



**Elizabethtown College**

# **COLLEGE CATALOG 2020-2021**

The provisions and requirements stated in this Catalog (and its electronic counter-part at [catalog.etown.edu](http://catalog.etown.edu)) are not to be regarded as an irrevocable contract between Elizabethtown College and the student. The College reserves the right to change any provision or requirement, rules, regulations, and procedures, whether published in this Catalog, the Student Handbook, or other official media.

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Elizabethtown College, located in historic Lancaster County, Pennsylvania, is a selective, private, residential, co-educational institution. Elizabethtown offers 56 undergraduate and five graduate majors and 100+ minors and concentrations, which lead to degrees in liberal arts, fine and performing arts, science and engineering, business, health and social services, and education.

Elizabethtown College is accredited by the Middle States Commission on Higher Education (MSCHE), *3624 Market Street, Philadelphia PA 19104, 267-284-5000*. The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation. In addition, Elizabethtown has specialized accreditations from ABET; the Accreditation Council for Occupational Therapy Education of the American Occupational Therapy Association; the American Chemical Society Committee on Professional Training; the Accreditation Council for Business Schools and Programs; the Council on Social Work Education; the National Accrediting Agency for Clinical Laboratory Sciences; and the National Association of Schools of Music.

## **President's Message**

I am pleased to share Elizabethtown College's 2020-21 Academic Catalog. This catalog offers a wide variety of courses that will prepare and connect you to careers and life beyond Etown. Your interactions and discoveries with fellow classmates and professors, both inside and outside the classroom, will bring teaching and learning to life. By carefully choosing your courses, in consultation with your advisor, you will engage in finding your life's calling, your life's work, and your most fulfilling future. Our impressive breadth and depth in course offerings will push you to think critically, analyze deeply, and communicate effectively through hands-on learning which incorporates research opportunities, internships, co-ops, clinicals, and study-abroad experiences. At Elizabethtown College, we encourage students to set goals and exceed expectations. Our student-centered community is here to help guide and mentor you to gain an educational foundation that prepares you for lifelong success.

Sincerely,

Cecilia McCormick, J.D.  
President, Elizabethtown College

## **How to Reach Us**

### **Mailing Address**

Elizabethtown College  
One Alpha Drive  
Elizabethtown, PA 17022-2298

### **Questions about Admissions**

**Office of Admissions**  
(717) 361-1400  
[admissions@etown.edu](mailto:admissions@etown.edu)  
[www.etown.edu/admissions](http://www.etown.edu/admissions)

## **Questions about this Catalog**

### **Office of Registration and Records**

(717) 361-1409

[regandrec@etown.edu](mailto:regandrec@etown.edu)

<http://www.etown.edu/registration>

## **Questions about Adult Education**

### **Elizabethtown College School of Continuing and Professional Studies at the Edward R. Murphy Center**

(717) 361-1411

[www.etown.edu/scps](http://www.etown.edu/scps)

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*Elizabethtown College complies with the requirements of Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and all other applicable federal, state, and local statutes, ordinances, and regulations. Elizabethtown College does not discriminate on the basis of gender, race, color, religion, age, disability, veteran status, national or ethnic origin, ancestry, sexual orientation, possession of a general education development certificate as compared to a high school diploma, or any other legally protected status in hiring and promotion in the administration of its educational policies, scholarship and loan programs, and athletic or other College-administered programs, except as such conditions may constitute bona fide occupational or assignment qualifications. Discriminatory acts of any kind are strictly forbidden. In keeping with the historical values of Elizabethtown College, the College endeavors to treat all employees with dignity, justice, and fairness.*

*Elizabethtown College was founded in 1899 by leaders of the Church of the Brethren. Today, the College is governed by an independent Board of Trustees and affirms a continuing covenantal relationship to the Church of the Brethren. Elizabethtown College is accredited by the Middle States Association of Colleges and Secondary Schools.*

## **Academics at Elizabethtown College**

### **Overview and Accreditations**

Founded in 1899, Elizabethtown College is a selective, private, residential, co-educational college located on 204 acres in historic Lancaster County, Pennsylvania. The campus is near Harrisburg, Lancaster, and Philadelphia, each of which is rich with cultural, athletic, and social opportunities.

Elizabethtown offers 61 majors and 100+ minors and concentrations, which lead to degrees in liberal arts, fine and performing arts, science and engineering, business, health and social services, and education. This array of programs allows our students to prepare for a broad spectrum of graduate programs and careers. Elizabethtown College is accredited by the Middle States Commission on Higher Education (MSCHE), *3624 Market Street, Philadelphia PA 19104, 267-284-5000*. The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation. In addition, Elizabethtown has specialized accreditations from ABET; the Accreditation Council for Occupational Therapy Education of the American Occupational Therapy Association; the American Chemical Society Committee on Professional Training; the Accreditation Council for Business Schools and Programs; the Council on Social Work Education; the National Accrediting Agency for Clinical Laboratory Sciences; and the National Association of Schools of Music.

Elizabethtown College is a member of the State Authorization Reciprocity Agreement (SARA), a voluntary, interstate agreement that establishes comparable standards for offering postsecondary distance education across state lines. Member states recognize participating institutions that are authorized in other member states. SARA establishes comparable national standards for interstate offering of postsecondary distance education courses and programs. It is intended to make it easier for students to take online courses offered by postsecondary institutions based in another state.

Currently, close to 1,700 full-time students are enrolled at the College. The majority of these men and women hail from the mid-Atlantic region (Pennsylvania, New Jersey, Maryland, Delaware, and New York) but also represent close to 15 additional states and 16 other countries. Educating our students are 124 full-time faculty members, 94% of whom hold doctorate or terminal degrees in their fields. In addition, 320 adult learners also are pursuing degrees through the College's School of Continuing and Professional Studies at the Edward R. Murphy Center.

### **Mission**

Elizabethtown College provides a transformative educational experience that cultivates personal strengths and develops a passion for lifelong learning and purposeful work.

The impact of an Elizabethtown College education is long-lasting and far-reaching because it is deeply transformative. Students acquire new habits of mind and heart—some in the course of the undergraduate experience, others as students grow beyond college.

### **Educational Philosophy**

Elizabethtown College engages students in a dynamic, integrated learning process that blends the liberal arts and professional studies. Challenged to take responsibility for their education, students at Elizabethtown embark on a journey of self-transformation that involves intellectual, social, and personal growth.

The College is committed to educating the whole person within a relationship-centered learning community, where common goals are achieved through engagement in a rigorous academic curriculum and thoughtful co-curricular experiences. Students are encouraged to develop and challenge their own values, while seeking to understand and appreciate alternative perspectives. Embedded in an ever-changing global context, the College promotes the developmental, collaborative, and complex nature of learning.

In seeking to "educate for service," Elizabethtown College believes that students can perform no greater service than they do when sharing knowledge and creativity with others. Opportunities to strengthen scholarship and leadership extend beyond the classroom, and students learn actively through practical experiences and civic engagement.

The impact of an Elizabethtown College education is long-lasting and far-reaching because it is deeply transformative. Students acquire new habits of mind and heart – some in the course of the undergraduate experience, others as students grow beyond college.

## **Learning Goals**

At Elizabethtown College, students are inspired and challenged to:

- assume responsibility for their intellectual development, personal growth, and well-being. Students will learn to sharpen their curiosity and become aware of the capabilities, strategies, and resources needed to learn.
- reason, analyze, and engage in critical thinking. Students will make, systematically evaluate, and, if necessary, refute arguments and claims – their own and those of others.
- demonstrate thoughtful and articulate communication by applying knowledge in a variety of contexts, including writing, speaking, listening, and interpretation.
- understand the creative process and its role in human expression, and cultivate the ability to make informed aesthetic judgments.
- navigate diverse cultural worldviews and perspectives, with the realization that differing frames of reference influence analysis, communication, and behavior.
- make reflective ethical decisions and act with integrity to seek just outcomes with relationships, communities, and society.
- apply and integrate different strands of learning and comprehend interconnections in the process of gaining knowledge and experience.
- identify and cultivate a sense of purpose that inspires a commitment to meaningful work in service to society.

## **The Qualities of Our Education**

Our educational experience blends a high standard of scholarship with four signature attributes, which include commitments to educate our students in a relationship-centered learning community, foster in our students international and cross-cultural perspectives, complement classroom instruction with experiential-learning opportunities, and prepare our students for purposeful lives and meaningful work.

## **Relationship-Centered Learning**

Our educational programs engage students in ways that capture their most profound attention, confront them with learning experiences that are compelling, and call out from them responses that reach beyond what even they thought possible. In this learning community, our faculty members and staff members demonstrate passion for their

subjects and for continued learning so our students see how compelling deep engagement is. Students receive personal attention, as all College employees commit to expressing sincere and genuine interest in the educational success of our students. Our College's classes deliberately are kept small to support our students' individual needs and challenge them to grow.

## **International and Cross-Cultural Perspectives**

Elizabethtown offers a globalized curriculum and co-curriculum. Programs of study and development help students understand and effectively engage with other cultures and the globalization of life and work. Our staff includes faculty and staff members who are citizens of countries from around the world, who speak a multitude of languages, and who have had myriad study and residential experiences on other continents. Students study alongside classmates from other cultures. Additionally, they encounter our international world when they visit, study, or live in cities as diverse as Harrisburg, Philadelphia, London, Beijing and Quito.

## **Signature Learning Experiences**

Elizabethtown College is committed to engaging its students in real-world learning opportunities that complement classroom learning and provide pathways to productive careers and lives beyond college. All Elizabethtown College students will complete at least two Signature Learning Experiences as part of their graduation requirements. In consultation with their academic advisor, students will select at least two of the following five Signature Learning Experiences: supervised research; community-based learning; cross-cultural experiences; internships, field experiences or practicums; and capstone experiences. More information can be found on The Core Program and Signature Learning Experiences.

## **Purposeful Life Work**

In both the curriculum and co-curriculum, the College's educational program fosters an understanding of education for a life of purpose based on a holistic model of student development that integrates career development; reflection on vocation, meaning and life; and a commitment to civic engagement. As a result, graduates of Elizabethtown are prepared to make the world a better place. They do so, in part, by living in ways that reflect their individual commitments, respond to the needs of others, and value personal and ethical integrity.

## **Inclusive Excellence and Diversity**

At Elizabethtown College the learning that takes place here happens inside and outside the classroom. Our students connect with and learn from faculty members and fellow students from all walks of life and cultures, domestic and international. Our College and members of our campus community thrive in this inclusive environment -- one that examines, recognizes and affirms the human dignity of everyone on our campus, regardless of race, ethnicity, sexual orientation, socioeconomic status, religion, ability, gender, gender identity and expression, age, or national origin. The Office of Diversity, Inclusion and Title IX supports this rich learning environment and connects with local, regional, and national organizations to strengthen diversity initiatives at the college. For more information, please visit [www.etown.edu/offices/diversity](http://www.etown.edu/offices/diversity).

## **History**

Elizabethtown College was established by representatives of the Church of the Brethren on September 23, 1899. As outlined in our charter, the purpose of the College was "to give such harmonious development to the physical,

mental and moral powers of both sexes as will best fit them for the duties of life." On November 13, 1900, classes began for six students in the A. Heisey Building, located in downtown Elizabethtown, until Alpha Hall was completed later that year.

During the early years, the institution operated as an academy, offering a limited curriculum. In 1921, the Pennsylvania Department of Public Instruction accredited the College and authorized it to grant bachelor's degrees in the arts and sciences. In May 1948, Elizabethtown was accredited by the Middle States Association of Colleges and Schools.

Since the late 1940s, Elizabethtown has grown significantly – in our student and faculty population, in our academic and co-curricular offerings, and in the number and quality of our facilities.

## **Our Campus**

To provide the superior classrooms and cutting-edge technology necessary to prepare our students for their futures, the College has significantly enhanced our facilities over the past several years. Today, our campus is a beautiful marriage of stately 1900s architecture – symbolic of the College's century-old heritage – and state-of-the-art academic and co-curricular buildings.

Located at the heart of campus, the Baugher Student Center is the hub of student activity at Elizabethtown. With the Grossman Commons addition, the Center offers comprehensive academic and career support through its Center for Student Success. Students who wish to get involved with activities or religious life on campus can visit the Center for Student Involvement. Additionally, the facility includes our Tempest Theatre, home to the College's theatrical performances; the College Store; dining facilities; and an on-campus post office.

At the edge of campus sits Leffler Chapel and Performance Center, a beautiful venue for showcasing the talents of world-class performers and speakers hosted by Elizabethtown College. Highlighting the year are performances by the College's talented musical ensembles and the annual Ware Lecture on Peacemaking, which has presented speakers such as former hostage Terry Waite, Nobel Peace Prize winner F.W. de Klerk, and New York Times reporter and op-ed columnist Nicholas Kristof.

The James B. Hoover Center for Business is home to the College's business program. In these modern facilities, our business faculty members create a learning environment in which students gain the knowledge and experience necessary to handle real-world business issues with expertise and integrity. This building also houses the Elizabethtown College School of Continuing and Professional Studies, which provides a variety of programs for adult learners, and the High Center, which provides support to area family businesses.

