonal communication as well as analysis of documents, personal narratives, and media images. Primary emphasis is placed upon African American experience in the U.S.

Meets general academic requirement DE (and W when offered as 373).

COM 374 - Gender, Communication, & Culture

This course explores how culture establishes, maintains, and cultivates gender through forms of social movements, communication, and institutional structures, particularly commercialized media. Students will examine how youth and adults are socialized to think, talk, and make sense in American culture; the implications of these differences for the construction of gendered identities (e.g., masculinity, femininity, transsexuality), communication, and relationships; and the construction of gender in media, including digital and print advertising, television programs, the Internet, books, magazines, video games, and the cinema.

Prerequisite(s): COM 201 Media & Society.

COM 378, 379 - Sport, Culture, & Media

Explores the cultural artifacts, historical developments, and related systems of power that comprise sport media. Students observe, document, and analyze mediated sport and its prominence in our cultural environment. Includes analysis of the

conventions of sports journalism (electronic and print) and transformations in those arenas. Emphasizes writing. Prerequisite(s): COM 201 Media & Society.

Meets general academic requirement W when offered as 379.

COM 442 - Children & Communication

This course investigates the meanings of media in children's lives. It adopts a cultural historical approach to understanding the role of media in children's cognitive, social, and moral development. Looking at children's interactions with media artifacts, it considers how childhood is constituted by the languages and images of media and situates these interactions within the broader political economic context constructing the child consumer. Children's media studied include television programs, video and computer games, films, books, toys, and the Internet.

Practice

These courses provide students with opportunities to become producers, not merely consumers, of print, video, digital, and audio information. Each course gives students in-depth opportunities to put theory into practice in research, writing, or digital media production.

COM 216 - Communication & Public Relations

Explores public relations from a critical perspective with emphasis on communication theory and research into public relations practices. Topics include the origins and development of public relations, its role in society, principles of public relations theory and practice, and the ethical issues raised by various philosophies and practices of public relations.

Prerequisite(s): COM 201 Media & Society.

COM 321, 322 - Writing for the Media

Provides intensive writing experiences in a variety of formats. Introduces students to the different conventions of writing for print media, radio, and television. Class structure, assignments, and timed writing exercises are designed to simulate a working media environment.

Prerequisite(s): COM 201 Media & Society or ENG 205 Introduction to Creative Nonfiction Writing or ENG 275 Theory & Methods of English Studies

Meets general academic requirement W when offered as 322.

COM 334 - Health Communication

Examines interpersonal as well as mediated dimensions of health communication, including theories and case studies that address issues in physician and patient communication; gender, race, and cultural constituents in health communication; social marketing techniques for the production, distribution, and assessment of health-care information; the design and implementation of public health campaigns; and the use of communication technologies in the production of health communications.

COM 336, 337 - Environmental Communication

Explores theories, models, and strategies for production and assessment of environmental communications. Examines environmental media and campaigns; provides students with skills to identify and solve problems in environmental communications and in the production of environmental media. Emphasizes writing.

Meets general academic requirement W when offered as 337.

COM 338 - Organizational Communication

Explores theories, models, and strategies for internal and external communication within organizations. The constituents, constraints, values, practices, and media of organizational cultures are investigated from historical, cross-cultural, and contemporary practices. Primary emphasis is on the corporate experience in the United States.

COM 351 - Video Production

Refines an understanding of video/television concepts and operations through the application of advanced production techniques. Provides hands-on experience beginning with the development of a professional project, treatment, script, and storyboard. Focuses on production tools and skills, class workshops, and outside exercises that facilitate becoming comfortable with camera and editing equipment and with the overall production process. Conceiving, coordinating, shooting, and editing the project, production teams will encounter real-time pressure and problem-solving situations. *Required lab*.

Prerequisite(s): COM 251 - Introduction to Moviemaking.

COM 361 - Radio Production

Introduces the tools, techniques, and principles of radio production. Students develop awareness of sound, the ability to structure information on the radio, and the capacity to sustain attention and build an audio documentary. Students will plan, produce, and evaluate audio projects in a variety of modes, including news, documentary, dramatic, and commercial.

COM 367 - Studio Workshop in Television & Film

Beginning with a survey of the promise and demands, historical, economic, and political circumstances surrounding community television, this course broadens students' exposure to television formats beyond mainstream commercial media. The course examines the history and innovation of community television in the United States and overseas. It provides students an opportunity to explore how to channel ideas into practice by expanding students' established skills (research, writing, scripting, producing, directing, multi-camera and audio strategies, staging and lighting, post-production). Toward that goal, the course engages students in the production of a regular series of documentary, narrative, and experimental television and film projects that will be realized during a multi-week intensive studio experience. Multimedia and interdisciplinary projects involving theatre, art, dance, and music will be welcome.

Prerequisite(s): COM 251 Introduction to Moviemaking recommended.

COM 376, 377 - Youth Media

This course introduces students to the theory, practice, and impact of youth media programs in local and international contexts. Students will also use media production to participate in fieldwork activities that contribute to HYPE, a media/youth development program housed in the department of Media and Communication at Muhlenberg College. Class projects will document and explore the possibilities of media making to promote young people's twenty-first century skills of digital communication and critical literacy, and their participation as agents of community change.

Prerequisite(s): COM 201 Media & Society and COM 231 Documentary Research.

Meets general academic requirement W when offered as 377.

COM 431 - Documentary Field Work

Develops advanced skills in documentary inquiry and practice. Provides tools and opportunities for developing skills in interviewing for archival, journalistic (print and electronic), social scientific, and administrative purposes. Course is organized around the design and development of individual or group documentary projects in selected media. Completed project(s) will be exhibited in some campus or public forum, e.g. submitted to campus newspaper, aired on campus radio or television, or displayed on the department website.

Prerequisite(s): COM 231 Documentary Research or instructor permission.

Internship

COM 960 - Communication Internship

Designed to provide both an educational experience and an opportunity to work with professionals in practical preparation for a career; the internship includes a significant academic (written and/or production) component. Under faculty supervision, students will serve as interns with newspapers, television and radio stations, advertising agencies, public relations firms, publishers, health, environmental, sports, and human and public service organizations. Students must have completed the sophomore year. Does not count toward the nine courses required by the major.

Prerequisite(s): COM 231 Documentary Research and instructor permission

CUE Courses

COM 401 - CUE: Seminar in Media & Communication

Each seminar has its own focal topic and includes an inquiry-driven project requiring students to generate an integrative research or grant proposal, and oral presentation about their proposal. The grant proposal is designed to build on the core scholarlyknowledge assignments in the department's required-course sequence. Focal topics may include children & communication, media reform, race & representation, media & the home, or media & social theory. The Seminar in Media & Communication is offered at least once a semester by different members of the department on a rotating basis. Seniors only Prerequisite(s): COM 301

COM 467 - CUE: Advanced Video Production

Students explore the convergence of video and digital media while studying the problems of constructing narrative and documentary texts within emerging experimental formats. Through their research-production projects, students learn to work with more advanced visual and organizational concepts and tools. Legal and ethical issues involved in media production are considered. Students present ongoing work and final projects in either an online or broadcast venue.

Prerequisite(s): COM 351 Video Production

COM 470 - CUE: Media & Communication Honors Seminar

Each year this course will have a different thematic focus which will allow honors and non-honors seniors to engage with faculty and visiting lecturers in challenging dialogues and research experiences, culminating in the production and presentation of an original research project or creative work based on the seminar theme. Provides students with extensive opportunities to work closely with faculty mentors in developing their research project and creative work.

Prerequisite(s): Enrollment limited to majors during the senior year.

COM 490 - CUE: Digital Media Design Lab

Students plan, develop, produce, and present CUE productions (whether video, web-based, digital storytelling, audio, animation, documentary, print, or multimedia) in a collaborative workshop setting. Students planning to enroll in this course prepare a project proposal to be approved by a CUE faculty advisor late in the junior year. Students design and develop a website, blog, e-book, or e-portfolio to present themselves as graduates prepared for positions in media related fields or students prepared for advanced graduate study in the discipline. They build their websites/e-portfolios to include representative work - writing, research, media artifacts - as well as representations of learning in the context of co-curricular activities (community service, student organizations, etc.), internship profiles, and study abroad reflections.

Prerequisite(s): Enrollment limited to majors during the senior year.

COM 965 - CUE: Communication Practicum

Designed to provide both an educational experience and an opportunity to work with professionals in practical preparation for a career, the practicum includes a significant academic (written and/or production) component. Under faculty supervision, students will serve as interns with newspapers, television and radio stations, advertising agencies, public relations firms, publishers, health, environmental, sports, and human and public service organizations.

Prerequisite(s): COM 231 - Documentary Research and instructor permission; enrollment limited to majors during the senior year.

Music (MUS)

Department Chair: Professor Paul Murphy

Professors: Conner, Ovens

Assistant Professor: Hartford, Helm

Pianist-in-Residence: Petit

The mission of the Music Department is to prepare students for lives as musicians, critical and creative thinkers, and responsible members of society. Knowledge, skills, and values are developed and fostered through the study of music within a liberal arts context. Students develop technical skills, problem-solving ability, judgment, and courage to analyze, perform, and compose music with an informed knowledge of theory, history, and the social context of artistic practice. More broadly, we teach students to develop self-discipline, analyze evidence, integrate knowledge from diverse fields, communicate effectively, reflect thoughtfully on their own work, and show respect for others as an integral part of the music program. We believe these abilities empower our students to develop into skilled musicians who are prepared for productive and successful lives.

Our curriculum emphasizes the inter-connectedness of music theory, composition, music history, and performance. We train thinking musicians who understand the musical-theoretical, compositional, and performance practices of

different historical periods, cultures, genres, and performative lens. This training produces thinking musicians who are prepared to develop their own voices as performers, composers, and scholars.

We encourage all Muhlenberg students to take music courses that interest them, many of which are open to students without prerequisite. All Muhlenberg students are eligible to participate in ensembles and/or take lessons in the department. Applied lessons may be completed at any level from beginning to advanced. Students with a serious interest in musical theatre may study voice in the Music Department and supplement this study with courses offered in the Theatre and Dance Department.

The Music Department sponsors over seventy concerts each year, including ensemble performances, student recitals, senior recitals, and guest artists. Our concerts are presented in the Dorothy and Dexter Baker Center for the Arts, designed by Philip Johnson, and the Egner Memorial Chapel.

Music Education

There are currently a limited number of music majors who are also participating in the teacher certification program at Moravian College. The requirements for teacher certification are available upon request from the Department of Music. Students intending to enter the music education certification program in collaboration with Moravian College **must** register for MUS 111 - Music Theory I during their first semester. It is extremely unlikely any student will be able to complete their studies in four years if they do not follow this advice.

Program Requirements

Major Requirements

The music major offers three areas of concentrated study: <u>Performance</u>, <u>Music Theory and Composition</u>, and <u>Music in History and Culture</u>. Each of the concentrations includes a shared core curriculum. The core curriculum provides music majors with foundational skills, knowledge of the discipline of music, and instroduces students to the process of analytical and creative thinking.

Core Curriculum

MUS 111 - Music Theory I

MUS 112 - Music Theory II

MUS 211 - Music Theory III

MUS 221 - Music History I: Medieval to 1750

MUS 222 - Music History II: 1750 to the Present

MUS 901 - Individual Applied Music - First Area (four semesters)

Culminating Undergraduate Experience (CUE)

Music majors will complete a Culminating Undergraduate Experience (CUE). This could be fulfilled with completion of MUS 440/441 Composition Workshop, or MUS 931/MUS 932 - Applied Music - Senior Recital II.

Concentrations

Each music major will complete three course units in one of the three concentrations. It is strongly recommended that all music majors participate in ensemble work for at least four semesters.

Performance Concentration

Students selecting the performance concentration will choose three course units as electives based on their particular interests and goals.

One additional course unit in Performance on the student's primary instrument:

MUS 901 - Individual Applied Music - First Area (two additional semesters, 0.5 units per semester)

One course unit in Music Theory and Composition from:

MUS 223 - Jazz Theory & Improvisation

MUS 313 - Form & Analysis

MUS 317 - Counterpoint

MUS 335 - Techniques of the Avant Garde

MUS 340, 341, 440, 441 - Composition Workshops

One course unit in Music History and Culture from:

MUS 215 - Women in Music

MUS 217 - American Music

MUS 219 - Opera

MUS 229 - World Music

MUS 235 - History of Jazz

MUS 237 - Pop, Rock, & Soul

MUS 331 - The English Ayre

Students concentrating in performance are expected to prepare a Senior Recital including a detailed program. This recital is planned in consultation with the student's applied music teacher.

Music Theory and Composition Concentration

Students selecting the Music Theory and Composition concentration will choose three course units in electives from the following list. One must be MUS 313 - Form & Analysis, MUS 317 - Counterpoint, or MUS 335 - Techniques of the Avant Garde:

MUS 140 - Introduction to Electroacoustic Music

MUS 223 - Jazz Theory & Improvisation

MUS 240 - Computer & Algorithmic Music

MUS 242 - Perception of Music

MUS 313 - Form & Analysis

MUS 317 - Counterpoint

MUS 335 - Techniques of the Avant Garde

MUS 340, 341, 440, 441 - Composition Workshops

MUS 350 - Orchestration

Students concentrating in Music Theory are expected to produce a research paper, which may be completed as part of the Senior Seminar. Students concentrating in Composition are expected to produce a composition portfolio.

Music in History and Culture Concentration

Students selecting the Music in History and Culture concentration will choose three course units in electives from the following list. At least one must be at the 300 level.

MUS 215 - Women in Music

MUS 217 - American Music

MUS 219 - Opera

MUS 229 - World Music

MUS 235 - History of Jazz

MUS 237 - Pop, Rock, & Soul

MUS 331 - The English Ayre

Students concentrating in Music in History and Culture are expected to produce a research paper, which may be completed as part of the Senior Seminar.

Minor Requirements

Students minoring in music must complete 5 units as follows:

MUS 111 - Music Theory I

MUS 112 - Music Theory II

MUS 221 - Music History I: Medieval to 1750

MUS 222 - Music History II: 1750 to the Present

Any other course in Music in History and Culture

MUS 901 - Individual Applied Music - First Area

MUS 900 - Class Applied Music

It is strongly recommended that all music minors participate in Music Department ensembles based on their particular interests and goals. Ensembles provide opportunities for students to integrate the knowledge, skills, and abilities that they have developed in their classes.

MUS 101 - Introduction to Music and MUS 102 - Fundamentals of Music cannot be enrolled to fulfill any major or minor requirements although they may be useful for some students in preparing for required courses in the major and minor.

Courses

MUS 101 - Introduction to Music

This course focuses on Western music in its historical and cultural contexts while also introducing students to issues of music perception, taste and musical values, and the role of music in our everyday lives. The emphasis is on Western art music (beginning with music of the Middle Ages through the present), but students will also explore current popular music. By understanding more about the musical past, students will deepen their connection to and understanding of the musical present. No musical background is needed. May not be counted toward the music major or minor. *Meets general academic requirement AR*.

MUS 102 - Fundamentals of Music

An introductory survey of the elements of music: melody, harmony, rhythm, tone color, form, and expression. Skill development in reading, writing, listening, and analyzing music are applied to performance, composition, and an understanding of cultural influences on these practices. Analytical studies in various styles and periods are included and connected to the other arts, which may include poetry and the visual arts. Primarily for students without extensive musical training. This course can be used as preparation for Music Theory I. May not be counted toward the music major or minor.

Meets general academic requirement AR.

MUS 111 - Music Theory I

The foundational course in music theory introduces the materials and structural elements of tonal music: scales, key signatures, intervals, chords, rhythm and meter, and the principles of voice-leading and harmonic progression. Students will develop conceptual, aural, and keyboard skills; incorporate those skills into listening and analysis; and connect the concepts of music theory with interpretation and performance.

Prerequisite(s): Ability to read music is assumed.

Meets general academic requirement AR.

MUS 112 - Music Theory II

Continued development of skills from Music Theory I and introduction to additional concepts: small forms, non-chord tones, seventh chords, secondary functions, and modulation. Increased emphasis on listening and analysis and integrating theory and performance.

Prerequisite(s): MUS 111 Music Theory I or exam.

MUS 140 - Introduction to Electroacoustic Music

A study of the development and practice of electroacoustic music from its earliest forms in Europe and the United States. Included will be the early history of electronic instrument design, the tape studio, and the arrival of early digital technologies including MIDI. Introduction to sequencing programs such as Digital Performer. Individual and class projects in

basic synthesis techniques and hardware sampling. Reading, listening, and composition projects. *Meets general academic requirement AR*.

MUS 211 - Music Theory III

Further development of skills and the study of chromatic harmony: altered chords and borrowed chords, modulation to distant keys, and extended chromatic techniques. Introduction to twentieth century compositional procedures and analytical techniques. Analysis includes logical reasoning and argumentation.

Prerequisite(s): MUS 112 Music Theory II.

MUS 215 - Women in Music

This course is an interdisciplinary survey of the history of women in music. From Sappho in ancient Greece to today's pop divas, women have been active as composers, performers, patrons, teachers, and scholars. As the subject of musical works, women have been alternately deified, as in opera, and vilified, as in Eminem's rap songs. As we study the roles of women in music, we will investigate the origins of feminist music criticism and consider the future of feminist thought in music.

Meets general academic requirement AR.

MUS 217 - American Music

The subject of this course is vernacular and cultivated music of the United States from the Colonial period to the present. Students will come to understand how musical life not only reflected contemporary issues and events, but actively shaped them, exerting a powerful influence on American history and culture. Topics may include sacred and secular vocal and instrumental music; the musical traditions of African Americans, Native Americans, Latino Americans, and Anglo-Celtic Americans, among others; the influence of European and African practices in concert music and jazz; and the rise of musical institutions in the context of the developing nation. Students may undertake an archival assignment using Special Collections in Trexler Library and complete a culminating research project on music in the Lehigh Valley.

Meets general academic requirement AR.

MUS 219 - Opera

This course approaches opera from an interdisciplinary perspective, celebrating the genre as one that brings together music, literature, drama, performance, and design. Course repertory will explore opera from its origins to the present, with greatest attention to works by Monteverdi, Handel, Mozart, Wagner, Verdi, Puccini, Debussy, Berg, and Adams. Reading, listening, and viewing assignments; course may include field trips to performances; reviews; semester project. Offered every other year. *Prerequisite(s): Ability to read music or permission of the instructor.*Meets general academic requirement AR.

MUS 221 - Music History I: Medieval to 1750

This course concerns the history of music from the early Christian period through the mid-eighteenth century and addresses current debates in historical musicology. Readings, score analysis, listening, and writing assignments trace the development of composition and performance practices and their relationship to cultural and intellectual perspectives. In these ways, students will consider music as a way of knowing our world and the composers, performers, patrons, and listeners who made this music possible. Topics may include Gregorian chant, the development of polyphony, sacred and secular vocal music during the Renaissance, the rise of national styles, the music of the Lutheran Baroque, ending with the High Baroque, and music by Johann Sebastian Bach and George Fredric Handel.

Meets general academic requirement AR and W.

MUS 222 - Music History II: 1750 to the Present

This course concerns the history of music from the mid-eighteenth century through the present and addresses current debates in historical musicology. Readings, score analysis, listening, and writing assignments trace the development of composition and performance practices and their relationship to cultural and intellectual perspectives. In these ways, students will consider music as a way of knowing our world and the composers, performers, patrons, and listeners who made this music possible. Topics may include mid-eighteenth century musical styles and schools, the Viennese classicists (Haydn and Mozart), Beethoven and the Romantic expansion of form and technique, opera, the beginnings of modernism (Debussy, Stravinsky), and more recent developments since World War II extending into the twenty-first century.

Meets general academic requirement AR and W.

MUS 223 - Jazz Theory & Improvisation

A study of improvisational techniques from the jazz tradition. Readings and listening assignments; analysis and performance projects; semester project.

Prerequisite(s): MUS 112 Music Theory II.

MUS 229 - World Music

A study of the role of music and musical-theoretical systems in non-Western cultures. Class discussions based on primary and secondary source readings and writing assignments are balanced with music practicums to insure musical-theoretical, historical, and cultural issues are grounded in musical performance. Issues of authenticity, power, and cultural confluences are examined through a variety of methodological approaches to develop analytical and creative thinking skills. A culminating research paper and aural presentation provide students with an opportunity to explore an area of their own interest in greater depth, refine their written and aural communication skills, and increase breadth of knowledge for the entire class.

Prerequisite(s): Ability to read music or permission of the instructor.

Meets general academic requirements AR and DE.

MUS 235 - History of Jazz

A study of Jazz that traces its roots and origins from late nineteenth century blues and ragtime to recent innovations in the twenty-first century. Swing, the big band era, bebop, modal jazz, free jazz, and "modern" jazz will be explored through primary and secondary source readings, score analysis, class discussions, writing, and listening assignments that examine technical, cultural, and performance issues. Topics will include gender, race, representation, power, authenticity, and identity. Various approaches to improvisation will be considered relative to compositional and theoretical strategies, historical and cultural trends, and performance practices to facilitate the development of analytical and creative thinking.

Prerequisite(s): Ability to read music or permission of the instructor.

Meets general academic requirement AR.

MUS 237 - Pop, Rock, & Soul

In this course, students will explore the vital role of popular music in U.S. society, gaining a deeper understanding of this music's relationship to politics, the marketplace, technology, and racial, sexual, and class identities. Students will develop music analytical skills to help them identify key stylistic features of pop music's various genres, including rhythm & blues, rockabilly, doo-wop, soul, folk rock, psychedelia, progressive rock, funk, disco, new wave, and hip hop. Throughout the semester, we will investigate these styles by studying a repertory of hits by performers and producers including Elvis Presley, The Beatles, Phil Spector, The Supremes, Bob Dylan, Jimi Hendrix, Led Zeppelin, James Brown, The Clash, and Public Enemy. In discussions, listening exercises, and writing assignments, students will engage with recent scholarship from the fields of musicology, ethnomusicology, history, sociology, and popular culture studies.

Meets general academic requirement AR.

MUS 240 - Computer & Algorithmic Music

Continuing study of computer applications used in various musical settings. These will include sequencing programs such as Digital Performer, live performance programs such as Ableton Live, interactive programs MaxMSP, and recording software Pro Tools. Periodic quizzes on programs and composition projects.

Prerequisite(s): MUS 140 - Introduction to Electroacoustic Music or permission of the instructor.

MUS 242 - Perception of Music

This course is an interdisciplinary study of music from the perspective of psychological principles of perception and cognition. We will survey musical memory, perception of musical form, notation and its effect on how we perceive music, emotion in music, and aspects of performance. Examples will be taken from different historical periods and cultures. Students will be expected to perform simple pieces, present research in class and write numerous short papers.

Prerequisite(s): Prerequisites: MUS 102 Fundamentals of Music, MUS 111 Music Theory I, or permission of the instructor. Students should be reasonably fluent in reading music.

MUS 313 - Form & Analysis

A study of musical forms from the smallest units of sectional forms (motive, phrase) through binary, ternary, rondo, and sonata forms. Analysis of music of all common-practice periods embodying various structural principles and incorporating historical context and performance implications. Extensive analysis and listening; may include reading and writing assignments.

Prerequisite(s): MUS 211 - Music Theory III.

MUS 317 - Counterpoint

A study of composition focusing on the contrapuntal practices of the Renaissance and Baroque periods. Readings from historical treatises and secondary source readings, analysis of selected compositions addressing technical, performance, and musical-rhetorical issues. Intensive written exercises leading to several compositional projects.

Prerequisite(s): MUS 112 Music Theory II or permission of the instructor.

MUS 331 - The English Ayre

A study of the English Ayre and its cultural role in late-Elizabethan and Jacobean England. This course will examine the structural and rhetorical practices shared by poets and composers, applying analytical techniques specific to the ayre's texts, music, and their synthesis as song. These analyses will be placed within the social and political contexts of the period to demonstrate the ways in which the ayre reflected its cultural milieu and articulated social trends. Texts for the course will include treatises on poetic, music-compositional, and performance practices from the late sixteenth and early seventeenth centuries and secondary source readings in literary theory and musicology. The analyses of musical, literary, cultural, and performance practices will be applied in weekly practicums in class to create informed performances of the English Ayre repertoire culminating in a concert performed by the class.

Prerequisite(s): MUS 111 Music Theory I and MUS 112 Music Theory II.

MUS 335 - Techniques of the Avant Garde

A study of the compositional techniques and styles of the twentieth and twenty-first centuries. Exploration of recent pitch languages and music in which aspects other than pitch become central features. Influence of technology, rock styles, and other issues will be discussed. Score study, analysis, and written exercises leading to compositional projects in a variety of styles. Reading and listening assignments; semester project.

Prerequisite(s): MUS 211 Music Theory III.

MUS 340, 341, 440, 441 - Composition Workshops (0.5 units)

This course alternates between group meetings and individual lessons. Group meetings will provide an introduction to orchestration and instrumentation, as well as score study. Students will present sketches and have these sketches sight-read by the group. On alternating weeks students will have individual lessons. A Student Composers concert will conclude each semester.

Prerequisite(s): MUS 211 Music Theory III or permission of the instructor.

MUS 350 – Orchestration (0.5 units)

A systematic study of the capabilities of the instruments of the orchestra in musical composition. A thorough understanding of these capabilities will be mastered through a study of selected works for solo instruments, chamber works, and orchestral literature. Readings and listening assignments; analysis and written exercises; semester project.

Prerequisite(s): MUS 211 Music Theory III.

MUS 450 - CUE: Senior Seminar

This seminar for senior music majors explores selected issues and debates in current musicological thought through the application of critical methods from the fields of ethnomusicology, historical musicology, and music theory. Organized around a series of broad topics, readings for discussion will feature diverse repertories, including Western art music, non-Western art musics, popular musics, and folk musics. By reaching across scholarly fields and repertories, students will consider a wide range of music and writing about music, and will think critically about the relationships among music, ideas, and society - thereby synthesizing prior department experiences. The seminar culminates in a major research project on a topic of the student's choice.

MUS 960 - Music Internship

Each internship is to be designed in consultation with a faculty sponsor and an on-site supervisor, and will include an academic project to be defined by and submitted to the faculty sponsor for evaluation. Will be graded pass/fail.

Applied Music

Study in voice, piano, organ, and the various string, brass, woodwind, and percussion instruments. Departmental permission is required for enrollment. Depending on the instructor, students take either thirteen 45-minute lessons or ten 60-minute lessons per semester. A minimum of five hours individual practice time per week is expected from each student. Attendance at recitals, concerts, and/or studio classes may be required. An additional fee is charged

for this instruction which is not refundable after the drop deadline. Applied Music may not be taken on a pass/fail basis and may only be taken as an audit when it constitutes an overload and when it does not constitute the initial semester of a student's applied music study; permission from both the instructor and department chair is required in this exceptional case. Two semesters of Applied Music may be used to complete the general academic requirement in the Arts (AR).

MUS 900 - Class Applied Music (0.5 units)

Class study in voice, piano, conducting, or diction, as available. An extra fee is charged.

MUS 901 - Individual Applied Music - First Area (0.5 units)

Individual lessons. An extra fee is charged.

MUS 911 - Individual Applied Music - Additional Area (0.5 units)

Individual lessons in another area. An extra fee is charged.

MUS 920 - Techniques Course (0.25 units)

Technique development for students involved in the Moravian Music Education Certification Program.

Prerequisite(s): Permission of the instructor.

MUS 931 - Applied Music - Senior Recital I (0.5 units)

Preparation for a senior recital. An extra fee is charged.

MUS 932 - Applied Music - Senior Recital II (0.5 units)

Preparation for a senior recital. An extra fee is charged.

Performing Ensembles

Ensembles are offered only as zero course unit experiences graded on a satisfactory (S) or unsatisfactory (U) basis.

MUS 935 - College Choir

College Choir is a large mixed chorus, open to all students by audition or permission of the instructor. Previous choral experience and music literacy skills are helpful but not required. Students are introduced to a wide variety of sacred and secular music in various styles and languages. In addition to learning pieces for performance, students also investigate their repertoire in terms of historical context, social significance, religious and philosophical tradition, stylistic interpretation, textual meaning, poetic construction, and music compositional techniques. Singers hone their musicianship skills (hearing, sight-reading, intonation, ensemble awareness), increase their musical vocabulary, expand their stylistic horizons, improve their abilities in diction and text interpretation, and develop a confident and professional stage presence. The College Choir rehearses twice weekly, performs several times each semester, and constitutes the musical core of the annual Candlelight Carols services in December.

MUS 936 - Chamber Singers

Chamber Singers is a small, select choral ensemble open to all students by audition or permission of the instructor. Advanced musical skills are required. Students are introduced to a wide variety of sacred and secular music in various styles and languages. In addition to learning pieces for performance, students also investigate their repertoire in terms of historical context, social significance, religious and philosophical tradition, stylistic interpretation, textual meaning, poetic construction, and music compositional techniques. Singers hone their musicianship skills (hearing, sight-reading, intonation, ensemble awareness), increase their musical vocabulary, expand their stylistic horizons, improve their abilities in diction and text interpretation, and develop a confident and professional stage presence. The Chamber Singers rehearse twice weekly and perform several times each semester, including the annual Candlelight Carols services in December.

MUS 937 - Women's Ensemble

A female-only vocal ensemble open to students by audition or permission of the instructor. Previous choral experience is recommended but not required. The Ensemble meets once a week. Because there are two to four student-led sectionals each semester, students are expected to spend additional time learning music independently. Women's Ensemble performs concerts of various styles each semester on campus and, occasionally, off-campus.

MUS 938 - Opera Workshop

The Opera Workshop is designed to give advanced vocalists an opportunity to explore and perform operatic solo and ensemble pieces. Members should be concurrently enrolled for Individual Applied Music or College Choir. *Open to advanced students by instructor permission.*

MUS 939 - Collegium Musicum

This ensemble is dedicated to the performance of Medieval, Renaissance, and Baroque music. The members of the Collegium study early music performance practices and perform on period instruments. The ensemble performs one concert each semester

MUS 940 - Chamber Orchestra

The Chamber Orchestra consists of 20-30 string players plus winds, brass, and percussion, and performs works from the eighteenth, nineteenth, and twentieth centuries. The ensemble performs one concert each semester.

MUS 941 - Musica da Camera

This ensemble performs chamber music for winds and strings from the Baroque to the twentieth century. Rehearsals are collaborative, and students take leadership roles. One concert each semester and special events by request.

MUS 942 - Wind Ensemble

The Wind Ensemble provides performance opportunities in traditional and contemporary concert music for interested and qualified wind and percussion players.

Open to all students with permission of the director. Rehearsals are held twice weekly. Participation in all performances required.

MUS 943 - Jazz Big Band

The Jazz Ensemble is a select group of 20-25 members which performs a wide variety of jazz styles. There is one rehearsal a week and several performances take place during the year.

MUS 944 - Jazz Improvisation Ensemble

This group is devoted to the study and performance of improvised music. Students participating in the ensemble explore traditional, progressive, and experimental forms of jazz in order to develop a wide range of approaches to improvisation. The ensemble performs one concert each semester.

MUS 950 - Small Ensembles

Various types of small groups including flute ensemble, percussion ensemble, chamber music, etc.

Natural Science

Director: Dr. Joseph Keane, Associate Professor of Chemistry

The natural science major provides a broad-based program of study in the sciences that includes basic training in biology, chemistry, physics, and calculus and enables students to achieve advanced training in two of these areas. Since its inception, the program has been the major of choice for many students who have gone on in the health professions to become medical doctors, osteopaths, chiropractors, dentists, nurses, occupational therapists, and many other professionals. Because the major is very flexible, it has been useful for students interested in other careers such as patent law, technical writing, elementary and middle school teaching, and as a second major for many in the social sciences and humanities. Muhlenberg has several programs that can be combined with this major (see Cooperative Programs): (1) a program in dentistry with the University of Pennsylvania School of Dental Medicine, (2) a program in medicine with Drexel University School of Medicine and Lehigh Valley Hospital, (3) a program with the School of Forestry and Environmental Studies at Duke University, (4) a program in physical therapy at Thomas Jefferson University.

Major Requirements

Required Courses:

Eight basic courses in the sciences:

BIO 151 - Principles of Biology III: Cells & Organisms

BIO 152 - Principles of Biology III: Molecules & Cells

CHM 103 - General Chemistry I CHM 104 - General Chemistry II

MTH 121 - Calculus I MTH 122 - Calculus II

MTH 119 - Statistical Analysis

PHY 121 - General Physics I

PHY 122 - General Physics II

Four courses numbered 200 or greater in biology, chemistry, physics, and mathematics that focus the student's studies. Two courses in each of two departments.

Two courses numbered 300 or greater that continue the study in one or both of the selected departments.