In the College's Masters Center for Science, Mathematics and Engineering are the classrooms, modern laboratories, and research facilities essential for a 21st-century science education. It features state-of-the-art learning centers and facilities, including the Lyet Wing for Biological Sciences, the Masters Mineral Gallery, Occupational Therapy Kid Zone, and the Bollman Fabrication Laboratory.

Zug Memorial Hall houses various music studios, classrooms and practice rooms, as well as lockers for storing instruments. Each rehearsal space is fully equipped for music study with a combination of upright and studio grand pianos, sound equipment and presentation podiums. Practice rooms are partially sound proof with upright pianos. Our main rehearsal and performance spaces contain Steinway pianos.

The athletics complexes and fitness and well-being facilities feature the Jay Walk where offices for the College's coaching staff and the Ira R. Herr Athletic Hall of Fame are located. The complexes include a collection of outstanding athletic facilities, including a softball field; an outdoor MONDO-surface track; Wolf Field, our artificial

turf surface for lacrosse and field hockey; and the Kevin Scott Boyd Memorial Stadium for baseball. The new \$24.5 million, 82,000 square foot Bowers Center for Sports, Fitness and Well-being, demonstrates the College's commitment to campus well-being. The complex provides space for group fitness classes and educational workshops, a 180-meter MONDO surface track, cardio equipment, health promotion programming, a smoothie bar, demonstration kitchen and locker rooms for athletic teams and the College community.

The Bowers Writers House at 840 College Hill Lane is a short walk from campus. An interdisciplinary venue for presentation, performance, expression, and study, Bowers Writers House supports a culture of creative curiosity and fosters a sense of excitement and enthusiasm for intellectual diversity. Bowers Writers House programs – from dramatic readings to interactive panels to musical performances – offer a dynamic variety of enjoyable and informative experiences.

## **Admission Guidelines**

The Elizabethtown College Office of Admissions seeks qualified students from a wide range of geographic, socioeconomic, ethnic, religious, and cultural backgrounds. While the ability to meet the challenges presented by Elizabethtown's curriculum is the primary consideration, all aspects of the applicant's profile can and will be considered.

Elizabethtown College emphasizes personal attention throughout the admissions process, and the Office of Admissions strives to assure the proper "fit" for both the College and the student. As such, Elizabethtown encourages applications from students who will contribute to and benefit from the College's academic, co-curricular, service, and cultural programs. Each application is carefully reviewed to determine the student's seriousness of scholarship, range of talents, and depth of character using the following guidelines:

Applicants must graduate from an accredited secondary school or a state Department of Education-approved program with at least four years of English, three years of mathematics, and two years each of laboratory sciences, social studies, and foreign languages.

Accompanying recommendations from a school guidance counselor and an academic course teacher must attest to the academic ability, potential, and personal character of the applicant.

Students who rank in the top 10 percent of their high school class are able to waive their standardized test scores from Elizabethtown's review for admission and merit-based scholarship consideration. If a student attends a high school that does not rank, a grade point average of 3.50 or better (on a 4.00 scale) will allow that student to waive his/her standardized test scores. Students applying to the Elizabethtown College Honors Program must submit their standardized test scores to be considered for admission to the Honors Program.

The application form should include references to participation in activities, arts, service, athletics, and other interests beyond the classroom, as well as employment, which indicate the talents, leadership, and abilities the student will bring to the Elizabethtown community.

A writing sample – essay, personal statement, or graded paper – must be provided as an example of the student's ability to clearly communicate his or her thoughts.

A campus visit is strongly recommended.

An interview is required for students applying to the Elizabethtown College Honors Program, Law Early Admission Program, and the occupational therapy program and is strongly recommended for all other applicants.

The following lists provide some insight into what Elizabethtown considers in the areas of academic, co-curricular and social fit:

<b>Academic</b>	<b>Co-Curricular</b>	<b>Social</b>
Strength of curriculum	Athletic ability	Integrity
SAT/ACT scores	Musical ability	Persistence
Grade point average	Dramatic ability	Seriousness of attitude
Rank in class	Service and leadership	Appreciation for the College
Letters of recommendation	Work experience	Interest in Elizabethtown
Academic awards/honors	Activity involvement	Work ethic

Requests for applications and other information regarding admissions should be directed to:

Office of Admissions  
Elizabethtown College  
One Alpha Drive  
Elizabethtown, PA 17022-2298  
(717) 361-1400  
[admissions@etown.edu](mailto:admissions@etown.edu)  
[www.etown.edu](http://www.etown.edu)

## **The Application Process**

Elizabethtown College admits students on a "rolling" basis with an application deadline of April 1. Most prospective students apply before January of their senior year. The Office of Admissions begins to notify students of acceptance decisions – usually beginning in mid-September – and continues to admit students until late spring. Students who are offered admission to the College must respond to the offer by May 1 for the following fall semester.

An application is considered complete when the following items are submitted for review:

**College Application.** The use of the Common Application is encouraged and can be accessed on the College website ([www.etown.edu](http://www.etown.edu)). An Elizabethtown College application is also available on the College website as an alternative. The College does not assess an application fee.

**School Report and Recommendations.** Applicants should notify the appropriate high school office and direct them to complete the School Report and Recommendations. Additionally, one teacher must complete a letter of recommendation on behalf of the applicant. Applicants may submit additional recommendations from other individuals who know him/her well, such as a coach, musical director, clergy member, or employer.

**Official High School Transcript.** All applicants must submit an official high school transcript.

**Standardized Testing Results.** In order to make the admissions process as easy as possible for families during this unique time period, Elizabethtown College will review applications with or without standardized test scores for students applying for admission to Etown's Class of 2025, which will enter the College in Fall 2021. The decision is in the hands of the applicant and there will be no penalty for choosing not to submit scores. This update includes students who are submitting a transfer application for entry to Etown in Fall 2021.

**Writing Sample.** All applicants must submit an example of their writing by submitting an essay on one of the topics suggested in the application. Students may also choose to submit a personal statement.

## **International Applicants**

In addition to the previously stated requirements, international applicants also must submit the following items:

**The International Student Financial Aid Application.** Contact the Office of Admissions to request this form.

**International Student Certification of Finances Guidelines.** Contact the Office of Admission to request this form.

**Personal Statement.** A 250-word personal statement discussing their choice to apply to Elizabethtown College.

**Standardized Testing Results.** The official results of the SAT, ACT, TOEFL, IELTS, EIKEN, Pearson PTE English Proficiency, and Cambridge English Examination.

## **Transfer Applicants**

Transfer applicants in good social and academic standing at an accredited college, university or two-year institution are encouraged to apply. Transfer students are accepted for both the fall and spring semesters.

All transfer applicants are encouraged to complete the Elizabethtown College transfer application. Students may also complete the Common Application for transfer students. In lieu of the school report, transfer applicants should submit the Transfer College Report and a letter of recommendation from a professor, teacher, or employer. Additionally, all transfer applicants must submit a high school transcript and official transcripts from all previous college work.

**Transfer applicants with an earned associate's degree,** consisting of at least 40 corresponding general education credits, may be recognized as meeting all of the Elizabethtown College Core Program with full junior standing. For more information, please refer to the Transfer Credit policies under Academic Policies.

All potential transfer credits – up to 64 from a two-year institution and up to 84 credits from a four-year institution – are evaluated by the Office of Registration and Records to determine how the credits will transfer to Elizabethtown College.

## **Special Application Requirements**

Because of limited and selective enrollment opportunities, applicants to some of Elizabethtown's programs are encouraged to submit an application earlier than the normal deadline of March 1. Those programs, with their suggested application deadlines, are as follows:

Occupational Therapy Program	December 15
Physician's Assistant Program	December 15
Pre-Med Primary Care Program	December 15
Law Early Admission Program	December 15
Master of Science in Molecular Biology Program	December 15
Elizabethtown College Honors Program	January 15

Students considering a degree in music, music therapy, or music education must complete an audition and are encouraged to contact the School of Arts and Humanities at (717) 361-1212 to learn more. Audition forms are available online through the School's website ([www.etown.edu/FAPA](http://www.etown.edu/FAPA)).

## **Personal Interviews and Campus Visitations**

A personal interview with a member of the Admissions staff is strongly encouraged for all prospective students. It is suggested that prospective students plan to interview prior to January 1 of their senior year. Campus interviews and tours are available throughout the year. Individual appointments are scheduled between 9 a.m. and 3 p.m., Monday through Friday. Morning appointments also are available on select Saturdays in the fall and spring. Simply contact the Office of Admissions at (717) 361-1400 or visit the website at [www.etown.edu/visit](http://www.etown.edu/visit) to schedule a campus visit.

Many on-campus programs are available throughout the year. Contact the Office of Admissions or visit the College's website ([www.etown.edu/visit](http://www.etown.edu/visit)) for the dates of Open Houses and other specialized on-campus programs.

## **Advanced Placement**

Elizabethtown College participates in the Advanced Placement (AP) program of the College Board. Depending upon approval of the School concerned, the College grants advanced placement credit to students who score four or better on the College Board's AP examinations. Please visit the Office of Registration and Records website at [www.etown.edu/registration](http://www.etown.edu/registration) for our current AP credit policy. Credit through the International Baccalaureate Program may be granted for scores of five or higher on the higher-level examinations, depending upon the School concerned. (See Academic Policies for more information.)

## **Transfer of Dual Enrollment Credits**

Dual Enrollment refers to the practice of a student being enrolled at two schools simultaneously, as may occur when an advanced high school student registers to take a course from a college or university. Elizabethtown College has adopted specific rules to define the conditions under which this type of course may transfer to Elizabethtown College. Students can transfer courses from accredited institutions that are judged by the Registrar and the appropriate School (in the case of courses for a major/minor) to be high quality, involve active delivery methods (ongoing exchange of ideas with an instructor), and are consistent with the mission and program goals of Elizabethtown College. No online courses that are independent study or correspondence can be transferred. It is recommended that students request the credit-granting institution include a cover letter with their transcript verifying the course completed adheres to our policy for the Transfer of Dual Enrollment Credits.

For further information, see [www.etown.edu/registration/registration-records](http://www.etown.edu/registration/registration-records).

## **Non-Degree Students**

Students who are not candidates for a degree but who wish to enroll in one or more courses should complete the College's application for admission. Non-degree applicants should arrange for an admissions interview to discuss course selection and special application requirements.

## **Early-Admission Students**

Superior high school students may accelerate their higher education by beginning their college work immediately after completion of their junior year. Students who are admitted enter the College as a regular first-year student.

## *Admission to the College*

When they successfully complete their first year, they receive their high school diploma in addition to the college credits earned. This program has the cooperation and support of the Pennsylvania Department of Education.

In addition to the fundamental requirement that early-admission applicants must have completed their 11th year in an accredited curriculum, they must exhibit the mental ability, scholastic achievement, social maturity, and personal motivation to adjust to the academic and co-curricular programs of the College. Following enrollment, early-admission students receive close academic advising by selected faculty members.

Early admission to Elizabethtown College after careful, individualized screening is based on the following:

**Class Rank and Academic Aptitude.** To be considered, students must rank among the top of their high school class and achieve a superior result in the SAT.

**Recommendations.** Written by the student's high school principal, guidance counselor, and teachers, recommendations must indicate the student's suitability for early admission.

**Parental, High School and Elizabethtown College Support.** The written approval of the student's parents, high school principal, and guidance counselor is mandatory before acceptance. Included in the approval is the assurance of a high school diploma upon successful completion of the first year at Elizabethtown. The selection process also requires an interview with the Office of Admissions.

## Tuition and Financial Aid

Elizabethtown College offers students an excellent and affordable educational experience. Not only is Elizabethtown one of the top-rated colleges in the North, we also are rated as one of the region's best values.

We understand, though, that students and their families may have some difficulty meeting the full cost of a college education without some assistance. For all who are accepted, Elizabethtown helps to make private education affordable through merit-based scholarships and need-based financial aid.

97% of our students receive some financial assistance. Scholarships – which could be as much as one-half of the total cost of tuition – are awarded to more than half of our incoming first-year students based on their academic and co-curricular achievement. Additionally, every current and prospective student is assigned a personal financial aid counselor who will work with that student and his or her family to determine ability to qualify for need-based financial aid from the College and from state and federal agencies.

## Tuition and Fee Information – 2020-2021

Full-time students – those who are taking 12 to 18 credit-hours per semester will pay a comprehensive annual fee. Students who take fewer than 12 credit-hours are considered part time and will pay per credit-hour based on the type of course in which they are enrolled. Course credits, internships, directed and independent studies, tutorials, audit courses, and private music lessons are combined to determine the student's status as part time, full time, or full time with overload (for those who are taking credits in excess of 18 per semester).

### Full-Time Students

#### Comprehensive Fees

	Annual Rate	Resident	Independent Living Units	Commuter/ Off-Campus
<b>Tuition</b>	\$32,960	X	X	X
<b>Room – Traditional</b>	\$5,970	X		
<b>Room – Ind. Living Unit</b>	\$7,010		X	
<b>Board</b>	\$6,090	X		
<b>Comprehensive Fee</b>		\$45,020	\$39,970	\$32,9600

Elizabethtown College's full-time students have access to campus facilities and programs. Included in the comprehensive fee is the use of the High Library, Bowers Center, gymnasium, and athletic fields. Full-time students also receive free admission to all regular season, on-campus athletic events, and most cultural activities offered by the College. Additionally, they receive a subscription to the Etowanian, the student-run newspaper.