One must be chosen from the following list of Culminating Undergraduate Experience courses:

BCM 441 - CUE: Advanced Biochemistry

CHM 090 and 490 - CUE: Chemistry Capstone Seminar

MTH 353 - CUE: Landmarks of Mathematics MTH 370 - CUE: The Art of Problem Solving

MTH 975 - CUE: Directed Research PHY 450 - CUE: Advanced Projects

Note: Prerequisite requirements for the specific CUE course must be met.

Students may sharpen their focus by completing additional courses in the sciences. Students seeking careers in the health professions should continue their focus in biology and chemistry. Biochemistry, genetics, microbiology, cell biology, metabolism, immunology, and organic chemistry are among the suggested courses.

Neuroscience (NSC)

Department Chair: Dr. Jeremy Teissére, Stanley Road, Associate Professor of Neuroscience

Associate Professors: Gotthard, Sprayberry

Assistant Professor: Williams

The major in neuroscience affords students the opportunity to develop rigorous foundational training in the neural underpinnings of mind and behavior within the context of the liberal arts. Course requirements of the major have been designed to balance biological, psychological, and philosophical approaches to the brain in order to broadly equip students with the fundamental knowledge and tools of the emerging interdiscipline of neuroscience. The critical skills required to complete this major will also foster creativity and proficiency in approaching problem solving, experimental design, and empirical analysis in neuroscience. In the broadest sense, graduates in neuroscience will confidently embrace the unknown, develop multiple strategies for generating new knowledge, and effectively articulate both what they do and do not understand. Given the broad curriculum, faculty scholarly expertise, and the many opportunities for faculty-student research collaborations, neuroscience majors are especially prepared for careers in academia, industry, or the clinic.

Honors Program

A student may work for honors by conducting research with a faculty mentor from the Neuroscience Program for two semesters during the senior year. Acceptance into the honors program is selective and based on the following criteria:

- 1. A minimum GPA of 3.50 in courses counting toward the neuroscience major.
- 2. Approval of an Honors Proposal submitted to a Neuroscience Program faculty member by the Fall of the Senior year. The student should work with the faculty member to develop the proposal which will be reviewed by an Honors Committee.
- 3. Availability of research positions within the laboratory of the faculty mentor.

Acceptance into the honors program does not mean that honors necessarily will be awarded. The Neuroscience Program will grant honors at commencement to majors who have fulfilled the following conditions:

- The candidate has met the expectations of two course units of research during the Senior year or the summer prior to the Senior year. Under rare circumstances, a highly active student may count research performed during the Junior year toward this requirement. Research counting toward honors work must occur under the NSC 970 Independent Study/Research designation. In all cases, research expectations will be clearly established by the faculty mentor.
- 2. The candidate has actively attended Neuroscience seminars and/or an affiliate departmental seminar series (including Biology, Psychology, and Philosophy Department seminar programs).
- 3. The candidate has submitted a senior thesis for review by the Honors Committee. The thesis should be a paper in standard scientific format. It should address a significant issue within neuroscience, provide substantial background on the subject, give a complete description of the experiments performed, and discuss the significance of the results. The Committee will judge the candidate's thesis based both on the scientific merit of the work and the quality of writing.
- 4. The candidate has presented the results of the honors research in the Neuroscience seminar, usually during the Spring semester of the senior year.

The Honors Committee will evaluate both the written thesis and the seminar of the candidate and make a determination as to whether Honors or no honors (with a passing grade) will be awarded.

Major Requirements

To declare and be retained as a neuroscience major, a student must maintain a 2.00 grade point average based on all required neuroscience, biology, chemistry, mathematics, philosophy, and psychology courses.

Required Courses:

Neuroscience majors must complete 15 courses: four core courses in neuroscience, three electives, and eight cognates.

I. Four core courses in neuroscience:

NSC 201 - Mind & Brain

NSC 310 - Brain & Behavior

NSC 311 - Neurons & Networks

NSC 401 - CUE: Advanced Seminar in Neuroscience

II. Eight cognate courses:

BIO 150 - Principles of Biology I: Organisms & Populations

BIO 151 - Principles of Biology II: Cells & Organisms

BIO 152 - Principles of Biology III: Molecules & Cells

CHM 103 - General Chemistry I

CHM 104 - General Chemistry II

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MTH 119 - Statistical Analysis
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MTH 121 - Calculus I

MTH 122 - Calculus II

MTH 223 - Calculus III

PHL 229 - Phenomenology

PHL 328, 338 - Philosophy of Mind

PSY 101 - Introductory Psychology

III. Three electives in neuroscience: At least one course must be drawn from List A.

List A

NSC 301, 302 - States of Consciousness

NSC 304 - Receptors & Channels

NSC 306 - Neuroprosthetics

PSY 410 - Memory & Amnesia

List B

BIO 205 - Cell Biology

BIO 215 - Genetics

BIO 220 - Biochemistry

BIO 240 - Developmental Biology

BIO 245 - Comparative Anatomy

BIO 250 - General Physiology

BIO 265 - Behavior

PHL 223 - Modern Philosophy

PHL 229 - Phenomenology

PHL 249 - Neuroethics

PHL 327, 337 - Philosophy of Language

PHL 328, 338 - Philosophy of Mind

PSY 212 - Learning & Behavior

PSY 214 - Sensation & Perception

PSY 240 - Abnormal Psychology

PSY 311 - Cognitive Processes

PSY 312 - Psychopharmacology

Students who elect to take PHL 229 to satisfy the philosophy cognate requirement may elect to take PHL 328/338 to satisfy an elective requirement, and vice versa.

In addition to the above cognate requirements, students interested in graduate study in neuroscience or the health professions are strongly encouraged to complete a year of organic chemistry, a year of introductory physics, a semester of statistical analysis, and a semester of introductory sociology.

Courses

NSC 115 - Drugs & Drug Abuse

In this course we will engage in a cross-disciplinary study of pharmacology by appealing to biological, sociological, historical, political, and anthropological points of reference. Our first discussions will center largely on the putative mechanisms by which drugs act in the central nervous system. We will also consider how power may define the representation of drugs in society and the resulting consequences for drug regulation. Additionally, we will discuss the relationship of colonialism to drug history, the social forces governing the perceived "moral" status of drug use, and the emerging ethical issues surrounding drug discovery. *Prerequisite(s): Students who have taken BIO 150, BIO 151, or BIO 152 need permission of the instructor to enroll.*Meets general academic requirement SC.

NSC 201 - Mind & Brain

The major trajectory of this course is to evaluate the project of neuroscience, and in so doing, assess the possibility that the mind is manifested in and caused by the brain. We will consider neural arguments about various states of mind, including dreaming, language, selfhood, agency, attention, and intention from a variety of disciplinary and interdisciplinary perspectives. Class discussions will center on working definitions of consciousness, experimental approaches to consciousness and self-knowledge, and dysregulations of mind. A laboratory will explore systems of consciousness from a physiological and phenomenological perspective. Three class hours and one and one-half laboratory hours per week.

Meets general academic requirement SC.

NSC 301, 302 - States of Consciousness

Critically examines the recent attempts by neuroscience to resolve the neural correlates of various states of consciousness. Our class conversations will broadly center on the philosophical and physiological traditions that guide this work. We will closely study the putative neural underpinnings of several states of consciousness, including sleep/dreaming, pain, meditation, ecstasy, and coma; in parallel, we will discuss how the resolution of neural function shapes and is shaped by social structures and cultural meanings.

Prerequisite(s): NSC 201 Mind & Brain.

Meets general academic requirement W when offered as 302.

NSC 304 - Receptors & Channels

A critical discussion of the structural and physiological principles of neurotransmitter receptor and ion channel signaling. Course lectures will introduce the foundational theories and methods of molecular pharmacology, biophysics, and structural biology. Topics discussed will include structural determinations of membrane proteins; receptor-ligand interactions; allosteric signaling of receptors; channel kinetics; and protein-protein signaling associations. Relevant primary literature will be introduced through class discussions and independent critical analyses.

Prerequisite(s): NSC 311 Neurons & Networks or BIO 220 Biochemistry or permission of instructor. Meets general academic requirement W.

NSC 306 - Neuroprosthetics

This course will eplore the state-of-the-art in assistive devices that connect directly to the nervous system, including cochlar implants, neuroprosthetic limbs, and other technologies. We will consider pragmatic questions of what signals to record, how to mathematically decode those signals, and how to maximize the useful lifetime of implanted devices. We will also consider the social context in which these technologies have been introduced - and sometimes rejected - and will imagine the ethical landscape for future developments.

Prerequisite(s): Prerequisite: BIO 152 - Principles of Biology III: Molecules & Cells

NSC 310 - Brain & Behavior

An examination of the biological basis of behavior in humans and other animals. Topics discussed will include neuroanatomy; sensory and motor systems; psychopharmacology and drug abuse; motivated behaviors; learning and memory; and neurological and psychological disorders. Research methods of behavioral neuroscience will be introduced through class discussions, relevant primary literature, and laboratory investigations. Three class hours and three laboratory hours per week. *Prerequisite(s): PSY 101 Introductory Psychology*.

NSC 311 - Neurons & Networks

An exploration of the molecular and cellular foundations of nervous system function. Topics discussed will include the ionic and electrical properties of neurons; the biochemistry of synaptic signaling; structure and function of ion channels and neurotransmitter receptors; neuronal and synaptic plasticity; and the functional regulation of basic neuronal circuits. Research methods of cellular and molecular neuroscience will be introduced through class discussions, relevant primary literature, and laboratory investigations. Three class hours and three laboratory hours per week.

Prerequisite(s): BIO 152 Principles of Biology III: Molecules & Cells.

NSC 401 - CUE: Advanced Seminar in Neuroscience

This course serves as a graduate-style seminar for the senior neuroscience major and will stress reading and discussion of primary texts, independent research writing, and critical analysis of timely issues within the field. Topics discussed may include synaptic mechanisms in memory and learning; analysis of simple neuronal circuits; cortical architecture; neuroendocrinology; the neural

basis of sleep and dreaming; pain mechanisms and integration; neurogenetics; neural and psychological disorders; and/or the relationship of neuronal function to behavior and consciousness. Three class hours per week.

Prerequisite(s): NSC 201 Mind & Brain, NSC 310 Brain & Behavior, and NSC 311 Neurons & Networks.

Meets general academic requirement W.

Philosophy (PHL)

Department Chair: Associate Professor Steven Coutinho

Professors: Schick, Sistare

Associate Professors: Doviak, Morgan, Robinson

Visiting Assistant Professor: Anderson

Philosophy aims at a comprehensive and coherent view of the world by critically examining our most basic beliefs about the nature of reality, knowledge, persons, and values. It involves scrutiny of the concepts that define who we are and give direction to our lives as well as exploration of the assumptions and methodologies fundamental to other disciplines. The student of philosophy develops skills in clarifying concepts, analyzing arguments, and assessing positions. The understanding and skills gained through the study of philosophy are valuable to all individuals and are highly prized by every profession, including law, medicine, government, and business. For those primarily interested in political philosophy, an interdisciplinary Philosophy/Political Thought major is available (see Philosophy/Political Thought, A.B.). For those primarily interested in science and medicine, there is an elective concentration in The Philosophy of Science and Medicine. For those primarily interested in law and morality, there is an elective concentration in Ethics, Law, and Justice.

Philosophy course offerings are classified under several categories: Introductory, Logic, History of Philosophy, Asian Philosophies, Ethics and Social Theory, Contemporary Areas and Movements, Seminars, and Individualized Instruction. The Introductory courses provide a broad-based exposure to issues that have stimulated philosophical inquiry. Logic courses furnish the student with the reasoning skills necessary to critically analyze and logically formulate arguments. Courses in the History of Philosophy examine the ideas that have helped to shape the course of Western civilization. Asian Philosophies courses include both surveys and in-depth study of philosophical views originating in China, India, and Japan. Courses in Ethics and Social Theory include theoretical approaches and applied issues in moral, social, and political philosophy. Contemporary Areas and Movements courses include those covering major philosophical fields and post-nineteenth century philosophy. CUE Seminar courses are offered once or twice yearly; Individualized Instruction includes independent study and internship opportunities.

Honors Program

An honors program is available to qualified students. To be considered for acceptance into the honors program students must have a grade point average of 3.30 or better in courses counting toward the major. Students wishing to complete honors work in Philosophy should declare their interest in writing to the department chair before the end of the spring semester of the junior year. Requirements for departmental honors in Philosophy include writing a substantial paper and defending it orally. If the completed project does not meet the standards for honors, the student will still receive credit for the semester with a grade determined by the professor.

Program Requirements

Major Requirements

A major in philosophy consists of nine courses, including:
One Logic course (*PHL 211 Formal Logic recommended*)

One course in the History of Philosophy (normally PHL 221 Ancient Philosophy or PHL 223 Modern

Philosophy)

One Ethics and Social Theory course

One Asian Philosophies course

One Contemporary Areas and Movements course

One CUE Seminar

Three Electives

No more than one Introductory course may be counted towards the major.

A minimum of two courses must be taken at the 300 level.

Students who major in Philosophy may choose elective courses as they see fit. However, students who wish to pursue a concentration may use their electives to satisfy the requirements for a designated concentration or a self-designed concentration.

Elective Concentrations

Concentration in the Philosophy of Science and Medicine

It is recommended that students who choose this concentration take PHL 211 - Formal Logic to satisfy their Logic requirement. In addition, students pursuing this concentration will choose three courses from the following:

PHL 229 - Phenomenology

PHL 237 - Philosophy of Science

PHL 241 - Biomedical Ethics

PHL 246 - Environmental Philosophy

PHL 249 - Neuroethics

PHL 328, 338 - Philosophy of Mind

PHL 331, 336 - Epistemology

PHL 332 - Metaphysics

Concentration in Ethics, Law, and Justice

It is recommended that students who choose this concentration take PHL 221 - Ancient Philosophy to satisfy their History requirement. In addition, students pursuing this concentration will choose three courses from the following:

PHL 105 - Conduct & Character

PHL 106 - Individual & Society

PHL 227 - Philosophy of Feminism

PHL 236 - Philosophy & the Arts

PHL 241 - Biomedical Ethics

PHL 242 - Law & Morality

PHL 245 - Business Ethics

PHL 246 - Environmental Philosophy

PHL 249 - Neuroethics

PHL 251 - Philosophies of China

PHL 333, 334 - Ethics

PHL 353 - Political Philosophy

Students who wish to emphasize political theory and law are encouraged to consider the Program in Philosophy/Political Thought, A.B.

Where there is compelling academic reason, students may petition the department chair to make a substitution to these concentrations.

Self-Designed Concentrations

In consultation with their advisor and the department chair, students may create their own concentration. Self-designed concentrations will consist of at least three courses unified by a single philosophical concept, theme, or approach. For example, a student might pursue a concentration in Asian Philosophy, the History of Philosophy, or Continental Philosophy.

Minor Requirements

A minor in philosophy consists of six courses, including:

One Logic course

One course in the History of Philosophy (normally either PHL 221 Ancient Philosophy or PHL 223

Modern Philosophy)

One Ethics and Social Theory course

One Asian Philosophies course

One Contemporary Areas and Movements course

One Elective

No more than one Introductory course may be counted towards the minor.

A minimum of one course must be taken at the 300-level.

Philosophy Courses are numbered as follows:

100 through 199 - open to all students; designed as a first philosophy course

200 through 299 - normally open only to students beyond the first year of college

300 through 399 - previous course work in philosophy required

Students are strongly advised to complete several courses at the 200-level before taking any 300-level course or Seminar.

Introductory Courses

PHL 104 - Philosophy East & West

A comparison/contrast of some of the great systems of Eastern and Western philosophical thought. Topics will include selves and persons, immortality and reincarnation, theism and atheism, mysticism and rationalism, perception and illusion, monism and pluralism, being and nothingness.

Meets general academic requirement HU and DE.

PHL 105 - Conduct & Character

An introduction to ethics through the study of leading perspectives and familiar moral issues. We engage in moral choice and action every day of our lives, but we also struggle with questions about our moral life. Among the questions the course addresses are: Is there genuine moral truth, or is it all just 'opinion'? What is the relation of conduct to character? What standards might we use in judging conduct or character, and on what are they based? How do these various standards apply to concrete problems in contemporary life? Why should we struggle to be moral at all?

Meets general academic requirement HU.

PHL 106 - Individual & Society

An introduction to the field of philosophy through an exploration of selected problems in socio-political theory with special attention to those that confront us in contemporary social life. These might include the grounds for political authority, the nature of individuals and social groups, our knowledge of the social good, and the comparative roles of reason, power, and wealth in human relations. Specific topics may vary.

Meets general academic requirement HU.

PHL 108 - Being & Knowing

An inquiry into the nature of reality and knowledge. What sort of thing is the universe? Is it composed solely of matter, or does it contain immaterial things like spirits? How can we tell? Is sense experience the only source of knowledge, or are there other ways of knowing? Why are we here? Were we created by God as part of a divine plan, or did we come into being as the result of purely natural processes? Is there a God? If so, what sort of being is he (she) (it)? What kind of creatures are we? Do we have a soul that will survive the death of our bodies, or will we cease to exist when our bodies die? Do we have free will? Are we masters of our destiny, or are our actions caused by forces beyond our control? We will trace the progression of philosophical thinking on these issues from their earliest formulations to the present day. Readings will include selections from both classic and contemporary philosophers.

Meets general academic requirement HU.

Logic

PHL 110 - Principles of Reasoning & Argument

A study of the principles and methods of correct reasoning. The course is designed to promote the development of skills in recognizing, analyzing, and evaluating arguments. Both deductive and non-deductive inferences will be considered; identification of common fallacies in reasoning will be emphasized.

Meets general academic requirement RG.

PHL 211 - Formal Logic

The formal analysis and assessment of deductive arguments using modern symbolic logic, including propositional and predicate logic.

Meets general academic requirement RG.

History of Philosophy

PHL 221 - Ancient Philosophy

The beginnings of western philosophy. A study of the enduring philosophical issues in the works of Plato and Aristotle with attention to their origins in pre-Socratic writings. Consideration will also be given to the development of Hellenistic thought and to the philosophical contributions of Augustine and Aquinas.

Meets general academic requirement HU.

PHL 223 - Modern Philosophy

European philosophical thought during the seventeenth and eighteenth centuries. A study of some of the most important attempts to formulate a systematic world-view consistent with modern science and its implications for an understanding of persons, knowledge, and society. Included are the continental rationalists Descartes, Spinoza, and Leibniz; the British empiricists Locke, Berkeley, Hume; and the critical idealism of Kant.

Meets general academic requirement HU.

PHL 226 - American Philosophy

A survey of American philosophical thought from the Colonial era through the twentieth century with special emphasis on the moral foundations of our political system, the history and development of the women's and civil rights movements, the transcendental themes of individualism and optimism, and the meaning and value of religious and aesthetic experience. Readings drawn from the works of Jefferson, Franklin, Thoreau, Emerson, DuBois, Stanton, King, James, and Dewey among others. *Meets general academic requirement HU*.

PHL 325, 326 - Nineteenth Century Philosophy

European philosophical thought during the nineteenth century. A study of some significant issues and projects that emerged in the wake of Kant's 'critical' philosophy and in a society increasingly shaped by scientific and industrial development. Readings will include works by Hegel, Marx, Kierkegaard, and Nietzsche.

Prerequisite(s): Any previous course in philosophy.

Meets general academic requirement W when offered as 326.

Contemporary Areas and Movements

PHL 229 - Phenomenology

In the twentieth century phenomenology emerged as a new and powerful philosophical program. At its core lay the impulse to reveal the reality that gets obscured by one-dimensional activity and "everyday" thinking. The thinkers who carry out this project reveal both similarities in method and provocative variation in results. For example, some phenomenologists ground reality in the first-person experience of time, whereas others privilege the spatial experience of persons in being with others. We will examine historical and contemporary variations of phenomenology and read figures such as Edmund Husserl, Maurice Merleau-Ponty, Alia Al-Saji, Lewis Gordon, and Elizabeth Grosz.

Meets general academic requirement HU.

PHL 234 - Philosophy of Religion

An examination of the nature of religion, the meaning of religious claims, and the justification of religious beliefs. The views of both religious adherents and critics will be studied. Primary focus will be on the twentieth century writings in the attempt to explore the possibilities of intellectually responsible religious commitment in the contemporary world.

Meets general academic requirement HU.

PHL 236 - Philosophy & the Arts

Art works and aesthetic objects are frequently held up as some of the most civilized and civilizing components of any society or community. Foundations preserve their contribution to identity, and heritage, museums prolong their status in cultural memory, and institutions receive and distribute funding to ensure their continued role in education and social values. Yet art and aesthetics can also serve as powerful vehicles of critique and disobedience - sometimes attacking these very foundations, museums, and institutions, in addition to government and other bodies of power - in any given community or social whole. It is this double nature of art as enacting both civility (through the aesthetic values of beauty, harmony, symmetry, and proportion) and disobedience (through the aesthetic orientations of ugliness, dissonance, the uncanny, sublimity, and incongruity) that we will explore in this course. After initially considering some aesthetic stereotypes of beauty versus ugliness as documented throughout the ages, our course will look to contemporary applications of the relationship among art, civility, and protest.

*Meets general academic requirement HU.

PHL 237 - Philosophy of Science

An examination of the goals, methods, and assumptions of modern science. What distinguishes scientific explanations from non-scientific ones? How are scientific theories discovered and confirmed? What criteria of adequacy are used to decide between competing scientific theories? Are all sciences reducible to physics? Has physics proven that the world does not exist independently of our consciousness? Does science give us objective knowledge of the world? Is science a religion? *Meets general academic requirement HU*.

PHL 327, 337 - Philosophy of Language

A study of major movements in twentieth century philosophy arising out of the study of language and meaning. This "linguistic turn" in philosophy includes logical atomism, logical positivism, ordinary language philosophy, and deconstruction. Readings will be drawn from the work of Russell, Wittgenstein, Ayer, Dummett, Ouine, and Derrida.

Prerequisite(s): Any previous course in philosophy.

Meets general academic requirement W when offered as 337.

PHL 328, 338 - Philosophy of Mind

This course is a survey of the fundamental issues, controversies, and methods in contemporary philosophy of mind. Topics will include the relation between the mental and the physical, the problem of consciousness, perception, intentionality, mental causation, and the self. The course will also examine various methods for studying the mind, such as phenomenology, conceptual analysis, and natural scientific approaches.

Prerequisite(s): Any previous course in philosophy or NSC 201 Mind & Brain. Meets general academic requirement HU (and W when offered as 338).

PHL 331, 336 - Epistemology

An exploration of the nature, scope, and sources of human knowledge. When and under what conditions do people have knowledge? Do we really know the things that we think we know? Is knowledge acquired by using the senses, the intellect, or both? Although some attention will be paid to the views of historical figures, the focus of the course will be on contemporary

issues. Topics may include skepticism, the problem of analyzing the concept of knowledge, theories about the nature and structure of justification, a priori knowledge, feminist theories of knowledge, and the naturalization of knowledge. *Prerequisite(s): Any previous course in philosophy.*

Meets general academic requirement W when offered as 336.

PHL 332 - Metaphysics

An inquiry into the ultimate nature of reality and our relationship to it. What sorts of things exist? Does the world consist solely of material objects or does it also contain immaterial objects such as God, souls, or numbers? What is the relationship between the mind and the body? Do humans have free will? Can humans survive the death of their bodies? Do our best theories reveal the truth about reality or do they merely reveal the ideological biases of the dominant group? Topics may include realism vs. anti-realism; nature of space and time; persons, minds, and free will; the problem of universals; and the existence of God. *Prerequisite(s): Any previous course in philosophy.*

Meets general academic requirement W.

Asian Philosophies

PHL 250 - Philosophies of India

A foundational course that explores the central schools of Indian philosophy. Through readings of primary texts we will develop a deeper understanding and appreciation of the world views, styles of thinking, and cultures of South Asia. We will examine several of the most important concepts, methods, texts, philosophers, and schools of India thought. Topics will be taken from *Vedas*, *Upanishads*, Samkhya, Yoga, Nyaya, Vaisheshika, Mimamsa, Vedanta, Jainism, Carvaka, early Buddhist thought, Madhyamaka and Yogacara Buddhist philosophies, and twentieth century appropriations and developments of traditional philosophical themes.

Meets general academic requirements HU and DE.

PHL 251 - Philosophies of China

A foundational course that explores the central schools of Chinese philosophy. Through readings of primary texts we will develop a deeper understanding and appreciation of the world views, styles of thinking, and cultures of East Asia. We will examine several of the most important concepts, methods, texts, philosophers, and schools of Chinese thinking, including Confucianism (*Analects, Great Learning, Doctrine of the Mean, Mencius, and Xunzi)*, Mohism (Mozi and the later Mohists), Daoism (Laozi, Zhuangzi), Legalism (Hanfeizi), the Logicians (Huizi and Gongsun Longzi), and Chinese Buddhist philosophies. *Meets general academic requirements HU and DE.*

PHL 351 - Daoist Philosophies

An advanced course in Daoist philosophies. In this course we shall read closely, discuss and interpret, analyze, and engage critically with the three central texts of Daoist philosophical thought: the *Laozi*, also know as the *Daodejing (Tao Te Ching)*, the *Zhuangzi (Chuang Tzu)*, and the *Liezi (Lieh Tzu)*. The course may also include the "Neo-Daoist" philosophical commentaries of Wang Bi and Guo Xiang, two influential thinkers of the Han and Jin dynasties. We shall attempt to trace the development of Daoist ideas, especially through the various schools represented in the chapters of the Zhuangzi.

Meets general academic requirement W.

Ethics and Social Theory

PHL 227 - Philosophy of Feminism

This course examines the historical development and current state of feminist theory as both a critical perspective and an area of systematic inquiry. We will investigate feminist models of knowledge construction, political theory, gender theory, and ethics as they intersect with each other and drive further the development of feminist theory. We will focus on postcolonial, global, and transnational feminisms.

Meets general academic requirement HU.

PHL 241 - Biomedical Ethics

An examination of the ethical issues raised by such practices as abortion, euthanasia, birth control, life prolonging techniques, human experimentation, recombinant DNA research, and cloning. How might such practices affect the individual and society?

Are such practices ethical? Do patients and/or doctors have a right to refuse treatment? What considerations are relevant in making life or death decisions? How should scarce medical resources be allocated?

Meets general academic requirement HU.

PHL 242 - Law & Morality

An examination of issues at the intersection of law and morality. Readings drawn from historical and contemporary thinkers as well as from legal texts. Topics may include the legitimate extent of legal control of individuals; the relation of legal validity and moral value; the role of moral reasons in judicial decision making; the nature of legal justice; legal obligation and forms of disobedience. *Not suitable for first year students*.

Meets general academic requirement HU.

PHL 245 - Business Ethics

An examination of the ethical problems encountered in business. What obligations do employers have to their employees to provide suitable working conditions, follow fair hiring and promotion procedures, etc.? What obligations do businesses have to consumers to provide product information, use fair advertising techniques, etc.? What obligations do businesses have to the public to conserve limited resources, preserve the environment, etc.?

Meets general academic requirement HU.

PHL 246 - Environmental Philosophy

Examination of several theoretical approaches to the question of human relations with the nonhuman world and to associated questions about valuation, human society, and human morality. Theoretical approaches include utilitarianism, Kantianism, and right-based moralities, along with contemporary developments such as biocentrism, ecofeminism, and deep ecology. Attention is given, where possible, to non-European perspectives. Applied topics include sustainability and our responsibilities to future generations, population ethics and consumerism, animal rights, and moral issues surrounding climate change. *Meets general academic requirement HU*.

PHL 249 - Neuroethics

Advances in neuroscience, biochemistry, and genetics have brought a new set of ethical questions to the fore. We now have the ability to not only monitor brain functioning in real time (through such devices as PET scanners and MRIs) but also to alter the structure of the brain (through drugs, surgery, implants, genetic engineering, etc.). But the brain is the seat of the mind; it directly affects how we think, feel, and act. Any change in brain structure can have a profound effect on the self. In this course we will examine the ethical implications of the new brain scanning and brain altering technologies. How should they be used? How should they be regulated? For example: If we could identify people with brain structures that are highly correlated with violent behavior, should we force them to undergo treatment? If brain scanning can reliably tell when people are lying, should that evidence be used in court? If brain-altering procedures can erase memories, increase intelligence, or alter personalities, when, if ever, should it be used?

Meets general academic requirement W.

PHL 333, 334 - Ethics

Examination of the theoretical structures and historical movement of predominantly western moral theories as well as of recent critical responses to traditional approaches. Perspectives typically covered include ancient and modern virtue theories, utilitarianism, Kantianism and its descendants, the critical views of Nietzsche or Marx, and contemporary Anglo-American work. Related issues, such as indeterminacy, pluralism, and the nature of moral judgment are also addressed.

Prerequisite(s): Any previous course in philosophy.

Meets general academic requirement W when offered as 334.

PHL 353 - Political Philosophy

An examination of central issues and concepts in political philosophy in the work of historical and contemporary thinkers. Topics may include the meaning and value of liberty, equality, and justice; competing political perspectives such as anarchism, liberalism, conservatism, fascism, etc.; debates within particular perspectives; the grounds of political legitimacy and of political obligation.

Not suitable for first year students

Meets general academic requirement HU.

CUE Seminar

PHL 500-549 - CUE: Seminar

An investigation into a selected philosophical problem, text, thinker, or movement carried on by readings, discussions, and papers. The seminar is designed to provide majors, minors, and other qualified students with more than the usual opportunity to do philosophy cooperatively and in depth.

Meets general academic requirement W.

Individualized Instruction

PHL 960 - Philosophy Internship

Philosophy/Political Thought

Dr. Chris Sistare, Professor of Philosophy

Dr. Giacomo Gambino, Professor of Political Science

This interdisciplinary major focuses on American and Western European political philosophy, integrating appropriate political science and philosophy courses to permit a comprehensive examination of the Western state and its functions, justifications, and ideological foundations. Political theory courses are complemented by philosophy courses that examine the basic assumptions that underlie the concept of the state and society in Western history. The major is recommended to pre-law students and students interested in graduate study in this area. Students in this major may not take any courses in philosophy or political science on a pass/fail basis. To continue as a major the student must maintain a 2.00 grade point average in all courses required for the program. Majors may satisfy the writing intensive course requirement for the major in philosophy or political science.

Major Requirements

Prerequisites: (One course chosen from the following)

PHL 105 - Conduct & Character PHL 106 - Individual & Society PSC 201 - Political Ideologies

Political Science Courses: (Choose two)

PSC 260, 261 - American Political Thought

PSC 262, 263 - Utopia & Its Critics PSC 264 - Politics & Public Space

PSC 348, 349 - Democratic Theory

PSC 356, 357 - War & Justice

One additional political science course: Selected in consultation with the faculty advisor from such courses as:

PSC 205 - Constitutional Law I

PSC 216 - Environmental Politics & Policymaking

PSC 339, 340 - Theories of International Relations

Philosophy Courses:

PHL 242 - Law & Morality

Choose two:

PHL 221 - Ancient Philosophy

PHL 333, 334 - Ethics

PHL 353 - Political Philosophy

One additional philosophy course: Selected in consultation with the faculty advisor from such courses as:

PHL 245 - Business Ethics

PHL 246 - Environmental Philosophy PHL 251 - Philosophies of China

Seminar: (Choose one)

PHL 500-549 - CUE: Seminar

PSC 450 - Seminar on Modernity & Its Discontents

Physical Education (PED)

Program Director: Professor Linda Andrews

All Muhlenberg College students are required to enroll PED 050 - Principles of Fitness & Wellness which meets the one semester physical education requirement.

Aside from PED 050 - Principles of Fitness & Wellness, all other physical education courses are offered on an elective basis. Department of Physical Education courses are offered as zero course unit experiences graded on a satisfactory (S) or unsatisfactory (U) basis. They are taught on both a semester (14 weeks) and quarter (7 weeks) calendar.

Courses

PED 050 - Principles of Fitness & Wellness (0 course units)

This course is designed to develop a greater understanding of fitness and wellness concepts in order to achieve the highest potential of personal well-being. It is divided into a wellness component and a fitness component. The wellness component will emphasize concepts and individual needs in order to practice behaviors that will lead to positive outcomes in the seven dimensions of wellness: physical, emotional, intellectual, social, environmental, occupational, and spiritual. Students will be introduced to various experiences addressing the cardiovascular, muscular, and flexibility components of fitness.

Meets general academic requirement PE.

Fitness Courses

Emphasis on the health related components of physical fitness (cardiovascular, muscular strength, muscular endurance, flexibility, and body composition).

PED 046 – Yoga (0 course units)

Physical Science

Director: Dr. Jane Flood, Associate Professor of Physics

Professors: Anderson, Dunham, Shive

Associate Professors: Clark, Fadem, Kussmaul

This program is designed for those students wishing to base a science and engineering career on a strong liberal arts education. Students can combine this major with a business minor, pursue education, enter high-tech industry, or continue for a degree in engineering, materials science, surface science, and related fields. Students can spend three to four years at Muhlenberg and then transfer to Columbia University to receive a Bachelor of Science degree from Muhlenberg and a second Bachelor of Science degree from Columbia.

Major Requirements

Eight basic courses in the sciences:

CHM 103 - General Chemistry I CHM 104 - General Chemistry II

CSI 102 - Computer Science I: Introduction to Game Programming

CSI 104 - Computer Science I: Introduction to Robotics

CSI 106 - Computer Science I: Introduction to Multimedia Computing

MTH 121 - Calculus I MTH 122 - Calculus II

MTH 227 - Differential Equations

PHY 121 - General Physics I

PHY 122 - General Physics II

Four courses numbered 200 or greater that focus the student's interest in two of the disciplines: chemistry, computer science, mathematics, and physics. Two courses must be taken in each of the two disciplines.

One course numbered 300 or greater that continues the study in one of the chosen disciplines.

Successful completion of a CUE from one of the physical science disciplines chosen as a concentration at the 200-level.

CHM 090 and 490 - CUE: Chemistry Capstone Seminar

CSI 370 - CUE: Computer Science Seminar MTH 353 - CUE: Landmarks of Mathematics MTH 370 - CUE: The Art of Problem Solving

PHY 450 - CUE: Advanced Projects

Physics (PHY)

Department Chair: Associate Professor Brett Fadem

Associate Professors: Clark, Flood

The study of physics enables students to develop the important skills of deductive and analytical reasoning. It provides an understanding of natural phenomena and demands that the student be able to express an intuitive model of nature in mathematical terms. In short the study of physics is the study of problem-solving. The skills developed help to prepare the graduate for the ever-changing technical world in which we live and for life in general.

PHY 100-110 Physics for Life, PHY 111 - Introduction to Astronomy, PHY 113 - Cosmology: The Scientific Exploration of the Universe, and PHY 140 - The Physics of Music are designed to meet the needs of all students. PHY 121 - General Physics I, PHY 122 - General Physics II, and courses numbered 200 or greater are designed for those students preparing for careers in medicine, engineering, and specialized scientific fields. The major is designed to provide a strong background in classical and modern physics and includes a substantial component of laboratory experience. Students who complete the major program will have an undergraduate training in physics that will enable them to find employment, teach at the secondary level, or attend professional or graduate school in a variety of fields and disciplines.

Teacher Certification

Students seeking certification for the teaching of physics in secondary schools are required to take PHY 235 Nuclear & Particle Physics as the course numbered between 200 and 399.

Program Requirements

Major Requirements

Required Courses:

PHY 121 - General Physics I

PHY 122 - General Physics II

PHY 213 - Modern Physics

PHY 216 - Analog & Digital Circuits

PHY 241, 242 - Thermal & Statistical Physics

PHY 319 - Analytical Mechanics

PHY 329 - Electromagnetism

PHY 450 - CUE: Advanced Projects

One other physics course numbered between 200 and 399

In addition, the student must complete:

MTH 121 - Calculus I

MTH 122 - Calculus II

Two additional courses in mathematics chosen from:

MTH 223 - Calculus III

MTH 226 - Linear Algebra

MTH 227 - Differential Equations

Students interested in graduate work in physics or engineering will be encouraged to elect additional physics and mathematics courses.

In addition to a major in physics, the College offers an interdisciplinary Physical Science Major. The physical science major is specifically designed to meet the core courses required for students interested in pursuing the Pre-Engineering Combined Plan program with Columbia University.

Minor Requirements

The department offers a minor in physics, requiring a minimum of six course units, in physics, including:

PHY 121 - General Physics I

PHY 122 - General Physics II

A student interested in the minor in physics should consult with the faculty advisor to develop a program suited to the individual's vocational and/or personal objectives. A student may be advised to enroll in mathematics courses beyond MTH 121 - Calculus I in order to complete a specific minor program successfully.

Courses

PHY 100-110 - Physics for Life

Physics for Life is a collection of courses that introduce students to the concepts of physics and physical science. Through indepth study of simple physical systems, students gain direct experience with the process of science. Each course in this collection concentrates on one or more topics, including but not limited to the following: properties of matter, heat and temperature, light and color, magnets, electric circuits, fluids, and motion. These courses are designed for students who do not intend to pursue further study or a career in physics or physical sciences.

The courses are not open to students who have completed PHY 121: General Physics I or PHY 122: General Physics II without permission of the instructor.

Prerequisite(s): No mathematical preparation beyond secondary school algebra and geometry is required.

PHY 101 - Circuits, Science, and the World

This course uses the study of electric circuits to introduce elements of the scientific method, including the construction of scientific models, testing of hypotheses, and problem solving with the use of a validated hypothesis. The majority of the course is conducted via guided inquiry with students largely formulating, testing, and refining their own hypotheses and very little traditional lecture. A second theme of the course is scientific literacy and how to think about scientific issues that can impact our day-to-day lives. One or more topics of current interest such as global climate change will be examined through the same lens as applied to circuits: What are the predictions of the relevant scientific models, and how well do they match the data? This course satisfies the environmental perspective for EDU certification.

Meets general academic requirement SC.

PHY 102 - Theory to Tech

An activity-based course designed to allow students to investigate some of the most ubiquitous features of the natural world such as light and sound. Using both laboratory equipment belonging to the College and student purchased electronics kits, topics as diverse as color perception and audio speakers will be explored. Online tools made available on Canvas will serve as the mechanism for students to undertake the activities, and extensive use will be made of both simulations and the mobile laboratory platform made available by the kits. Along the way, students will learn about electrical circuits, quantum mechanics, nuclear physics, and climate change. This course satisfies the environmental perspective for EDU certification.

Meets general academic requirement SC.

PHY 103 - Heat, Buoyancy, and Climate Change

This course is a lab-based, inquiry driven introduction to concepts in physical science. The course focuses on heat, temperature, and buoyancy and their relationship to issues influencing global climate change. Students will develop fundamental scientific ideas through activities modeling scientific investigation. No mathematical preparation beyond secondary school algebra and geometry is required. This course satisfies the environmental perspective for EDU certification.

Meets general academic requirement SC.

PHY 104 - Light, Color, & Electric Circuits

This course is a lab-based, hands-on introduction to basic concepts in physical science involving light, color, and electric circuits. Students will analyze simple systems in detail and through observations, develop basic physical concepts. A guided inquiry approach is utilized with an emphasis on scientific reasoning and the process of going from observations to conclusions. Students will work with different ways to represent physical ideas: in words, with diagrams, with formulas, and with graphs. Students will relate these ideas to real-world situations. Investigation of electric energy in circuits serves as a bridge to explore environmental aspects of energy usage. This course satisfies the environmental perspective for EDU certification. *Meets general academic requirement SC*.

PHY 111 - Introduction to Astronomy

A study of the structure, motions, and evolution of the bodies of the physical universe. Emphasis is given to understanding physical principles and the techniques used by astronomers to study the universe. Topics of special interest include the structure of the solar system, the properties of stars, stellar evolution and collapse, the structure of galaxies, and cosmology. *Meets general academic requirement SC*.

PHY 113 - Cosmology: The Scientific Exploration of the Universe

We are continually seeking the answers to the age-old questions about the origin, age, composition, structure, and ultimate fate of the universe. Just as the cosmos is changing, our views of the cosmos are changing as new observations and interpretations emerge. This course will examine the generally accepted cosmological models and the personalities responsible for these models from the time of the ancient Greeks up to the present. Each will be examined in light of the observational data available at the time. Primary emphasis will be given to understanding the most current observations about the universe and the prevailing inflationary Big Bang model of the universe. Offered as a course designed for Muhlenberg Scholars.

Meets general academic requirement SC.

PHY 121 - General Physics I

An introductory, calculus-based physics course. Discussions, demonstrations, and problem solving are emphasized during lecture periods. The activity-based component meets in the laboratory where concepts are explored through experimentation and other hands-on activities. Follow-up discussions, demonstrations, and problem solving are emphasized during lectures. Topics covered include one and two-dimensional kinematics and dynamics, momentum, energy, rotational kinematics and dynamics.

Pre- or co-requisite: MTH 121 Calculus I Meets general academic requirement SC.

PHY 122 - General Physics II

Topics covered are electrostatics, dc circuits, magnetism and electromagnetic induction, wave optics, ray optics. Follows the same weekly format as General Physics I.

Prerequisite(s): PHY 121 General Physics I. Meets general academic requirement SC.

PHY 140 - The Physics of Music

The Physics of Music is designed for students with an interest in the phenomena of sound. This inquiry-based course offers hands-on activities to relate the physics of sound to the students' everyday experiences of music. The theoretical principles of music, the ways composers write, the design of musical instruments, and our perceptions of music all have their foundations in physics. By studying the physical principles of simple harmonic motion, resonance, harmonic series, waveforms, Fourier analysis and electronic synthesis, we will relate the science of sound to the art of music. *Does not count toward the physics major or minor.*

Prerequisite(s): MUS 111 Music Theory I or permission of instructors. Meets general academic requirement SC.

PHY 213 - Modern Physics

An introduction to twentieth century developments in physics with an emphasis on the special theory of relativity, Rutherford scattering, introduction to quantum theory, atomic structure, and nuclear energy.

Prerequisite(s): PHY 122 General Physics II.

PHY 216 - Analog & Digital Circuits

Through a mix of laboratory and classroom work students will build and analyze analog and digital circuits found in many scientific and computer applications. Specific topics include passive and active filters, electronic feedback, operational amplifiers, oscillators, A/D and D/A conversion, digital waveshaping, and instrumentation.

Prerequisite(s): PHY 122 General Physics II.

PHY 226 - Optics: From Lenses to Lasers

The student will explore the field of optics, starting with the fundamentals of waves and electromagnetic theory through geometrical and physical optics and culminating in the study of selected topics from modern optics. The modern topics may include lasers, optical data processing, holography, or nonlinear optics. This course meets for two hours, twice a week, and will be taught in a laboratory/discussion format.

Prerequisite(s): PHY 122 - General Physics II.

PHY 235 - Nuclear & Particle Physics

Elementary particles are the building blocks of nature. The "standard model" describes the interaction of these building blocks and constitutes the most comprehensive understanding of the physical world in existence. An overview of the standard model will be presented as well as topics in nuclear physics. Discussion and hands on experience with particle detectors will be included.

Prerequisite(s): PHY 122 - General Physics II

PHY 241, 242 - Thermal & Statistical Physics

The laws of thermodynamics, their consequences, and applications. Kinetic theory of an ideal gas and an introduction to statistical mechanics.

Prerequisite(s): PHY 122 General Physics II.

Meets general academic requirement W when offered as 242.

PHY 250 - Simulating Science

Computer simulations are an integral part of contemporary basic and applied science and computation is becoming as important as theory and experiment. The ability "to compute" is now part of the essential repertoire of research scientists. This course will introduce students to methods of computer simulation with applications to physics, biology, chemistry, and environmental science. Possible topics include chaotic dynamics (physics), how populations change with time (biology), the kinetic theory of

gases (chemistry), and the change over time of pollution levels in lakes (environmental science). No programming experience is necessary. Elements of structured programming will be presented as needed.

Prerequisite(s): PHY 121 General Physics I.

PHY 319 - Analytical Mechanics

A detailed study of the kinematics and dynamics of particles, systems of particles, and rigid bodies. Newtonian, Lagrangian, and Hamiltonian formulations of classical mechanics will be considered with applications to oscillators, gravitation, projectile motion in the presence of frictional forces, and motion in electromagnetic fields. Einstein's theory of special relativity will also be studied.

Prerequisite(s): PHY 122 General Physics II and MTH 122 Calculus II.

PHY 329 - Electromagnetism

A study of electrostatics, magnetostatics, electrical currents, and their effects. Maxwell's equations are derived. Vector methods are stressed and field notation is used.

Prerequisite(s): PHY 319 Analytical Mechanics.

PHY 341 - Introduction to Quantum Mechanics

Origin of quantum concepts; the wave function and its interpretation; the Schrodinger equation; treatment of the free particle; potential barriers and wells; the linear harmonic oscillator and the hydrogen atom. Representation of dynamical variables as operators and matrices; introduction to perturbation theory.

Prerequisite(s): PHY 213 Modern Physics and PHY 319 Analytical Mechanics.

PHY 450 - CUE: Advanced Projects

Primarily a laboratory course focused on exploring classic and contemporary experiments from atomic, nuclear, thermal, and quantum physics, with an emphasis on interfacing instrumentation and error analysis. This course will culminate in an extended experimental or theoretical research project. Students will present results in both written and oral presentations. Offered every spring.

Prerequisite(s): PHY 213 Modern Physics and PHY 216 Analog & Digital Circuits plus one of the following: PHY 241, 242 Thermal & Statistical Physics, PHY 319 Analytical Mechanics or PHY 329 Electromagnetism.

Meets general academic requirement W.

Political Economy and Public Policy

Director: Dr. Christopher Herrick, Professor of Political Science *Professors:* Borick, Hashim, Kish-Goodling, Raymond, Slane

Associate Professors: Deegan, Knox, Mello

PEPP Advisors: Herrick, Hashim

Our economic system does not operate in a vacuum. The issues we address as a society, such as taxation, environmental protection, regulation of business, and trade policy, are greatly influenced by the political interests of powerful constituencies. A variety of interest groups, including labor unions, businesses, taxpayers, environmentalists, consumers, and retired citizens attempt to achieve economic ends at least in part by political means. The Political Economy and Public Policy major emphasizes these interactions between the economic and political systems through course work in both economics and political science. It is excellent preparation for those interested in careers in the public policy arena or those who intend to pursue graduate study in economics, political science, public policy, or the law.

Students in this major may not take any courses in economics or political science on a pass/fail basis. To continue as a major, the student must maintain a 2.00 grade point average in all course work required for the program. Majors may satisfy the writing intensive course requirement for the major in economics or political science.

Major Requirements

Prerequisites:

ECN 101 - Principles of Macroeconomics

ECN 102 - Principles of Microeconomics

PSC 101 - Introduction to American National Government

PSC 103 - Introduction to Comparative Politics & International Relations

MTH 121 - Calculus I

Core Courses:

ECN 220 - Intermediate Microeconomic Theory

ECN 222, 223 - Intermediate Macroeconomic Theory

PSC 301 - Political Science Research Methods

PSC 960 - Political Science Internship

Required Pair:

ECN 490 - CUE: History of Economic Thought AND

PSC 343 - International Political Economy

Elective Pair: (Choose one)

1. ECN 332, 333 - Public Finance AND

PSC 219, 220 - Public Administration & Policy Implementation **OR**

PSC 221 - Government Regulation of Business OR

PSC 400 - Seminar in Urban Policy & Planning

2. ECN 251, 252 - Development Economics **OR**

ECN 334, 335 - International Trade & Globalization AND

PSC 339, 340 - Theories of International Relations OR

PSC 341 - American Foreign Policy

3. ECN 245, 246 - Environmental Economics AND

PSC 216 - Environmental Politics & Policymaking OR

PSC 330, 331 - Comparative & International Environmental Policies

4. ECN 243 - Health Care Economics AND

PSC 213 - Public Health Policy

5. ECN 251, 252 - Development Economics AND

PSC 232 - Governments & Politics of East Asia OR

PSC 237 - Government & Politics of Africa **OR**

PSC 244, 245 - Government & Politics of Latin America **OR**

PSC 248, 249 - Governments & Politics of the Middle East

With the approval of the appropriate program director, a seminar or special topic course may be substituted for an economics or political science course in the optional pair area. PSC 960, Internship in Local Government, will be arranged to meet the student's particular interests.

Political Science (PSC)

Department Chair: Associate Professor Michele Moser Deegan

Professors: Borick, Gambino, Hashim, Herrick, Slane

Associate Professors: Mathews-Schultz, Mello

Political Science is a discipline that aims to understand, analyze, and evaluate governmental institutions, public policy, political ideas, and collective action within societies and among nations. By introducing students to the tools of the discipline - its theories, concepts, and research methods - the study of political science enables them to

explore the power relationships, social-economic conditions, and ideological commitments that shape political action and public argument in a diverse and globally interdependent society. The Political Science Department takes seriously the mission at the heart of liberal arts education: cultivating thoughtful, articulate, active, and responsible citizens. In doing so the department offers courses and research experiences emphasizing the development of writing skills, critical thinking, and active and intelligent engagement with issues affecting contemporary public life. Political Science students develop an array of skills and experiences that lead to careers in federal, state, and local government; international organizations; law; nonprofit organizations and associations; campaign management and polling; journalism; teaching; and graduate study.

Students interested in politics and government may also consider several interdisciplinary majors with a substantial political science component. These majors are International Studies, A.B., Philosophy/Political Thought, A.B., and Political Economy and Public Policy, A.B. The department strongly encourages its students to participate in a study abroad experience, a semester in Washington, D.C. or local internship.

Special Programs

Honors Program

Exceptional students in Political Science are invited to propose a research project for honors consideration during their senior year. Proposals must be submitted by the end of the fall semester. Applicants will work closely with a faculty member in developing and completing an honors thesis using empirical or theoretical research methods. To be eligible for honors, students must meet the following requirements:

- 1. A 3.75 GPA in political science courses and an overall 3.50 GPA at the end of their junior year.
- 2. In consultation with a faculty advisor, candidates will select at least 2 additional faculty committee members to serve as additional advisors. The candidate is expected to have his/her proposal approved by his/her committee no later than the end of the Fall semester prior to thesis completion. More information about this process is available from department faculty.
- Honors candidates will enroll in an Independent Study (PSC 970) in either semester of their senior year.
 Under the direction of a faculty advisor, the applicant will develop a senior thesis using empirical and/or theoretical research methods.
- 4. The student will present and successfully defend his or her thesis in a public forum before political science faculty and students. After the thesis defense, department faculty will determine the award of honors.
- 5. In the event that the candidate does not receive honors, a grade will be received for the Independent Study.

Semester in Washington, D.C.

Since 1986 Muhlenberg College has participated in a Washington semester program: The Lutheran College Washington Semester. The program is sponsored by the thirteen colleges in the Lutheran College Washington Consortium and is open to all majors and minors. See Semester in Washington, D.C.

Program Requirements

Major Requirements

The departmental courses are organized into four groups that represent the major subdivisions within political science as recognized by the American Political Science Association: American Government, Comparative Politics, International Politics and Foreign Policy, and Political Theory. Majors will complete a minimum of ten courses, including the CUE: Senior Capstone Seminar. Additionally, at least one writing intensive course in political science is required for majors.

Required Courses:

PSC 101 - Introduction to American National Government

PSC 103 - Introduction to Comparative Politics & International Relations

PSC 201 - Political Ideologies

PSC 301 - Political Science Research Methods

PSC 490 - CUE: Senior Capstone Seminar

Five advanced courses with at least two at the 300 level or higher and at least one from three of the following areas:

American Government and Political Processes

Comparative Politics

International Politics and Foreign Policy

Political Theory

Introductory courses, Political Ideologies, and Research Methods should normally be completed by the end of the sophomore year. Majors must maintain at least a 2.00 grade point average in political science courses to remain in good standing in the department. No more than one political science internship and no more than two courses taken outside the department will count toward the political science major. PSC 960 - Political Science Internship will count as a 200 level course. Selected courses in philosophy, sociology, economics, and history are recommended for majors. Foreign language competency is strongly recommended.

Majors are urged to participate in the Washington Semester, study abroad programs, service learning and community-based research experiences, internship, and opportunities with the Muhlenberg Institute of Public Opinion. All majors are eligible for internship programs in local, state, and national governments as well as in appropriate nongovernmental organizations. Consult with faculty in the department to discuss internship opportunities.

Minor Requirements

Political science offers a minor program with three options, all of which require the completion of six courses. Students may substitute PSC 960 - Political Science Internship for one of the 200-level courses.

General: (Total of six courses)

PSC 101 - Introduction to American National Government

PSC 103 - Introduction to Comparative Politics & International Relations

PSC 201 - Political Ideologies

Two 200-Level Courses

Two 300-Level Courses

American Government and Political Processes: (Total of six courses)

PSC 101 - Introduction to American National Government

PSC 201 - Political Ideologies

Two 200-Level Courses in American Government

Two 300-Level Courses in American Government

Comparative Politics and International Politics: (Total of six courses)

PSC 101 - Introduction to American National Government

PSC 103 - Introduction to Comparative Politics & International Relations

Two 200-Level Courses in Comparative Politics and/or International Politics

Two 300-Level Courses in Comparative Politics and/or International Politics

Courses in political science are numbered as follows:

100 - 199	Introductory courses open to all students; required for the major
200 - 299	Intermediate courses normally open to students beyond the first semester of college
300 - 399	Advanced courses with previous course work in political science normally required;
	usually require a significant research project.
400 - 499	Seminars with intensive reading; recommended for juniors and seniors with substantial
	work completed toward the major; strongly encouraged for those seeking honors in
	political science.

Required Courses

PSC 101 - Introduction to American National Government

This course examines the constitutional foundations, institutions, and processes of American national government. Key issues explored include relationships between, and powers among, the main institutions of government-Congress, the Presidency, the Judiciary; citizenship and political behavior; campaigns and elections; political parties; the media; interest groups; and a range of contemporary public policy issues.

Meets general academic requirement SL.

PSC 103 - Introduction to Comparative Politics & International Relations

The course provides a basic introduction to core concepts and problems in the fields of international relations and comparative government. Key issues explored in the course include how and why nation-states apply their power to act cooperatively, why they occasionally resort to violence to settle disputes, and how and why states differ in their organization and in their relationship between citizen and government.

Meets general academic requirement SL.

PSC 201 - Political Ideologies

An examination of the philosophical and historical foundations of major political ideologies of the modern era. Students will investigate how ideologies make claims about human nature, history, and the state; how they attempt to understand the relationship between socio-economic conditions and the state; how they envision a just political order; and how they prescribe and justify programs of action. Among the ideologies examined: liberalism, civic republicanism, conservatism, socialism, communism, anarchism, nationalism, fascism, Nazism, fundamentalism, and feminism.

Intended for those planning to major or minor in political science.

PSC 301 - Political Science Research Methods

This course is intended to provide students with the essential methods for the analysis of political phenomena. Students receive an overview of the principles of research design as well as an introduction to the fundamental techniques involved in the quantitative and qualitative analysis of data. Specific aspects include quasi-experimental design, hypothesis testing, measurement, and ethical considerations in the research process. The goal is to provide students with the training to be competent consumers of empirical analyses as well as to give them a foundation for the study of advanced quantitative research techniques. Prerequisite(s): PSC 101 Introduction to American National Government; IST 101 Introduction to International Studies or PSC 103 Introduction to Comparative Politics & International Relations. MTH 104 Statistical Thinking or MTH 119 Statistical Analysis is recommended.

PSC 490 - CUE: Senior Capstone Seminar

The CUE: Senior Capstone Seminar provides an in-depth examination of questions central to contemporary research and scholarship in Political Science. Students will examine seminal works that have significantly contributed to the field, explore contemporary theories and concepts on issues such as power, ideology, globalization, and citizenship, and develop the analytical tools of the discipline needed for advanced studies. In addition, the seminar positions students to synthesize the full range of their curricular experiences as Political Science majors and to make meaningful connections to the contemporary political world. Required of all majors; encouraged for minors.

Prerequisite(s): Minimum of two advanced classes in Political Science (300 level or above). Must be completed during the senior year.

American Government and Political Processes

Courses in the American government and political process subfield focus on the institutions, actors, inputs, and outcomes of the American political process and the role of citizenship within the broader society.

PSC 203, 204 - Civil Rights & Liberties

An examination of the Fourth, Fifth, Sixth, and Eighth Amendments of the United States Constitution and their protection of the rights of criminal defendants.

Meets general academic requirement SL (and W when offered as 204).

PSC 205 - Constitutional Law I

An examination of the origins of and limitations on judicial review; the constitutional sources of national authority with special focus on the nature and scope of the commerce and tax powers; the constitutional limitations on presidential and congressional power; and selected First Amendment freedoms.

Meets general academic requirement SL.

PSC 207, 208 - Constitutional Law II

Examination of the incorporation of the Bill of Rights; the rise and demise of substantive due process; the concept of state action; federal enforcement of civil rights; the nature and scope of equal protection of the law; and selected First Amendment freedoms. *Meets general academic requirement SL (and W when offered as 208).*

PSC 209 - Elections & Campaigns in the United States

This course examines American elections, campaigns, and voting behavior within the broader context of political representation and electoral systems. Attention is provided to the rules, strategies, and behaviors governing elections in the United States and the internal and external factors influencing the American voters' decision-making process. Ongoing political campaigns will play a major role with students engaged in numerous exercises related to the various elections taking place during the semester. *Meets general academic requirement SL*.

PSC 213 - Public Health Policy

The course is a survey of contemporary issues related to the provision of public health policies in the United States. From disease control to the provision of health insurance, government plays a central role in the field of American health care. This course provides attention to numerous aspects of government interaction in the area of health policy, including the funding of research, regulation of pharmaceuticals, management and prevention of epidemics, and the provision of medical insurance. The class is designed for students interested in pursuing careers related to public health or with a general interest in the field. Course requirements include research projects and required service experiences in local health care locations, such as Allentown's health department and local medical clinics. The class will also include a simulation that examines the decision making process that is used by the Center for Disease Control (CDC) in addressing a potential outbreak of an infectious disease.

Meets general academic requirement SL.

PSC 216 - Environmental Politics & Policymaking

A study of recent and contemporary U.S. environmental policy and its formulation. The course examines the political and institutional settings and constraints on the formulation of environmental policy, including the role of the President, Congress, the courts, bureaucracy, state governments, and interest groups. Attention will also be given to theoretical issues as they arise out of, and influence, the policy making process. In addition, the course will examine the interaction of global environmental problems and domestic policy making.

Meets general academic requirement SL.

PSC 219, 220 - Public Administration & Policy Implementation

An examination of the theory and practice of managing the public sector with emphasis on the politics of administration, organization structures, communications, decision-making systems, budgeting processes, and personnel management. *Meets general academic requirement SL (and W when offered as 220).*

PSC 221 - Government Regulation of Business

An examination of the legal framework (the legislatures, the courts, and government agencies) and business's major legal responsibilities as established in the following subject areas: administrative law, the Bill of Rights, antitrust, labor relations,

employment discrimination, federal consumer protection, and regulation of environmental quality. *Meets general academic requirement SL.*

PSC 223 - Political Organization & Democratic Voice: Parties, Interest Groups, & Citizens in U. S. Politics

This course examines the bonds between citizens, political elites, and political institutions in the United States with an eye toward examining opportunities for political voice in American democracy. Topics include the emergence, evolution, and impact of American political parties and interest groups; the distribution of political voice across the American citizenry; the effectiveness of political participation (both electoral and non-electoral) in shaping political outcomes; and the relationships between political organization, citizenship, and democratic accountability.

Meets general academic requirement SL.

PSC 303, 304 - Gender, Politics, & Policy

Gender both shapes and is shaped by politics. This course explores this fundamental proposition in the context of several primary themes, including feminist political activism in historical perspective; women in American electoral politics (both mass politics and as political elites); globalization and gender equity; and gender and public policy. A major portion of the course is devoted to considering contemporary public policy issues through the lens of gender-as it intersects with race, class, and other social divisions-focusing on policies such as welfare, sexual harassment, reproduction and women's health, and gender discrimination in sports, education, and the military.

Prerequisite(s): PSC 101 Introduction to American National Government or WST 202 Topics in Women's and Gender Studies, or another Women's Studies Course, or permission of instructor.

Meets general academic requirement SL (and W when offered as 304).

PSC 305 - U.S. Congress

This course addresses several empirical and analytical questions about Congress and the legislative process: What does Congress do? How do members of Congress get elected and stay in office? How do legislators "represent" us? How does the institution of Congress function as a lawmaking body? What really matters in congressional decision-making processes? How have Congress and congressional lawmaking changed throughout U.S. history? In brief, this course is organized around the history, members, workings, and future of the U.S. Congress.

Prerequisite(s): PSC 101 Introduction to American National Government or permission of instructor.

PSC 309 - The American Judiciary

This course examines the nature and function of law as well as the organization of the American court systems and the legal process. Consideration given to developing students' understanding of the role of the law in American society, the organization of state and federal judicial systems, the civil and criminal court processes, and judicial decision-making and policy-making process.

Prerequisite(s): PSC 101 Introduction to American National Government.

PSC 311, 312 - The American Presidency

The presidency is an institution shaped by historical, systemic, and contextual factors. This course examines the intellectual and historical roots of the American presidency, its possibilities and limitations in relation to other political institutions, and its relation to the citizenry. It examines the creation of the presidency, its development as a democratic institution, the emergence of "presidential greatness" in the twentieth century, and the expansion of national administrative power. A main focus is placed on understanding changes in executive power over time, placing recent contemporary events in historical context.

Prerequisite(s): PSC 101 Introduction to American National Government or permission of instructor.

Meets general academic requirement SL (and W when offered as 312).

PSC 315, 316 - Inequality & U.S. Public Policy

This course explores the intersection between economic and political equality. The class begins with an examination of traditional theories of inequality in the U.S. During the semester we explore ways in which our national and state governments attempt to reduce social and economic inequalities through the creation of public policies. Students research the creation of legislation and explore how politics impedes achievement of policies to reduce inequality.

Prerequisite(s): PSC 101 Introduction to American National Government or ECN 101 Principles of Macroeconomics. Meets general academic requirement DE (and W when offered as 316).

PSC 400 - Seminar in Urban Policy & Planning

This seminar is designed as an exploration of urban politics and planning in the United States. Its purpose is to provide an improved understanding of the workings of urban political systems and the mechanisms by which government attempts to manage urban environments. The course will examine both historical and contemporary aspects of urban politics with an emphasis on the evolution of governmental arrangements in the last century. It will also focus on contemporary urban problems such as transportation, housing, and crime and, finally, will examine the basic foundations of urban planning and its application throughout cities in the United States. *Course limited to juniors and seniors*.

Prerequisite(s): PSC 101 Introduction to American National Government and PSC 301 Political Science Research Methods. Meets general academic requirement W.

Comparative Politics

Comparative Politics is the comparative study of political phenomena, including political institutions, behavior, and ideas in countries other than the United States. The sub-discipline studies the domestic politics of foreign nations with a focus on how power is organized and exercised.

PSC 230, 231 - Government & Politics of Europe

This course introduces students to European politics in the post-Cold War era. It focuses on political, economic, and social continuity and change in Western, Southern, and East-Central European nations. Taught from a broad regional perspective, the course will analyze the role of institutions and actors in shaping the dynamic political processes in the nations of Europe. Special attention is given to their economic and political interactions and their ramifications for the European integration process.

Meets general academic requirement SL (and W when offered as 231).

PSC 232 - Governments & Politics of East Asia

Analysis of the contemporary political systems of East Asia, primarily China and Japan, in their social and cultural settings, historical background, and dynamics of modernization.

Meets general academic requirement SL and DE.

PSC 234, 235 - Government & Politics of Russia

The course evaluates in-depth the contemporary political, economic, and social changes in post-Soviet Russia. Students will analyze the challenges facing Russia's transition to markets and democracy. We will look at how the legacy of the Soviet experience impacts the democratization and marketization processes in Russia today. Students will also study and evaluate the efficacy and viability of the new institutions regulating political and economic life in post-Soviet Russia. The course will focus on the political struggles surrounding institutional choice and policy making in contemporary Russia, and it will pay particular attention to reforms undertaken by President Vladimir Putin since 2000.

Meets general academic requirement SL (and W when offered as 235).

PSC 237 - Government & Politics of Africa

This course will examine the domestic politics and international relations of Africa. In particular, it will explore common problems faced by these states, including the formation of viable political systems, the implementation of policies to promote economic development, and the conduct of viable foreign policies. The course will also examine the effect of historical culture, economic conditions, and colonial penetration upon the formulation and conduct of public policy in Africa.

Meets general academic requirement SL and DE.

PSC 244, 245 - Government & Politics of Latin America

A study of the political processes within the Latin American region; the historical and cultural contrasts with North American-European politics; and the social, political, and economic development problems which continue to face this region. Particular attention will be given to Mexico, Colombia, Chile, Brazil, Argentina, and a representative number of other nations in Central America, South America, and the Caribbean region.

Meets general academic requirement SL and DE (and W when offered as 245).