Partial meal plans are available to students residing in Independent Living Units and to non-residential students for an additional cost. Please contact the Business Office at [businessoffice@etown.edu](mailto:businessoffice@etown.edu) or (717) 361-1417 for details.

## *Tuition and Financial Aid*

### **Other Fees**

All applicants must send a non-refundable deposit of \$300 to the Office of Admissions. This deposit will be held as a security deposit. All full-time students are required to maintain a \$300 security deposit on the account.

Full-time students may carry up to 18 credits per semester. A cumulative grade point average of 3.20 is required to carry more than 18 credits, with the maximum allowed credit load being 20 credits. The excess credit(s) will be invoiced at the current part-time, daytime course rate of \$1,175 per credit-hour.

### **Part-Time Students**

#### **Daytime Courses**

Tuition per credit-hour	\$1,175
Audit per credit-hour in excess of 18	\$390

#### **2019-2020 SCPS Evening and Summer Courses**

Tuition per credit-hour	\$555
MBA tuition per credit-hour	\$695
Audit per credit-hour	\$185

#### **All Students – Miscellaneous Charges**

##### **Challenge Testing**

For Credit	\$590
For Credit, test fee	\$120
For Placement/Waiver	\$ 85

In addition, 50 percent of the appropriate part-time tuition rate in effect at the time the test is administered is charged for academic credits awarded as a result of performance on the challenge tests.

##### **Administrative Fee**

Affiliated Approved Off-Campus Study/Semester	\$250
Non-Affiliated Approved Off-Campus Study/Semester	\$1,000

##### **Late Fee** \$50

Late fees are assessed for occurrences such as late registration, late course changes and late payment of fees. For additional details, please see the information on Tuition Payment Policy.

##### **Surcharges**

Tutorial – per credit-hour	\$150
Private music lessons – per half-hour lesson	\$460

##### **Transcripts** Free-of-Charge

No transcripts of records will be furnished to anyone whose account is not paid in full.

<b>Drexel Program</b>	\$38,250
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## **Tuition Payment Policy**

All charges are due on or before the due date for each semester. Checks should be made payable to Elizabethtown College.

Full-time students are sent a bill in July and December for one-half of the annual comprehensive fee. All confirmed financial aid is listed on the bill. Students should compare the bill with their latest financial aid award letter and deduct from their bill any aid not listed, excluding Federal Work-Study (FWS).

Elizabethtown College offers an interest-free monthly payment option. This service is available for a \$55.00 fee for an annual (fall and spring semester) payment plan or a \$35.00 fee for a single semester payment plan. Students may enroll in the payment plan through CASHNet, accessible through Jayweb. Parents who have been provided a parent pin by their student, may also enroll in the payment plan option through CASHNet. Enrollment in the payment plan will be available in early March. The first payment for the 12-month payment plan will be due by March 10 and for the 10 month payment plan by June 10.

Elizabethtown College does accept direct monthly installments or deferred payments for tuition from certain third-party tuition plans. For more information, please contact the Business Office at (717) 361-1417.

All amounts not received by the due date are subject to a one-time late payment fee of \$50 and monthly interest at a rate of 1.5 percent per month, which is 18 percent per year. Loan funds – such as Federal Direct Stafford Loans, Federal Direct PLUS Loans, private loans, etc. – or any other sources of financial aid not confirmed by the due date also are subject to a late charge and interest. In order to help ensure timely receipt, all loans should be applied for prior to July 1.

## **Financial Aid**

Elizabethtown College's Financial Aid Office assists enrolled and prospective students in finding the financial means to allow them to fully participate in the educational experience at Elizabethtown College. Services include providing information on institutional, federal, state and private aid options, budgeting, debt management, and financial aid counseling. The office is open from 8 a.m. until 4:30 p.m., Monday through Friday and located in Zug Memorial Hall, room 208.

Students interested in need-based financial aid from the College or federal student aid must complete the Free Application for Federal Student Aid (FAFSA). It is strongly recommended that students complete the FAFSA electronically at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Elizabethtown College's Title IV code is 003262 no later than March 15.

All applicants are considered for merit-based scholarships during the admissions application review. Some of these scholarships include endowed scholarships and gifts that are available to Elizabethtown students through the generosity of the College's alumni and friends. Notification of these scholarships follows the offer of admission, but precedes any need-based awards.

## *Tuition and Financial Aid*

For more detailed information regarding Elizabethtown College's financial aid programs, individuals may visit the Financial Aid website at [www.etown.edu/FinancialAid](http://www.etown.edu/FinancialAid) or by contacting us at:

Financial Aid Office  
Elizabethtown College  
One Alpha Drive  
Elizabethtown, PA 17022-2298  
(717) 361-1404  
[finaid@etown.edu](mailto:finaid@etown.edu)

## **Federal Financial Aid Requirements**

### **We Have a Right to Ask**

All information requested by the Financial Aid Office is authorized by law. The legal right to ask applicants to provide their social security number is based on Section 7(a)(2) of the Privacy Act of 1974 (P.L. 93-579).

All applicants for financial aid at Elizabethtown College are advised that disclosure of their social security number is required as a condition of participation in federal, state, and institutional financial aid programs. The applicant's social security number is used in conjunction with the College identification number to identify the applicant's financial aid application and account at Elizabethtown.

The legal right to ask for all other information is based on sections of the law that authorize the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (SEOG), FWS, Federal Perkins Loan, and Federal Direct Stafford Loan programs. These include sections 411, 413B, 443, 464, 425, 428, and 482 of the Higher Education Act of 1965, as amended. Any information submitted is subject to verification. If applicants do not supply proof when asked, they will not receive financial aid.

### **Referral of Fraud**

Cases of suspected fraud on the part of a Title IV aid applicant involving information relevant to a student's eligibility or amount of assistance will be referred to the U.S. Department of Education. The following circumstances are indicative of possible fraud when the aid administrator can find no other legitimate reason for the discrepancy: 1) false claims of independent student status, 2) false claims of citizenship, 3) use of false identities, 4) forgery of signatures or certifications, and 5) false statements of income. Any referrals made to a local or state law enforcement agency also will be reported to the Office of Inspector General within the U.S. Department of Education.

### **Viewing an Application File**

If students think that an error in their financial aid package stems from information in their file in the Financial Aid Office, they may review their file at any time, according to the Family Rights and Privacy Act of 1974. To see a file, students should contact the Financial Aid Office.

The Financial Aid Office treats each student's file with sensitivity and utmost confidentiality. The financial information in these files is released only to those who have contributed to it, i.e., the student and, if he or she is a dependent, his or her parents. Students must give explicit written and signed permission before the College will release information from their file to a third party. All students should keep copies of their tax returns, if submitted, as the College's copies cannot be returned.

## Institutional Refund Policy

Notice of withdrawal for medical reasons must be processed through Student Wellness. Students must complete the necessary medical withdrawal paperwork located: <https://www.etown.edu/offices/counseling/forms.aspx>. Notice of withdrawal for non-medical reasons must be given in writing to Academic Advising, which can be contacted at 717-361-1415. The effective date of calculating refunds is the date of acceptance of a written notice of voluntary withdrawal by Counseling Services. Failure to provide notice of withdrawal will result in an unofficial withdrawal. The College withholds refunds and transcripts until an official withdrawal has been obtained.

If the withdrawal occurs within the three weeks prior to registration, a resident student is liable for a \$150 room penalty in addition to his or her deposit.

If a student withdraws or changes credit-hours and/or room-and-board status after the beginning of the semester, the student is obligated to pay the actual room and board used to the date of withdrawal plus 25 percent of the unused room-and-board charges. Tuition refunds are calculated as follows:

Withdrawal in first week of classes	75 percent
Withdrawal in second through third week of classes	50 percent
Withdrawal in fourth week of classes	25 percent
Withdrawal at the beginning of fifth week of classes	0 percent

Refunds of tuition and room-and-board charges for a withdrawal due to medical reasons are prorated to the date of withdrawal. A student who is absent from the College because of sickness or other reason and who retains a place in class must pay in full during the absence.

Students who are dismissed or suspended from the College are refunded tuition charges according to the standard policy. Board charges are prorated to the date of dismissal or suspension and a 25-percent surcharge of the unused board is assessed. No room refunds are granted under these circumstances.

## Return of Federal Student Aid

Under HEA98 Public Law 105-244, the Department of Education stipulates the way funds paid toward a student's education are to be handled when a recipient of funds from the Student Financial Aid (SFA) Program withdraws from school.

A statutory schedule based on the period the student was in attendance is used to determine the amount of SFA Program funds a student has earned when he or she ceases attendance. Up through the 60-percent point in each payment period or period of enrollment, a pro rata schedule is used to determine how much of the SFA Program funding the student has earned at the time of withdrawal. After the 60-percent point in the payment period or period of enrollment, a student has earned 100 percent of the SFA Program funds.

In general, the amendments require that if a recipient of SFA Program assistance withdraws from school during a payment period or period of enrollment in which the recipient began attendance, the school must calculate the amount of SFA Program assistance the student did not earn and return those funds.

The percentage earned is one of the following:

If the date of student withdrawal occurs on or before the student completed 60 percent of the payment period or period of enrollment, the percentage earned is equal to the percentage of the payment period or period of enrollment that was completed.

## *Tuition and Financial Aid*

If the date of student withdrawal occurs after the student completed more than 60 percent of the payment period or period of enrollment, the percentage earned is 100 percent.

The percentage and amount not earned is the complement of the percentage of SFA Program assistance earned multiplied by the total amount of SFA assistance that was disbursed and that could have been disbursed to the student or on the student's behalf for the payment period or period of enrollment as of the day the student withdrew.

For credit-hour institutions, the percentage of the payment period or period of enrollment completed is the total number of calendar days in the payment period or period of enrollment for which the assistance is awarded divided into the number of calendar days completed in that period as of the day the student withdrew.

If the student receives less SFA Program assistance than the amount earned, the school must comply with the procedures for late disbursement specified by the department in regulations. If the student receives more SFA Program assistance than the amount earned, the school and/or the student must return the unearned funds as required and in the order specified.

The school must return the lesser of: 1) the amount of SFA Program funds that the student does not earn or 2) the amount of institutional costs that the student incurred for the payment period or period of enrollment multiplied by the percentage of funds that was not earned.

The student – or parent, if a Federal Direct PLUS Loan – must return or repay, as appropriate, the remaining unearned SFA Program grant and loan funds. However, a student is not required to return 50 percent of the grant assistance that he or she receives and is obligated to pay.

The student – or parent, if a Federal Direct PLUS Loan – must return the unearned funds for which he or she is responsible to the loan program in accordance with the terms of the loan and to grant programs as an overpayment. Grant overpayments are subject to repayment arrangements satisfactory to the school or overpayment collection procedures prescribed by the Secretary of the Department of Education. SFA Program funds for the payment period or period of enrollment for which a return of funds is required must be returned in the following order: 1) unsubsidized Federal Direct Stafford Loans, 2) subsidized Federal Direct Stafford Loans, 3) Federal Perkins Loans, 4) Federal Direct PLUS Loans, 5) Federal Pell Grants, 6) Federal SEOGs, and 7) other assistance under Title IV regulations.

## **Student Life**

### **Division of Student Life**

Elizabethtown College recognizes that learning and achievement extend beyond the classroom.

The Vice President, together with the educators in Student Life, provide students with the opportunity to make connections with campus resources, to develop necessary skills for success, and to productively join in college life. Elizabethtown offers comprehensive co-curricular programs and services that supports our students' growth and development and enriches their college experience.

### **Vice President for Student Life**

Elizabethtown's Vice President for Student Life serves as the senior student affairs administrator and the primary advocate for our students. The Vice President, together with the Student Life staff, works with students and faculty to shape the living and learning environment and enhance the quality of life for all students.

For more information, please visit [www.etown.edu/offices/vp-student-life/](http://www.etown.edu/offices/vp-student-life/).

## **Athletics**

Elizabethtown College proudly sponsors one of the top NCAA Division III intercollegiate athletic programs in the nation. Enjoying an 89-year tradition of success, the College's 24-team, 13-sport varsity program operates within the principles and rules of the NCAA and the Landmark Conference's philosophy of amateur student-athlete participation. Our exceptional coaching staff believes in the importance of integrating our students' academic and athletic experiences.

All Elizabethtown students receive free admission to home contests. The entire campus community joins in cheering on our Blue Jays to victory.

For more information, please visit [www.etownbluejays.com](http://www.etownbluejays.com).

## **Campus Security**

The Department of Campus Security is a multi-service agency that provides safety, security, fire prevention, crime prevention, and emergency management on the Elizabethtown College campus 24 hours a day, seven days a week, 365 days a year.

Campus Security staff are non-sworn personnel. Campus Security additionally employs a contingent of student patrol officers or SPO's, who supplement Campus Security operations by performing basic security functions including foot patrol, escorts, building checks, and special event security. The department works closely and cooperatively with federal, state, and local agencies, as well as all on-campus offices, regarding problems of mutual concern. Campus Security also serves a variety of other functions including responding to all medical emergencies, alarms, parking enforcement, access control, and providing information to college guests and visitors.