PSC 246 - Developing Nations

A study of the politics of developing nations, their struggles to overcome poverty and underdevelopment, their efforts at nation-building, and their impact in the world. The challenges and dilemmas of modernization and contending theories about the causes

of underdevelopment and appropriate development strategies will be discussed. *Meets general academic requirement SL and DE.*

PSC 248, 249 - Governments & Politics of the Middle East

This course will examine the domestic politics and international relations of the Middle East. In particular, it will examine the effect of historical culture, economic conditions, and colonial penetration upon the current political conditions of the area. *Meets general academic requirement SL and DE (and W when offered as 249).*

PSC 420 - Seminar in Regimes & Regime Changes

Designed to introduce students to modern democratic, authoritarian, and totalitarian political systems (regimes). We will study how power is organized and exercised in various political systems of the world. Students will learn about institutions and processes that shape domestic politics in various regimes and that explain why and how political regimes change. The course will analyze the causes of breakdown and consolidation of democratic and non-democratic regimes. Iraq will be used as a case study. Prerequisite(s): PSC 103 Introduction to Comparative Politics & International Relations or IST 101 Introduction to International Studies. Two additional courses in the Comparative and/or International subfields are strongly recommended.

PSC 430 - Seminar in Comparative National Security Policy

This course uses a comparative approach to examine national security policy processes in the United States and a selected group of countries. Students will engage in policy analyses that examine the impact of a range of factors-including the international system, size of the state, historical and societal factors, governmental system, bureaucratic politics, and individual personalities-in determining the national security policies of these states.

Prerequisite(s): PSC 103 Introduction to Comparative Politics & International Relations or IST 101 Introduction to International Studies. Two additional courses in the Comparative and/or International subfields are strongly recommended. Meets general academic requirement W.

International Politics and Foreign Policy

International Politics in the study of the interaction among nations, international organizations, and an increasing range of non-state or nongovernmental actors, such as multinational corporations, terrorist organizations, etc. International relations also seeks to explain the processes by which this wide range of actors attempt to address the increasingly broad range of security, development, and environmental issues facing the world.

PSC 242, 243 - Introduction to Conflict & Peace Studies

This is an introductory course in the interdisciplinary field of conflict and peace studies which examines different approaches to conflict definition, management, and resolution. Fundamental issues of peace, war, conflict, and violence are discussed from a variety of perspectives within the political science and international studies paradigms.

Meets general academic requirement DE (and W when offered as 243).

PSC 254 - Globalization & Social Justice

Interdependence and globalization have brought the world closer to American citizens. As their lives become more interconnected with the dynamics of international market and political forces, the traditional distinctions between local and global concerns begin to fade. The events of September 11th, wars in Afghanistan and Iraq, and the cycles of anti-globalization social mobilization have made us acutely aware that national security or national economic prosperity can no longer be conceived apart from the international context. As issues concerning Americans become more "intermestic", the avenues and scope for affecting socioeconomic and political transformation also change. The course aims to further student understanding of the complex phenomenon of globalization and its impacts. We will analyze how citizens, as social actors, respond to the new challenges posed by globalization. Students will look at how issues of global socioeconomic and political justice are addressed by various citizen groups, social movements, and non-governmental organizations (NGOs) in areas as diverse as human rights, environmental concerns, cultural diversity, and economic welfare.

Meets general academic requirement SL.

PSC 328, 329 - International Law & Organization

The course will study the development and role of international law and international organizations (the United Nations, regional, and functional organizations) in the regulation of interactions among nation-states. The view of Western, communist, and less

developed states toward these institutions will be examined. It will focus on issues such as the rights and obligation of states, treaty law, and the role of international organization in maintaining the peace and promoting the improvement of the physical conditions of humankind. Students will be expected to provide brief analyses of hypothetical cases in international law plus an indepth analysis of an issue facing international organizations.

Prerequisite(s): PSC 103 Intro to Comparative Politics & International Relations or IST 101 Intro to International Studies. Meets general academic requirement W when offered as 329.

PSC 330, 331 - Comparative & International Environmental Policies

The course will examine the domestic and global dimensions of environmental politics. Subjects covered will include atmospheric issues, coastal and ocean pollution and multiple resource use, land resources, biodiversity, international river systems, environmental refugees, and population. It will compare policy-making in the European Union, ASEAN, NAFTA, and the United Nations systems.

Prerequisite(s): PSC 103 Intro to Comparative Politics & International Relations or IST 101 Intro to International Studies. Meets general academic requirement W when offered as 331.

PSC 339, 340 - Theories of International Relations

A critical analysis of the current and historical theories of international relations, including the nation-state system, balance of power, and societal and governmental factors predisposing nations to peace and war. The course will also explore emerging theories of decision-making at the national and international level as well as the growing role of transnational relations.

Prerequisite(s): PSC 103 Intro to Comparative Politics & International Relations or IST 101 Intro to International Studies

Meets general academic requirement W when offered as 340.

PSC 341 - American Foreign Policy

A study of the evolving nature of the formulation and conduct of American foreign policy, including the impact of an emerging international civil society on the policy formulation process since World War II. The course will emphasize contemporary issues, such as North-South relations, defense, humanitarian intervention and disarmament, international trade, as well as emerging issues, such as international resource management, pandemic disease control, and transnational organized crime.

Prerequisite(s): PSC 103 Intro to Comparative Politics & International Relations or IST 101 Intro to International Studies.

PSC 343 - International Political Economy

The course examines the complex relationship between politics and economics in the global system. Students will analyze interconnected themes, such as the relationship between power and wealth, the politics of international trade and international monetary management, globalization's impact on international, regional, and national economies. There is a particular focus on the theories and practice of international development.

Prerequisite(s): PSC 103 Intro to Comparative Politics & International Relations or IST 101 Intro to International Studies.

PSC 440 - Seminar in International Studies

The course will focus on an emerging issue in international relations. Potential topics would include democratization, cross-cultural communications, sustainable development, regional organizations, the management of international trade, conflict resolution, peace-making efforts in selected geographic regions, etc. It will provide the students with an opportunity to engage in cooperative learning through the development of policy analyses of various aspects of selected issues in international relations. Prerequisite(s): PSC 103 Introduction to Comparative Politics & International Relations or IST 101 Introduction to International Studies. Two additional courses in the Comparative and/or International subfields are strongly recommended.

Political Theory

Political theory involves the critical examination of the ideological and philosophical underpinnings of political communities, the analysis and evaluation of ideas that animate contemporary political arguments, and the interpretation of classic texts in the history of political theory.

PSC 260, 261 - American Political Thought

An examination of the major political ideas and ideological arguments influencing the development of political institutions and democratic practices in the United States. Attention is given to the debates leading to the ratification of the Constitution as well as to important nineteenth and twentieth century political figures and intellectuals who challenged and reshaped our understanding

of the Constitution and the American Founding. Consideration is also given to contemporary political thought such as feminism, multiculturalism, and environmentalism.

Meets general academic requirement HU (and W when offered as 261).

PSC 262, 263 - Utopia & Its Critics

An examination of utopianism and realism as contrasting modes of political thinking. By examining the works of thinkers such as Plato, Thomas More, Bellamy, and Morris, the course will consider the meaning, justifications, and functions of utopian thought, both as a blueprint for a just society and a genre of social criticism. The course will consider anti-utopian or realist thinkers such as Thucydides, Machiavelli, and Hobbes who insist on a sober assessment of power as the basis of political and social order. *Meets general academic requirement HU (and W when offered as 263).*

PSC 264 - Politics & Public Space

This course considers how ideas about the use and meaning of public space, such as neighborhoods, city streets, marketplaces, parks, and public monuments, frame political conflicts on issues such as social justice, environmental protection, and historical preservation. We examine how laws, socio-economic forces, and cultural values give shape to public spaces and how such spaces are transformed by the political struggles over their access, control, and meaning. We consider questions such as: What is public space? How is it constructed, interpreted, and contested? Who defines the boundaries between public space and private property? Who has the right to access public space? We also consider how social-economic forces such as suburbanization, globalization, and privatization are reshaping public space.

Meets general academic requirement SL.

PSC 348, 349 - Democratic Theory

Examines important contributions to the meaning and practice of democracy drawn from both classic and contemporary sources, including representatives of liberal, communitarian, civic republican, and Marxists traditions of thought. Among the issues considered are the nature and scope of democratic citizenship, forms of participation, civic education, deliberation and representation, issues of identity and difference, social and economic conditions needed for democratic politics, and structure of democratic institutions.

Prerequisite(s): PSC 201 Political Ideologies or PSC 260, 261 American Political Thought or PSC 262, 263 Utopia & Its Critics or any course in political philosophy offered in the Philosophy Department.

Meets general academic requirement HU (and W when offered as 349).

PSC 356, 357 - War & Justice

This course considers the relationship between international relations, statecraft, and ethics through an examination of the just war tradition in Western political thought. The moral arguments of both ancient and contemporary theorists of just war will be examined along with their application to modern conflicts such as World Wars I and II, Vietnam, and the Persian Gulf War. *Prerequisite(s): PSC 103 Intro to Comparative Politics & International Relations or IST 101 Intro to International Studies. Meets general academic requirement HU (and W when offered as 357).*

PSC 450 - Seminar on Modernity & Its Discontents

Does modernity have a future? Modern liberalism, socialism, and communism grew out of the Enlightenment faith in progress, reason, and emancipation, each promising an expansion of freedom and equality through the human mastery of nature. Yet the catastrophes of the twentieth century have revealed darker forces at work in the modern era: world wars, alienation, totalitarianism, genocide, environmental deterioration, and terrorism. This seminar considers those political and social critics who offer both a diagnosis of and a cure for modernity's discontents. Thinkers may include Nietzsche, Marx, Henry Adams, Freud, Max Weber, Arendt, Marcuse, and Foucault. For juniors and seniors only.

Prerequisite(s): PSC 201 Political Ideologies or PSC 260, 261 American Political Thought or PSC 262, 263 Utopia & Its Critics or any course in political philosophy offered in the Philosophy Department.

Meets general academic requirement W.

Internship

PSC 960 - Political Science Internship

Pass/fail only.

Psychology (PSY)

Department Chair: Professor Mark Sciutto Professors: Edelman, Harring, Rudski, Tjeltveit

Associate Professors: Gotthard, Richmond, Sinno, Wolfe Assistant Professors: Bagley, Frazer, Lassiter, Michniewicz

Psychology is the scientific study of human behavior. The major is designed to permit a wide range of applications while maintaining requirements that will give an excellent background in and knowledge of what constitutes the science of psychology.

Students with a wide range of interests either major in psychology or complete a number of psychology courses. A major in psychology will give students the necessary background to go to graduate school in any area of psychology (e.g., clinical, counseling, development, social, or experimental). The study of psychology provides an excellent background for students interested in careers in a variety of areas, such as the health professions, human resources, law, education, business, biology, or the natural sciences.

Special Programs

Psychology Thesis Program & Graduation Honors

Qualified psychology majors may apply for a year-long thesis program featuring advanced, original research. The program is developmental in that it seeks to offer intellectually curious students an intensive experience of mentorship and collaboration. To be eligible for the Thesis Program, a student must be a junior or senior psychology major and must have a psychology GPA of 3.30 or better. Normally, students will have also completed PSY 103 - Psychological Statistics, PSY 104 - Research Methods in Psychology, and at least one semester of PSY 270 - Research Apprenticeship, PSY 970 Independent Study/Research, or equivalent experience prior to beginning their thesis.

Thesis students develop, conduct, and defend a sophisticated empirical or theoretical research project. The first semester of the thesis year is spent developing a comprehensive research proposal. During the second semester, students complete their research, generate a written thesis, and orally defend the project at a public presentation. Thesis work is advised and evaluated by a Thesis Committee.

The Thesis Program counts as a Capstone (Culminating Undergraduate Experience) experience. Thus, students who successfully complete the program are not required to take PSY 490 - CUE: Advanced Research in Psychology. Interested students should speak with their advisors in the Fall of their junior year, and may visit the Psychology Department office or the Psychology website for more information.

Graduation Honors in Psychology

Students seeking graduation honors in psychology must first be admitted to the Thesis Program and successfully develop a research proposal during the first semester of the thesis year. During the second semester, the thesis advisor may choose to nominate exceptional work for honors consideration. The thesis committee decides whether or not to grant honors at a meeting immediately following the student's oral defense. Please note that being nominated does not guarantee the conferral of psychology honors. Students must maintain a psychology GPA of 3.70 or higher to qualify for departmental graduation honors.

Teacher Certification

Students who are accepted into the Pre K-4 Program may count EDU 104, 105 - Educational Psychology: Child Learning & Development, as an elective in the Psychology major. Students who complete the Pre K-4 Program may

count EDU 201 - Introduction to Special Education: Diverse Learners & Inclusive Classrooms to satisfy one of the courses in the Advanced Course and Seminar requirement. Admission to student teaching requires 2.50 grade point average in the Psychology major.

Program Requirements

Major Requirements

Majors will complete a minimum of 10 courses in the department. All students take a sequence of courses - Psychological Statistics, Research Methods, and Advanced Research in Psychology - to learn the methods employed in psychology. Although the multiple dimensions of human psychological functioning are integrated, taking courses from each of the four Content Areas insures exposure to the breadth of those dimensions. Students progress from Introductory Psychology to courses in basic areas in psychology and then take upper level courses (e.g., seminars) before completing as seniors a culminating integrative academic experience.

PSY 101 - Introductory Psychology

PSY 103 - Psychological Statistics

PSY 104 - Research Methods in Psychology

PSY 490 - CUE: Advanced Research in Psychology

Successful completion of the Thesis Program

One of the following cognate courses:

MTH 119 - Statistical Analysis

MTH 121 - Calculus I

Four additional courses, one from each of these Content Areas:

Biological, Behavioral, and Cognitive Processes

Sociocultural Processes

Developmental Processes

Clinical and Applied Psychology

Two electives chosen from any course offerings in psychology except PSY 270 - Research Apprenticeship. Only one credit of PSY 960, PSY 970, PSY 975, or PSY 976 can count toward the major as an elective.

Of the four Content Area courses and two electives, at least two courses must be numbered at the 300 or 400 level.

PSY 101 - Introductory Psychology is a prerequisite for all other psychology courses. Majors may meet the requirement for a writing intensive course in the major by completing PSY 104 - Research Methods in Psychology.

A grade point average of at least 2.00 in required psychology courses must be maintained in order to remain a major in the department. Opportunities for internships and individual research projects that contribute to the degree are available for majors who have demonstrated the capability for independent work.

Courses

PSY 101 - Introductory Psychology

An introduction to the science of psychology. Students will investigate theories, topics, and applications in the field of psychology across biological, cognitive, social, developmental and clinical areas. Students learn to identify ways in which the science of psychology affects everyday lives and gain knowledge in multiple areas of psychology that provides a foundation for future courses within the major and across campus. The course will highlight connections among different areas of psychology and identify ways in which different perspectives contribute to a fuller understanding of human behavior.

Meets general academic requirement SL.

PSY 103 - Psychological Statistics

Introduction to the role of statistical analyses in testing hypotheses in psychology. Students will learn both descriptive and inferential uses of statistics as they apply to a variety of research designs commonly used in psychology. This course also emphasizes scientific writing and the use of SPSS to conduct statistical analyses.

Prerequisite(s): PSY 101 Introductory Psychology and MTH 119 Statistical Analysis or MTH 121 Calculus I.

PSY 104 - Research Methods in Psychology

Exploration of the methodological issues and strategies most germane to research in psychology. Topics include types of research designs, ethics, measurement, library resources, and a review of data analysis procedures. Scientific writing and oral presentations of research results will be emphasized. Four hours lecture/lab.

Prerequisite(s): PSY 101 Introductory Psychology and PSY 103 Psychological Statistics or permission of instructor. Meets general academic requirement W.

Biological, Behavioral, and Cognitive Processes

PSY 212 - Learning & Behavior

An investigation of how our behavior is changed by experience. Topics will include the nature-nurture issue, conditioned reflexes, operant conditioning, observational learning, reinforcement schedules, punishment, and the stimulus-control of behavior.

Prerequisite(s): PSY 101 Introductory Psychology.

PSY 214 - Sensation & Perception

Exploration of the human sensory systems and perception. The course is focused on investigating the relationship between our conscious experience of the world and the anatomy and physiology of the sensory systems. We start with very basic sensory coding and work up to looking at individual differences and the influence of learning and development on perception. There is an emphasis on classroom demonstrations and laboratory experiences. All students run a perception experiment.

Prerequisite(s): PSY 101 Introductory Psychology.

Meets general academic requirement SC.

PSY 215 - Biological Psychology

A study of the nervous system and physiological processes directly related to behavior in human beings and animals. The mechanisms underlying sensory and motor processes, learning, emotion, and innate behavior patterns.

Prerequisite(s): PSY 101 Introductory Psychology.

Meets general academic requirement SC.

PSY 311 - Cognitive Processes

The study of human mental processes, including perception, attention, memory, problem solving, language, conceptual representation, and visual imagery. All students participate in classroom demonstrations and in cognitive research. This is an upper level class and is not recommended for first year students. Recommended for teacher education candidates.

PSY 312 - Psychopharmacology

An exploration of the key concepts and principles of how drugs and brain chemistry affect behavior. Topics will include basic pharmacology, research methods, states of consciousness, reinforcement and addiction, treatment of psychological disorders, and sociocultural influences and implications of pharmacotherapy and addiction. A \$30 lab fee will apply.

Prerequisite(s): PSY 101 - Introductory Psychology, PSY 215 - Biological Psychology or BIO 151 - Principles of Biology II: Cells & Organisms, and one additional psychology course or permission of instructor.

PSY 410 - Memory & Amnesia

This seminar will examine the broad categories of memory and amnesia. Readings will be based entirely on primary literature, and class meetings will follow a discussion-based format. Memory and amnesia will be examined via both psychological and biological perspectives and will include topics such as memory modulation and malleability, consolidation and reconsolidation, various forms of amnesia (e.g., retrograde and anterograde amnesia), recovery of memory, and memory-based treatments for some forms of psychological pathology (e.g., PTSD).

Open only to Psychology or Neuroscience majors.

Prerequisite(s): PSY 101 - Introductory Psychology. PSY 215 - Biological Psychology or NSC 310 - Brain & Behavior required.

Sociocultural Processes

PSY 220 - Social Psychology

The study of social influences on individual behavior, including topics in social cognition, attitude change, interpersonal behavior, social influence, and small group behavior.

Prerequisite(s): PSY 101 Introductory Psychology.

PSY 221 - Multicultural Psychology

This course will examine marginalized groups within the United States and will address the role of race, ethnicity, gender, class, disability status, and sexual orientation in psychological discourse. Psychological theory and research will serve as a basis to explore topics such as identity development, acculturation, and world views. This course also aims to examine privilege and the way various "isms" (e.g., sexism, racism, heterosexism, classism, ableism, and their intersections) inform psychological theory, research, and practice.

Prerequisite(s): PSY 101 Introductory Psychology.

Meets general academic requirement W.

PSY 320 - History of Psychology

A review of the historical background and development of psychology with special attention given to the positions on controversial issues taken by different schools in the past and present. Primarily for upper-class majors to provide a perspective on the field of psychology.

Prerequisite(s): PSY 101 - Introductory Psychology and at least two additional psychology courses or permission of instructor.

PSY 322 - Psychology of Women

This course will examine theory and research on gender differences, specifically female gender development, taking into consideration biological, cognitive, behavioral, and social influences. Emphasis will be placed on a critical analysis of the assumptions about human behavior and the methods used to test these ideas. Topics include gender-role development, achievement motivation, women and work, sexuality and health, and violence against women.

Prerequisite(s): PSY 101 - Introductory Psychology and two additional psychology courses or WST 202 - Topics in Women's and Gender Studies.

Meets general academic requirement W.

PSY 425 - Contemporary Racism

This seminar is an in-depth, psychological examination of the new and more subtle types of racism present in American society. Based primarily on research from social psychology, we will explore the manifestations and consequences of contemporary racism and the challenges inherent in reducing this form of racism. We will focus predominantly on prejudice toward, and the experiences of, African-Americans. The seminar will include, among other assignments and activities, student-led discussions, primary source readings, and critical intrapersonal analysis recorded in student journals.

Prerequisite(s): PSY 101 - Introductory Psychology and two additional psychology courses, including either PSY 220 - Social Psychology or PSY 221 - Multicultural Psychology or permission of instructor.

Meets general academic requirement DE.

Developmental Processes

PSY 230 - Child Development

This course examines the physical, psychological, and social aspects of human development from conception to middle childhood. In particular, this course focuses on strengthening content knowledge of developmental psychology in conjunction with real-life examples of child growth and development.

Prerequisite(s): PSY 101 Introductory Psychology.

PSY 231 - Adolescent Development

This course addresses human development throughout the adolescent years. In particular, the course focuses on making connections between theories of developmental psychology and real-life experiences of teenagers growing up in American society.

Prerequisite(s): PSY 101 Introductory Psychology.

PSY 232 - Personality Psychology

Historical and more contemporary approaches to personality are explored. Current research topics in the field of personality psychology are also addressed.

Prerequisite(s): PSY 101 Introductory Psychology.

PSY 305 - Adult Personal & Cognitive Development

This course is designed for students who are interested in becoming a Peer Learning Assistant. This course will explore current theories in psychology, neuroscience, and education relating to reasoning ability, problem-solving, learning, memory, and other relevant cognitive processes as they apply to adult learning. Students will gain experience in implementing teaching strategies with current available technology, and will learn how to engage with peers in a peer-teacher context.

Prerequisite(s): Permission of instructor.

Meets general academic requirement SL.

PSY 330 - Developmental Psychopathology

An exploration of emotional, behavioral, developmental, and learning disorders in children and adolescents. This course emphasizes the interdependence of biological, psychological, and social/cultural factors in the etiology, course, and treatment of childhood disorders. Includes required service learning.

Prerequisite(s): PSY 101 - Introductory Psychology, PSY 240 - Abnormal Psychology or EDU 201 - Introduction to Special Education: Diverse Learners & Inclusive Classrooms, and one additional psychology course.

PSY 430 - Development: Inclusion-Exclusion

All individuals have had experiences with the joys of being included and the disappointment of being excluded. This seminar course, grounded in developmental psychology, will explore how individuals, from young children to adults, reason about the dynamics of inclusion and exclusion, looking at how and why social reasoning about interrelationships changes with age.

Prerequisite(s): PSY 101 - Introductory Psychology and two additional psychology courses, including either PSY 230 - Child Development or PSY 231 - Adolescent Development.

Clinical and Applied Psychology

PSY 240 - Abnormal Psychology

An exploration of psychological problems ranging from the commonplace to the bizarre. The classification, assessment, causes, course, treatment, and prevention of the major types of abnormal behavior will be addressed. Pertinent scientific research, narrative approaches, and major theories will be emphasized.

Prerequisite(s): PSY 101 Introductory Psychology.

PSY 241 - Interpersonal Psychology

This course will serve as an introduction to contemporary psychological theories of interpersonal communication, its nature, its functions, and its goals. It will include both discussion of interdisciplinary theory and facilitation of the development of skills for communicating, in a diverse and global world, in relationships both interpersonal and professional.

 $Prerequisite(s): PSY\ 101-Introductory\ Psychology\ .$

PSY 340 - Psychotherapy & Counseling

An exploration of psychotherapy theories and intervention strategies, scientific research on therapy process and outcome, the place of therapy in contemporary society, and a critical evaluation of therapeutic ideals.

Prerequisite(s): PSY 101 - Introductory Psychology and two additional psychology courses, including either PSY 232 - Personality Psychology or PSY 240 - Abnormal Psychology or permission of instructor.

PSY 341 - Psychological Assessment

Introduction to the theory and application of psychological tests as measures of personality, intellectual functioning, and attitudes. This course considers the use, abuse, and limitations of such measures and focuses on topics such as validity and reliability of tests; construction of tests, rating scales, and surveys; the administration of tests and the interpretation of test results. Prerequisite(s): PSY 101 - Introductory Psychology, PSY 103 - Psychological Statistics, and one other psychology course. PSY 104 - Research Methods in Psychology recommended.

PSY 440 - Clinical Case Studies

Focuses on the construction of case conceptualization. Actual clinical cases from the private practices of the instructor(s) and a casebook will be presented. Students will explore cause and precipitating and maintaining influences of a person's psychological, interpersonal, and behavioral concerns. Conceptualization helps organize the complexities clients bring with them into counseling sessions. Emphasis is on class discussion, deeper understanding of psychological disorders, consideration of practical applications of psychotherapy.

Prerequisite(s): Permission of instructor required.

PSY 441 - Health Psychology

An interdisciplinary course that examines how biological, psychological, and social factors interact and affect individual health and illness. Topics include: the development of health promotion programs, factors that affect patient adherence to prescribed treatments, psychoneuroimmunology, pain management, the etiology, treatment, and adjustment to chronic illness (cancer, heart disease, HIV/AIDS) and the analysis of local and global heath disparities. Includes required service learning.

Prerequisite(s): PSY 101 - Introductory Psychology and two additional psychology courses or permission of instructor. Public Health majors and minors should contact the instructor for permission to enroll in the course if they do not have the required psychology courses

Culminating Undergraduate Experience

PSY 490 - CUE: Advanced Research in Psychology

CUE: Advanced Research in Psychology is designed to be a culminating undergraduate experience in which students apply and integrate skills and knowledge from the previous psychology courses they have taken. Each course includes an inquiry-driven project requiring students to engage in a substantive literature review; explore novel hypotheses or theories; collect and analyze relevant evidence; synthesize and reflect upon the information gathered; and generate an integrative paper and oral presentation about their work. The course emphasizes mastery of critical thinking, interpersonal, writing, and presentation skills and may have a focal topic that varies by instructor. Past topics have included Stigma of Mental Illness, Stereotyping & Prejudice, Superstition, Family Engagement with Middle School Education, and Memory. Focal topics will be announced prior to registration each semester. Five hours per week, lecture/discussion and lab.

Prerequisite(s): Junior/senior standing, PSY 103 - Psychological Statistics, PSY 104 - Research Methods in Psychology, and at least one course in each of the 4 content areas.

Individualized Instruction

PSY 270 - Research Apprenticeship (0.5 units)

Students work in a faculty member's on-going research program, learning a variety of important research skills and gaining indepth knowledge of a specialized topic in psychology. Experiences may include, but are not limited to, any of the following: gathering and analyzing information to develop proposals, stimulus development, data collection, statistical analysis, writing and presenting results. Topics and course availability will vary by professor. Interested students should consult with individual faculty for more information. This course can be repeated and does not count toward the requirements for the psychology major. It will count toward the 4 course units of individualized instruction that can be earned toward the 34 course unit degree requirement. Pass/fail only.

Prerequisite(s): Permission of instructor.

PSY 960 - Internship

Provides psychology students with an opportunity to work in a professional setting and begin to connect their academic knowledge with experiences, expectations, values, and demands of the world outside the classroom. Students will meet weekly to discuss professional, psychological, ethical, and other issues relevant to the internship experience. Students are required to complete a minimum of ten hours a week at their internship, keep a professional journal, attend class meetings, and give a formal presentation about their experience. Pass/fail only.

Prerequisite(s): Permission of instructor.

PSY 975 - Thesis I

A student with a strong interest in, and intellectual curiosity about, a particular topic may select to conduct a psychology thesis. Students who are accepted into the Thesis Program will conduct two semesters of independent and original research, write a

thesis based on that empirical or theoretical work, and make an oral defense of the thesis at a colloquium attended by faculty and students. See this catalog, an advisor, or the Psychology Department website for additional information about the requirements of the Thesis Program and how to apply. Successful completion of both semesters of the thesis program fulfills the required CUE. Prerequisite(s): Junior/senior standing and permission of instructor. PSY 104 - Research Methods in Psychology . PSY 270 - Research Apprenticeship and/or PSY 970 Independent Study/Research strongly recommended.

PSY 976 - Thesis II

This course is the second semester of the senior thesis sequence. Successful completion of both semesters of the thesis program fulfills the required Culminating Undergraduate Experience.

Prerequisite(s): PSY 975 - Thesis I and permission of instructor.

Public Health (PBH)

Director: Chrysan Cronin

Professors: Borick, Harring, Wilson Associate Professor: Kahlenberg Assistant Professor: Burger

Affiliate Faculty: Bywater, Deegan, Doviak, Dowd, Edwards, Eisenberg, Hark, Hashim, Heiman, Kelsey, Kushner,

McCain, Ouellette, Schick, Sciutto, Sprayberry, Tjeltveit, Tuerk, Walther

Public Health is an interdisciplinary major/minor that focuses on the protection and improvement of health for individuals, communities, and populations at risk for injury and disease. The curriculum extends across the natural sciences, mathematics, social sciences, and humanities to educate and empower students about health related issues from varying points of view.

Students who major/minor in Public Health will gain an understanding of behavioral, economic, historical, political, and social determinants of health and of the important relationships that statistics and science have on the design of public health interventions. The core class, Issues in Public Health, is designed to introduce students to a wide variety of public health topics, including historical perspectives, epidemiological principles and health intervention practices, health promotion and health communication, and global issues of health.

The major prepares students for graduate work and professional careers in public health. The minor offers students flexibility to choose electives appropriate to their interests in public health that also compliment their respective majors. Students are encouraged to participate in public health related experiences, including independent research study, service learning or other experiential learning connected to a course, internships within the community, and community service unconnected to a course.

Program Requirements

Major Requirements

To declare and be retained as a Public Health major, a student must maintain a 2.00 grade point average based on all required core and elective courses.

Required Courses

Public Health majors must complete 11 courses: seven core courses and four electives.

Required Core Courses

PBH 200, 201 - Issues in Public Health PBH 250 - Fundamentals of Epidemiology PBH 325 - Introduction to Global Health PBH 350 - Environmental Health

MTH 119 - Statistical Analysis

MTH 332 - Mathematical Statistics II

PSY 103 - Psychological Statistics

PSC 213 - Public Health Policy

PSC 216 - Environmental Politics & Policymaking

Designated CUE course, internship, research, or independent study, approved by the program director

Group I Social and Behavioral Health (at least two courses with different prefix)

BUS 260 - Marketing in Not-for-Profit Organizations

BUS 315 - Management of Not-for-Profit Organizations

COM 334 - Health Communication

ECN 243 - Health Care Economics

PBH 252 - Occupational Health

PBH 327 - Public Health in Panamá

PSC 219, 220 - Public Administration & Policy Implementation

PSC 246 - Developing Nations

PSY 240 - Abnormal Psychology

PSY 441 - Health Psychology

SOC 317 - Sociology of Health

SOC 320 - Environmental Sociology

Group II History and Humanities of Public Health (at least one course)

HST 143 - Introduction to History: Epidemic America

HST 341 - Environmental History of the United States

HST 345 - Disease & Medicine in American History

HST 347 - History of Public Health in America

HST 373 - Environmental History of Latin America

PHL 241 - Biomedical Ethics

PHL 246 - Environmental Philosophy

PHL 249 - Neuroethics

Group III Living Systems (at least one course)

BIO 101 - Human Biology, Science, & Society

BIO 107 - From DNA to Cancer

BIO 109 - Bubonic Plague to AIDS: Influence of Infectious Disease on the Human Species & Environment

BIO 111 - Crisis Earth: Causes, Consequences, & Solutions for a Changing Planet

BIO 118 - Genes, Genomes, & Society

BIO 151 - Principles of Biology II: Cells & Organisms

CHM 101 - Chemistry of the Environment

ESC 111 - Topics in Environmental Science

ESC 113 - Environmental Science I

Students who have taken MTH 104 prior to the Fall 2015 semester may count that course towards the major in place of MTH 119. Students taking Statistics AFTER the Spring 2015 semester must take MTH 119 to fulfill the major and minor requirement.

Minor Requirements (seven courses)

Introduction and overview of public health:

PBH 200, 201 - Issues in Public Health

Knowledge of statistics: Students must take one of the following courses

MTH 119 - Statistical Analysis

MTH 332 - Mathematical Statistics II

PSY 103 - Psychological Statistics

Knowledge of human living systems and how they connect to society: Students must take one course

BIO 101 - Human Biology, Science, & Society

BIO 107 - From DNA to Cancer

BIO 111 - Crisis Earth: Causes, Consequences, & Solutions for a Changing Planet

BIO 118 - Genes, Genomes, & Society

BIO 151 - Principles of Biology II: Cells & Organisms

CHM 101 - Chemistry of the Environment

ESC 111 - Topics in Environmental Science

ESC 113 - Environmental Science I

Knowledge of the social, behavioral, cultural, and economic context of public health:

Students must take a combination of four (4) courses from Lists B and C. The courses must be from at least three (3) different disciplines and at least two (2) courses must be from List B and at least one (1) course must be from List C.

List B (Courses Concerning Health, Medicine, or Disease)

COM 334 - Health Communication

ECN 243 - Health Care Economics

HST 143 - Introduction to History: Epidemic America

HST 345 - Disease & Medicine in American History

HST 347 - History of Public Health in America

PBH 250 - Fundamentals of Epidemiology

PBH 252 - Occupational Health

PBH 325 - Introduction to Global Health

PBH 327 - Public Health in Panamá

PBH 350 - Environmental Health

PHL 241 - Biomedical Ethics

PHL 249 - Neuroethics

PSC 213 - Public Health Policy

PSY 240 - Abnormal Psychology

PSY 441 - Health Psychology

SOC 317 - Sociology of Health

SUS 350 - Community Sustainability in Costa Rica

List C (Related Electives)

BUS 260 - Marketing in Not-for-Profit Organizations

BUS 315 - Management of Not-for-Profit Organizations

COM 336, 337 - Environmental Communication

HST 341 - Environmental History of the United States

HST 373 - Environmental History of Latin America

PHL 246 - Environmental Philosophy

PSC 216 - Environmental Politics & Policymaking

PSC 219, 220 - Public Administration & Policy Implementation

PSC 246 - Developing Nations

PSC 315, 316 - Inequality & U.S. Public Policy

SOC 320 - Environmental Sociology

PBH 960 Internship or PBH 970 Independent Study/Research OR a Practicum, Internship, Independent Study/Research in another related discipline approved by the program director, may be taken for credit toward the List C requirement, but at least one additional course from List C must also be taken.

Courses

PBH 200, 201 - Issues in Public Health

Using a topical approach, this course is designed to introduce students to the wide variety of disciplines associated with the field of Public Health. Based on the issue or issues selected as the focal point of the course, students will examine the global impact of disease from various points of view-historically, biologically, economically, psychologically, and politically. Students will explore the roles of those in Public Health such as epidemiologists, health care managers, media broadcasters, health specialists, environmentalists, and public policy makers in maintaining the health safety of the public.

Meets general academic requirement W when offered as 201

PBH 250 - Fundamentals of Epidemiology

This course will cover the basic concepts of epidemiology and biostatistics as applied to public health problems, with emphasis on the principles and methods of epidemiologic investigation and appropriate summaries and displays of data. Topics include study design, measures of disease frequency and association, bias, confounding and effect modification, causality, screening and disease surveillance.

Prerequisite(s): PBH 200, 201 Issues in Public Health and MTH 119 Statistical Analysis or PSY 103 Psychological Statistics

PBH 252 - Occupational Health

From a fire in a Bangladesh garment making facility or an explosion on an oil platform to asbestos-related cancer in shipyard workers or radium poisoning in New Jersey painters, this course considers the impact of business practices on the health of workers and the environment. We will analyze several case studies that emphasize the importance of safe practices and highlight the need for federal safety regulations in the workplace. We will examine the impact of industrial operations both domestically and abroad on the environment and public health, and consider the ethical and social aspects of strategies used by big business to sell their products. Students will learn and practice key skills of research, critical analysis, and oral communication.

PBH 325 - Introduction to Global Health

Students are introduced to the current and emerging issues in global health, including the global burden of disease, global health systems, and the roles of nation states, international agencies, and nongovernmental organizations in promoting health.

Prerequisite(s): PBH 200, 201 Issues in Public Health

PBH 350 - Environmental Health

A study of the impact of environmental quality on the health of populations, this course addresses the societal and environmental factors that increase the likelihood of exposure and disease. Topics include the potential health effects of exposure to hazardous substances in air, water, soil, and food; natural disasters; physical hazards; climate change; the impact of food production on the environment; and the built environment.

Prerequisite(s): PBH 200, 201 Issues in Public Health and at least one science course

Religion Studies (REL)

Department Chair: Associate Professor William "Chip" Gruen

Associate Professor: Pettit

Assistant Professors: Cooperman, Nash, Takahashi

Senior Lecturer: Albert

Andrew W. Mellon Post-Doctoral Fellow: Parikh

The work of the Religion Studies Department of Muhlenberg College is the academic investigation of religious traditions in their thought and practice. Faculty and students study cultural and intellectual responses to basic questions of life and meaning. Our discipline, exploring essential aspects of human experience, is inherently cross-

cultural, multidisciplinary, and analytical. Its geography is global; its chronology extends from antiquity to the present. We analyze texts, beliefs, rituals, arts, communities, cultures, and their integration into coherent worldviews. Our methodologies as well as our content interact with disciplines spanning the liberal arts curriculum from the humanities to the social sciences to the sciences. For those with particular interest in Asian or Jewish Studies, programs are available. (See Asian Studies Minor and Jewish Studies, A.B., Jewish Studies Minor for more information.)

Honors Program

Students who wish to complete the Honors Thesis in Religion Studies must have a 3.50 grade point average in departmental courses and a 3.30 grade point average overall. The project will normally be undertaken in either semester of the senior year. A written proposal for this project must be approved by a faculty member in Religion Studies in the semester prior to the one in which the thesis will be completed. The proposal must consist of a working thesis, a detailed description of the project, and a preliminary bibliography. In consultation with the student's advisor, the student will also establish a three person Project Committee. The culmination of the project will be a presentation for faculty and students at the end of the semester. Religion Studies faculty will determine whether Honors will be awarded upon completion of the project and presentation. The Honors Thesis does not take the place of the Culminating Undergraduate Experience (CUE), the Advance Seminar in the Study of Religion.

Program Requirements

Major Requirements

Students majoring in Religion Studies will be expected to develop broad expertise, reflecting the geographical and typological diversity that characterizes the religions of the world. Students will distribute courses among the department's offerings to include at least three areas of study, distinguished by religious tradition or geography.

A major in Religion Studies consists of nine courses distributed as follows:

At least one 100 level course

REL 201 Theory & Method in the Study of Religion

At least two of the following courses:

- REL 203 Religions of India
- o REL 207 Religions of China
- o REL 208 Religions of Japan
- REL 225 Buddhist Traditions
- REL 227 Islamic Traditions
- o REL 229 Jewish Traditions
- o REL 233 Christian Traditions

At least two 300 level courses

REL 450-469 CUE: Capstone Seminars in the Study of Religion

Religion Studies Majors may count a maximum of two courses from cognate disciplines with prior department chair approval.

Students majoring in both Religion Studies (REL) and majoring or minoring in Jewish Studies (JST) may double count a maximum of 3 courses in fulfillment of major requirements unless prior approval is obtained from the Religion Studies Chair.

Minor Requirements

A minor in religion consists of six courses, including:

At least one 100 level course

REL 201 Theory & Method in the Study of Religion

At least two of the following courses:

- o REL 203 Religions of India
- o REL 207 Religions of China
- o REL 208 Religions of Japan
- REL 225 Buddhist Traditions
- o REL 227 Islamic Traditions
- o REL 229 Jewish Traditions
- o REL 233 Christian Traditions

At least two 300 or 400 level courses

Minors may count one course from cognate disciplines with prior department chair approval.

Students minoring in Religion Studies who are also majoring or minoring in Jewish Studies may double count a maximum of two courses in fulfillment of Religion Studies minor requirements unless prior approval is obtained from Religion Studies Chair.

Courses

REL 100, 101 - Religion & Popular Culture

This course will examine the ways different religious beliefs and practices are represented in a variety of print, film, television, and other media in our culture and the ways in which those representations may function to influence opinions, actions, and policy. Analysis of media content will accompany an introduction to the study of religions presented and misrepresented in popular culture.

Meets general academic requirement HU (and W when offered as 101).

REL 102 - Religion & Violence

Religious ideology and rhetoric play a significant role in violent conflict in the modern period, a phenomenon that we are only now coming to appreciate fully. In this course we will examine some of the central religious issues that have been at the forefront of modern conflicts. We will consider some of the ways that religious terminology, symbolism, and myth have been employed as a way of marking difference and setting identity boundaries from the First World War to the current "War on Terror." *Meets general academic requirement HU*.

REL 104 - Sex, Gender, & Religion

Gender and sexuality as fundamental aspects of human experience play important roles in all major religious systems whether explicit and positive or suppressed and denigrated. In this course we will explore how the varied understandings of gender and sexuality in different cultures and at different times have influenced religious practice and belief and how, in turn, religions have affected these understandings. We will also consider how this interaction between gender and sexuality and religion has affected the status of men and women in their various roles and orientations.

Meets general academic requirement HU.

REL 107 - Jews & Christians in the Twenty-first Century

Students will study the distinctive relationship between these two religious traditions in recent decades. Topics will be drawn from the current public discourse of Judaism and Christianity. Among the many factors shaping the self-understandings and mutual understandings of the two communities we will consider the legacy of the Holocaust, increased religious diversity in Europe and North America, the State of Israel, and the postmodern critique of religious claims. Both Jews and Christians ground their religious self-understandings in biblical revelation - however conceived. Both receive that revelation mediated through an interpretive tradition - however explicit. This opens an avenue to introduce the ideas of revelation, hermeneutics, tradition, social location, and identity politics in relation to significant theological and communal factors in both traditions. *Meets general academic requirement HU*.

REL 115, 116 - Monotheism: Creating God

O sole God, like whom there is no other! The idea of one God was first expressed by the pharaoh Akhenaten who lived between 1352-1336 b.c.e. Over 3000 years later, three major world religions are still struggling to understand and incorporate this seemingly simple concept of monotheism. In this course we will explore some of the issues that surround monotheism and examine how the idea of one God has shaped the development of Judaism, Christianity, and Islam individually and in relation to each other. In doing so, we will attempt to gain a better understanding of the nature, role, and meaning of the ideas of God in western consciousness and culture.

Meets general academic requirement HU (and W when offered as 116).

REL 117 - Animals & the Sacred

Religious myth and ritual is full of allusions to animals. From the "Scapegoat" and the "Lamb of God" to the "Sacred Cow" and the "Chinese Dragon" animals are central to the symbolic representation and language of almost every religious tradition. This course will compare and contrast the way animals are imagined and used in the beliefs and practices of several religious traditions.

Meets general academic requirement HU.

REL 131 - Myth, Religion, and Creation

From Genesis' depiction of the divine organization of the universe in the Hebrew Bible to Hindu traditions of creation's emanation from Brahma, narratives concerning the origin of the world have attracted devotional and scholarly attention from around the globe since ancient times. In this course, we will use the comparison of creation stories as an introduction to the study of myth, its relationship to ritual, and its place and function in religious traditions. Furthermore, we will critically examine the ways in which different cultures have used stories of origins to address questions regarding contemporary political, social, or religious contexts. Particular emphasis will be placed on creation stories from the ancient Near East and Bible, and the symbolic and literary connections between them.

Meets general academic requirement DE and HU.

REL 133 - Pilgrimage: Rites of Way

Why is travel almost universally understood to hold the potential for significant transformation? How do various communities and individuals define sacred travel through their own practice, and how does it define them in turn? This course employs the many methodologies of Religion Studies in investigating pilgrimage around the world. We will look to a number of modern theoretical interpretations of sacred journey, and will examine ethnographic accounts of pilgrimage primarily in the contexts of Buddhism, Islam, Christianity, and Judaism. Pilgrimage will serve as our window onto these traditions' ethical systems, cosmologies of space and time, religious art and aesthetics, and views of the body's agency and power, and in some cases, onto the contested space of multiple traditions' holy ground.

Meets general academic requirement DE and HU.

REL 135 - Religion in America

This course will explore the evolution of religious life in the United States and of American ideas about the nature and place of religion within American society. Beginning in the colonial period and continuing through the present, this class will examine the phenomenon of religion in the United States and consider the ways that immigrants, atheists, and founders of new religious movements have changed and challenged established assumptions about what it means to be an American. Using primary documents, and particularly court cases, the class will explore the contested terrain of American religious life and ask how our understanding of religion has shaped notions of statehood, citizenship, and equality in the United States.

Meets general academic requirement HU.

REL 201 - Theory & Method in the Study of Religion

This course is required of all Religion Studies majors and is a survey of the various methods used in the study of religion and an examination of several theories about the nature of religion.

Prerequisite(s): Religion Studies major or minor or permission of instructor.

REL 203 - Religions of India

A survey of the forms and images of religion in the Indian subcontinent, concentrating on Hinduism and Buddhism. The religious spirit, ancient and modern, will be examined through a study of mythological, scriptural, historical, cultural, and artistic phenomena.

Meets general academic requirement HU and DE.

REL 207 - Religions of China

This course will address the origins and development of Confucianism, Taoism, and Buddhism and trace the interactions of these religions as they have shaped the spiritual and ethical environment that exists in China today. We will also consider material culture, popular forms, and folk traditions and, finally, the unique challenges posed by the modern Chinese political situation. *Meets general academic requirement HU and DE*.

REL 208 - Religions of Japan

Students will study the native Japanese religious tradition, Shinto, as well as the Chinese traditions that have become fundamental to Japanese religion (Confucianism, Taoism, and Buddhism) as they have been interpreted in Japan. The course will also consider material culture, popular forms, folk traditions, and the "new religions" of modern Japan as well as attitudes toward religion in today's Japan.

Meets general academic requirement HU and DE.

REL 225 - Buddhist Traditions

From its origins in India to its development throughout East and Southeast Asia and beyond, Buddhism has prospered in a wide variety of cultures and environments. This course will introduce students to the origins, evolution, and manifestations of Buddhism in scripture, practice, and artistic expression.

Meets general academic requirement HU and DE.

REL 227 - Islamic Traditions

This course will survey the beliefs, practices, and history of Islam, focusing on how Islam has evolved over time and culminating in a close examination of the forms Islam takes today and the place of Islam in current events. Special consideration will be given to what it means to consider Islam as a religion rather than a cultural or political entity. Attention will also be given to Islam's relationship with other monotheistic traditions and to American Islam.

Meets general academic requirement HU and DE.

REL 229 - Jewish Traditions

The Jewish religion includes a fascinating array of rituals, laws, holidays, and life-cycle events. This course is designed to introduce Judaism as it exists today around the world, including Ashkenazic and Sephardic Jews, Middle Eastern and African Jewish communities, and diverse Jewish communities in the U.S.

Meets general academic requirement HU.

REL 233 - Christian Traditions

Christianity is not and never has been a single set of beliefs and practices; instead, the religion is marked by diversity of thought and action. The purpose of this course is to engage the variety in the tradition through the exploration of rituals and beliefs held by different Christian communities around the world and through time. In addition to primary and secondary readings, students will also explore the visual arts, architecture, and music as manifestations of Christian diversity. Additional themes for consideration will include the place of the Bible and its interpretation, the role of church leaders and their relationship to the divine, and ethical/moral differences that are present within the tradition.

Meets general academic requirement HU.

REL 302 - Hebrew Bible (Old Testament)

The Hebrew Bible is the most significant touchstone of western literature and civilization and serves as a foundation for the three major western religious traditions. In order to appreciate many aspects of western culture, from an etching by Rembrandt to a novel by Steinbeck or even an episode of the Simpsons, not to mention the religious life and thought of Christianity, Islam, and Judaism, it is often necessary to be familiar with the text of the Hebrew Bible. This course is designed to provide an opportunity for students to read and understand some of the most important and fascinating parts of the Hebrew Bible from the narratives of Genesis and Exodus to the histories of the Kings of Israel to the poetry of the Prophets and Writings. In addition to biblical narrative, we will also explore the historical life and setting of the biblical world through archeological evidence, some of which has only very recently been discovered. No previous study of Hebrew Bible expected.

Meets general academic requirement HU.

REL 304 - New Testament

This course studies the distinctive scriptural foundation of Christianity in its literary, historical, and theological contexts. Topics may include Jesus as an historical figure and as the object of early Christian faith; the relationships of various early Christian communities to one another and to contemporary Judaisms, Greek religions, and philosophies; the place and role of Paul; the gospel genre and its several examples; the definition of the canon; approaches to interpreting the New Testament. No prior study of the New Testament is expected.

Meets general academic requirement HU.

REL 308 - Scrolls, Scribes, and Scriptures

Did you ever wonder how ancient texts, like the New Testament, reach the modern world? In this course, students will explore the challenges and opportunities of studying New Testament and other ancient Christian materials in their oldest forms. Central to this examination will be how the texts were read, interpreted, and transmitted within Christian communities over time. This course will include an introduction to several techniques used to analyze ancient scriptural materials as well as the basic syntax and vocabulary of Koine Greek. No previous language skills are expected or required.

*Meets general academic requirement HU.

This course focuses on dance, dance-drama, and music as ritual expressions of Indian spirituality. Multi-media sources are actively utilized as well as readings from the formal Indian tradition (Natya Sastra) and Western interpretive works on Indian music and dance.

Meets general academic requirement HU and DE.

REL 314 - Death and Desire in Tibetan Buddhism

REL 313 - Religion & Performing Arts in India

This course examines the practices of death and desire in the unique traditions of Tibetan tantra, a form of Himalayan Buddhism. Tibetan tantra involves practices of wrathful deities, sexual yogas, and subtle body technologies to produce a unique understanding of mind and body and their potential for transformation in both sexual union and in death. We will look at the foundational Tibetan Book of the Dead cycle of texts, as well as explore their evolving meanings in contemporary, non-Buddhist contexts like American Hospice. How have Tibetan Buddhists associated desire, power, and knowing? How might investigations of Tibetan practices of death and desire inform our own?

Meets general academic requirement DE and HU.

REL 322, 323 - Religion & Literature

This course provides an exploration of the ways in which literary imagination (metaphor, literary style, narrative voice, description, creative manipulation of time and place) interacts with religious imagination (projections of tradition, expression of mystical experience, ritual, symbolic phenomena) to produce works of a transformative nature. Examples from both Eastern and Western literary traditions may be chosen.

Prerequisite(s): Any previous course in religion studies.

Meets general academic requirement HU (and W when offered as 323

REL 353 - Gender & Sexuality in Judaism

In this course we will examine how issues relating to gender and sexuality have influenced Jewish experience. We will discuss a wide range of Jewish history and literature, extending from the Bible to contemporary Jewish culture, in order to gain a broad perspective on how gender and sexuality have played a role in Jewish life and thought over time. We will consider how gender and sexuality relate to questions of power and authority and discuss the ways that bodies, both gendered and sexual, become meaningful in different Jewish contexts.

Meets general academic requirement HU.

REL 355 - Christianity at the Crossroads: The Emergent Church in Late Antiquity

Until the rise of the Roman Emperor Constantine, the history of Christianity was marked by a plurality of belief structures, a constant threat of persecution, and a fluid leadership structure. With the imperial patronage of Constantine the face of ancient Christianity changed forever, embracing a close relationship between the church and the state, instituting particular formulas of belief, and solidifying the hierarchy of the ecclesiastical structure. Among other important developments in this period is the construction of the first grand Christian worship structures, the composition of the Nicene Creed, and the development of the canon of the New Testament. This class will examine these changes in the context of late antique society and politics and trace

the influence of these changes across the span of Christian history. *Meets general academic requirement HU.*

REL 357, 358 - The Holocaust: Nazi Germany & the Jews

This course will examine the Holocaust and its historical context by considering both the pre-war position of Jews in Europe and the factors that led to the destruction of European Jewry during WWII. Religious context and responses to these events within affected communities will be studied through a variety of sources, including literature, film, and memoirs.

Meets general academic requirement HU (and W when offered as 358).

REL 363 - Islam in America

American Muslims come from a wide diversity of backgrounds and cultures. In this course we will explore the historical contexts and current realities of Muslim communities in the United States. Questions to consider will include: How have traditional Islamic and Muslim doctrines and practices converged with American ideals of pluralism and secularism? Is there a distinctive "American Islam"? How have Muslim culture and Islam enriched the broader American culture?

Meets general academic requirements HU and DE.

REL 365 - Gender and Sexuality in Islam

Islam presents a particular challenge for Women's and Gender Studies. A submissive, veiled woman is often the first image that comes to mind when Westerners think of Islam. Paradoxically, the oppressed Muslim women has become for non-Muslims a primary symbol of the perceived dangers of Islam, even as that image is used to represent disempowerment. Yet Islam is a major world religion with over 1.6 billion adherents, approximately half of whom are women, and all of whom are sexual beings whose religious positioning intersects with their gender and sexuality in myriad ways. So what do Muslims really believe about gender and sexuality? And what do they do? In this course, we will examine constructions of gender and sexuality in Islam by investigating both traditional sources such as the Qur'an, Hadith, and Islamic Law; and also by considering how Muslim women today are challenging the patriarchal structures of authority, while at the same time critiquing Western feminism.

*Meets general academic requirement DE and HU.

REL 371 - Paths in Jewish Thought

An historical and thematic consideration of leading thinkers and way of thought in the Jewish tradition. Topics to be considered include the relationship between the Jewish people and Judaism, relations between Judaism and other religions, faith and reason, the problem of evil, and Judaism and politics. Students will be exposed to primary sources including the Bible and Talmud and medieval and modern Jewish thinkers.

Meets general academic requirement HU.

REL 377 - God, Self, & Other in Judaism & Christianity

Human identity, individually and collectively, is shaped in significant ways by the presence, the perception, and the definition of the Other. In the case of Jews and Christians, the mutual heritage of biblical Israel and its covenant with God demands that each continue to articulate its relationship to the other explicitly or implicitly. In this course, we examine the dynamics of the relationship from antiquity to the present, focusing on key transitional periods and major figures, and analyzing the impact of "the other" on their respective self-understandings and interactions.

Meets general academic requirement HU.

REL 450-469 - CUE: Capstone Seminars in the Study of Religion

The seminars are a capstone experience for our majors and other advanced students. Faculty and students work together to explore a research topic in depth. Each course offers both theoretical and methodological content. *Meets general academic requirement W.*

REL 470 - Honors Thesis in Religion Studies

This project is designed for Religion Studies majors who have consistently proven to be excellent students. It offers them the opportunity to pursue a self-designed major research and analysis thesis in close consultation with a faculty member. *Prerequisite(s): Instructor permission required.*

REL 960 - Religion Studies Internship

Russian Studies

Director: Dr. Luba Iskold, Professor of Russian

Professors: Croskey, Hashim, Tighe

The Russian Studies major and minor programs provide students with an integrated interdisciplinary knowledge of the Russian language and culture. They prepare students for graduate work leading to careers in international organizations, the foreign service, research, and teaching. The programs are also of value for students who wish to focus their liberal arts education on this dynamic and volatile geo-political region as part of an awareness of the growing importance of Russia and the Slavic world in current affairs. Students may wish to major in Russian Studies and another academic discipline, such as political science, international studies, history, the sciences, business administration, economics, media and communication, or another language.

Program Requirements

Major Requirements

Students majoring in Russian Studies must successfully complete RUS 204 - Intermediate Russian II with a grade point average of at least 2.00 or demonstrate an equivalent command of the language. All majors must maintain a grade point average of at least 2.00 in all courses completed for the major.

Majors take nine courses beyond RUS 102 - Elementary Russian II, including:

Language:

RUS 203 - Intermediate Russian I

RUS 204 - Intermediate Russian II

RUS 302 - Russian Conversation & Composition

RUS 303, 304 - Advanced Russian Conversation & Composition

Literature: (Two courses are required)

RUS 305, 306 - Readings in Russian Literature

RUS 402 - Twentieth Century Russian Literature in Translation

Culture:

RUS 320 - Russian Culture & Civilization

History:

HST 263 - Imperial Russia

HST 265 - Soviet Russia

Electives: (Number required dependent on Russian language proficiency)

HST 307, 308 - Orthodox Christianity: A Root of Russia

PSC 234, 235 - Government & Politics of Russia

RUS 490 - CUE: Russia & the Near Abroad

RUS 970 Russian Independent Study/Research or HST 970 History Independent Study/Research or PSC

970 Political Science Independent Study/Research focused on the Slavic world

Minor Requirements

Students minoring in Russian Studies take six courses beyond RUS 102 - Elementary Russian II, including:

Literature:

RUS 402 - Twentieth Century Russian Literature in Translation

Culture:

RUS 320 - Russian Culture & Civilization

History: (one course is required)

HST 263 - Imperial Russia HST 265 - Soviet Russia

Electives: (three courses are required)

RUS 203 - Intermediate Russian I RUS 204 - Intermediate Russian II

RUS 302 - Russian Conversation & Composition

RUS 303, 304 - Advanced Russian Conversation & Composition

RUS 305, 306 - Readings in Russian Literature

HST 307, 308 - Orthodox Christianity: A Root of Russia

PSC 234, 235 - Government & Politics of Russia A second Russian literature or history course

Sociology (SOC)

Interim Department Chair: Dr. Sue Curry Jansen, Professor of Media & Communications

Department Chair: Dr. Janine Chi, Associate Professor of Sociology

Assistant Professors: Bywater, Carter, Finkelstein

Visiting Assistant Professors: Campoamor, Cheruoff, Sadeghi

Sociology is the study of group behavior and society. The realization that our social world - be it a family, a campus, a city, a nation, an entire world - guides our actions and life choices is an essential lesson of the discipline. To think sociologically is to realize how the general categories into which we fall shape our particular life experiences and influence our thoughts, feelings, and actions. In doing so sociologists examine the causes and consequences of human behavior; the goal is not to document a particular perspective of society but rather to know how societies work and why. The field of sociology has broad scope. Topics of investigation range from intimate relationships to the consequences of overpopulation; from shared religious beliefs to social movements promoting radical social change; from problems of poverty to corporate downsizing; from questions of group solidarity and shared identities to instances of group conflict and violence. Sociology provides a distinctive perspective on the world and addresses many challenging issues that are confronting society and the world today. The sociology major offers a capstone course, SOC 450 - CUE: Senior Seminar in Sociology, in which students conduct original research.

Honors Program

We offer an honors program that includes conducting advanced original research through a close working relationship with a faculty member. Requirements for admission to the honors program include: 1) 3.60 GPA in sociology courses and an overall 3.00 at the time of application; 2) the successful completion of at least two 300 level electives in the department; 3) the successful completion of SOC 311 - Research Design in Sociology; and 4) an application that includes a statement of purpose and a proposal for the research project. The application must be given to the faculty advisor and the department chair by April 15 of the junior year. For more details see the department website.

Career Considerations

We offer a graded sequence of courses that is designed to help students understand and comprehend the central concepts, principles, issues, and methods associated with this discipline and to see how sociological research is

connected to research in other disciplines. Majors from the department have a strong record of successful applications to graduate programs across the country and have found careers in teaching and research at the university level. Due to the department's emphasis on methodological rigor, our graduates are often employed in law, civil service, social services, education, social work, public health and policy, human resource management, marketing research companies, and non-profit research organizations. International organizations such as the United Nations, World Bank, and World Health Organization regularly hire sociologists for research and policy analysis, and they can also be found working in museums and national parks.

Program Requirements

Major Requirements

Required Courses:

SOC 101 - Introduction to Sociology

SOC 302 - Sociological Theory

SOC 311 - Research Design in Sociology

SOC 312 - Quantitative Methods for Social Data

Electives: (5 or more of the following courses, at least 3 must be at the 300 level or above)

SOC 224, 225 - American Ethnic Diversity

SOC 235 - Inequality & Power

SOC 243 - Sexuality & Gender

SOC 270-279 - Topics in Sociology

SOC 313 - Qualitative Methods

SOC 317 - Sociology of Health

SOC 320 - Environmental Sociology

SOC 323 - Sociology of Food

SOC 325 - Imagined Communities: The Sociology of Nations & States

SOC 340 - Development & Social Change

SOC 342 - Boundaries & Belonging: Sociology of Diasporas

SOC 350 - Social Movements, Protests, & Conflicts

SOC 450 - CUE: Senior Seminar in Sociology

Minor Requirements

Required Courses:

SOC 101 - Introduction to Sociology

SOC 302 - Sociological Theory

SOC 311 - Research Design in Sociology

Electives: (3 or more of the following courses, at least 1 must be at the 300 level or above)

SOC 224, 225 - American Ethnic Diversity

SOC 235 - Inequality & Power

SOC 243 - Sexuality & Gender

SOC 270-279 - Topics in Sociology

SOC 312 - Quantitative Methods for Social Data

SOC 313 - Qualitative Methods

SOC 317 - Sociology of Health

SOC 320 - Environmental Sociology

SOC 323 - Sociology of Food

SOC 325 - Imagined Communities: The Sociology of Nations & States

SOC 340 - Development & Social Change

SOC 342 - Boundaries & Belonging: Sociology of Diasporas

SOC 350 - Social Movements, Protests, & Conflicts

SOC 450 - CUE: Senior Seminar in Sociology

Courses

SOC 101 - Introduction to Sociology

What is sociology? How do sociologists go about their work? How is society structured? Is inequality an inherent part of human life? How and why do societies change? This course introduces the central concepts and principles of major sociological perspectives. It provides an overview of the study of social institutions, social stratification, and social change. Taught every semester.

Meets general academic requirement DE and SL.

SOC 224, 225 - American Ethnic Diversity

This course is designed to provide a general overview of the field of the sociology of race and ethnic relations with a particular emphasis on the historical situations and experiences of various immigrant and minority groups in American society. We will first examine the socio-political and economic history of a variety of minority and immigrant groups. A substantial amount of course material will then focus on analyzing the varying structural conditions and institutional barriers that affect the different strategies by which various minority and immigrant groups have sought entry and success in dominant society. Finally, throughout the course discussions will be devoted to examining specific institutions and the various ways in which constructions of racial and ethnic categories and hierarchies are produced and reproduced in the U.S.

Prerequisite(s): SOC 101 - Introduction to Sociology.

Meets general academic requirement DE (and W when offered as 225).

SOC 235 - Inequality & Power

The study of inequality (how it emerges, its various manifestations, and why it persists) is a cornerstone of sociology. This course is designed for those who are interested in the theoretical conceptions and critiques of power and privilege and their combined effects on socio-political and economic life. The course is divided into three parts: a brief survey of the various theoretical perspectives of inequality and stratification; an examination of the complex intersections of race, ethnicity, and class structures in American society; and a discussion of gendered effects of migrant work within a global and comparative perspective.

Prerequisite(s): SOC 101 - Introduction to Sociology.

Meets general academic requirement DE.

SOC 243 - Sexuality & Gender

In this class we will use sociological perspectives to explore sex, sexuality, and gender. We will examine the mechanisms of power that construct and regulate our identities, behaviors, and very bodies. In particular we will look at how sex, sexuality, and gender are shaped by law, research, medicine, "sexperts," the media, and our family and friends. We will also look at how sex, sexuality, and gender permeate our daily lives, often in ways we do not even see.

Prerequisite(s): SOC 101 - Introduction to Sociology.

SOC 270-279 - Topics in Sociology

Selected courses with a specialized focus that are not contained within the regular sociology curriculum. Such topics might include Urban Sociology or Criminology.

Prerequisite(s): SOC 101 - Introduction to Sociology.

SOC 302 - Sociological Theory

An investigation of the classical foundations of social thought in sociology. The course concentrates on the original works of theorists such as Marx, Weber, Durkheim, and other important authors from the nineteenth and early twentieth centuries as well as contemporary theorists. Analyses of central theoretical paradigms and questions are explored. Taught every fall semester. *Prerequisite(s): SOC 101 - Introduction to Sociology*.

Meets general academic requirement W.

SOC 311 - Research Design in Sociology

This course provides experience in the design and implementation of sociological research. It introduces quantitative and qualitative techniques for collecting, analyzing, and reporting data. The epistemological issues that underlie sociological research, the ethical questions involved in research, and the assumptions on which various research strategies are based are examined. The strengths and weaknesses of the most commonly used methods are evaluated. Students will design an original research project. *Prerequisite(s): SOC 101 - Introduction to Sociology and one elective.*

Meets general academic requirement W.

SOC 312 - Quantitative Methods for Social Data

This course focuses on quantitative methods. Students will learn how to use statistics to address research questions in sociology, using popular statistical packages such as SPSS to analyze data.

Prerequisite(s): SOC 311 - Research Design in Sociology.

Meets general academic requirement W.

SOC 313 - Qualitative Methods

This course provides a theoretical and practical introduction to multiple forms of qualitative research methods and the numerous phases of conducting a qualitative research project, including project proposal, data collection, data management, analysis, interpretation, linking findings to theory, and presenting data. It will also engage questions about what we can know, strategic and ethical concerns, and the use and impact of self in doing research. The course assignments include a series of structured exercises to provide experience in collecting and analyzing data, as well as an original research project.

Prerequisite(s): SOC 311 - Research Design in Sociology.

SOC 317 - Sociology of Health

In this course we will explore the social aspects of health, illness, and the health care system in the contemporary United States. This will include an introduction to the theoretical underpinnings of medical sociology and health disparities as well as examinations of the social and historical construction of medical problems and disease, the relationship between health care providers and patients, the health care system, and pressures that are transforming the medical sciences. This seminar provides a survey of a number of topics related to health, illness, and the health care system. Students will have the opportunity during the semester to delve more deeply into an issue of special interest or importance to them.

Prerequisite(s): SOC 101 - Introduction to Sociology.