The Campus Security office is located at 605 South Mount Joy Street, directly across from the Office of Residence Life. For more information, please visit [www.etown.edu/offices/security](http://www.etown.edu/offices/security).

## Career Services

Career Services assists students with all aspects of the career development process, from choosing a career, to selecting a major, and implementing their post-graduate plans. Students are encouraged to connect in their first year with Career Services to develop goals that will integrate their passions, skills, and values as they pursue curricular and co-curricular activities.

Signature programs include:

*Career Pathway courses* provide students with the opportunity to engage in 1-credit classes designed according to their year of study. Topics include exploring career options, mapping your career plan, developing professional skills, and implementing your post-graduate plans.

*Job Shadowing and Informational Interviews* enable students to experience "a day in the life of" a professional related to their field of interest. Students have the opportunity to reflect on their interests and gain an insider's perspective of a possible career option.

*Wings of Success Internship Program* coaches students through the internship search and supports a student's development of skills such as teamwork, written communication, time and project management, problem solving, and relating to a supervisor.

*P.O.S.T. (Program on Senior Transitions)* helps seniors prepare for their next steps. This mini-conference style event has sessions on developing a budget, student loans, interviewing skills, resume reviews, and LinkedIn information.

*Networking and Employer Connections* help students reach their career goals. These connections are facilitated through career fairs, on-campus recruiting, career panels and presentations, employer site visits, mentoring, networking sessions, and the use of Handshake (our online job posting system).

For more information, please visit [www.etown.edu/offices/career](http://www.etown.edu/offices/career).

## Career Pathways Courses

### **CP 130 - Professional Skills Development and Defining Career Goals**

1.00 credit. This course is designed to assist juniors or seniors with professional skill development such as resumes, cover letters, networking, interviewing and searching for a job or internship. This course will give students the opportunity to reflect on where they are headed post-graduation, and how to proactively connect to the next steps in their desired plan. Graded Pass/No Pass.

### **CP 140 - Mapping Career Goals and Job Shadow**

1.00 credit. This interactive course will provide time for in-class activities including career research, career related inventories, and discussion groups. Students will self-reflect about primary career paths of interest and experiential goals relevant to preparing for life after college. Students will develop networking skills and participate in a job shadow experience or a career relationship building opportunity. Graded Pass/No Pass.

### **CP 150 - Career and Purposeful Pathways**

1.00 credit. Career and Purposeful Pathways is designed to assist students who are clarifying majors and exploring career options. Students will have the opportunity to reflect on their interests, values, and skills/strengths and how these may impact their career related decisions. Additionally, students will develop a framework for career planning that they can use during their college experience. Graded Pass/No Pass.

## **Center for Student Involvement**

The Center for Student Involvement is a crossroads space for the many leadership, service, civic, governing, wellness, international, religious, cultural, club/group, entertainment, and fun activities at Elizabethtown College. In the CSI space, you will find Called to Lead, Community & Civic Engagement, Chaplain's Office, Club & Group Lockers, International Student Services, Peer Mentors, Purposeful Life Pathways, Strengths Education and Coaching, Student Activities (OSA), and Student Senate.

## **Office of the Chaplain and Religious Life**

The Office of the Chaplain strives to create a vital and vibrant atmosphere for spiritual growth and religious exploration. Each year, the Office sponsors Soul Cafe, Interdenominational Christian Worship, interfaith prayer services, the Labyrinth Experience, Fake Fireplace, Real Conversation, and a spring break Civil Rights Interfaith Leadership & Service Trip. Religious Life on campus also includes many active student groups, as well as a number of ministries from various denominations and organizations, including Catholic Campus Ministry, Campus Crusade for Christ, Hillel Club, the Humanist Alliance, InterVarsity Christian Fellowship, and Muslim Students and Friends. The Chaplain is available to students for spiritual mentoring, pastoral care, and vocational exploration. For more information, please visit [www.etown.edu/offices/chaplain](http://www.etown.edu/offices/chaplain).

### **Called to Lead Program**

The overall mission of Called to Lead is to empower students, faculty, and staff to clarify vocational calling and discover individual leadership strengths that will allow them to practice visionary servant leadership in support of the College's motto *Educate for Service*. In Called to Lead, students engage in faculty and staff led discussions, take innovative academic courses, work with personal mentors, embark on servant leadership trips, learn from their peers, lead campus organizations, and share in networking dinners. Students earn points throughout the program; points signify learning. Students who complete the program earn a certificate and recognition at commencement. Explore our website to find out more: [www.etown.edu/programs/calledtolead](http://www.etown.edu/programs/calledtolead).

### **Strengths Education**

At Elizabethtown College, we believe that every single person has unique natural talents. Our goal is to help each person discover their strengths and unlock their potential. We begin by utilizing the Clifton Strengths inventory, backed by 50 years of research and developed by Gallup. Students have the opportunity to complete this online inventory, which returns their top 5 themes of talent, and engage in educational opportunities to learn how to utilize their strengths to succeed.

For more information, please visit [www.etown.edu/strengthsfinder](http://www.etown.edu/strengthsfinder).

## **Center for Student Success**

The Center for Student Success provides comprehensive academic support services to Elizabethtown College students. The Center is comprised of distinct, yet integrated, service areas, including Academic Advising, Disability Services, Learning Zone, and Writing Wing. Additionally, the Center's Director chairs the Campus Wellness Network.

For more information, please visit [www.etown.edu/offices/student-success](http://www.etown.edu/offices/student-success).

## **Academic Advising**

Academic Advising guides students in the development of meaningful educational plans that are compatible with their life goals. This program supports and complements the faculty advising system on campus, and is available to all students at Elizabethtown College.

First-year students are assigned a faculty advisor, who also is their First-Year Seminar instructor. In their second semester, first-year students may declare a major and, if they do, will be assigned a faculty advisor from the school of their chosen major. Exploring students remain with their first-year advisor for another semester, and thereafter will be assigned to one of our professional advisors from Academic Advising until they declare a major.

Additionally, our students benefit from support and guidance from trained peer mentors, peer academic advisors, resident assistants, and other Student Life professionals.

We strive to support students who are experiencing difficulty when that academic advice is the most productive – early and while there is still an opportunity to resolve concerns with a successful outcome. This office coordinates the use of Starfish Alert. This early-warning system provides a tool for intervention, referral and support.

Additionally, Academic Advising provides support to all students at the College who are placed on academic probation.

The Director of Academic Advising or designee may conduct academic progress checks by contacting faculty to determine a student's current academic standing, attendance, participation, and observable behavior in courses for the purpose of follow-up, support, or intervention.

The Director of Academic Advising or designee may notify faculty and staff when a student is unable to attend classes due to brief illness, hospitalization, death of a loved one, or other personal circumstances. The notification is to facilitate communication only and does not supersede individual course attendance policies. The student will be responsible for contacting faculty to discuss missed work. The student or family member may call (717) 361-1415 for more information. For more information regarding a Leave of Absence or withdrawal from the College, see **Academic Policies**.

## **Disability Services**

Elizabethtown College is committed to providing equal access to all of its courses, programs and services for qualified students with disabilities in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990.

The Office of Disability Services requires documentation from the treating health care provider about a student's condition in order to establish the presence of a disability, gain an understanding of how the disability affects the student's ability to function in a college setting, and make informed decisions about reasonable accommodations and adjustments. All requests for academic adjustments and accommodations are reviewed by the Director of Disability Services.

For further clarification about policies for students with disabilities or for information about the College's disability policy grievance procedures, please contact Lynne Davies, Director of Disability Services, at (717) 361-1227.

For more information, please visit [www.etown.edu/offices/disability](http://www.etown.edu/offices/disability).

## **Learning Zone**

The Learning Zone encourages all enrolled students to take advantage of peer tutoring and resources for college success. Professional staff members provide academic coaching to students and assistance with time management, test-taking preparation, and study strategies. Faculty-recommended students provide peer tutoring in writing and specific academic courses.

For more information, please visit [www.etown.edu/offices/learning](http://www.etown.edu/offices/learning).

## **The Writing Wing**

The Writing Wing can help all students improve their writing with the help of student tutors who are trained and updated on their skills by a faculty member who teaches writing at Elizabethtown, and who is a professional writer. Writing Wing tutors are friendly, and it's easy for students connect with them for an hour-long session. Many tutors are education or English majors, but there are also some from other majors. We emphasize a chain of events frequently called the writing process. It's not simply a proofreading service; instead, it's a learning service aimed at helping students become better writers. The Writing Wing also conducts workshops about all aspects of writing for faculty and students and can act as a resource about writing for anyone in the campus community.

To learn more about The Writing Wing, please visit [www.etown.edu/offices/writing-wing](http://www.etown.edu/offices/writing-wing), or to stop by and see us in the Baugher Student Center, second floor, in Learning Services.

## **International Students**

Elizabethtown College welcomes students each year from more than 25 countries who choose to study at Elizabethtown either as exchange students for a semester or year, or who pursue full degree programs. The following individuals assist international students on campus:

- Lori Bomboy, PSDO: Assists students with SEVIS (F-1 Visas, CPT, OPT, STEM OPT and transfers); provides guidance about US Citizenship and Immigration Services (USCIS) and Department of Homeland Security updates
- Amy Benowitz and John Champoli, DSO: For incoming Elizabethtown College Students
- Megan Bell: Leads IS Orientation, Teaches ISS 101, Supports IS students on campus
- Amy Berra: Point of Contact for International Students
- Stephanie Rankin: Academic advisor for non-degree IS
- Jennifer Crowder, Director of Community Living: Assists with residential/storage

### **ISS 101 - Seminar for International Student Success**

1.00 credit. This seminar is a requirement for all new international students during their first semester of study at Elizabethtown College. Students are registered for the seminar, which meets twice a week for the first six weeks of the semester and is structured around the following goals: to introduce new international students to the facilities, services and resources available at Elizabethtown College and in and around Lancaster County (i.e., PennDot, Social Security, etc.); to suggest strategies for understanding and adapting to undergraduate studies at Elizabethtown College; to encourage new international students to share their own culture with classmates and others while learning about U.S. and Elizabethtown College culture, values, customs, traditions and expectations; to create a community that is conducive to sharing new experiences and discoveries as well as raising questions, problems and concerns that may not be addressed elsewhere on campus. Graded Pass/No Pass. Register by Instructor.

For more information, please visit [www.etown.edu/offices/international-students](http://www.etown.edu/offices/international-students).

## **Campus Wellness Network**

Elizabethtown College's Campus Wellness Network is an effective student support system that seeks to proactively identify and aid at-risk students. Composed of faculty and staff, the Campus Wellness Network bridges academic and co-curricular aspects of college life at Elizabethtown to take a more holistic approach to student success.

Any member of the campus community may refer to the Campus Wellness Network a student who he/she believes is experiencing difficulty in or out of the classroom. Once identified, the Network will formulate an appropriate course of intervention that will suggest choices and options that the at-risk student may not have recognized. Through interventions, students receive the support they need and learn valuable skills that benefit them not only during their college career, but also throughout their lives.

For more information, please visit [www.etown.edu/offices/counseling/campus-wellness-network](http://www.etown.edu/offices/counseling/campus-wellness-network).

## **Community Living**

Community Living encompasses a variety of engagement opportunities with students. Whether it is through our on-campus Residence Life program, participating in a club or organization through Student Activities, or learning more about personal and social responsibility through our Student Rights and Responsibilities, we are here to serve students.

## **Residence Life**

We know the Elizabethtown College experience is best when students live in on-campus housing for their undergraduate journey. Therefore, Elizabethtown College is a residential college, which means students live on campus throughout their time as undergraduates. The residential facilities at E-town are vibrant and inclusive communities where students live out their strengths, build meaningful relationships, explore big concepts like purpose and service, and prepare for post-college life. We call this the Live E-town experience. Incoming students complete a four-year Housing Agreement prior to arriving on campus for move-in day. Residential housing options on campus include traditional residence halls, townhouses, apartments, and campus-owned houses, and students can choose to participate in a variety of themed housing opportunities. Our commuting students can engage with the Commuter Engagement Program

For more information, visit [www.etown.edu/offices/community-living/](http://www.etown.edu/offices/community-living/) or email [reslife@etown.edu](mailto:reslife@etown.edu).

## **Office of Student Activities**

The Office of Student Activities (OSA) is the student-run central programming organization on campus. OSA is responsible for planning and executing a wide variety of events, both entertaining and educational, for the entire campus. They also manage the social lounge, campus traditions, off-campus trips and a bike-share program.

For more information, please visit [www.etown.edu/offices/osa](http://www.etown.edu/offices/osa) or email [osa@etown.edu](mailto:osa@etown.edu).

## **Student Rights and Responsibilities**

Student Rights and Responsibilities (SRR) holds the primary function of resolving alleged violations of the Student Code of Conduct. SRR upholds practices of a facilitative and fair nature, respecting individual rights while balancing these with community integrity, honesty, civility, and safety. SRR team takes pride in their daily

interactions with students, especially in their goal of educating students about the College's policies and procedures as well as the College's goals of living healthy, balanced, and ethically rich lives.

For more information, please visit [www.etown.edu/offices/student-rights](http://www.etown.edu/offices/student-rights) or email [reslife@etown.edu](mailto:reslife@etown.edu)

## **Counseling Services and Student Health**

The office of Counseling Services and Student Health provides services and programs to foster the physical, emotional, and psychological well-being and development of Elizabethtown College students in order to facilitate students' personal, social, and academic success. We use a team and holistic approach to help students in a diversity-affirming environment.