SOC 320 - Environmental Sociology

This course analyzes the social causes and consequences of environmental change. We explore the relationships among production, consumption, population, technology, and environment. The major theoretical paradigms in environmental sociology are used to analyze environmental issues. Some of the questions we address include: Is "green" capitalism possible? Does population growth lead to environmental degradation? Can technical fixes solve environmental problems? Has the environmental movement been successful? Taught every other year.

Prerequisite(s): SOC 101 - Introduction to Sociology.

Meets general academic requirement SL.

SOC 323 - Sociology of Food

This course relies on a sociological lens to uncover the complexity behind what is an everyday activity by examining the interrelated systems of production, processing, marketing, and consumption of food across and within international, national, regional, and local markets. We will consider what, when, how, and with whom we eat and discover how various aspects of food consumption and production can be understood in terms of the organization of society's social institutions as well as the structure of social relations among the individuals that comprise that society. Taught every other year.

Prerequisite(s): SOC 101 - Introduction to Sociology.

SOC 325 - Imagined Communities: The Sociology of Nations & States

This course aims to elucidate the complex interactions between nation and state by examining the nationalist experiences of several post-colonial and non-Western societies in Southeast Asia. A central part of this examination will entail addressing questions of citizenship and identity amidst contemporary socio-political and economic changes. Readings will focus on some of the central debates in the sub-field of political sociology as well as the dominant theoretical paradigms in the study of nations and nationalisms. A substantial part of the course will focus on a critical analysis of the institutional processes underlying state

formation and nation-building as well as assessing the impact of globalization on institutional and group-level definitions of national, ethno-cultural, religious, and gender identities. Taught every other year.

Prerequisite(s): SOC 101 - Introduction to Sociology.

Meets general academic requirement DE.

SOC 340 - Development & Social Change

This course analyzes development from a sociological perspective. It examines different theoretical models for understanding macro-level social change, such as modernization theory, dependency theory, and world-systems theory. Possible topics for exploration include the environment, economic development, revolution, urbanization, population, and poverty. Taught every other year.

Prerequisite(s): SOC 101 - Introduction to Sociology.

Meets general academic requirement SL.

SOC 342 - Boundaries & Belonging: Sociology of Diasporas

This course will investigate the impact of historical and contemporary movements of peoples across international borders and on definitions of citizenship and identities by raising questions about the permeability of national borders and the fluidity of cultural boundaries. A close examination of how globally dispersed peoples maintain and cultivate real and imagined ties to the ideals of a "homeland" or "place" reveals the cultural and institutional productions of transnational migrant communities that challenge the binary boundaries of "home" and "abroad." Relying on a sociological perspective, we will consider the negotiations of belonging within and between these peoples and their host societies and study the different forms of transnational, diasporic, and cosmopolitan identities that result from such negotiations. In particular, case studies will include, but are not limited to, that of the Chinese and African Diasporas.

Prerequisite(s): SOC 101 - Introduction to Sociology.

Meets general academic requirement DE.

SOC 350 - Social Movements, Protests, & Conflicts

A sociological investigation of the causes and consequences of social movements. The course will examine both historical and contemporary social movements in the United States and elsewhere to understand the underlying social, economic, political, and demographic factors that cause their emergence and that influence their evolution. Movements as diverse as the Civil Rights movement and the White Supremacy movement will be examined. Taught every other year.

Prerequisite(s): SOC 101 - Introduction to Sociology.

Meets general academic requirement SL.

SOC 450 - CUE: Senior Seminar in Sociology

A sociology seminar in which students participate in a collective research and/or applied project. Open only to sociology majors and minors or by permission. Taught every spring.

Prerequisite(s): SOC 302 - Sociological Theory and SOC 311 - Research Design in Sociology.

Meets general academic requirement W and CUE.

Sustainability Studies Minor (SUS)

Director: Dr. Richard Niesenbaum, Professor of Biology, Director of Sustainability Studies, and Rita and Joseph Scheller Endowed Chair

Sustainability is most commonly defined as meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. The field of Sustainability Studies explores and critiques ways to do this in the context of maintaining ecological and environmental health while generating economic opportunity and ensuring social justice and well-being. The minor operates across disciplines with its goal of instilling understanding, appreciation, and thoughtful problem solving skills in students about the relationships and interactions of human society and the environment. The Sustainability Studies Minor will highlight issues related to sustainability and explore how those issues impact and are addressed at local, national, and global levels. This minor will provide the interdisciplinary background that is needed to understand many of the complex challenges facing our world and will equip students with the skills needed to develop solutions to these problems. An additional goal

is to build a community of faculty and students with a diversity of perspectives and areas of expertise committed to seeking creative solutions for sustainability.

Minor Requirements

Students take 6 courses from throughout the curriculum: 2 theory/representation courses, 2 sustainability in practice courses, 1 course focused at the community level, and 1 course focused on sustainable solutions related to specific problems or issues.

Sustainability: Theory and Representation (two courses)

Courses primarily focus on theory, including basic science and social science, the representation of nature and sustainability, and environmental ethics and history. They provide the framework and context for further work in Sustainability Studies.

Students take 2 courses listed below, one must be in the Sciences (BIO, CHM, ESC) and one must be from the Humanities or Social Sciences (ECN, ENG, HST, PHL, SOC).

BIO 111 - Crisis Earth: Causes, Consequences, & Solutions for a Changing Planet

BIO 260 - Field Botany & Plant Ecology

BIO 268 - Freshwater Ecology

BIO 270 - Ecology

CHM 101 - Chemistry of the Environment

ECN 245, 246 - Environmental Economics

ENG 259, 260 - Literature & Ecology

ESC 111 - Topics in Environmental Science

ESC 113 - Environmental Science I

HST 341 - Environmental History of the United States

HST 373 - Environmental History of Latin America

PBH 200, 201 - Issues in Public Health

PHL 227 - Philosophy of Feminism

PHL 236 - Philosophy & the Arts

PHL 246 - Environmental Philosophy

PSC 246 - Developing Nations

PSC 330, 331 - Comparative & International Environmental Policies

SOC 323 - Sociology of Food

SOC 340 - Development & Social Change

Sustainability in Practice (two courses)

Courses have an applied focus and offer a substantial research or service-learning component related to sustainability and the environment. Although they may cover theoretical aspects, they are differentiated from the above group by providing both hands-on experience and more focus on the application of theory and basic science.

Students take two courses listed below from two different departments or programs.

ATH 262 - Historical Ecology

ATH 317 - Field Archaeology

BIO 108 - Plants & People

BIO 262 - Cultural & Economic Botany

BIO 275-279 - Field Investigations in Biology

BIO 465, 466 - CUE: Conservation Biology

BUS 263, 264 - Sustainability in Business

COM 336, 337 - Environmental Communication

COM 344 - Documentary Film & Social Justice

PBH 350 - Environmental Health

PSC 216 - Environmental Politics & Policymaking

PSC 254 - Globalization & Social Justice

SOC 320 - Environmental Sociology

SUS 960 - Sustainability Studies Internship

Sustainable Communities (one course)

These courses examine sustainability at the community level. They focus on analysis and problem solving by examining a variety of issues confronted by a particular community and offer opportunities to work with members of that community to understand and solve problems at the human-environment interface.

SUS 350 - Community Sustainability in Costa Rica

SUS 355 - Climate Change & Sustainable Development in Bangladesh

SUS 365 - Local Sustainability

Sustainable Solutions (one course)

Through a seminar or independent research, students focus on a particular issue or set of issues, such as energy, food, or sustainable design, and work towards the development of practical solutions. The focus is on specific problems and solutions that might be applied to them on local, national, and global scales. Students will study the issues and focus on design, data collection, dissemination and assessment related to solving the problem being analyzed. The experience offers hands-on opportunities to engage in real world problem solving.

SUS 405 - Sustainable Solutions

SUS 970 - Independent Research (see Independent Study/Research)

Courses

SUS 350 - Community Sustainability in Costa Rica

Students explore solutions to complex community problems related to sustainability in Costa Rica. During the spring semester students develop projects and prepare for the two-week study/research/travel experience to Costa Rica at the end of May. Preparation includes study of the area's ecological diversity; political, cultural, and social issues; research skills; and service in the Allentown Community. In Costa Rica students explore a variety of habitats, live in and interact with members of a small town, and conduct both community service and independent research projects. Research projects focus on ecology, sociology, culture, sustainability, and public health of the region. One objective is to remove the blinders of specific discipline-based learning and our own culture to enable us to develop sustainable solutions.

Meets general academic requirements DE and SC.

SUS 355 - Climate Change & Sustainable Development in Bangladesh

This team-taught course examines the impact of climate change on economic, social, and political development by focusing on the nation of Bangladesh. In addition to introducing students to the science and politics of climate change, the course also examines the specific environmental, economic, and social changes confronting Bangladesh's political development since its independence; investigates the environmental and social consequences of state-sponsored development strategies, especially recent market-based "neo-liberal" policies; and evaluates new "sustainable development" strategies that are emerging as a response to the challenges posed by climate change.

Meets general academic requirement DE.

SUS 365 - Local Sustainability

This course will take an interdisciplinary approach to analyzing sustainability at the local level, either in the Muhlenberg community or communities in the Lehigh Valley and will explore human-environment issues within the context of the relationship among individuals and institutions. Through readings, presentations, and the development of individual research projects, students will assess current sustainability efforts and develop recommendations for future efforts. Research projects may include surveying community members on perceptions and attitudes towards sustainability and environmental issues, assessing current sustainability efforts, and interviewing local experts - members of organizations and politicians. Priorities for research will be determined in collaboration with the community and results and recommendations will be shared.

Prerequisite(s): Any single course in the Sustainability Studies Minor. Meets general academic requirement SC

SUS 405 - Sustainable Solutions

An interdisciplinary approach to developing and assessing sustainable solutions to meet the needs of human society and the environment on local, regional, and global scales. Through readings, writing, presentations, and field trips, students will identify and explore specific problems, and then through project-based learning will design and test potential solutions that might help further sustainability. Students will study the issues and focus on innovation, policy, individual action, stakeholder participation, project design, data collection, and dissemination related to solving the problems being analyzed.

Prerequisite(s): Any two courses in the Sustainability Studies Minor.

Meets general academic requirement W.

SUS 960 - Sustainability Studies Internship

Internships arranged with local, national, and international public or private organizations in the areas of development, environment, and sustainability in practice.

Theatre (THR), Speech (SPC)

Department Chair: Professor Beth Schachter

Professors: Averill, Cartelli, Coppa, Dretsch, Peck, Richter, Roussel

Associate Professors: Cate, Dwyer Assistant Professors: Luckett, Moore Visiting Assistant Professor: Singer

The theatre program at Muhlenberg engages students in the artistic and intellectual processes that enable them to make and analyze theatre and performance. The required creative work of the major program includes acting, directing, design, and critical writing, supplemented by offerings in stage management and playwriting. Students emerge with extensive knowledge of the literature and performance traditions of the theatre. Grounded in the liberal arts tradition, the department is committed to the study of theatre as a way of knowing the world. The major serves as an excellent preparation for advanced study (M.A., M.F.A., Ph.D.) and careers in the theatre arts.

In keeping with the department's dedication to live performance, theatre at Muhlenberg joins with the dance program to form the Department of Theatre and Dance. The faculty, staff, and students in both areas work closely together in the department's performance program. Please refer to the Dance section of this catalog for a more detailed explanation of Dance. Students with a serious interest in musical theatre performance can study acting and dance in the Department of Theatre and Dance and receive vocal training in the Department of Music. At least one major musical production is presented each year as part of the performance program.

An important feature of theatre education at Muhlenberg is the award-winning performance program. The production season is grounded in the belief that as an academic discipline, theatre must be simultaneously intellectual and experiential. Presented under the auspices of the Muhlenberg Theatre Association, each year six major theatre productions and several studio performances occur in the state-of-the-art Trexler Pavilion for Theatre and Dance and the Dorothy and Dexter Baker Center for the Arts. In addition, the department sponsors touring educational pieces offered to local schools and community groups. All students, regardless of major, are eligible to participate in the performance program and work on production crews.

Ongoing visiting artist and educational exchange programs expose students to the work of theatre practitioners from outside the college. The Baker Artist-in-Residence Program brings distinguished professional guest artists to Muhlenberg to teach and participate in the performance program. In addition, the department employs numerous other guest professional artists each year in the performance program and as adjunct instructors. Each summer students may audition for the Muhlenberg Summer Music Theatre Festival Company, a high-quality professional stock operation that presents three full productions in College facilities. Theatre majors are encouraged to spend a

semester in England studying at Goldsmith's College or Queen Mary College of the University of London, or at the Accademia Dell'arte in Arezzo, Italy (see Study Abroad Programs).

Major Requirements

All students will take thirteen courses, ten in the theatre department and three in cognate disciplines. Students in the theatre major must opt for one of five concentrations: Acting, Directing, Design and Technical Theatre, Stage Management, and Performance Studies. Students majoring in theatre may double major or minor in dance. Students with a strong interest in musical theatre are encouraged to double major or minor in music or major in theatre and minor in music and dance.

Core Courses (three courses):

All theatre students must enroll in the following two courses:

THR 100 - Theatre & Society: An Historical Introduction

THR 165 - Stagecraft: Aesthetics & Lighting (0.5 units)

In addition, all majors will take either:

THR 166 - Stagecraft: Scenic Techniques (0.5 units) OR

THR 167 - Stagecraft: Costume Techniques (0.5 units)

Theatre Scholarship (five courses):

These courses give students a substantive encounter with important movements and traditions in theatre and introduce influential methods of analyzing theatre. All majors take five courses selected from three categories: Dramatic Literature, Theatrical and Aesthetic Theory, and Theatre History. Dramatic Literature courses emphasize the study of playtexts. Courses in Theatrical and Aesthetic Theory study theories of the nature and function of theatre and art. Courses in Theatre History analyze embodied performances in historical context.

Three of these courses must be *Cognates*, taken outside the theatre department; one course must address primarily pre-modern* material.

Dramatic Literature (at least one course):

Cognates

ENG 231 - Modern Drama

ENG 229, 232 - African American Drama

ENG 237, 294 - Postwar Drama

ENG 238, 239 - Plays on Film

ENG 247, 248 - Shakespeare

ENG 263, 264 - Postwar British Theatre & Film

ENG 267 - Literature & Sexuality

ENG 321, 322 - Shakespeare Reproduced

FRN 313 - French Theatre of Resistance

GRM 313 - German Drama in Translation

SPN 412 - Early Modern Spanish Drama & Performance

Theatrical & Aesthetic Theory (at least one course):

THR 212 - Performance Studies

THR 301, 302 - Feminist Theories of the Theatre

Cognates

PHL 236 - Philosophy & the Arts

Theatre History (at least one course):

THR 336 - The History of Queer Performance

THR 337 - History of the American Musical Theatre

THR 339, 340 - Post-Independence African Theatre

Cognates

ENG 235, 236 - Contemporary Drama & Performance Art

ENG 323, 324 - Renaissance Plays in Process

ENG 328 - Staging the Restoration

MUS 219 - Opera

Area of Concentration (five courses):

Students select one concentration. These courses allow students to pursue their artistic scholarly interests at an advanced level.

Acting Concentration:

THR 250 - Acting I: Process

THR 251 - Acting II: Scene Study

Two acting courses at the 300 level: One of these must be THR 350 - Acting Classical Verse or THR 351 -

Commedia dell'Arte for verse work.

THR 350 - Acting Classical Verse

THR 351 - Commedia dell'Arte

THR 352 - Experiments in Acting

THR 353 - Acting the Song

THR 355 - On-Camera Acting

One directing course selected from:

THR 370 - Fundamentals of Directing

THR 371 - Directing: Process in Production

THR 372 - Major Directors: Theory & Practice

Directing Concentration:

THR 161 - Creativity & Collaboration

THR 250 - Acting I: Process

THR 251 - Acting II: Scene Study

Two courses in directing selected from:

THR 370 - Fundamentals of Directing

THR 371 - Directing: Process in Production

THR 372 - Major Directors: Theory & Practice

Design and Technical Theatre Concentration:

THR 161 - Creativity & Collaboration

Two Intermediate Design Courses chosen from:

THR 260 - Scene Design I

THR 261 - Stage Lighting I

THR 262 - Costume Design I

One Advanced Design Course chosen from:

THR 360 - Scene Design II

THR 361 - Stage Lighting II

One Course chosen from:

THR 150 - Introduction to the Art of Acting

THR 250 - Acting I: Process

ARS 103 - Drawing I

ARS 113 - Drawing Studio

Stage Management Concentration:

THR 164 - Stage Management

Two Design Courses:

THR 163 - Introduction to Sound Design

THR 261 - Stage Lighting I

Two additional courses selected from:

THR 150 - Introduction to the Art of Acting

THR 161 - Creativity & Collaboration

THR 250 - Acting I: Process

THR 260 - Scene Design I

THR 262 - Costume Design I

BUS 311 - Arts Administration

Performance Studies Concentration:

One acting course:

THR 150 - Introduction to the Art of Acting OR

THR 250 - Acting I: Process

One directing course selected from:

THR 370 - Fundamentals of Directing

THR 371 - Directing: Process in Production

THR 372 - Major Directors: Theory & Practice

Three more courses in Theatrical & Aesthetic Theory or Theatre History to be chosen from those listed in the basic categories above OR from additional cognates listed below specifically (and only) for Performance Studies Concentrators:

ATH 240 - Witchcraft, Magic, & Sorcery

DNC 150 - African Dances & Cultures

DNC 170 - Dance & Society

DNC 201 - Dance History

MUS 229 - World Music

Performance Studies Concentrators must take THR 212 - Performance Studies to fulfill their basic requirement in Theatrical and Aesthetic Theory.

Performance Theory, History, and Literature

THR 100 - Theatre & Society: An Historical Introduction

Students in this course study the historical development of world theatre with an emphasis on the western dramatic tradition as a way of understanding how the theatrical experience reflects the society in which it exists. A broad range of theatrical literature and theoretical material will be explored. The members of the class will attend several live theatrical performances and are required to complete production laboratory hours.

Open to all Muhlenberg students, this is the foundation course for the theatre major. Students planning to major in theatre should complete this course in their first year.

THR 190 - Foundations of the Creative Arts

1 course unit

Students will investigate the basic aesthetic concepts in visual arts, music, dance, and drama. They will examine the arts as a way of perceiving the world, reflecting and challenging cultural norms, and expressing new ideas. By exploring and experiencing the fundamental skills used in the creative process, students will discover their own connection to the arts as a means of personal expression. Through a primarily studio experience, students will have the opportunity to engage a variety of art forms as part of the process of learning an aesthetic language. This objective will be achieved most effectively as students actively work in and through multiple artistic perspectives.

Open to teacher certification candidates only.

Meets general academic requirement AR.

THR 212 - Performance Studies

This course introduces the burgeoning interdisciplinary field of Performance Studies and investigates the human body engaged in symbolic action using methods drawn from such disciplines as the performing arts, cultural anthropology, ritual studies, and popular culture studies. Thus, it analyzes aestheticized forms like theatre, performance art, dance, and music but also inquires into cultural performances like political protests, fashion shows, sporting events, and worship services. Students will learn the basic history of the field and develop a working knowledge of its scholarly methods and proclivities.

Meets general academic requirement W.

THR 301, 302 - Feminist Theories of the Theatre

This course introduces students to the intellectual viewpoints, critiques, and new questions (and the new objects of study to match the new questions) that have arisen in the late twentieth and early twenty-first centuries' feminist theories of the theatre. In order to move through the theoretical models employed by feminist critics in the theatre, we will begin with those key essays in film theory, semiotics, and materialist analysis that contributed to the current body of theoretical feminist material. By reading theories of reception and representation, of race and whiteness, and of unmaking mimesis, students will become familiar with analyses articulated by contemporary scholars. As objects of study upon which to practice these theoretical approaches, the class will read contemporary plays of feminist writers.

Prerequisite(s): THR 100 - Theatre & Society: An Historical Introduction or permission of instructor. Meets general academic requirement W when offered as 302.

THR 336 - The History of Queer Performance

This course charts the significant but often obscured influence of queerness on Western performance culture - and therefore, on Western culture as a whole - since the late nineteenth century. We will explore historical records of the personal and professional lives of playwrights, actors, directors, producers, designers, and critics, as well as consider the impact of major historical and performance events, both mainstream and queer, within the past 150 years. With a foundation in the history of sexual identity in the modern public sphere, we wrestle with the problems of investigating and analyzing queer performance practices (both on and off stage). Focused primarily on the United States and Britain, the course investigates how economic, social, and political anxieties have fueled apprehension about non-mainstream sex/gender identity, as well as art. Of particular interest is how these combined anxieties have thwarted, and can continue to hinder, the work of the queer theatre historian.

Prerequisite(s): THR 100 - Theatre & Society: An Historical Introduction or permission of instructor. Meets general academic requirement HU and W.

THR 337 - History of the American Musical Theatre

Students will study the history and development of American musical theatre from the era of early minstrel shows of the 1840s to the present day. As a crucial element of American culture, the study of musical theatre can lead to a deeper understanding of how issues of race, gender, ethnicity, and national identity impacted popular stage entertainment as the nation moved through the industrial revolution, civil and world wars, periods of massive immigration, depression, and increasingly complex technological change.

Prerequisite(s): THR 100 - Theatre & Society: An Historical Introduction. Meets general academic requirement HU.

THR 339, 340 - Post-Independence African Theatre

This course examines theatre in Africa beginning from the anticolonial independence movements of the 1950s and continuing to the present. It does not purport to offer a comprehensive view of Africa's diverse theatrical traditions but examines several regions, heritages, and time periods, attentive to both commonalities and differences. Particular attention will be given to theatre's function as an agent of social and political change. Theoretical concerns are likely to include theatre and nationalism, negritude and its critics, the relationship between theatre and ritual, the role of women, and the interaction of indigenous African performance practices with western theatre.

Prerequisite(s): THR 100 - Theatre & Society: An Historical Introduction or permission of instructor. Meets general academic requirement HU and DE (and W when offered as 340).

Theatre Studio Performance: Acting

THR 150 - Introduction to the Art of Acting

A survey of acting theories and practice culminating in the rehearsal and performance of scenework. The course is designed for non-majors and those who plan to major in theatre but have limited previous acting training. The first part of the semester will examine a variety of approaches to the art of acting, including those of Stanislavski, Artaud, Brecht, the Elizabethans, and one or more non-European traditions. Students will be asked to consider the basic assumptions about the nature and function of theatre implied by each approach. The balance of the work will consist of exercises to explore the intentional and communicative nature of concentration, introductory Meisner technique, improvisation, and the acquisition of a basic acting vocabulary. To gain a practical understanding of the preparatory work, each student, with one or more partners, will rehearse and perform a scene from the modern American theatre. Meets four hours per week.

Meets general academic requirement AR.

THR 151 - Voice & Speech for the Actor

Employing techniques devised by Linklater, Lessac, and Skinner, this course aims to develop (1) refined - released, unrestricted, supported vocalization for the stage and (2) clear - articulate speech for the stage. Both the International Phonetic Alphabet (IPA) and the phonetic annotative scheme of Arthur Lessac are introduced, as the phonemes that make up spoken Standard American English are catalogued and practiced. Students address the phonetic bases of their own regional dialects with an ear toward acquiring vocal habits to support acting choices in a wide range of roles.

Meets general academic requirement AR.

THR 250 - Acting I: Process

The beginning class in the acting sequence, this class lays the foundations for the ultimate goal of the acting program: to create actors who know how to work on a role within the context of the play and who have flexibility in their craft. The focus will be on acting process, including relaxation work; how to critique; commitment to language, sound, emotional connection, and movement; the active choice; and actor's text analysis. Actors will be judged on their individual growth and also on their ability to work as an ensemble member within the class. This course is the building block leading into scene work and a requirement of the class will be a fully staged scene. Possible readings from Stanislavsky, Peter Brook, Chekhov, Williams, Shephard, and other writers. Films may be shown as an example of craft. Class meets for six hours a week.

 $\label{eq:continuous} \textit{Prerequisite}(s) : \textit{THR 100 - Theatre \& Society} : \textit{An Historical Introduction}$

Meets general academic requirement AR.

THR 251 - Acting II: Scene Study

Building on the foundations taught in Acting I, this class moves the student actor into scene work. Primary focus in the class is on American realistic text with the possibility of moving into increasingly difficult texts from the modern canon. Class will explore the tools of the actor, including text analysis, critique, commitment to action, linking choices to the larger structure of the play, theatricality, language, impulse work, and style. Actors will be judged on their individual growth and also on their ability to work as an ensemble member within the class. Playwrights may include Hellman, Kushner, O'Neill, Churchill, Fornes, among other writers. Films may be shown as an example of technique. Will meet for four hours per week. *Prerequisite(s): THR 250 - Acting I: Process.*

THR 350 - Acting Classical Verse

This advanced acting class investigates methods for approaching, rehearsing, and performing pre-modern lyric texts, such as those by William Shakespeare and his contemporaries. With a focus on the practical demands of heightened language, the course addresses technical, stylistic, historical, and interpretive considerations as they relate to the feat of performance. Special attention is paid to linguistic structure as well as to its relationship to the individual experience of the actor/character. A directed emphasis on voice and speech development complements study by providing physical conditioning aimed at enhancing the student's production of poetic language. Topics of study also include verse structure, metrical variation, rhythm, language-as-action, forward movement, prose, phonetic word fabric, and imagery. The course acknowledges the modern actor's psychological approach to text (regardless of period) while at the same time recognizing that classical plays require actors to make distinct shifts in both acting-style and psychology. Graded performance projects involve advanced scene work from Shakespeare's

oeuvre. Class will meet for four hours per week. Prerequisite(s): THR 251 - Acting II: Scene Study.

THR 351 - Commedia dell'Arte

This is an advanced acting class that explores comic performance from the classical French, Italian, and Spanish traditions. Scenes from the plays of Goldoni, Gozzi, Moliere, Marivaux, Beaumarchais, and Cervantes will be analyzed and performed. In addition, the study of the stock Commedia dell'Arte characters (Arlecchino, Pantalone, Brighella, Dottore, Capitano, etc.) will allow the actor to improvise with masks in order to expand vocal and physical abilities. Students in the class are required to write and perform contemporary scenes in the style of the Commedia, and elements of comedy will be researched through the viewing of current films and plays in order to trace the influence of this tradition on contemporary practice. A final performance will take place in a community venue.

Prerequisite(s): THR 251 - Acting II: Scene Study.

THR 352 - Experiments in Acting

This course is designed to explore the extremes of tragedy and comedy, and to combine them in the specific style of Samuel Beckett, as "tragi-comic." With readings from Sophocoles, Friederich Nietzche, Antonin Artaud, Joseph Chaikin, and Peter Hall, the class discovers the dynamics of Greek chorus, the presence of the neutral mask and the building of a clowning act. Texts from *Electra* and *Waiting for Godot* are studied in depth and serve as inspiration for writing a scene in a tragi-comic style. Films are assigned every week.

Prerequisite(s): THR 251 - Acting II: Scene Study.

THR 353 - Acting the Song

This class will help the actor develop such skills as finding the right attitude in approaching the song, telling the story, playing with the music, and connecting with the audience on a very personal level. Students will learn to creatively act characters from musicals and/or to express themselves through cabaret performance. Special attention will be given to learning about cabaret traditions, auditioning the song, writing material, and the business of building an act. All kinds of styles of music are encouraged from musicals to jazz, and/or diverse languages. The focus of the class is not on vocal technique, but is about *acting* the song. *Prerequisite(s): THR 251 - Acting II: Scene Study*.

THR 355 - On-Camera Acting

This upper level course is designed to introduce students to the skills required to work effectively on camera. Using material drawn from the professional world, students will work in a variety of on-camera genres that may include commercials, daytime, primetime (sitcom and drama), and film. Class time will be divided equally between shooting and viewing, and students are expected to engage critically with both their own work and their classmates. Analytical viewing assignments from each of the genres will be required.

Prerequisite(s): THR 251 - Acting II: Scene Study.

THR 450 - Advanced Topics in Acting (1 or 0.5 units)

This intensive laboratory course explores the ideas and techniques of one or more advanced approaches to performance. In some iterations this studio class will concentrate on topics such as Advanced Problems in Acting/Emotional Techniques, will meet for 4 hours per week, and students will receive one unit. Additional topics may include Stage Combat, which will meet for 3.5 hours per week and students will receive .5 units, (students should start with the "Unarmed" version).

Prerequisite(s): For one unit version, THR 251 Acting II: Scene Study; for .5 unit version, THR 250 Acting I: Process

THR 451 - Performing Magic

This course is a studio introduction to the performance art of magic. While we read important works in the theory or philosophy of magic (by Eugene Burger, Juan Tamariz, Dai Vernon, Jeff McBride, and others), the primary focus is to train students in the effective performance of magic. Some main areas of training will be sleight of hand, directing attention, the psychology of deception, scriptwriting, persona, audience interaction, and repertoire selection. The course is being taught as an introduction, so no previous experience with magic is required. What is required is a strong desire to perform magic for other people and a commitment to focused, disciplined, and creative work. By the end of the semester everyone will have one or two quality performance pieces: that is, the beginning of a repertoire and knowledge of how to build upon it. As a culminating experience, students will perform their pieces for and be evaluated by a jury of professional magicians.

Prerequisite(s): THR 150 - Introduction to the Art of Acting or THR 250 - Acting 1: Process or permission of the instructor.

Theatre Studio Performance: Directing

THR 370 - Fundamentals of Directing

This class introduces the art form of theatre directing. Students learn key directorial concepts, focusing especially on issues of plot, character, space, and sound. A series of compact, supervised projects give students the opportunity to develop their abilities with these and other tools. In addition to teaching the basics of craft, the course presumes that directing is an expressive art form. Subsidiary concerns of the class will include models of rehearsal, directorial text analysis, and contemporary directing theory. Meets four hours per week.

Prerequisite(s): THR 251 - Acting II: Scene Study.

THR 371 - Directing: Process in Production

This is an experiential course that explores the process of bringing the play text to the stage. Working as an ensemble of actors and directors, the class will confront the challenges of production conceptualization, text analysis, problems in physical staging, and collaborative process. Each student will participate as a director and actor in the mounting of several one-act plays in the course of the semester. Members of the class will also produce two production prompt books based on their work as directors. Meets four hours per week.

Prerequisite(s): THR 251 - Acting II: Scene Study.

THR 372 - Major Directors: Theory & Practice

This course explores the ideas and techniques of one or more major theatre directors. The class will touch upon the historical development of each artist, concentrating on the conceptual and practical bases of their work. Students will read and write about these signal figures and create many new theatrical projects inspired by them. Extensive collaboration will be expected. The directors studied will change from semester to semester but might include Vsevolod Meyerhold, Bertolt Brecht, Joan Littlewood, Tadevsz Kantor, or Arianne Mnouchkine. Meets four hours per week.

Prerequisite(s): THR 251 - Acting II: Scene Study or permission of the instructor.

Design and Technical Theatre

THR 161 - Creativity & Collaboration

An introduction to 'total design' for the stage using a text-based approach to generate and test ideas as the core of creating a design. With the actors as the central focus of concentric rings of aesthetic choices, analysis would include a study in each successive circle: costume design - the fluid layer moving with the actor; stage properties - the objects the actor immediately uses; scenery - the contained world of the play; lighting design - the revelation of the physical world; and sound design - the most unconscious mood-maker onstage. The course will introduce the beginning stage designer to the creative process of making "art" onstage that is forged through a strong visual production concept.

Meets general academic requirement AR.

THR 162 - Introduction to Stage Make-up (0.5 units)

This 7-week course is an introduction to the basics of stage make-up; study includes historical and contemporary techniques in make-up and hair design and execution. Students will analyze the face and explore ways to manipulate and exaggerate the features with make-up and three-dimensional mediums. Projects include work with analyzing plays and characters to then create conceptual make-up charts that lead to realized designs. Study includes human physiognomy, theatrical make-up styles, and rendering techniques.

THR 163 - Introduction to Sound Design

Covers basic design theory and history, engineering, and technology for theatrical sound scoring and sound reinforcement. Classes include both lecture and hands-on labs in weekly three-hour sessions. Students write short plays that require sound designs, fabricate conceptual designs for short works, create a complete sound plot, engineer a series of audio projects, and work on lab projects and exercises. Students will be able to conceptualize, discuss, and research projects; record and create basic cues; and understand and operate simple sound systems.

Meets general academic requirement AR.

THR 164 - Stage Management

Introduction to the craft and art of the theatre stage manager and the professional stage management process. The course will cover the theory and historical development of contemporary practice. Studies will require the acquisition of specific skills and knowledge, including a vocabulary of theatre terminology, blocking notation, production book, and scheduling techniques. Students will learn how technical and design elements are coordinated, how to effectively work with directors, and to call and maintain shows. This course is designed to integrate theories and concepts with skills and techniques in order to meet the problem-solving and organizational challenges commonly encountered by stage managers in the creation of a show.