For more information, please visit [www.etown.edu/offices/wellness](http://www.etown.edu/offices/wellness).

### **Student Health**

Student Health medical care is provided in collaboration with Penn State Health Medical Group Elizabethtown, at 1 Continental Drive in Elizabethtown (on the edge of campus, just off College Avenue near the Alumni House). Students can meet with our College Health Liaison for no additional charge, or use their health insurance (a variety of types are accepted) to meet with one of the other health care providers.

Eileen Wagener RN, College Health Liaison, phone = 717-489-1021

Penn State Health Medical Group Elizabethtown, phone = 717-361-0666

For medical concerns after hours, please call Campus Security at 717-361-1264 (to access the Nurse Triage line for non-urgent concerns) or 717-361-1111 (for a medical crisis).

For more information, please visit [www.etown.edu/offices/health](http://www.etown.edu/offices/health).

### **Counseling Services**

Counseling Services provides a broad range of counseling and mental health support services that facilitate our students' personal, social, and academic development. Our licensed mental health professionals provide short-term individual counseling, group counseling, crisis intervention, and consultation to currently enrolled students for no additional charge. Counseling services are provided in a confidential and diversity-affirming environment to help students address a variety of mental health, situational, and developmental concerns. Our office is located in the Baugher Student Center, Suite 216. Appointments can be made in person or by calling 717-361-1405. Urgent walk-in services are also available. To access our after-hours crisis services, please call the 24/7 Campus Security number of 717-361-1111.

For more information, please visit [www.etown.edu/offices/counseling](http://www.etown.edu/offices/counseling).

## **Bowers Center for Sports, Fitness and Well-Being**

The Bowers Center for Sports, Fitness and Well-Being serves as a dynamic campus hub for health and well-being as well as supports the college's expanding athletics program. It provides purposeful programming and a state-of-the-art facility that inspires, educates and empowers students and the campus community to cultivate healthy and active lifestyles. Features of the space include a cardio, strength and fitness area, group fitness rooms, multipurpose

rooms, athletic training area, six athletic locker rooms, indoor track, three multi-use courts, smoothie bar, demonstration kitchen, relaxation room, lounges with fire places, an outdoor fire pit, and outdoor courts. Within the Bowers Center for Sports, Fitness and Well-Being is the Office of Campus Recreation and Well-Being (RecWell). RecWell provides many of the extracurricular events and programming on campus, focusing on the holistic health of our campus community.

For more information, please visit <https://www.etown.edu/bowers-center/>.

## **Intramurals**

A variety of intramural sports are offered each semester that are free for students, faculty and staff to participate in. Consisting of structured game play between other teams on campus, intramurals are a great way for the campus community to engage in physical activity and meet new people.

For more information, please visit <https://www.etown.edu/bowers-center/intramurals.aspx>

## **Group Fitness**

The Group Fitness program provides students, faculty and staff with an opportunity to participate in a variety of group exercise offerings that encourage and support a healthy lifestyle in a fun environment. Classes are run by certified student instructors as well as employees and outside instructors. We offer a diverse listing of classes each semester to accommodate a range of skills, interests and groups.

For more information, please visit <https://www.etown.edu/bowers-center/group-fitness/index.aspx>

## **Health Promotion**

Health Promotion strives to promote a healthier campus community through prevention programs and educational activities. Our Student Wellness Advocates focus on the eight dimensions of wellness to assist students in achieving individual well-being by making health choices based on their developing values. Health Promotion also offers The WELL, a resource room located in the Bowers Center for Sports, Fitness and Well-Being that provides free over-the-counter medications and wellness resources to students.

For more information please visit <https://www.etown.edu/bowers-center/health-promotion/index.aspx>

## **Unique Centers of Learning**

### **Overview**

Five centers of learning at Elizabethtown College – the Center for Global Understanding and Peacemaking, the Center for Community and Civic Engagement, the Young Center for Anabaptist and Pietist Studies, the Center for Excellence in Teaching and Learning, and the Bowers Writers House – add depth and uniqueness to our academic program and broaden the institution's appeal to a wider audience.

The Center for Global Understanding and Peacemaking provides a variety of opportunities for our undergraduate and graduate students both in and out of the classroom, at home and abroad. The Center for Community and Civic Engagement creates civic engagement experiences to provide opportunities to more fully explore the meaning of our motto "Educate for Service" in today's increasingly global society. The Center for Excellence in Teaching and Learning is a resource center and educational forum for developing new modes of learning for our students. The Young Center peripherally touches our students through the speakers it hosts, the resources it brings to our classrooms, and the lectures it offers on our campus. The Bowers Writers House is an interdisciplinary venue for presentation, performance, expression and study.

### **Center for Global Understanding and Peacemaking**

The Center for Global Understanding and Peacemaking advances curricular and co-curricular programs to enhance global understanding and non-violent conflict transformation. The Center also brings together two interdisciplinary programs, International Studies and Asian Studies and is the home of the Ware Colloquium for Global Citizenship and Peacemaking, an endowed program that includes the Ware Lecture on Peacemaking and the Ware Seminars on Global Citizenship.

The Center creates opportunities for students, faculty, and staff to develop into global citizens who are knowledgeable about global issues, empathetic towards people of other cultures and nationalities, and committed to the values of peace, human dignity, and social justice.

The College's approach to global citizenship is distinctive, owing to our particular mission and heritage. In keeping with the Brethren faith of our founders, Elizabethtown's mission declares that "the College affirms the values of peace, nonviolence, human dignity, and social justice and seeks to make those values manifest in the global community," consistent with our motto to "Educate for Service." The Center's mission affirms the values of the College and frames international engagement as a commitment to peace, service, and cultural understanding.

Every year, the Center organizes a variety of trips, activities, lectures, and events to enable students to more fully explore the practice of and their commitment to peace. The Center's Ambassador-in-Residence manages external and international partnerships. Since spring 2007, the Ware Lecture on Peacemaking has brought world leaders, including several Nobel Laureates, to campus to engage students, faculty, and staff on issues of global peace and justice.

For more information, please visit the Center for Global Understanding and Peacemaking website at [www.etown.edu/centers/global](http://www.etown.edu/centers/global).

## **Center for Community and Civic Engagement**

The Center for Community and Civic Engagement (CCCE) provides opportunities for students, faculty, and staff to engage and deepen their involvement through service in local, national, and international contexts. Reciprocal relationships with local organizations are the foundation of these efforts. The CCCE is the administrative home for the College's curricular and co-curricular service-related initiatives.

Community-Based Learning (CBL) is a core component of the College-wide Signature Learning Experience initiative. In CBL courses, students and faculty engage with dozens of community organizations on projects of mutual benefit. CBL provides students opportunities to apply knowledge and skills from the classroom to analyze and address issues facing the local community. The CCCE facilitates, maintains, and evaluates these partnerships, and provides guidance about best practices in CBL pedagogy.

The CCCE offers a wide variety of co-curricular programs for students each year, including Community Service Work Study, ongoing volunteer projects, mentoring and after-school programs (including the Moving Forward Together Program with the Milton Hershey School), and other service initiatives. Annual campus-wide events, such as Into the Streets, provide opportunities for students, faculty, and staff to engage in direct service. Regular service trips are conducted in partnership with local, national, and international relief and development agencies. Across campus, there are frequent and focused service efforts of student clubs, organizations, and Student Directed Learning Communities.

The CCCE is also engaged in documenting and reporting on service and community engagement efforts from across the College. Elizabethtown College has been selected for the President's Higher Education Community Service Honor Roll -- recognizing the efforts our College community makes in building a culture of service and civic engagement -- every year that the designation has been available. In 2020, Elizabethtown College received the Carnegie Foundation for the Advancement of Teaching's Community Engagement Classification, demonstrating alignment of mission, culture, leadership, resources, and practices that support dynamic and noteworthy community engagement.

For more information, please visit the Center for Community and Civic Engagement website at [www.etown.edu/centers/community-civic](http://www.etown.edu/centers/community-civic).

## **Young Center for Anabaptist and Pietist Studies**

The Young Center for Anabaptist and Pietist Studies is an internationally recognized scholarly institute that fosters the research and interpretation of Anabaptist and Pietist groups and connects the college to an international network of scholars. Integral to the academic life of Elizabethtown College, the Young Center's faculty members teach undergraduate courses and conduct research on the life, culture, and beliefs of Anabaptists and Pietists, primarily in the North American context. Interpretive programs open to the general public include evening lectures and seminars during the academic year, exhibits, and occasional conferences.

Located on Elizabethtown College's Lake Placida, the Young Center is named for Dr. Galen S Young, D.O., and Jessie M. Young and includes the Bucher Meetinghouse, named for long-time college trustee Rufus P. Bucher, and the Bowers Interpretive Gallery, named for Kenneth Bowers and Rosalie Bowers. The Young Center holds a unique collection of Amish-related publications and a small rare book collection related to Anabaptist and Pietist groups.

The Young Center brings visiting scholars to campus for a semester of research and writing in Anabaptist and Pietist studies by offering the Snowden Fellowship and the Kreider Fellowship. The Fellows present the Snowden Fellow Lecture and the Kreider Fellow Lecture each year. A doctoral fellowship is also available for doctoral students who

are researching or writing about topics related to Anabaptism and Pietism. Fellows come to the Young Center from diverse backgrounds from across the nation and around the world.

The Young Center works with Johns Hopkins University Press to publish Young Center Books in Anabaptist and Pietist Studies, a book series for which Senior Scholar Steven M. Nolt serves as editor.

Each year the Center presents the Dale Brown Book Award for the book designated by a panel of independent judges as the best new book in Anabaptist or Pietist studies. The Center also sponsors the annual Durnbaugh Lectures, which feature a distinguished scholar who advances Anabaptist and Pietist studies.

For more information, please call (717) 361-1470 or visit the Young Center website at [www.etown.edu/centers/young-center](http://www.etown.edu/centers/young-center).

## **Teaching and Learning Design Studio**

The Elizabethtown College Teaching and Learning Design Studio, located in Nicarry 114, promotes and supports a relationship- and learner-centered culture of instruction, guidance, and scholarship, with focus on evidence-based pedagogies from the scholarship of teaching and learning that foster student academic engagement, advance the College's mission, and cultivate innovative teaching. Its core functions are: promoting a campus-wide mindset of innovation, growth, and pedagogical inquiry; championing interdisciplinary dialogue and collaboration and diversity in all its dimensions across curricular and co-curricular activities; diversifying the College's modality of teaching and learning through use of leading-edge technology and course redesign; and creating and promoting new technological assets, providing necessary training, and assisting faculty with the creation of blended, online, and adaptable courses and curricula that are suitable for an ever-changing world. The Studio supports the integrated professional development of faculty, staff, and students by providing opportunities and resources applicable to all stages of the career trajectory. The Studio recognizes and celebrates teaching successes; promotes the sharing of best practices in pedagogy; conducts workshops; offers individual and programmatic consulting; and supports the activities of College Schools, Centers, and Programs. The Studio also houses a library of teaching and learning resources.

For more information, please email [studio@etown.edu](mailto:studio@etown.edu).

## **Bowers Writers House**

Since 2010, Bowers Writers House has offered an interdisciplinary variety of programming, involving scholars from all genres of study. In our first five years, we've hosted over 200 historians, mathematicians, musicians, genetic scientists, linguists, poets, actors, playwrights, and national and international activists and humanists. And in those three years of activity Bowers Writers House has seen over 250 events and over 1,500 visitors. We look forward to contributing to the on and off-campus communities of Elizabethtown College for years to come, including a variety of summer programming for 14-17 year olds.

Because written communication -- whether it be fiction, poetry, drama, essay, or nonfiction -- colors the way people visualize the world, each academic program at Elizabethtown College relies on effective writing to inform, educate, enlighten and entertain. Our College has a firm commitment to fostering effective writing and encouraging intellectual dialogue that crosses academic boundaries. Illustrative of this commitment is Elizabethtown College's creation of Bowers Writers House, designed to provide thought-provoking opportunities for the faculty, staff, and students from our 40+ majors as well as members of the Lancaster County community.

*Unique Centers of Learning*

For more information, please call (717) 689-3945 or visit the Bowers Writers House website at [www.etown.edu/centers/writershouse](http://www.etown.edu/centers/writershouse).

## Degrees Offered

Elizabethtown College grants eight residence degrees: Bachelor of Arts, Bachelor of Music, Bachelor of Science, Bachelor of Social Work, Master of Education, Master of Music Education, Master of Public Policy, Master of Science, and Doctorate in Occupational Therapy. Additional degrees are offered through the College's School of Continuing and Professional Studies.

No more than one bachelor's degree is ever awarded to an individual by Elizabethtown College; however, students may complete a second major, a minor, or teacher certification subsequent to graduation.

### Bachelor's

The College offers degrees in the following academic majors, within which a number of options are available.

- Accounting (B.S.)
- Actuarial Science (B.S.)
- Art Education (B.A.)
- Arts (B.A.)
- Biochemistry and Molecular Biology (B.S.)
- Biology (B.S.)
- Biology Laboratory Science (B.S.)
- Biology Secondary Education (B.S.)
- Business Administration (B.S.)
- Business Data Science (B.S.)
- Chemistry (B.S.)
- Chemistry Laboratory Science (B.S.)
- Chemistry Secondary Education (B.S.)
- Computational Physics (B.S.)
- Computer Engineering (B.S.)
- Computer Science (B.S.)
- Criminal Justice (B.A.)
- Data Science (B.S.)
- Digital Media Production (B.A.)
- Early Childhood Education (B.S.)
- Early Childhood Education with Special Education Certification (B.S.)
- Economics (B.A.)
- Elementary/Middle Level Education (B.S.)
- Engineering (B.S.)
- English (B.A.)
- English Secondary Education (B.A.)
- Environmental Science (B.S.)
- Exercise Science (B.S.)
- Finance (B.S.)
- Financial Economics (B.S.)
- French (B.A.)
- German (B.A.)
- Graphic Design (B.A.)
- Health Sciences (B.S.)
- History (B.A.)
- Individualized Major (B.A.)
- Information Systems (B.S.)
- International Business (B.S.)
- Japanese (B.A.)
- Journalism (B.A.)
- Legal Studies (B.A.)
- Marketing (B.S.)
- Mathematical Business (B.S.)
- Mathematics (B.S.)
- Mathematics - Secondary Education (B.S.)
- Media Analytics and Social Media (B.S.)
- Music (B.A.)
- Music Education (B.M.)
- Music Therapy (B.M.)
- Neuroscience (B.S.)
- Physics Secondary Education (B.S.)
- Political Science (B.A.)
- Psychology (B.A.)
- Public Health (B.A./B.S.)
- Public Relations (B.A.)
- Religious Studies (B.A.)
- Social Studies (B.S.)
- Social Work (B.S.W.)
- Sociology (B.A.)
- Spanish (B.A.)
- Spanish Education (B.A.)

## **Master's**

The College offers the following master's degrees.

- Master of Education in Curriculum and Instruction (M.Ed.)
- Master of Education in Special Education (M.Ed.)
- Master of Music Education (M.M.E.)
- Master of Organizational Analytics (M.S.)
- Master of Physician Assistant Studies (M.P.A.S.)
- Master of Public Policy (M.P.P.)
- Master of Science in Occupational Therapy (M.S.)

## **Doctoral**

- Occupational Therapy (OTD)

## **Joint Degree Programs**

In Joint Degree Programs, students study at Elizabethtown College and at affiliated academic institutions or clinical facilities in the United States. The following programs are offered in conjunction with other academic institutions.

- Doctor of Dental Medicine/Baccalaureate 4+4 Program with Lake Erie College of Osteopathic Medicine
- Doctor of Dental Surgery/Baccalaureate 4+4 Program with West Virginia University School of Dentistry
- Doctor of Optometry/B.S. 3+4 Program with Pennsylvania College of Optometry at Salus University
- Doctor of Osteopathic Medicine/B.S. 3+4 or 4+4 Program with Lake Erie College of Osteopathic Medicine
- Doctor of Pharmaceutical/B.S. 3+4 or 4+4 Program with Lake Erie College of Osteopathic Medicine
- Doctor of Physical Therapy/B.S. 3+3 Program with Widener University
- Doctor of Physical Therapy/B.S. 4+3 Program with Thomas Jefferson University
- Law Early Admission Program (LEAP) with Drexel University Thomas R. Kline School of Law
- Law Early Admission Program (LEAP) with Duquesne University School of Law
- Law Early Admission Program (LEAP) with Widener University School of Law
- Master of Public Health Program with Penn State University College of Medicine
- Master of Science in Molecular Medicine/B.S. in Biotechnology 4+1 Program with Drexel University College of Medicine
- Osteopathic Medicine/B.S. 3+4 or 4+4 Program with Philadelphia College of Osteopathic Medicine (Emphasis in Biology)
- Osteopathic Medicine/B.S. 3+4 or 4+4 Program with Philadelphia College of Osteopathic Medicine (Emphasis in Chemistry/Biochemistry)
- Premedical Primary Care Program with Pennsylvania State University College of Medicine

## **Certificates**

- ESL Program Specialist K-12 Certificate
- Graduate Certificate in Curriculum and Instruction
- Graduate Certificate in ESL Program Specialist K-12
- Graduate Certificate in Integrative Science, Technology, Engineering, and Mathematics (STEM) Education Endorsement

- Graduate Certificate in Interdisciplinary Autism Support
- Graduate Certificate in Trauma Informed Practice
- Public Heritage Studies Certificate
- SAS Joint Certificate in Data Analytics
- TESOL (Teaching English as a Second or Other Language)

## Advising Program

Students may participate in the following specialized advising programs.

- Health Professions Advising
- Pre-Law Advising Program

## Minors

Students may elect to pursue an academic minor in addition to their major. Minors allow the student to acquire depth of knowledge in an area of secondary interest outside the major. The College offers the following minors:

- Architectural Studies Minor
- Art History Minor
- Arts Administration Minor
- Arts Minor
- Asian Studies Minor
- Biochemistry Minor
- Biology Minor
- Business Administration Minor
- Chemistry Minor
- Coaching Minor
- Cognitive Science Minor
- Communications Minor
- Computer Science Minor
- Creative Writing Minor
- Data Analytics Minor
- Economics Minor
- English Literature Minor
- English Professional Writing Minor
- Family Business and Entrepreneurship Program
- Finance Minor
- French Minor
- General Science Minor
- German Minor
- Graphic Design Minor
- History Minor
- Human Services Minor
- Information Systems Minor
- International Studies Minor
- Japanese Minor
- Mathematics Minor
- Music Minor
- Philosophy Minor
- Physics Minor
- Political Science Minor
- Psychology Minor
- Religious Studies Minor
- Sociology Minor
- Spanish Minor
- Technical Design Minor
- Women and Gender Studies Minor

## **The Core Program and Signature Learning Experiences**

The Core Program supports the academic goals expressed in Elizabethtown College's mission statement. It has four major purposes: to provide a sense of mission and purpose to general education, to provide a foundation for successful study in liberal arts and professions, to integrate knowledge across the disciplines by engaging students in the study of the natural world and the human experience, and to develop habits of the mind that foster continued intellectual growth. The Core Program promotes truth, tenable judgments, and important ideas by assuring that a student has the opportunity to acquire significant knowledge and accepted methods of inquiry.

An important component of the Core Program is the First-Year Seminar. In addition, students enroll in 10 courses in eight Areas of Understanding. The thematic Areas of Understanding unite the Core Program into a cohesive offering, develop skills of self-education, and integrate knowledge across the disciplines. Any exceptions to Core requirements must be petitioned to the Academic Standing Committee.

The Core Check Sheet is available [here](#).

### **Common Core**

Students, who are entering the College for the first time and who are pursuing a bachelor's degree, must take a First-Year Seminar during their first semester. Transfer students who have completed fewer than 24 credits of course work at another college also are required to complete the First-Year Seminar.

#### **Student Learning Outcomes for First-Year Seminar:**

*Students will be able to:*

- Demonstrate an understanding of the academic expectations of college life.
- Demonstrate effective critical thinking skills.
- Communicate orally in an effective manner.
- Informed by explicit information literacy by a librarian, produce an appropriately researched, documented, and written academic paper.
- Relate opportunities for learning outside the classroom to academic courses, personal interests, and intended program of study.

### **FYS 100 - First-Year Seminar**

4.00 credits. The First-Year Seminar provides an educational experience that is composed of several important components. First, it develops intellectual skills, such as critical analysis and synthesis, and communications skills, such as speaking and writing. Second, it broadens definitions of learning. The student is exposed to multiple ways of acquiring information and knowledge. Third, the First-Year Seminar establishes the integration of knowledge. Using the instructor's major field of study as a foundation, this course promotes connections across disciplines. Students will also attend events outside of class such as talks, plays, concerts, art exhibits, and Student Life events. The First-Year Seminar is letter-graded. Register by Instructor.

## **Areas of Understanding**

The Elizabethtown College Core Program consists of eight thematic Areas of Understanding (AU).

### **Power of Language (two courses)**

Students are required to take one English-based course (Power of Language - English) and one Modern or Ancient Language Course (Power of Language - Other) to complete this Area of Understanding.

Courses in the English component of this AU emphasize the use of the English language in logic, rhetoric, and persuasive communication. Students learn to articulate ideas and critically evaluate arguments. Students may complete a writing-based English course (EN 100 ) or, for students who test accordingly, an advanced course (EN 150 or PH 110 ). Students placed in English 100 must successfully complete EN 100 for their Power of Language AU. Students who receive credit for EN 100 (including transfer or AP credit) cannot receive credit for EN 150 . The Power of Language – English course must be taken during the students' first year or prior to the start of their second year.

#### **Student Learning Outcomes for the Power of Language (English-based) AU:**

*Students will be able to:*

- Construct logical and persuasive argument.
- Read carefully and critically.
- Analyze and synthesize new ideas.
- Explain how language affects thinking and conceptual development.

Courses in the Other component of the Power of Language AU allow students to start or continue the study of a Modern or Ancient Language. These courses come primarily from the School of Arts and Humanities.

#### **Student Learning Outcomes for the Power of Language (other) AU:**

Students will be able to:

- Comprehend and/or produce the target language at the appropriate course level for the discipline.
- Demonstrate knowledge of corresponding culture(s) at the appropriate course level of the discipline.

#### **To meet the Power of Language: Other (Modern/Ancient Language) Core requirement, students may choose one of the following options:**

- Take a new modern/ancient language
- Take an upper-level course that the program has designated as appropriate for native speakers
- Students who have received a TOEFL score of 82 or higher may receive 4.00 credits towards the PLO requirement. In order to receive the credits, students must request their TOEFL score from the Educational Testing Service to be sent to Elizabethtown College and request a review by sending an e-mail to the Office of Registration and Records.
- Take a second Guided Writing and Research (GWR) designated course.

### **Mathematics (one course)**

This AU develops competency in quantitative reasoning and problem-solving skills. These courses come primarily from the School of Engineering, Computer Science, and Mathematics.

#### **Student Learning Outcomes for the Mathematics AU:**

*Students will be able to:*

- Use inductive or deductive reasoning to formulate and evaluate arguments.
- Model real-world phenomena mathematically.
- Utilize mathematics effectively in problem-solving strategies.

### **Creative Expression (one course or course equivalent)**

Courses in this AU include analysis and interpretation of artistic works. Students focus on creation or performance within a particular artistic discipline. These courses come primarily from the School of Arts and Humanities (Art, Music, Dance, English). Students can also use any combination of private music lessons or ensembles equaling 4 credits to satisfy this requirement.

#### **Student Learning Outcomes for the Creative Expression AU:**

*Students will be able to:*

- Examine concepts employed in the creation and analysis of like artworks.
- Develop and articulate informed aesthetic judgments.
- Create or perform artistic work representative of the discipline.
- Express the intrinsic value of an artistic medium.
- Define the ways in which creative art forms show and affirm human feelings, desires, experiences, and/or values.

### **Western Cultural Heritage (one course)**

This AU introduces students to Western culture and history through the critical analysis of significant human endeavors in European societies and/or their global offshoots. Communities in Europe and the Americas typically (though not exclusively) fall into this category. The courses in this AU come primarily from the programs of English, History, Philosophy, Sociology/Anthropology, Religious Studies, Modern Languages, and Political Science.

#### **Student Learning Outcomes for the Western Cultural Heritage AU:**

*Students will be able to:*

- Demonstrate an understanding of the importance of a specific aspect of Western cultural heritage.
- Explain the historical context of the subject under study, illustrating the complexity of the past and its relationship to the contemporary world.
- Explain how knowledge can be subject to a variety of interpretations.
- Analyze primary and/or secondary sources.

### **Non-Western Cultural Heritage (one course)**

This AU introduces students to Non-Western culture and history through the critical analysis of significant human endeavors in societies other than European ones and/or the global offshoots of European societies. Communities in Asia and the Pacific, Africa, and the Middle East typically (though not exclusively) fall into this category. The courses in this AU come primarily from the programs of English, History, Philosophy, Sociology/Anthropology, Religious Studies, Modern Languages, and Political Science.

#### **Student Learning Outcomes for the Non-Western Cultural Heritage AU:**

*Students will be able to:*

- Demonstrate an understanding of the importance of a specific aspect of non-Western cultural heritage.
- Explain the historical context of the subject under study, illustrating the complexity of the past and its relationship to the contemporary world.
- Explain how knowledge can be subject to a variety of interpretations.

### **Natural and Physical Sciences (two courses in different disciplines)**

This AU explores the natural and physical world through discussion and discovery of major scientific concepts and theories. Students must complete two courses in different disciplines. At least one course must include a laboratory component, which emphasizes "the hands on" nature of science. These courses come primarily from the programs of Biology, Chemistry, and Engineering and Physics.

#### **Student Learning Outcomes for the Natural and Physical Sciences AU:**

*Students will be able to:*

- Describe and apply major scientific concepts of a particular field.
- Explain methods of scientific inquiry.
- Collect (if a lab-based course), analyze, and interpret data.

### **Social Sciences (one course)**

Courses in this AU observe and analyze human behavior, ranging from the formation of the self and family structures to economic trends and the interactions of nations. These courses come primarily from the programs of History, Political Science, Sociology, Psychology, and Economics.