THR 165 - Stagecraft: Aesthetics & Lighting (0.5 units)

Introduction to a theatre designer's aesthetic choices, including overview of stage design styles and design process as applied to stage design. The course will cover techniques, tools, and materials of stage lighting, including the hang and focus of lighting design. Crew/laboratory requirement will complement class lecture.

THR 166 - Stagecraft: Scenic Techniques (0.5 units)

This course will cover techniques, tools, and materials used in the construction and painting of scenery. Other technical studies will include safety, stage rigging and knots, properties, and production organization. A crew/laboratory requirement will complement class lectures.

THR 167 - Stagecraft: Costume Techniques (0.5 units)

This course will cover techniques, tools, and materials used in the construction of costumes. Topics will include properties of different fabrics, sewing, cutting and draping, dying, and costume maintenance. A crew/laboratory requirement will complement class lectures.

THR 260 - Scene Design I

An exploration of the relationship between the play and its physical setting. Students will explore how the cultural/literary context of specific theatrical works can be expressed through the designer's process. A major focus will be on production conceptualization and the aesthetics of the theatre. Class members will be introduced to the basics of model building, color rendering practice, and the various media available to the modern designer. Crew work will be required. Offered in alternate years.

Prerequisite(s): THR 161 - Creativity & Collaboration or permission of the instructor. Meets general academic requirement AR.

THR 261 - Stage Lighting I

An exploration of the properties of light and their relation to the stage play in production. Areas to be covered include electrical theory, color theory, stage lighting design theory, and control systems. Students will develop an understanding of the potentials of the lighting instruments available to the designer and the uses of computer memory control. Crew work will be required Offered in alternate years.

Prerequisite(s): THR 161 - Creativity & Collaboration or permission of the instructor. Meets general academic requirement AR.

THR 262 - Costume Design I

A survey of costume design and history with training in basic construction techniques. The application of basic design concepts and their relation to clothes, costume, and the human figure will be discussed and related to script analysis exercises. Students will work on designing, patterning, and planning costumes for specific plays. Figure drawing and rendering technique will be covered, and crew work will be required.

Prerequisite(s): THR 161 - Creativity & Collaboration or permission of the instructor. Meets general academic requirement AR.

THR 360 - Scene Design II

Advanced work in production conceptualization and a discussion of the design process in relation to the demands of period drama. Students will study the historical development of architecture and period décor and will work to hone drafting and

rendering skills. Offered in alternate years. Prerequisite(s): THR 260 - Scene Design I.

THR 361 - Stage Lighting II

Continuing study in the practice of lighting design for the stage with principal emphasis on aesthetics and interpretation, discussion of lighting as an art form, and its effect upon other aspects of theatre. Drafting as it relates to the completion of lighting plots and the associated paperwork will be taught. Class projects as well as concentrated involvement in actual productions will be required. Offered in alternate years.

Prerequisite(s): THR 261 - Stage Lighting I.

THR 460 - Advanced Topics in Design

This studio course explores specialized ideas or techniques in theatre design. Possible topics might include scene painting; moving lights technology.

Prerequisite(s): THR 161 - Creativity & Collaboration or permission of the instructor

Ensembles and Internships

THR 900-959 - Community Performance Ensemble

Members of the Community Performance Ensembles in theatre and dance develop, rehearse, and tour programs (plays, dance performances, interactive dramatic pieces) for presentation at schools, community centers, and senior citizen residences. In addition to participation in the touring ensemble, students will be expected to submit a journal about their experience in mounting the production and touring to diverse audiences. May be repeated.

Audition required for participation.

THR 960 - Theatre Internship

An opportunity for students to serve internships with professional theatre companies. These internships will usually be in such areas as stage management, technical theatre areas, and theatre administration.

Acting internships are usually not available. Internships are available both in Allentown and at theatres outside the Lehigh Valley. Pass/fail only.

Speech Course (SPC)

SPC 250 - Basic Speech

An introduction to the principles of public speaking. Concentration on the development of assurance and good platform presence through making frequent short speeches of simple expository or narrative types.

Women's and Gender Studies Minor (WST)

Director: Dr. Marcia Morgan, Associate Professor of Philosophy

Advisory Board: Dr. Maura Finkelstein, Assistant Professor of Anthropology

Dr. Margo Hobbs, Associate Professor of Art History

Dr. Beth Schachter, Professor of Theatre

Dr. Frederick Staidum, Assistant Professor of English and Africana Studies

Why do women and men still have wage inequities? How do different societies and cultures define femininity and masculinity in intersection with ethnic histories and mythologies of racial difference? What does the history of medically defined and racially specific gender categories (male, female, and transgender) reveal about the way in which power flows through a society? When we explore ideas about racial otherness and masculinity, for instance, as they are embedded in our world (films we see, sciences we study and practice, etc.), what new visions of societal and global life might we build?

These are just some of the questions that Women's and Gender Studies asks of the world. The Women's and Gender Studies Program at Muhlenberg offers a six course minor that students can combine with any major. Recent graduates have majored in biology, psychology, media and communication, sociology, history, English, mathematics and religion studies. Some have gone into careers in anthropology, public health, law, publishing, and public policy making; others have gone on to graduate study in teaching and medicine.

By completing the Women's and Gender Studies program, students learn how gender is shaped by and shapes social structures, everyday practices, conventions of representation, and the production of knowledge. When a student graduates they will have mastered the ability to connect scholarly research to real-world applications. Our graduates bring those problem-solving skills to all of their future endeavors.

The current list of Women's and Gender Studies electives offers students coursework in 14 different majors, and the program adds new classes every year. All Women's and Gender Studies minors also have a shared scholarly experience when they complete the program's single required course, WST 202 - Topics in Women's and Gender Studies. This core class teaches students the transnational history of Women's and Gender Studies and, in addition, the latest thinking in these areas: feminism, sexuality studies, masculinity studies, and queer studies.

Minor Requirements

To complete the Women's and Gender Studies minor, students must complete WST 202 - Topics in Women's and Gender Studies (or an equivalent course designated by Director) and five additional courses from the list of approved classes. A WST internship, study abroad, independent study, and special topic courses which are often available on a semester-by-semester basis can also count toward the minor.

With its great variety of courses, the WST program allows students to fulfill many graduation requirements while completing the minor. In general, WST 202 - Topics in Women's and Gender Studies is offered as a writingintensive course.

The five additional courses to be chosen in consultation with the Director include, but are not limited to, this list of courses:

AAS 101 - Introduction to Africana Studies

ARH 225 - Women & Art

COM 316 - Propaganda & Promotional Cultures

COM 224 - Feminist Media Studies

COM 372, 373 - Race & Representation

COM 374 - Gender, Communication, & Culture

DNC 201 - Dance History

ECN 247, 248 - Economics of Men & Women at Work

ENG 206 - Reading Austen

ENG 267 - Literature & Sexuality

ENG 329, 330 - Nineteenth Century British Fiction: The Marriage Plot

ENG 397, 398 - Gender, Sensation, & the Novel

FRN 343 - Family, Sexuality, & Gender in the Francophone World

FRN 424 - Francophone Women Writers of Africa & the Caribbean

HST 327, 328 - Women's America

HST 365, 366 - The African American Experience I: to 1896

HST 367, 368 - The African American Experience II: since 1896

HST 375, 376 - Race & Ethnicity in Latin America & the Caribbean

HST 377, 378 - Gender & Sex in European History

HST 397 - Women in the Middle East

MUS 215 - Women in Music

PHL 227 - Philosophy of Feminism

PSC 201 - Political Ideologies

PSC 242, 243 - Introduction to Conflict & Peace Studies

PSC 303, 304 - Gender, Politics, & Policy

PSY 221 - Multicultural Psychology

REL 104 - Sex, Gender, & Religion

REL 353 - Gender & Sexuality in Judaism

SOC 101 - Introduction to Sociology

SOC 235 - Inequality & Power

SOC 243 - Sexuality & Gender

SOC 350 - Social Movements, Protests, & Conflicts

SPN 416 - Postcolonial Realities in Spanish American Literature

SPN 419 - Border Literature

SPN 420 - Human Rights Literature in the Americas

THR 301, 302 - Feminist Theories of the Theatre

WST 960 - Women's and Gender Studies Internship

Courses

WST 202 - Topics in Women's and Gender Studies

Engages the foundational and vigorously debated ideas within women's studies, gender studies and feminist thought. The scope of the class encompasses women's studies, feminisms, sexuality studies, masculinity studies, and lesbian and queer studies within their historical contexts. The course explores what is at stake in the constructions of femaleness and maleness. The readings are interdisciplinary and cover gender and women's studies theories from the nineteenth century to the present. Special attention will be given to the connections among gender, race (including Black Feminism and whiteness), ethnicity, and socioeconomic class. We explore how gender functions as an organizing system of power, privilege and oppression and intersects with other identity markers. Our readings will be grounded in objects of inquiry such as bodies, modes of artistic representation, the state, and health and science. Professors from such diverse disciplines as Africana Studies, Art, History, Philosophy, Political Science, Psychology, Sociology, and Theatre teach the class. Students considering the WST Minor should take soon after taking a first Women's and Gender Studies course.

Prerequisite(s): One course included in the WST list of classes or permission of the instructor.

Meets general academic requirement W.

WST 960 - Women's and Gender Studies Internship

Supervised work and/or community service, arranged in consultation with the Director of Women's and Gender Studies.

Pre-Professional Programs



Health Professions

Cailín Pachter, Director, Pre-Professional Advising

All students who have definite or potential interest in a health professions career should register and consult with the Pre-Professional Advising Office as early as possible beginning their first year at Muhlenberg.

The Pre-Professional Advising Office is responsible for counseling Muhlenberg students who are interested in careers in the health professions, including medicine, dentistry, physician assistant, physical and occupational therapy, or a career in public health or pharmacy. In the majority of cases, students are not required to belong to any special program, and, with some exceptions, it is not necessary for them to major in science.

Admission requirements differ somewhat according to the type of health professions school and occasionally change. Biochemistry, for instance, is increasingly being required of competitive dental, veterinary, and medical school applicants. Presently, the following schedule satisfies basic admission requirements for American schools of chiropractic, dentistry, medicine, optometry, podiatry and veterinary medicine:

One year each of biology, general chemistry, organic chemistry, physics (all with labs) and English. (Some schools recommend a year of math but do not require it.) We strongly recommend that our students take all of the above named courses at Muhlenberg. Any request for an exception to this policy must be presented for prior approval, in writing, to the appropriate department for a final decision.

Often individual schools in the allied health fields have additional requirements. It is important for students to make certain early in their careers that they will take the appropriate courses to satisfy the admission requirements of a particular school in which they are interested.

The MCAT (for students interested in allopathic, osteopathic, and podiatric medicine) now has an increased focus on the social and behavioral sciences. Individual courses that heighten and broaden student awareness in these areas such as Psychology and Sociology are also recommended.

Prelaw

Cailín Pachter, Director, Pre-Professional Advising

The American Bar Association "does not recommend any undergraduate majors or group of courses to prepare for a legal education." Students are admitted to law school from almost every academic discipline and may choose to major in subjects that are considered to be traditional preparation for law school, such as history, English, philosophy, political science, economics, or business, or in areas as diverse as art, music, science, mathematics, computer science, or theatre. Whatever major is selected, students are encouraged to pursue an area of

study that interests and challenges them while taking advantage of opportunities to develop their research and writing skills. Taking a broad range of difficult courses from demanding instructors is excellent preparation for law school.

The ABA has identified the following core skills, values, knowledge, and experience which are important for you to acquire prior to law school and will provide a sound foundation for a legal education.

- Problem Solving
- Critical reading
- Writing and editing
- Oral communication and listening
- Research
- Organization and management
- Public Service and promotion of justice
- Relationship building and collaboration
- Background knowledge
- Exposure to law

There are many ways to develope these attributes while at Muhlenberg, both in and outside of the classroom.

All students who elect to participate in the pre-law program or who seek advice and direction regarding pre-law studies or applying to law school should contact Cailín Pachter in the Pre-Professional Advising Office.

Religious Professions Preparations

Advising: Office of the Chaplain

Students considering seminary, graduate theological study, or work in a religious tradition are encouraged to design programs which emphasize History, Philosophy, English, classical languages, Jewish Studies, and Religion Studies. Majors and minors in Religion Studies and Jewish Studies are available. Students should consult with the advisor about program requirements, denominational procedures for persons preparing for ministries, and the selection of undergraduate courses.

Students are encouraged to become involved in religious organizations and activities both on and off campus. Study groups on the Bible, sacred texts, social issues, personal development, and ecumenical and interfaith relations are available on campus and there are many community service and fellowship opportunities as well.

The Muhlenberg Community

(As of September 1, 2016)



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Professor of Political Science

Director of the American Studies Program

B.A., Pennsylvania State University;

M.A., East Stroudsburg University;

Ph.D., State University of New York at Binghamton.

Flor Maria Buitrago (2002)

Lecturer in Spanish

B.A., University of Guelph, Ontario, Canada;

MA, University of Western Ontario, Canada.

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Assistant Professor of Public Health

B.S., Northern Arizona University;

M.S., University of Rhode Island;

Ph.D., Pennsylvania State University.

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B.A., Brown University;

Ph.D., Duke University.

Michael J. Carbone (1984)

Professor of Education

Isaac Miles Wright Professorship of Education

Department Chair

B.A., M.A., Ed.D., Ball State University.

Thomas Cartelli (1980)

Professor of English and Film Studies

B.A., Bennington College;

M.A., Ph.D., University of California at Santa Cruz.

Benjamin Carter (2008)

Assistant Professor of Anthropology

B.A., Drew University;

M.A., Ph.D., Washington University in St. Louis.

Holly Cate (2006)

Associate Professor of Theatre

A.B., Harvard University;

M.F.A., Brandeis University.

Byungchul Cha (2007)

Associate Professor of Mathematics

B.S., Korea Advanced Institute of Science and Technology;

Ph.D., Johns Hopkins University.

Moria Chambers (2015)

Assistant Professor of Biology

B.S., Massachusetts Institute of Technology;

Ph.D., Stanford University.

Ioanna Chatzidimitriou (2013)

Assistant Professor of French

M.A., Ph.D., University of North Carolina at Chapel

Carolyn Chernoff (2015)

Visiting Assistant Professor of Sociology

B.A., Amherst College;

M.S.Ed., Ph.D., University of Pennsylvania.

Rita Chesterson (2015)

Assistant Professor of Innovation and Entrepreneurship

Director of Innovation and Entrepreneurship Program

B.A., West-Chester University;

J.D., Temple University Beasley School of Law;

M.Ed., Arcadia University

Certificate of Corporate Entrepreneurship, Lehigh

University

Janine Kay Gwen Chi (2003)

Associate Professor of Sociology

Department Chair

B.Sc., University of Iowa;

M.A., Ph.D., University of Washington.

Irene Chien (2014)

Consortium for Diversity Fellow in Media and

Communication

B.A., Oberlin College;

M.A., Ph.D., University of California, Berkeley.

Adam Clark (2008)

Associate Professor of Physics

B.A., New College of Florida;

M.A., University of Texas;

M.S., Ph.D., University of Washington.

Susan W. Clemens (1998)

Senior Lecturer in History

B.S., Ursinus College;

M.A., Lehigh University.

Keri L. Colabroy (2005)

Associate Professor of Chemistry

Co-Director of Biochemistry Program

B.S., Messiah College;

M.S., Ph.D., Cornell University.

Theodore A. Conner (1997)

Professor of Music

B.A., Johns Hopkins University;

B.M., New England Conservatory;

M.M., University of Michigan;

Ph.D., University of Connecticut.

Jessica Cooperman (2007)

Assistant Professor of Religion Studies

Director of Jewish Studies Program

B.A., University of Pennsylvania;

M.A., Ph.D., New York University.

Francesca Coppa (1998)

Professor of English and Film Studies

B.A., Columbia University;

M.A., M.Phil., Ph.D., New York University.

Amy Corbin (2009)

Associate Professor of Media and Communication and Film Studies

B.A., College of William & Mary;

M.A., Ph.D., University of California, Berkeley.

Steven Coutinho (2005)

Associate Professor of Philosophy

Department Chair

B.A., M.Phil., University College London;

Ph.D., University of Hawaii at Manoa.

Thomas Cragin (2005)

Professor of History

B.A., Trinity University;

M.A., Ph.D., Indiana University, Bloomington.

Chrysan Cronin (1994)

Lecturer in Biology

Director of Public Health Program

B.S., University of New Hampshire;

M.S., New Mexico State University;

M.P.H., Johns Hopkins Bloomberg School of Public Health.

Robert M. Croskey (1984)

Professor of History

B.A., M.A., Ph.D., University of Washington.

Jadviga da Costa Nunes (1984)

Professor of Art

B.A., Paterson College;

M.A., Ph.D., Rutgers University.

Allison Davidson (2014)

Assistant Professor of Mathematics

B.S., Roberts Wesleyan College;

M.S., Ph.D., Purdue University.

Karen Dearborn (1993)

Professor of Dance

Director of Dance Program

B.S., Radford University;

M.F.A., Connecticut College.

Michele Moser Deegan (2006)

Associate Professor of Political Science

Department Chair

B.A., University of Pittsburgh;

M.S., DePaul University;

Ph.D., New York University.

Daniel Doviak (2009)

Associate Professor of Philosophy

Director of Muhlenberg Scholars Program

B.A., Rutgers University;

Ph.D. University of Massachusetts, Amherst.

Melissa Dowd (2015)

Visiting Lecturer in Biology

B.S., Dickinson College;

M.S., Drexel University.

Curtis G. Dretsch (1979)

Professor of Theatre Arts

Director of Design and Technical Theatre

B.A., Montana State University;

M.F.A., Southern Methodist University.

Troy Dwyer (2005)

Associate Professor of Theatre

B.A., Oglethorpe University;

M.F.A., University of Wisconsin.

Laura Edelman (1987)

Professor of Psychology

B.A., University of California, Riverside;

M.A., Ph.D., University of Oregon.

Marten J. Edwards (2002)

Professor of Biology

B.A., Reed College;

Ph.D., University of Arizona.

Gail R. Eisenberg (1983)

Senior Lecturer in Business and Accounting

Internship Director

B.A., LaSalle College;

M.B.A., Lehigh University.

Joseph E. B. Elliott (1983)

Professor of Art

B.S., University of Minnesota;

M.F.A., Pratt Institute.

Brett Fadem (2004)

Associate Professor of Physics

Department Chair

B.A., Grinnell College;

Ph.D., Iowa State University.

Yariv Fadlon (2016)

Assistant Professor of Economics

B.A., M.A., Ben-Gurion University, Israel;

Ph.D., Vanderbilt University.

Maura Finkelstein (2015)

Assistant Professor of Anthropology

B.A., Colorado State University;

M.A., Columbia University;

Ph.D., Stanford University.

Eugene Fiorini (2015)

Truman Koehler Professor of Mathematics

B.S., Pennsylvania State University;

M.S., Temple University;

M.S., Ph.D., University of Delaware.

Jane D. Flood (1989)

Associate Professor of Physics

Director of Physical Science Program

B.A., Hunter College;

Ph.D., University of Pennsylvania.

Megan Flynn (2014)

Assistant Professor of Dance

B.F.A., Newcomb College, Tulane University;

M.F.A., Claire Trevor School of the Arts, University of California-Irvine.

Alexandra Frazer (2013)

Assistant Professor of Psychology

B.A., M.A., Northern Arizona University;

Ph.D., Lehigh University.

Beau Gaitors (2016)

Consortium for Faculty Diversity Fellow in History

B.A., Brown University;

M.A., Purdue University;

Ph.D., Tulane University.

Giacomo Gambino (1990)

Professor of Political Science

Co-Director of Philosophy/Political Thought

B.A., Rutgers University;

M.A., Ph.D., Duke University.

Elaine Gannon (2005)

Visiting Lecturer in Chemistry

B.A., Princeton University;

M.B.A., University of Pennsylvania.

Barri Gold (1997)

Professor of English

Department Chair

B.S., Massachusetts Institute of Technology;

M.A., Ph.D., University of Chicago.

Jonathan Gooch (2016)

Visiting Assistant Professor of Chemistry

B.S., Misericordia University;

Ph.D., Syracuse University.

Gretchen Hanson Gotthard (2008)

Associate Professor of Psychology and Neuroscience

B.S., University of North Dakota;

M.A., Ph.D., Kent State University.

William Gruen III (2006)

Associate Professor of Religion Studies

Department Chair

B.A., University of Kentucky;

M.A., University of Cincinnati;

Ph.D., University of Pennsylvania.

William Gryc (2010)

Associate Professor of Mathematics

B.A., Amherst College;

M.S., Ph.D., Cornell University.

Amy Thompson Hark (2004)

Associate Professor of Biology

Co-Director of Biochemistry Program

B.S., College of William and Mary;

M.A., Ph.D., Princeton University.

Kathleen E. Harring (1984)

Professor of Psychology

Dean of Institutional Assessment and Academic Planning

B.A., Franklin and Marshall College;

M.A., Ph.D., University of North Carolina.

Kassandra Hartford (2015)

Assistant Professor of Music

A.B., Mount Holyoke College;

M.A., Ph.D., Stony Brook University.

Syed Mohsin Hashim (2000)

Professor of Political Science

Director of Dana Scholars Program

B.S., M.S., Moscow State University;

Ph.D., Pennsylvania State University.

Carolyn Hedges (2016)

Visiting Assistant Professor of Media and Communication

A.B., Duke University, Trinity College;

M.A., Ph.D., Syracuse University, S.I. Newhouse School of Public Communications.

Kimberly Wagner Heiman (2008)

Lecturer in Biology

B.A., New College of the University of South

Florida;

Ph.D., Stanford University.

George Heitmann (1994)

Professor of Economics

A.B., Syracuse University;

M.A., Ph.D., Princeton University.

Patricia Helm (2004)

Assistant Professor of Music

B.A., Colorado College;

M.A., University of Pennsylvania.

Christopher W. Herrick (1983)

Professor of Political Science

Director of International Studies Program

Director of Political Economy and Public Policy Program

B.A., Bates College;

M.A., University of New Hampshire;

Ph.D., University of South Carolina.

Margo Hobbs (2008)

Associate Professor of Art

Department Chair

B.A., St. John's College;

M.A., School of the Art Institute of Chicago;

Ph.D., Northwestern University.

Michael Huber (2006)

Professor of Mathematics

B.S., Loyola College;

M.S.E., Johns Hopkins University;

M.S., Ph.D., Naval Postgraduate School.

Christine M. Ingersoll-Fermier (1998)

Professor of Chemistry

Department Chair

B.S., State University of New York at Oswego;

Ph.D., State University of New York at Buffalo.

Paula L. Irwin, C.P.A. (1991)

Associate Professor of Accounting

Coordinator of Accounting Program

B.S., Pennsylvania State University;

M.B.A., Lehigh University.

Luba Iskold (1995)

Professor of Russian

Director of Russian Studies Program

Director of Language Learning Center

B.A., M.A., State University of Chernivtsy, Ukraine;

Ed.D., Lehigh University.

Erika Vienna Iyengar (2003)

Associate Professor of Biology

B.S., Stanford University;

Ph.D., Cornell University.

Frederick Wright Jones (2016)

Assistant Professor of Art

B.A., University of Pennsylvania;

M.F.A., State University of New York at Buffalo.

Susan G. Kahlenberg (1998)

Associate Professor of Media and Communication

A.B., Muhlenberg College;

M.A., University of Delaware;

Ph.D., Temple University.

Joseph M. Keane (2004)

Associate Professor of Chemistry

Director of the Natural Science Program

B.A., B.S., Lycoming College;

Ph.D., University of Virginia.

Jason W. Kelsey (2002)

Professor of Environmental Science

Director of Environmental Science Program

B.A., Lafayette College;

M.S., Ph.D., Cornell University.

Cathy Y. Kim (1998)

Senior Lecturer in Education

B.A., University of Illinois at Urbana-Champaign;

M.A., Northeastern Illinois University.

Donna M. Kish-Goodling (1990)

Professor of Economics

Dean of Global Education

B.A., Moravian College;

M.B.A., Ph.D., Lehigh University.

Daniel Klem, Jr. (1979)

Professor of Biology

Sarkis Acopian Professor of Ornithology and Conservation Biology

NCAA Faculty Athletic Representative

B.A., Wilkes College;

M.A., Hofstra University;

Ph.D., Southern Illinois University at Carbondale;

D.Sc., Wilkes University.

Trevor Knox (2000)

Associate Professor of Accounting and Economics

B.A., Davidson College;

M.A., Ph.D., University of Connecticut.

Roland Kushner (2006)

Associate Professor of Business

B.A., Carleton University;

MBA, Ph.D., Lehigh University.

Clifton L. Kussmaul (2003)

Associate Professor of Computer Science

B.S., B.A., Swarthmore College;

M.S., Dartmouth College;

Ph.D., University of California, Davis.

Jonathan Lassiter (2016)

Assistant Professor of Psychology

B.S., Georgia College and State University;

M.A., Ph.D., California School of Professional

Psychology at Alliant International University.

Daniel Leisawitz (2013)

Lecturer in Italian

Director of Italian Studies Program

B.A., Lafayette College;

M.A., University of Pennsylvania;

M.A., Ph.D., Yale University.

Michael London (2006)

Associate Professor of Business

B.A., University of Michigan;

Ph.D., Case Western Reserve University.

Dawn Lonsinger (2013)

Assistant Professor of English

B.A., M.A., Bucknell University;

M.F.A., Cornell University;

Ph.D., University of Utah.

Sharrell Luckett (2016)

Assistant Professor of Theatre

B.I.S., Georgia State University;

M.Ed., Kennesaw State University;

Ph.D., University of Missouri-Columbia.

John W. Malsberger (1978)

Professor of History

A.B., Ph.D., Temple University.

P. Alec Marsh (1993)

Professor of English

B.A., Bennington College;

M.A., Ph.D., Rutgers University.

James N. Marshall (1975)

Professor of Economics and Finance

B.S., B.Eng., Massachusetts Institute of Technology;

MBA, University of Pennsylvania;

Ph.D., Lehigh University.

Joan F. Marx (1984)

Professor of Spanish

A.B., Muhlenberg College;

M.A., Ohio University;

Ph.D., Rutgers University.

A. Lanethea Mathews-Schultz (2003)

Associate Professor of Political Science

B.A., Hamilton College;

M.A., Ph.D., Syracuse University.

Ermira Mazziotta (2015)

Assistant Professor of Accounting

B.S., University of Tirana, Tirana, Albania;

M.B.A., Saint Joseph's University.

Elizabeth R. McCain (1994)

Professor of Biology

Department Chair

B.S., New College;

M.S., University of South Carolina;

Ph.D., University of Texas.

Eileen L. McEwan (2003)

Associate Professor of French

Department Chair

B.A., M.A., University of Notre Dame;

Ph.D., University of Wisconsin-Madison.

Paul McEwan (2005)

Associate Professor of Media and Communication and

Film Studies

Director of the Film Studies Program

B.A., University of Guelph, Ontario;

M.A., Wilfrid Laurier University, Ontario;

Ph.D., Northwestern University.

Linda E. McGuire (1999)

Professor of Mathematics

Director of the Faculty Center for Teaching

B.S., Seton Hall University;

M.S., Ph.D., Stevens Institute of Technology.

Roberta Meek (2012)

Lecturer in History and Media and Communication

Director of the Africana Studies Program

B.A., Muhlenberg College.

Paul T. Meier (1993)

Associate Professor of Biology

B.A., State University of New York;

M.S., Ph.D., Ohio University.

Careena Melia (2015)

Visiting Assistant Professor of Theatre

B.A., Sara Lawrence College;

M.F.A., American Repertory Theatre/Moscow Art

Theater Institute at Harvard University.

Brian Mello (2007)

Associate Professor of Political Science

B.A., Fairfield University;

M.A., Ph.D., University of Washington, Seattle.

Kenneth Michniewicz (2015)

Assistant Professor of Psychology

B.S., University of Central Florida;

M.A., Ph.D., University of South Florida.

Holmes Miller (1991)

Professor of Business

Department Chair

B.S., M.S., Ph.D., Northwestern University.

Linda Miller (1990)

Associate Professor of English

A.B., M.F.A., University of Michigan.

Matthew Moore (2015)

Assistant Professor of Theatre

B.A., Muhlenberg College;

Ph.D., Stanford University.

Amelia Moreno (2015)

Lecturer in Spanish

B.S., Universidad Del Valle De Atemajac, Mexico;

B.A., Cedar Crest College;

M.A., Villanova University.

Marcia Morgan (2009)

Associate Professor of Philosophy

Director of Women's and Gender Studies

B.S., Villanova University;

M.A., Ph.D., New School for Social Research.

Paul Murphy (2015)

Associate Professor of Music

Department Chair

B.M., University of Mexico;

M.M., Texas Christian University;

M.M., University of Texas;

Ph.D., University of Texas at Austin.

Lindsey Nagy (2013)

Assistant Professor of Economics

B.A., Hood College;

M.A., Ph.D., University of Arizona.

Dustin Nash (2014)

Visiting Assistant Professor of Jewish Studies

B.A., Luther College;

M.T.S., Harvard Divinity School;

Ph.D., Cornell University.

Elizabeth Nathanson (2009)

Associate Professor of Media and Communication

B.A., Haverford College;

M.A., Ph.D., Northwestern University.

Richard A. Niesenbaum (1993)

Professor of Biology

Director of RJ Fellows Program

Director of Sustainability Studies

B.A., University of Pennsylvania;

M.S., University of Connecticut;

Ph.D., University of Pennsylvania.

Eduardo Olid (2009)

Associate Professor of Spanish

B.A., University of Málaga, Spain;

M.A., Southern Illinois University;

Ph.D., University of California.

Shelley Oliver (1993)

Lecturer in Dance

B.A., York University, Toronto, Ontario.

Emily Orzech (2013)

Assistant Professor of Art

B.A., Smith College;

M.F.A., University of Michigan.

Cathy Marie Ouellette (2008)

Associate Professor of History

Director of Latin American and Caribbean Studies

B.A., Connecticut College;

M.A., University of Pittsburgh;

M.A., Ph.D., Emory University.

Douglas P. Ovens (1990)

Professor of Music

B.M., San Francisco State University;

M.A., Ph.D., University of California, Santa Barbara.

Purvi Parikh (2015)

Andrew W. Mellon Post-Doctoral Fellow

B.A., Rutgers University;

Ph.D., University of Pennsylvania.

James Peck (1999)

Associate Dean for Diversity Initiatives

Professor of Theatre Arts

B.A., Carleton College;

M.F.A., University of California at San Diego;

Ph.D., New York University.

Jeffrey Peterson (2012)

Assistant Professor of Dance

B.F.A., University of Minnesota;

M.F.A., New York University.

Peter A. Pettit (1999)

Associate Professor of Religion Studies

Director of the Institute for Jewish-Christian

Understanding

A.B., Princeton University;

M.Div., Lutheran Theological Seminary;

M.A., Ph.D., Claremont Graduate University.

Jefferson D. Pooley (2003)

Associate Professor of Media and Communication

Department Chair

A.B., Harvard College;

M.A., Ph.D., Columbia University.

Camille Qualtere (2009)

Lecturer in Spanish

B.A., Russell Sage College;

M.A., State University of New York at Albany.

John G. Ramsay (2009)

Professor of Education

B.A., Bucknell University;

Ph.D., State University of New York at Buffalo.

Kathryn Ranieri (2004)

Assistant Professor of Media and Communication

B.A., Cedar Crest College;

M.A., Ed.D., Northern Illinois University.

Ranajoy Ray-Chaudhuri (2015)

Assistant Professor of Economics

B.A., Jadavpur University;

M.A., Jawaharlal Nehru University;

M.A., Ph.D., Ohio State University.

Arthur J. Raymond (1991)

Professor of Economics

B.S., Bryant College;

M.A., Ph.D., Tufts University.

Jorge Reyes-Silveyra (2016)

Assistant Professor of Computer Science

B.S., Universidad Autonoma del Estado de Mexico,

Mexico;

M.S., Ph.D., University of North Texas.

Katherine Richmond (2006)

Associate Professor of Psychology

B.A., Muhlenberg College;

Ph.D., Nova Southeastern University.

Charles C. Richter (1978)

Professor of Theatre Arts

Director of the Muhlenberg College Theatre

B.S., Syracuse University;

M.F.A., Meadows School of Arts of Southern Methodist University.

Sally A. Richwine (1989)

Senior Lecturer in Education

A.B., Muhlenberg College;

M.Ed., Lehigh University.

Thaddeus Robinson (2007)

Associate Professor of Philosophy

B.A., Luther College;

M.A., Northern Illinois University;

Ph.D., Purdue University.