#### **Student Learning Outcomes for the Social Sciences AU:**

*Students will be able to:*

- Discuss and apply major concepts and theories that interpret human behavior and interaction.
- Analyze human experiences and interactions in diverse social contexts.
- Explain the organization and function of one or more social systems.
- Describe the methods and procedures of social science research.

## **Humanities (one course)**

Courses in this AU examine ethical and moral dilemmas, values, and choices from an analytical or critical perspective. Students are engaged in the decision-making process and consider the implications of their choices for self and society. Courses in this AU come primarily from the School of Arts and Humanities.

### **Student Learning Outcomes for the Humanities AU:**

*Students will be able to:*

- Explain the nature of one or more values that govern human conduct.
- Explain how an individual's values and choices can be influenced by many factors, as seen in a major work (literary, artistic, historical, religious, or philosophical).
- Apply knowledge about values to a particular ethical situation, moral dilemma, or aesthetic judgment.

## **Interdisciplinary Colloquium (IC) Program**

Each Interdisciplinary Colloquium is a course team-taught across two Core Areas of Understanding by faculty members from two different disciplines. These courses offer dynamic opportunities for teaching and learning as well as a distinct curricular advantage.

**Students completing an Interdisciplinary Colloquium will fulfill the requirements for two Areas of Understanding at once and thereby make room for a Core elective.** The latter may be fulfilled either by (1) taking a Core course in an area of the student's choosing, or (2) taking a 200-, 300-, or 400-level course outside the student's primary major. In other words, the number of courses needed to complete the Core Curriculum remains the same, but students completing an Interdisciplinary Colloquium may finish the Core with the aforementioned elective. Students are encouraged to use this Core elective to broaden interests or to fulfill requirements for a minor or even a second major. The Interdisciplinary Colloquium is not a Core requirement. Rather it is an option, one that interested students would ideally take in the second semester of the sophomore year.

Please note that Interdisciplinary Colloquia with an NPS component shall stand in their own NPS disciplinary category. This provision shall have no impact on the requirement that at least one NPS course must have a lab component.

## **Interdisciplinary Colloquium Courses**

### **IC 201 - NPS/CE Ecology and Short Fiction**

4.00 credits. (**Natural and Physical Science Biology Non-Lab Core Course and Creative Expression Core Course**) This interdisciplinary course pairs the study ecological principles with the analysis and composition of creative short stories. Students enrolled in this course will critically examine their relationship to their environment through class lectures, class and contemporary short stories, and the creative writing process.

### **IC 202 - HUM/WCH Visualizing Women in 19th Century Western Art and Literature**

4.00 credits. (**Humanities Core Course and Western Cultural Heritage Core Course**) During the nineteenth century, as women began to enter the public sphere and demand equal participation in society, new images emerged in the literature and the fine arts of Britain, France, and the United States: the goddess, the fallen woman, the femme fatale, the working woman, the "new woman," and the "Oriental" or a colonized woman. The course will explore these representations in their social context using concepts such as "body," "virtue," "power," "transgression," "danger," and "liminality."

**IC 203 - NPS/WCH Foundations of Modern Physics**

4.00 credits. (**Natural and Physical Science Physics Non-Lab Core Course and Western Cultural Heritage Core Course**) \***A Guided Writing and Research course.** This is a course in the philosophy of modern physics, i.e., special relativity, general relativity, quantum mechanics, and quantum field theory. More specifically, we will introduce and discuss the philosophy and physics behind the relativity of simultaneity, block universe, curved spacetime, black holes, Big Bang cosmology, closed time-like curves, delayed choice experiments, Bell's inequality, no counterfactual definiteness, entanglement, quantum nonlocality, the measurement problem, Many Worlds interpretation, retrocausality, particle physics, unification, and quantum gravity. There will be applications to dark matter, dark energy, time travel, and consciousness in the block universe.

**IC 204 - CE/HUM Artistic Peacebuilding**

4.00 credits. (**Creative Expression Core Course and Humanities Core Course**) The conflicts today are intersectional, complex, and interactive. The models and frameworks used to address and 'solve' these problems need to be equally reflective of this reality. Art, be it poetry, literature, theatre, film, music, and/or dance, has the expressive capacity to illuminate these intersectional, complex, and seemingly intractable conflicts. This course proposes to structure an investigation of multiple disciplines through the framework of symbols, processes, and practices of creating peace.

**IC 205 - NPS/CE Disease and Disability: The Science and the Stories**

4.00 credits. (**Creative Expression Core Course and Natural Physical Science Biology Non-Lab Core Course**) This course will combine the study of science, literature, and creative writing to explore the ways that both science and narrative contribute to our understanding of illness and disability. Students will learn the biological origins and effects of illnesses and disabilities, including Alzheimer's Disease, mental illness, and Down syndrome, and they will explore the ways that science has informed selected literary works about these conditions. Using these texts as models, students will craft an original creative work about illness and disability.

**IC 206 - NCH/SSC Middle East Politics**

4.00 credits. (**Non-Western Cultural Heritage Core Course and Social Science Core Course**) \***A Guided Writing and Research course.** Developments in the Middle East and North Africa occupy newspaper headlines every day. This course is designed to prepare students to critically analyze the contemporary government and politics in the region. It analyzes the human experiences and interactions in the diverse social context of the Middle East, the domestic politics of various countries in the region, their institutions, political cultures, and the way in which these differ between countries. We will pay particular attention to the political regimes (whether the country is democratic or authoritarian and the nuances between different types of authoritarian governments), the economic context, the religious and ethnic makeup of the country and the role of ethnic and religious cleavages in the politics of these countries, and the most important political issues facing citizens. **Signature Learning Experience: Field Experience.**

**IC 207 – HUM/SSC Aging, Regeneration, and Spirituality**

4.00 credits. (**Humanities Core Course and Social Science Core Course**) This course introduces students to the constructs of aging, regeneration, and spirituality by providing various perspectives on and voices within these topics. The course will focus on both individual Mind-Body-Spirit paradigms and larger social-political-cultural contexts as it relates to these topics. Students will also discover and apply current research on the topics to construct and co-construct their knowledge and understanding of aging. **Signature Learning Experience: Community Based Learning.**

## **Signature Learning Experiences**

An important component of Elizabethtown College Signature Learning Experiences is the high impact practices which supplement classroom learning. Signature Learning Experience is so significant that, completing at least two of these five Signature Learning Experiences (SLE) is a graduation requirement for all Elizabethtown College students. The student's academic adviser will assist in choosing two of five SLEs:

### **Supervised Research**

Undergraduate research actively engages students in scholarship at an advanced level under the close supervision of a faculty mentor or approved disciplinary expert. Results from the research should be disseminated publicly in a way that is appropriate to the discipline (presentation, in writing, performance, exhibition, prototype development, etc.).

### **Internships, Field Placements, Practicums**

A transcribed academic internship is a form of experiential learning that integrates knowledge and theory learned in the classroom with practical application and skills development in a professional setting. A field experience or practicum is a learning opportunity that takes place in the field of practice, is embedded in an associated course, and supervised by faculty.

### **Capstone Course, Project or Development Portfolio**

Culminating experience near the end of the college career in which students integrate, synthesize and apply what they have learned in the major or program. Capstone experiences can include courses, projects, performances, exhibits, and/or portfolios. Portfolios should include artifacts and narratives, sampled during the college career under faculty review, that demonstrate competencies or learning outcomes in the major or program.

### **Community-Based Learning**

Community-Based Learning is an instructional strategy that gives students opportunities to apply knowledge and skills from the classroom to analyze and address community problems. In so doing, students achieve a deeper and more integrated understanding of their studies while benefitting the community.

### **Cross-Cultural Experience**

Cross-cultural experiences allow students to engage meaningfully with diverse cultures, experiences, and worldviews, by living and studying in a culture different from their own. These experiences can be domestic or abroad and include traditional semester study abroad programs as well as short-term faculty-led programs.

All students are encouraged to discuss these opportunities with their peer mentors, first-year seminar adviser and professors and explore the College website to see how other students have personalized a Signature Learning Experience that is just right for them.

## **Additional Requirements and Policies**

After completion of the First Year Seminar, students will be required to complete one core course identified in the semester scheduled as "Guided Writing and Research" (GWR). A course with a GWR designation shall a) provide direct instruction in writing and research, including instruction in locating and analyzing sources, in organizing

logical arguments, in paraphrasing, and in citing information from sources; b) require a total of at least 15-20 pages of finished writing; c) provide periodic instructor feedback on writing and practice in revision; d) incorporate an evaluation of the student's performance in research and writing in their final grade; and e) have an appropriately reduced class size to facilitate careful instruction in research and writing. Additionally, only 200-level classes be designated as GWR. It is the expectation that a student successfully complete EN 100/150 before enrolling in GWR.

Courses approved by Academic Council for Core that also are required for a particular major or minor may be used to fulfill both requirements.

Seniors may enroll in Core Program courses to complete Core, major or minor requirements as needed. Seniors may not enroll in Core Program courses for elective purposes until all enrolled underclass students have had the opportunity to select courses during official registration periods in November and April. In this context, seniors include students of senior status and juniors who will achieve senior status at the completion of the current semester.

The Core Program may be satisfied in its entirety by transfer courses (i.e., there is no residency requirement for the Core). Students wishing to satisfy the GWR requirement with an off-campus course must submit a syllabus for evaluation.

Students can satisfy Core AU requirements with transferred courses that are worth at least three credits.

Majors with more than 125 credits for graduation may be allowed to count two courses required of the major in lieu of two courses from the Core. Courses would have to meet the goals for the appropriate AU. Academic Schools may apply to the Core Committee and Academic Council to demonstrate how the major courses satisfy the goals of the AU.

When course requirements for an academic program meet the educational objectives for a Core AU, Academic Schools may petition Academic Council for a waiver of that AU for students completing the program. The course requirements supporting the waiver must be an integral part of the academic program.

Students are required to complete the appropriate level of mathematics, English, and modern/ancient language courses as determined by the College. Once students have completed the appropriate level, they cannot receive credit for taking a lower-level course in the sequence.

The First-Year Seminar may not be substituted for a major or minor course or to waive a requirement for the major or minor.

## **Elizabethtown College Honors Program, Momentum, Prestigious Scholarships and Fellowships**

### **Honors**

The Elizabethtown College Honors Program, established in 1999 and sponsored by The Hershey Company, reflects the College's commitment to providing hand-crafted learning opportunities for its students. In the case of the Honors Program, the focus of this handcrafting is on students with excellent academic records, superior academic abilities, intellectual promise, and demonstrated initiative. Consistent with the mission of the College, the Honors Program seeks to promote high standards of scholarship, leadership, and service among those students selected for the program. Class size deliberately is kept small in order to allow for more individualized attention to students.

The opportunity to work closely with faculty mentors from the first year to the senior year is an explicit goal of everyone associated with the program. In order to foster even greater involvement between faculty scholars and Honors students, co-curricular activities are an integral part of the program. Study abroad and international travel are strongly encouraged.

To facilitate such experiences, the Elizabethtown College Honors Program allows each qualified student to apply for an Academic Research Grant that can be used in support of international travel, senior thesis research, or graduate and professional exams such as the GRE, LSAT, or MCAT. In order to help foster a deeper sense of community, study rooms, a reserved lounge, and a computer lab are located in the Honors Center for Honors student use.

Honors Program students in good standing will have priority registration for each semester for which they are members of the Honors Program. Priority registration indicates that Honors Program students will have the opportunity to register before other students with the same class standing, though RBI courses are occasionally exceptions in this regard.

For more information, please visit [www.etown.edu/honors](http://www.etown.edu/honors).

### **Admissions Process**

Admission to the Elizabethtown College Honors Program is competitive. For current admission requirements, please contact the Office of Admissions.

The preferred application deadline for the Honors Program is January 15, and the final application deadline is March 15. Under normal circumstances, notification will be made by May 1. Students interested in the Honors Program are ordinarily required to have an on-campus interview with an Admissions officer.

A limited number of students are accepted to the Honors Program after the first semester. These students must demonstrate excellence in their coursework, provide a recommendation from at least one Elizabethtown professor, and have the concurrence of the Honors Director. After the first semester, such applications are accepted on a rolling basis.

### **Participation Requirements**

Students entering the Elizabethtown College Honors Program in their first academic year take an Honors First-Year Seminar, and usually an Honors English course. In the sophomore/junior years, Honors students ordinarily take three additional Honors courses from the College's Core Program or in majors, minors, or electives. The final capstone Honors experience is the completion of a Senior Honors Thesis. A total of 24 credits must be acquired in

Honors courses in order to fulfill the requirements and graduate as a recognized Elizabethtown College Honors Scholar. In order to remain in good standing within the program, students must maintain a grade point average of 3.50 overall.

A list of Honors courses is available through the course descriptions tab of this Catalog. Define the search criterion as an "HON" in the "Code" field or select a specific Honors "Type" shown in the drop-down menu. All Honors courses are noted on course schedules with an "H" at the beginning of the course code and "HNR" at the beginning of the title.