Kim Rohrbach (2011)

Lecturer in Education

Director of Student Teaching Program

B.S., Muhlenberg College;

M.Ed., Kutztown University.

Pearl M. Rosenberg (1998)

Associate Professor of Education

B.A., Pennsylvania State University;

M.A.T., Villanova University;

M.S., Ph.D., University of Pennsylvania.

David Rosenwasser (1985)

Professor of English

Co-Director of the Writing Program

B.A., Grinnell College;

M.A., Ph.D., University of Virginia.

Francine Roussel (2000)

Professor of Theatre Arts

Baccalaureat Philosophie, Académie d'Aix en Provence:

Diplôme Universitaire d'Etudes Littéraires;

Licencie Es Lettres, La Sorbonne.

Jeffrey Rudski (1994)

Professor of Psychology

B.S., McGill University;

Ph.D., University of Minnesota.

James Russell (2016)

Assistant Professor of Mathematics

B.A., College of Holy Cross;

Ph.D., Pennsylvania State University.

Elyn K. Rykken (1999)

Professor of Mathematics

Department Chair

B.A., St. Olaf College;

M.A., Ph.D., Northwestern University.

Sahar Sadeghi (2014)

Visiting Assistant Professor of Sociology

B.A., University of California, Davis;

M.A., Ph.D., Temple University.

Danielle Sanchez (2015)

Assistant Professor of African History

B.A., University of Texas at Austin;

M.P.S., Cornell University;

Ph.D., University of Texas at Austin.

Beth Schachter (2001)

Professor of Theatre Arts

Department Chair

B.A., Harvard-Radcliffe University;

M.F.A., University of California, San Diego;

Ph.D., Graduate School and University Center of the City University of New York.

Theodore W. Schick, Jr. (1980)

Professor of Philosophy

B.A., Harvard University;

M.A., Ph.D., Brown University.

Michael Schnack (2012)

Lecturer in Voice and Choral Music

B.A., Yale University;

M.A., D.M.A., University of Iowa.

Mark J. Sciutto (2001)

Professor of Psychology

Department Chair

B.A., Villanova University;

M.A., Ph.D., Hofstra University.

Grant F. Scott (1989)

Professor of English

B.A., University of California, San Diego;

M.A., Ph.D., University of California, Los Angeles.

Jean R. Simonnet (2008)

Entrepreneur-in-Residence

Diploma Superior Study, College Etienne Bezout,

Nemours, France;

Diploma Electronic Engineer, Ecole Centrale

Electronique de Paris.

Larry Singer (2010)

Visiting Assistant Professor of Theatre

B.F.A., Boston University.

Stefanie Sinno (2007)

Associate Professor of Psychology

B.S., Ursinus College;

Ph.D., University of Maryland College Park.

Christine T. Sistare (1989)

Professor of Philosophy

Co-Director of Philosophy/Political Thought

Director of the Center for Ethics

B.A., Connecticut College;

M.A., Ph.D., Emory University.

Alton J. Slane (1967)

Professor of Political Science

B.A., Rutgers University;

M.A., Temple University;

Ph.D., University of Pennsylvania.

Randall Anthony Smith (2015)

Assistant Professor of Dance

B.F.A., M.F.A., Claire Trevor School of the Arts, University of California, Irvine.

Justin Sparks (2015)

Assistant Professor of Chemistry

B.S., DeSales University;

Ph.D., Pennsylvania State University.

Jordanna D. H. Sprayberry (2008)

Associate Professor of Biology and Neuroscience

B.S., University of Rhode Island;

Ph.D., University of Washington.

Frederick Staidum, Jr. (2014)

Assistant Professor of English and Africana Studies

B.A., Dillard University;

M.P.S., Cornell University;

M.A., Ph.D., Northwestern University.

Michael Stehlin (2002)

Visiting Lecturer in Business

B.A., Providence College;

M.B.A., Pepperdine University.

Mark L. Stein (2002)

Associate Professor of History

Department Chair

B.A., Northwestern University;

M.A., Ph.D., University of Chicago.

Jill Stephen (1987)

Professor of English

Co-Director of the Writing Program

B.A., University of Illinois;

Ph.D., New York University.

Pamela Stilin (1994)

Lecturer in Spanish

B.A., University of Wisconsin;

M.A., City University of New York.

John L. Sullivan (1998)

Professor of Media and Communication

B.A., Pomona College;

M.A., Ph.D., University of Pennsylvania.

Erika M. Sutherland (1995)

Associate Professor of Spanish

A.B., Bryn Mawr College;

M.A., Ph.D., University of Pennsylvania.

David I. Tafler (1995)

Professor of Media and Communication and Film Studies

B.A., SUNY at Binghamton;

M.A., University of Wisconsin;

M.F.A., M.Phil., Ph.D., Columbia University.

Kammie Takahashi (2011)

Assistant Professor of Religion Studies

Director of the Asian Traditions Program

B.A., Mount Holyoke College;

M.A., Ph.D., University of Virginia.

Lora E. Taub-Pervizpour (2001)

Professor of Media and Communication

Associate Dean of Digital Learning

B.A., M.A., Ph.D., University of California, San Diego.

Jeremy Teissére (2003)

Associate Professor of Neuroscience

Department Chair

B.A., Willamette University;

Ph.D., University of Wisconsin.

William J. Tighe (1986)

Professor of History

B.A., Georgetown University;

M.A., M.Phil., Yale University;

Ph.D., Cambridge University.

Alan Tjeltveit (1989)

Professor of Psychology

B.A., St. Olaf College;

M.A., Ph.D., Fuller Theological Seminary.

Mirna Trauger (2003)

Lecturer in Spanish

B.A., Moravian College;

M.A., Rutgers University.

Karen Tuerk (2010)

Lecturer in Environmental Science

B.S., Western Washington University;

M.S., College of Charleston, SC.

Kevin Tuttle (2002)

Senior Lecturer in Art

B.F.A., Kansas City Art Institute;

M.F.A., University of North Carolina Greensboro.

Teresa VanDenend Sorge (2010)

Lecturer in Dance

B.A., Hope College;

M.Ed., Temple University.

Debra Walther (2011)

Lecturer in Biology

B.S., University of Delaware;

Ph.D., University of Wisconsin.

Bruce C. Wightman (1996)

Professor of Biology

Department Chair

B.A., Oberlin College;

Ph.D., Harvard University.

Patrick Williams (2011)

Assistant Professor of Neuroscience

B.S., Carnegie Mellon University;

Ph.D., New York University Center for Neural

Science.

Daniel J. Wilson (1978)

Professor of History

B.A., University of Wisconsin-Whitewater;

M.A., Ph.D., Johns Hopkins University.

Connie Tesh Wolfe (2002)

Associate Professor of Psychology

A.B., Ohio University;

M.A., State University of New York at Buffalo;

Ph.D., University of Michigan.

Lynda Yankaskas (2011)

Assistant Professor of History

B.A., Swarthmore College;

Ph.D., Brandeis University.

Sherri Young (2012)

Assistant Professor of Chemistry

B.S., Albright College;

Ph.D., Lehigh University.

ADMINISTRATORS

John I. Williams, Jr.

President

B.A., Amherst College;

M.B.A., Harvard Business School;

J.D., Harvard Law School.

Rebekkah Brown

Vice President, Advancement

A.B., Muhlenberg College;

M.B.A., St. John's University.

Michael S. Bruckner

Vice President of External Affairs & Community Relations B.A., University of Rhode Island.

Ken Butler

Executive Assistant to the President & the Board of Trustees

B.M., Union University.

Allan Chen

Chief Information Officer

B.A., Stanford University;

M.B.A., Santa Clara University;

Leavey School of Business

Kent A. Dyer, C.P.A.

Chief Business Officer and Treasurer

B.A., Kutztown University.

Christopher Hooker-Haring

Vice President of Enrollment Management

A.B., Muhlenberg College.

Calista Isabelle

Chaplain

B.A., Gustavas Adolphus College;

M.Div. Yale Divinity School.

Dawud Abdur-Rehkman

Coordinator for Diversity Inclusion & Leadership

Thomas Allison

User Support Specialist

Stephen Althouse

Director of Communication & Donor Relations

B.A., Temple University.

Cynthia Amaya-Santiago

Senior Associate Director of Admission

Coordinator of Multi-Cultural Recruitment

A.B., Muhlenberg College.

Bruce Anderson

Dean of Academic Life

Professor of Chemistry

B.A., Western Maryland College;

Ph.D., University of Colorado.

Jill Anderson

Assistant Vice President for Annual Giving & Advancement

Services

B.A., Lehigh University;

M.S., Lehigh University.

Kimberly Anderson

Director of Special Projects

B.A., Elizabethtown College;

M.A., Duquesne University.

Samantha Anglestein

Enrollment Outreach Manager

The Wescoe School of Muhlenberg College

A.B., Muhlenberg College.

Jena Azar

Instructional Design Consultant

B.S., Cedar Crest College;

M.Ed., Lehigh University.

Amy Benninger

Web & Marketing Coordinator

The Wescoe School of Muhlenberg College

Brian Blenis

Director of Purchasing

B.S., Eastern College;

M.B.A., Kutztown University.

James Bolton

Director of Plant Operations

B.S., Philadelphia University.

Brian Borosky

Assistant Director of Writing & Information Consultant

Center

A.B., Muhlenberg College.

Aaron Bova

Senior Associate Director of Housing Services

A.B., Muhlenberg College.

Christine Boyko

Assistant Director of Annual Giving

A.B., Muhlenberg College.

Kristin Brodt

Interlibrary Loan Manager

B.S., Kutztown University.

Molly M. Brown

Director of Marketing and Public Relations,

The Wescoe School of Muhlenberg College

B.A., Moravian College.

Kelly Cannon

Outreach and Scholarly Communication Librarian

B.A., Brigham Young University;

M.A., University of Mississippi;

M.L.S., Ph.D., University of North Carolina.

Joshua Carter

Assistant Coach, Football

B.A., Muhlenberg College

Allan Chen

Chief Information Officer

B.A., Stanford University;

M.B.A., Santa Clara University, Leavey School of Business.

Thomas Christie

Cataloging & Metadata Librarian

B.A., Lehigh University;

B.A., SUNY Stony Brook;

M.L.S., Queens College.

Timothy Clarke

Head of Library Systems and Information Transfer Services

B.A., University of Louisville;

M.S., University of Maryland.

Monica Cocca

Tutorial Coordinator

A.B., Muhlenberg College.

Sonya Conrad

Senior Assistant Director of Admission

B.S., Muhlenberg College.

Carolyn Cook

Costume Shop Manager

A.B., Ithaca College;

M.F.A., University of Virginia.

Eric Covell

Assistant Technical Director

Jessica Bien Covell

General Manager of Department of Theatre and Dance

B.A., Hartwick College.

Marisa DeStasio

Head Softball Coach

B.S., Binghamton University;

M.S., West Virginia University.

Michael Donnelly

Head Football Coach

B.A., Ithaca College;

M.S., State University of New York at Albany.

Brynnmarie Dorsey

Director of the Student Health Services

B.S., Villanova University;

M.S., Duke University.

Thomas Dowd

Executive Director, Career Services

B.A., Dickinson College;

M.S., Lehigh University.

Nicole Duggan

Assistant Director of Admission

B.A., Cabrini College;

M.S., Neumann University.

Megan Eddinger

Head Field Hockey Coach,

Senior Woman Administrator

B.A., Gettysburg College.

Heather Ennis

Associate Director, HMMS

Susan Falciana

Special Collections and Archives Librarian

B.A., College of William & Mary;

M.A., Montclair State University;

Master of Library & Information Science, Rutgers University.

Melissa Falk

Associate Dean of Admission and Financial Aid

A.B., Muhlenberg College.

Michael Falk

Director of Athletic Communications

B.A., Drew University.

Jason Feiertag

Assistant Treasurer

B.A., Franklin and Marshall College;

M.P.A., Kutztown University.

Patrick Fligge

Director of Alumni and Parent Engagement

B.S., Muhlenberg College.

Evily Freeman

Associate Director of Community Engagement

B.S., B.A., Bemidji State University;

M.A., The Ohio State University.

Brett Fulton

Grounds Manager, Plant Operations

B.S., Penn State University.

Michael Gardner

Principal Gift Officer

B.A., Indiana University;

M.B.A., Ball State University.

Katie Garson

ESL Coordinator

B.A., Binghamton University;

M.S.Ed., University of Pennsylvania.

Damon Gelb

Technical Director of Theatre

B.F.A., Penn State University.

Traci Gensits

Assistant Director Disability Services

B.A., Kutztown University;

M.Ed., East Stroudsburg University

Linda George

Senior Reporting/Analyst - DAR

B.S., Cedar Crest College

Glenn A. Gerchman

Director of Seegers Union and Campus Events

Andrea Gillespie

Assistant Controller

B.S., University of Pittsburgh

Corey A. Goff

Director of Athletics

B.A., Susquehanna University;

M.A., University at Albany

Tod Gross

Head Baseball Coach/Equipment Room Manager

B.A., Shenandoah University

Karen Gruber

Acquisitions and Budget Manager

A.A.S., Lehigh Carbon Community College

Brad Hackett

Director of Cross Country/Track and Field

Director of Intramural and Recreational Sports

B.A., Colgate University

Emmeline Hadeed

Mailroom Supervisor

A.A., Lehigh Carbon Community College;

A.B., Muhlenberg College

David Hallowell

Assistant Dean, Academic Resource & Disability Services

B.S., Drexel University;

M.S.Ed., University of Pennsylvania

Beth Halpern

Director of Community Engagement

B.A., Lawrence University;

M.A., Ohio State University

Rachel Hamelers

Head of Public Outreach & Information Literacy Services

Reference Services/Sciences Librarian

B.A., Texas A&M University;

M.L.S., Queens College.

Nicole Hammel

Director of Institutional Research

A.B., Muhlenberg College.

Natalie Hand

Assistant Vice President of Alumni Affairs and Career

Services

A.B., Muhlenberg College.

Joseph F. Hardenberg

Textbook Coordinator

A.A.S., Northampton Community College.

Kathleen Harring

Interim Provost

Dean for Institutional Assessment & Academic Planning

Professor of Psychology

B.A., Franklin and Marshall College;

M.A., Ph.D., University of North Carolina.

Phedra Henninger

Webmaster

A.B., Muhlenberg College.

Tina Hertel

Director of Trexler Library

B.S., Pennsylvania State University;

M.I.S., Indiana University.

Priscilla Howard

Director of Teacher Certification,

The Wescoe School of Muhlenberg College

A.B., The College of William and Mary;

M.Ed., Kutztown University;

Ed.D., Lehigh University.

Philip Howe

Director of Accelerated Degree Program

The Wescoe School of Muhlenberg College

B.S., Wilkes University;

M.B.A., Lehigh University.

Jane E. Hudak

Dean

The Wescoe School of Muhlenberg College

B.A., M.Ed., Kutztown University.

Merritt Jacob

Physics Laboratory Manager/Lab Instructor

B.S., M.S., University of Pittsburgh.

Jennifer Jarson

Information Literacy & Assessment Librarian

B.A., Swarthmore College;

M.L.S., Rutgers University.

Naomie Kachel

Assistant Director of Admissions

B.S. Moravian College;

M.S., Fordham University.

Mary Beth Kallen

Associate Director, Academic Resource Center

B.A., University of Pittsburgh;

M.Ed., Lehigh University.

Alexa Keckler

Head Coach of Women's Volleyball

Assistant Director of Recreation

B.S., Trevecca Nazarene University;

M.S., Frostburg State University.

William Keller

Senior Director, Communications

B.A., York College.

Anita Kelly

Director of Counseling Services

B.A., DeSales University;

M.A., Kutztown University.

Leslie Kiernan

Head Women's Soccer Coach

B.S.E., State University of New York at Cortland;

M.Ed., East Stroudsburg University.

Deborah J. Kipp

Associate Vice President for Development

A.B., Lycoming College;

M.Ed., Kutztown University.

Donna Kish-Goodling

Dean of Global Education

Professor of Economics

B.A., Moravian College;

M.B.A., Ph.D., Lehigh University.

Stephanie Klatka

Manager of Employment and Benefits

B.S., Cedar Crest College;

M.B.A., Alvernia University.

Lee Kolbe

Title IX Coordinator

B.A., Villanova University;

M.S., American University.

Danielle Koren

Senior Associate Director, Communication & Donor Relations

A.B., Muhlenberg College;

M.S., Drexel University.

Tim Korn

Mechanical Maintenance Supervisor

Joseph F. Kornfeind

Associate Dean

The Wescoe School of Muhlenberg College

Director of Veterans' Affairs

B.A., Moravian College;

M.S., University of Pennsylvania.

Shaun Lally

Head Coach, Wrestling

B.A., State University of NY - Empire State College.

Marjorie Lauer

Administrative Manager of Lee and Virginia Graver

Arboretum

A.B., Bryn Mawr College.

Heather Lavin

Associate Director Alumni Affairs

A.B., Muhlenberg College.

Lisa Lewis

Director, Admissions & Academic Success

The Wescoe School of Muhlenberg College

A.B., Muhlenberg College.

Marcie Lightwood

Schools Program Coordinator, Institute for Jewish-

Christian Understanding

B.S.W., Cedar Crest College.

Penelope Lochner

Head of Collection Resource Management

B.A., University of Pittsburgh;

M.L.S., Rutgers University.

Roger H. Loos

Technical Support Specialist

A.B., Muhlenberg College.

Beverly A. MacEwan

Director of Student Activities

A.B., Muhlenberg College.

Serioja Maciujec

Network Engineer

Robert C. Mahar

Network Manager

B.S., Kutztown University.

Stephen Maliniak

Student Help Desk Supervisor

Kathleen Mangold

Assistant Director of South & East Area of Residential Services

B.S., Bloomsburg University

Julie Manzo

Disability Services Specialist

B.A., Yale University;

M.S., SUNY, Albany;

Ph.D., Lehigh University

Mark Mazer

Director of Advancement Services

B.S., Pennsylvania State University;

M.S., Pennsylvania State University

Rudi McCauley

Support Manager

A.A., Allentown Business School

Patrick McClary

Head Coach Men's Basketball

A.B., Muhlenberg College

William McGlinn

Director of Corporate Foundations and Government Relations

B.A., University of Notre Dame;

M.F.A., Yale University;

M.P.A., New York University

Mary McGovern

Associate Director of Accelerated Programs

The Wescoe School of Muhlenberg College

A.B., Muhlenberg College

Sean Miller

Instructional Technology Consultant

Manager, Media Services

Nathan Milne

Assistant Coach, Football

B.A., Hobart & William Smith College

Gregory S. Mitton

Associate Dean of Admission

Director of Financial Aid

B.A., Franklin and Marshall College

Sean Morrow

Associate Director of Alumni Affairs

A.B., Muhlenberg College;

M.Ed., Temple University

Pamela Moschini

Director of Disability Services

B.S., Purdue University;

M.S., Trenton State College

Linda Nemes

Assistant to Chief Business Office & Treasurer

Stephen R. Nemes, Jr.

Head Athletic Trainer

B.S., West Chester University.

Kim Nguyen

Senior Assistant Director, Admission

Coordinator of International Student Recruitment

A.B., Muhlenberg College.

Paul Nicholson

Gallery Director

B.F.A., SUNY, Fredonia;

M.S., SUNY, Buffalo;

M.F.A., University of Buffalo.

Holly Nonnemacher

Assistant Director Annual Giving & Student Philanthropy

M.S., Penn State University.

Susan B. Norling

Global Education Coordinator

A.B., Washington University;

M.Ed., The University of Missouri-Columbia.

Karen Normann

Manager of 'Berg Bookstore

B.F.A., Pratt Institute of Art and Design.

Jordon Noyes

Instructional Technologist

B.A., Duke University;

M.A., Duke University.

Cailin M. Pachter

Director of Pre-Professional Advising

B.A., Lehigh University;

M.A., Eastern Kentucky University.

Megan Patruno

Assistant Athletic Director

B.A., Ursinus;

M.Ed., East Stroudsburg University.

Gregory M. Pattison

Hardware/Software Technical Support Specialist

Diploma, Lincoln Technical Institute.

Michele Paules

Counselor, Counseling Services

B.S., Kutztown University;

M.S.W., Marywood College.

Rosemary Pezzi

Network Security Administrator

B.S., Davis & Elkins College;

M.B.A., Seton Hall University.

Jake Plunket

Head Coach, Men's Lacrosse

B.S., Syracuse University;

M.S., SUNY, Cortland.

Lindsay A. Porembo

Associate Athletic Trainer

B.S., Pennsylvania State University.

Ellen Pothering

Controller

A.B., Muhlenberg College.

Kalyna Procyk

Sustainability Coordinator

B.A., Wesleyan University;

J.D., Illinois Institute of Technology.

David Rabold

Capital Projects Manager

B.S., Tufts University.

Laura A. Rasmussen

Senior Associate Director of Financial Aid

A.B., Muhlenberg College.

Carolyn Brown Ray

Web Architect

B.B.A., Baruch College, The City University of New York;

M.S. I.S., DeSales University.

Anita Regan

Systems Analyst

B.S., University of Scranton;

M.B.A., Kutztown University.

Robin Riley-Casey

Director of Multicultural Life

B.A., Lourdes College;

M.A., Ohio University.

Ronald P. Rohn

Head Coach of Women's Basketball

B.A., Fordham University.

JoEllen Rooney

Conference Services Manager

A.B., Muhlenberg College.

Thomas Roth

Systems Manager

B.S., Clarion University of Pennsylvania;

M.B.A., University of Connecticut.

Peter Saenger

Acopian Ornithological Specialist

Karen Schall

Associate Registrar

Joseph Schmidt

Systems Analyst

B.S., Muhlenberg College.

Jeffrey Schmitt

Head Coach of Men's Tennis

A.B., Muhlenberg College;

M.A., Lehigh University.

Jane Schubert

Associate Dean of Students

Student Conduct Officer

A.B., Muhlenberg College.

Janette M. Schumacher

Director of Residential Services

B.A., M.Ed., Kutztown University.

Thomas J. Sciarrino

Manager, Instructional Technology & Digital Learning

B.S., Kutztown University.

Gregg Scully

Assistant Dean

The Wescoe School of Muhlenberg College

B.A., Cedar Crest College;

M.A., Pennsylvania State University.

Kristen Stuckel Seiler

Head Women's Lacrosse Coach

B.A., Gettysburg College;

M.S., Western Maryland College.

Katherine Shelley

Assistant Director, Residential Services

B.A., Pennsylvania State University.

Joseph F. Shigo

Communications Specialist

A.S., Pennsylvania State University.

Brayden Sickler

Head Coach, Cheerleading

B.S., Penn State University.

Rabbi Melissa Simon

Jewish Chaplain/Hillel Director

B.A., Mount Holyoke College;

M.A., Hebrew Union College - Jewish Institute of Religion

Tara Simpson

Assistant Director, Alumni Affairs

A.B., Muhlenberg College

Diana Skowronski

Sr. Associate Director, Alumni Affairs

A.B., Muhlenberg College;

M.A., Lehigh University

Stephen Small

Network Systems Technician

B.S., Pennsylvania State University

Mark Smiley

Assistant Director, Multicultural Life

B.A., James Madison University;

M.A., Virginia Tech

Ryan Smolko

Associate Director, Student Engagement & Transition

B.A., Pennsylvania State University;

M.Ed., Kutztown University

Scott Snyder

Marketing & Development Manager,

Theatre Arts Department

Anne W. Speck

Vice President of Human Resources

B.S., Rider College;

M.B.A., Lehigh University

Ann Marie Stevens

Counselor, Counseling Services

Kimberly A. Stolarik

Leadership Gift Officer

A.B., Muhlenberg College

Joseph Swanson

WMUH General Manager

Mid-Western Broadcasting School

Deborah Tamte-Horan

Registrar

B.A., North Park University

Ian Tauber

Associate Director, Advancement Services

A.B., Muhlenberg College;

M.B.A., DeSales University.

Paul E. Theisen, Jr.

Theatre Technician

B.A., Viterbo College;

M.F.A., University of Delaware.

Darin Thomas

Director of Fitness, Strength, & Conditioning/Facility

Manager

B.S., M.S., State University of New York.

Eric Thompson

Assistant Director of Admission

A.B., Muhlenberg College.

Sean C. Topping

Head Coach of Men's Soccer

A.B., Muhlenberg College.

Howard Unrue

Head Coach, Men's Hockey

B.S., DeVry Institute of Technology;

M.B.A., Ohio State University.

Arielle Weil

Programs & Engagement Associate, Hillel

B.A., Elon University.

Philip Weisgold

Senior Assistant Director of Admission & Financial Aid

A.B., Muhlenberg College.

Stephen Williams

College Organist

B.A., Brevard College.

Gregory Wilson

Planned Giving Officer

B.A., Lebanon Valley College;

M.S., Eastern University.

Mylene Wursta

Leadership Gift Officer

B.S., University of Houston.

Rick Yenser

Assistant Director of Counseling Services

B.S., M.A., Kutztown University.

Jeffrey Yorgey

Media Services Technician

B.A., Lebanon Valley College.

EMERITI

William S. Abruzzi (1996)

Associate Professor of Anthropology, Emeritus

B.S., Widener University;

M.A., Temple University;

Ph.D., State University of New York at Binghamton.

Anna Adams (1982)

Professor of History, Emerita

B.A., M.A., Boston University;

Ph.D., Temple University.

Charles S. Bednar (1962)

Professor of Political Science, Emeritus

B.A., M.A., Rutgers University;

Ph.D., Columbia University.

Patricia T. Bradt (1994)

Associate Professor of Environmental Science, Emerita

B.A., Cornell University;

M.S., Ph.D., Lehigh University.

John W. Brunner (1955)

Professor of German, Emeritus

A.B., Ursinus College;

M.A., Ph.D., Columbia University.

Roland W. Dedekind, Jr. (1959)

Assistant Professor of Mathematics, Emeritus

B.S., Ursinus College;

M.S., University of Wisconsin;

M.S., Rutgers University.

Jamie T. Doran, C.P.A. (1992)

Associate Professor of Accounting, Emerita

B.S., Indiana University of Pennsylvania;

M.S., Duquesne University.

Penelope H. Dunham (1993)

Professor of Mathematics, Emerita

B.A., St. Mary-of-the-Woods College;

M.S., Ph.D., Ohio State University.

William Dunham (1992)

Truman L. Koehler Professor of Mathematics, Emeritus

B.S., University of Pittsburgh;

M.S., Ph.D., Ohio State University.

Diane W. Follet (2000)

Professor of Music, Emerita

B.M., University of Texas at Austin;

M.M., University of Arizona;

D.A., University of Northern Colorado.

Paul E. Frary (1990)

Professor of Business, Emeritus

B.A., Baker University;

M.S., Emporia State University;

Ph.D., University of Arkansas.

Ralph S. Graber (1953)

Professor of English, Emeritus

B.A., M.A., Lehigh University;

Ph.D., University of Pennsylvania.

Kenneth R. Graham (1970)

Professor of Psychology, Emeritus

B.A., University of Pennsylvania;

Ph.D., Stanford University.

Richard C. Hatch (1962)

Professor of Chemistry, Emeritus

Sc.B., Brown University;

Ph.D., University of New Hampshire.

Peyton Randolph Helm (2003)

President Emeritus

Professor of History, Emeritus

B.A., Yale University;

Ph.D., University of Pennsylvania.

Sue Curry Jansen (1985)

Professor of Media and Communication

B.A., M.A., Ph.D., State University of New York at Buffalo.

William H. Jennings (1969)

Professor of Religion, Emeritus

B.A., Lenoir Rhyne College;

B.D., Lutheran Southern Seminary;

M.A., Ph.D., Yale University.

Eileen Kern

Registrar, Emerita

Albert A. Kipa (1966)

Professor Laureate of Comparative Literature, Emeritus

B.A., City College of New York;

A.M., Ph.D., University of Pennsylvania.

Adnah G. Kostenbauder (1962)

Professor of Mathematics, Emeritus

A.B., University of Rochester;

M.A., Ph.D., Syracuse University.

Connie Kunda (1966)

Professor of Physical Education, Emerita

B.S., Pennsylvania State University;

M.Ed., East Stroudsburg State College.

Mary Lawlor (1990)

Professor of English, Emerita

B.A., University of Maryland;

M.A., Ph.D., New York University.

Stewart S. Lee (1963)

Professor of Political Science, Emeritus

B.A., Westminster College (Pa.);

M.A., Ph.D., Rutgers University.

Walter E. Loy, Jr. (1960)

Professor of Physics, Emeritus

B.S., Muhlenberg College;

M.S., Drexel Institute of Technology;

Ph.D., Temple University.

Charles S. McClain (1970)

Professor of Music, Emeritus

B.A., College of Wooster;

M.A., Cornell University;

A.M.D., Eastman School of Music.

Robert F. Milligan (1971)

Professor of Physics, Emeritus

B.S., Muhlenberg College;

Ph.D., University of Rochester.

David A. Nelson (1989)

Associate Professor of Mathematics and Computer Science, Emeritus

B.S., U.S. Air Force Academy;

M.A.M., North Carolina State University;

Ph.D., Pennsylvania State University.

Carl S. Oplinger (1963)

Professor of Biology, Emeritus

B.S., Muhlenberg College;

M.S., Lehigh University;

Ph.D., Cornell University.

John T. Pearce (1970)

Associate Professor of French and Spanish, Emeritus

B.A., M.A., University of Michigan;

Ph.D., University of Chicago.

Ludwig F. Schlecht (1969)

Professor of Philosophy, Emeritus

B.A., Gettysburg College;

Ph.D., Emory University.

Henry L. Schmidt (1968)

Professor of Music, Emeritus

B.A., University of Rochester;

M.A., Eastman School of Music;

Ph.D., University of North Carolina.

Irvin R. Schmoyer (1976)

Professor of Biology, Emeritus

B.S., Muhlenberg College;

M.S., Ph.D., Purdue University.

Susan L. Schwartz (1988)

Professor of Religion Studies, Emerita

B.A., State University of New York at Buffalo;

M.A., Indiana University;

Ph.D., Syracuse University.

Franklin Sherman (1989)

Professor of Jewish-Christian Studies, Emeritus

A.B., Muhlenberg College;

M.Div., Lutheran School of Theology at Chicago;

M.A. (Oxen), Oxford University;

Ph.D., University of Chicago.

Donald W. Shive (1969)

Professor of Chemistry, Emeritus

B.S., Pennsylvania State University;

Ph.D., Massachusetts Institute of Technology.

Rohini S. Sinha (1965)

Senior Professor of Economics, Emeritus

I.Sc., Bihar University;

B.A., Patna University;

M.A., Ph.D., New School for Social Research.

Marion W. Smith (1983)

Assistant Professor of Chemistry, Emerita

B.S., University of Nottingham;

D.A., Lehigh University.

Robert K. Stump (1959)

Assistant Professor of Mathematics, Emeritus

B.S., Muhlenberg College;

M.S., Rutgers University.

Nelvin L. Vos (1965)

Professor of English, Emeritus

B.A., Calvin College;

M.A., Ph.D., University of Chicago.

John C. Weston (1967)

Professor of Biology, Emeritus

B.A., Bowdoin College;

M.S., Ph.D., University of Pennsylvania.

Carol Shiner Wilson (1981)

Assistant Professor for Humanities, Emerita

B.A., Cornell College;

M.A., University of Missouri;

Certificat, Université de Paris;

M.A., University of Kansas;

Ph.D., Indiana University.

Kathryn A. Wixon (1986)

Professor of French, Emerita

B.A., University of Michigan;

M.A., Middlebury College;

Ph.D., University of North Carolina.

Robert Wind (1975)

Professor of Classics, Emeritus

B.A., Wesleyan University;

M.A., University of Wisconsin;

Ph.D., State University of Iowa.

Arvids Ziedonis, Jr. (1962)

Professor of Comparative Literature, Emeritus

A.B., Muhlenberg College;

M.Div., Lutheran Theological Seminary at

Philadelphia;

S.T.M., Lutheran Theological Seminary, Gettysburg;

Ph.D., Temple University.

HEALTH SERVICE STAFF

Brynnmarie Dorsey, M.S.N., R.N., C.R.N.P.

Director of Health Center

B.S.N., Villanova University;

M.S.N., Duke University.

Health Bobeck, B.S.Ed., RN

Staff Nurse

Diploma, St. Luke's School of Nursing;

B.S.Ed., West Chester University.

Theresa Calogero, B.S., R.N.

Staff Nurse

B.S., Wagner College.

Christine M. Lynch, B.S.N., R.N.

Staff Nurse

B.S.N., Villanova University.

Kelly Powell, R.N.

Staff Nurse

Diploma, Allentown Hospital S.O.N.

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