**The Honors Program offers the following non-disciplinary courses:**

**HON 201 - HNR Elizabethtown History: Campus and Community (PHS 201)**

2.00 credits. This research seminar provides Honors students with an understanding of the practice of local history and an appreciation for local history's relationship to other branches of historical studies as well as a wide variety of academic disciplines. The course is based on the study of local history as a means for Honors students to examine the people who built the local community. Through the study of local history, students will gain an appreciation of the importance and context of place and how their own contributions impact the larger community. Students' research findings will be shared publicly through an ArcGIS electronic story map. This resource with the students' research is used by the Pennsylvania Department of Transportation and the Federal Department of Transportation to inform decisions made in the Section 106 National Historic Preservation Review for the National Historic Preservation Act. Students will engage in hands-on projects in areas such as oral history, archival research, and grant writing and personally engage with members of the campus and local communities through field trips, site visits, and guest lectures. As a primary feature of this course, the local community (the College campus, Elizabethtown Borough, and Lancaster County) will serve as a learning laboratory. Honors students will learn how to take notice of the environment in which they live, recognize how it developed, and offer ideas about how it should grow. Repeatable for credit. **Signature Learning Experience: Community-Based Learning.**

**HON 205 - HNR Leadership Theory and Personal Narrative**

2.00 credits. This Honors seminar examines a wide variety of theories, practices, models, and examples of leadership. Students will discern types of leadership skills they possess, and leadership skills they wish to develop. Course content will focus broadly on leadership theory and studies in grand strategy. Student will research and discuss leadership theories and practices in a field of their choosing. Students will write a personal leadership narrative which can be used in applications for grants, graduate schools, employment, competitive post graduate scholarships and fellowships.

**HON 207 - HNR Peer Educator Seminar**

2.00 credits This course guides Peer Educators in leadership of a Peer Reading Seminar. The course hones skills of analysis, expression, and teaching. Students are limited to a maximum of 4 credits for any combination of HON 207 and HON 208. Graded Pass/No Pass.

**HON 208 - HNR Peer Reading Seminar**

1.00 credit. This course guides students in discussion/analysis of a group of books (approximately 750-1000 pages of total reading). The course stimulates love of reading and fosters an environment in which a Peer Educator mentors younger students in this regard. Students are limited to a maximum of 4 credits for any combination of HON 207 and HON 208. Graded Pass/No Pass.

**HON 301 - HNR Thesis Preparation**

1.00 credit. A foundation for successfully developing and writing the Honors Senior Thesis through becoming familiar with writing and research approaches of the student's chosen discipline; strengthening writing and oral

presentation skills; developing a timetable with deadlines for defining the scope of work and managing its completion; completing a working bibliography and a research proposal for an Honors Senior Thesis Project; and becoming more confident and capable of successfully completing a year-long thesis project with minimal supervision from a professor. Credit counts toward senior thesis requirement. To be taken spring semester of Junior year. Graded Pass/No Pass. Honors students only.

**The following Core and disciplinary Honors courses are offered. Other Honors courses may be offered from time to time.** See individual Schools for course descriptions.

HEN 105 - HNR HUM Introduction to Literature: Utopian and Dystopian Literature

HEN 252 - HNR HUM Irony, Humor, and Despair in Modern Literature

HMA 251 - HNR MA Probability and Statistics

HMA 275 - HNR CE Mathematics in Music

HPC 105 - HNR SSC Introduction to Psychology

HPC 125 - HNR NPS Introduction to Neuroscience

HPS 300 - HNR Gender and the Law (HWG 300)

HRE 285 - HNR WCH Amish, Brethren, and Mennonites in the U.S. Since 1875

HRE 289 - HNR Communal and Utopian Societies

HSO 224 - HNR SSC The Amish in Modern Society

HWG 300 - HNR Gender and the Law (HPS 300)

For more information, contact the Interim Director of the Honors Program, Dr. Oya Dursun-Ozkanca.

## **Momentum**

The Office of the Dean for Academic Affairs is home to the Momentum Program. In 2010, Elizabethtown College was awarded a grant from the Council of Independent Colleges (CIC) through the Walmart Foundation's Walmart College Success Awards program, to enhance the success of first-generation college students. With the grant, the College established the Momentum program with an interdisciplinary approach to introducing students to the liberal arts curriculum and helping them prepare for the academic expectations of college.

The program was called Momentum because the purpose is to help students build momentum toward their experience with fall orientation and college life. The program establishes a momentum, which students maintain throughout their time at the college. Momentum is designed to prepare students for college, assisting them in their effort to get the most from their education and become an integral part of the college community. The Momentum program is a stimulus for students to become energized about Elizabethtown College and to help them maintain this energy, motion, and activity throughout their college experience. The program has an emphasis on students and ideally, exceeding academic expectations and developing mentoring relationships with faculty, especially their faculty academic advisor. Momentum students are also supported by upper class student academic peer advisors known as the Kinesis—the energy behind a momentum. All four cohorts of the Momentum program are invited to join the Student Senate sponsored club the Momentum Society.

For more information, please visit [www.etown.edu/programs/momentum](http://www.etown.edu/programs/momentum).

## **Prestigious Scholarships and Fellowships**

The Prestigious Scholarships and Fellowships program encourages high-achieving students to pursue nationally competitive scholarships best reflecting their academic interests and post-graduate aspirations. Competitive scholarships and fellowships awards are often substantial, and recipients and finalists are held in a high esteem by educational institutions and employers. Scholarships and fellowships can range from short-term summer courses to multi-year graduate programs throughout the world. The application process offers certain benefits in improved critical thinking, analytical writing, and oral presentation skills- all of which can be usefully applied in nearly any future pursuit. The Office of Prestigious Scholarships and Fellowships, located in the Honors Center, aims to demystify these opportunities and help students discern the most appropriate awards for which to apply. We introduce students to opportunities, resources, and plenty of practical advice to helping them put together a competitive application. Whatever questions they have about prestigious scholarships and fellowships, we are eager to help students explore the possibilities they represent and encourage them in the application process. From the initial inquiry, to the nomination and selection stage of a national competition, we work with students and alumni to prepare competitive applications.

For more information, please visit [www.etown.edu/programs/fellowships](http://www.etown.edu/programs/fellowships).

## **Alternative Study Options**

### **Program Variations and Options**

In addition to majors and minors, Elizabethtown College offers a number of alternative learning opportunities both on and off campus. On-campus study includes special learning options that emphasize individual study and close work with a member of the faculty. Off-campus opportunities include internships or joint programs with academic institutions or clinical facilities.

#### **Independent Study**

Independent Study (IS) is designed for students to pursue individual investigations and/or reading in an area of special interest, or to advance competencies in the major/minor area. Independent Study is initiated by the student and progresses largely unsupervised. Students pursuing independent study are expected to do extensive research, reading, writing, and/or creative work resulting in a major paper, presentation, work of art, or other learning outcomes agreed upon by the supervising faculty member and the student.

Independent Studies may not be used to replace a course listed in the curriculum, to fulfill any Core Program requirements, or to substitute for registering an internship, co-op, or field work/experience. Independent Studies counting toward major credit must be letter graded. Independent Studies must demonstrate significant emphases on academic involvements, activities, and outcomes.

To apply for an IS, students must have **junior or senior status, plus a grade point average of 2.0 or higher**. Independent Studies are registered between one to four credits per study. *Please note: the ISC expects at least 4-5 pp. of writing per credit plus a detailed bibliography.* Typically a student may carry only one Independent Study at a time. Two Independent Studies may be approved at the discretion of the Independent Study Committee. A maximum of 12 credits of independent study can be applied toward graduation. If study abroad is part of the IS, an approval from the study abroad office must be attached to the application. Any requests for exceptions to the Independent Study policy must be made to the Academic Standing Committee.

Independent Studies are not tied to the academic calendar; application deadlines are to be determined based on the completion dates of an IS. A completed *Independent Study Application* including the *Independent Study Proposal* must be submitted to Independent Study Committee via the Registration and Records Office. Registration for the spring semester begins in November and registration for the fall semester begins in April.

- a) For Fall and Spring semester registrations, the IS application must be submitted during open registration but no later than 4:30 pm on the 1<sup>st</sup> day of classes for the Fall/Spring semester in which it will be completed.
- b) Students who plan to register an independent study in the Summer or Winter term must submit their proposal to the Registration and Records Office at least two weeks before last day of the Spring or Fall semester prior to the Summer or Winter term.
- c) The Independent Study Committee does NOT meet during the Summer or Winter term; therefore, IS Applications submitted after the dates listed above will not be accepted or reviewed.

Following approval by the Independent Study Committee, the Chair of the Independent Study Committee will forward the ISA to the Office of Registration & Records during the official registration period for the semester during which it will be completed. **Students must add and register an independent study during the regular course add period of each semester. Forms are available in the Office of Registration and Records.**

**Independent Studies will not be added to students' schedules after the regular "add" deadline of the semester (i.e., 4:30 p.m. on the fifth day of the semester).**

## **Directed Study**

In contrast to independent study of a special topic, directed study is undertaken for a regular course in the curriculum that is not being offered in a given semester. This method of study should be used by the student who needs rather frequent conferences with the professor.

**Note: Students must register for directed studies prior to beginning course work and no later than the end of the first week of classes (i.e., during the official Add Period for the semester).** Registration forms are available in the Office of Registration and Records.

## **Tutorials**

The tutorial is used to register a course that is not offered in the Catalog. In this respect, it is different from a Directed Study, which is used to register a course that is in the Catalog but is not offered in a given semester. The tutorial is also different from the Independent Study. With an Independent Study, the student is responsible for proposing the content of the project (which is not in the Catalog) and then works largely independently on the project of their design. **With a Tutorial, the faculty member is responsible for developing the content of the course and then works closely with the student to provide instruction in the topic.** Tutorials must be registered during the regular course Add Period and are assigned a 379 course number. An additional surcharge of \$150 per credit is assessed for the full-time student who registers for a tutorial. Full-time undergraduate students whose course load exceeds 18 hours as a result of a tutorial registration are charged the current part-time rate for tuition for those hours in excess of 18.

## **Internships**

Through internships, Elizabethtown College offers students the opportunity to apply and augment their classroom learning with real-world experience. Internships can assist students with deepening and sharpening their personal learning and career goals. They provide opportunities for students to demonstrate their knowledge in work and practice settings, gaining confidence and skill as they integrate the abstract/theoretical with the practical and applied.

## **Guidelines**

Internships will be registered in the Academic Program of the supervising faculty member.

Internships will normally be graded Pass/No Pass. Programmatic exceptions must be approved by Academic Council and be noted in the Catalog as letter-graded experiences.

Students enrolling in internships must have minimum cumulative and major grade point averages of 2.00. If a Program sets a higher grade point average standard, and if the internship is required for graduation, the higher standard must be approved by Academic Council.

Internships must be registered during the semester in which the work is completed. In the case when internship hours clearly overlap two terms (e.g., begins in April and ends in June), the registration of the internship can be split (e.g., two credits registered in the spring term and two credits registered in the summer term for an internship experience that is four total credits). Summer internships cannot be registered during spring or fall semesters.

### *Alternative Study Options*

An internship can be taken for up to 12 credits. To be awarded academic credit, students must work a minimum of 40 hours over the course of the term in which the internship is registered for each credit awarded. This is a minimum expectation; some Programs or internship sites may have higher work expectations. At least two-thirds of these hours should be spent at the internship site, with the remaining one-third spent on related activities.

Each Program will establish its own criteria for related activities and expectations for awarding academic credit to internships, including whether students can engage in multiple internships over the course of their college career and the maximum number of credits that students in their programs can accrue through internships.

To prevent potential conflicts of interest, students must disclose any familial relationships with employees or owners of the organization at which they want to intern. Students may not intern at a company owned or managed, fully or in part, by a family member, nor may the on-site supervisor be a member of the student's family or anyone working under supervision of a family member. In addition, continuation of a part-time or summer job may not serve as an internship. Any exceptions to these prohibitions would be unusual and require the approval by the Dean for Curriculum and Honors.

All internships must have a faculty supervisor and an on-site supervisor. The intern must have regular contact with the on-site supervisor during the term of the internship. At the end of the internship, the on-site supervisor will be asked to submit a written evaluation to the faculty supervisor, describing the work and responsibilities of the intern and providing an evaluation of the intern's level of performance and progress during the internship.

Internships must be registered no later than the third Friday of the regular fall or spring term. This additional registration time is provided to enable students to collect their on-site supervisor's signature on the Internship Contract form. For summer internships, registration must be by the end of the first week of the internship.

The Internship Contract or syllabus must specify the goals and objectives of the internship, the activities necessary to reach those goals, and the methods by which the student will be evaluated. An Internship Contract must be signed by the student, the on-site supervisor and the faculty supervisor.

Consult the appropriate Academic School for more detail on its internship policy.

## **Study Abroad Programs**

Elizabethtown College, through the Study Abroad Office, provides guidance and support to students in all majors who want to study abroad in a semester, summer, or short-term program. The Study Abroad Office promotes, supports, and coordinates all study abroad programming and works with faculty to encourage overseas experiences.

Students may participate in a wide variety of semester-long, study abroad opportunities with our affiliated and partnering programs, which currently include specific locations from API Study Abroad; Amizade; Bifrost University; CIS Abroad; The School for Field Studies; International Studies Abroad (ISA); ISEP; KCP International; Nihon University; Kansai Gaidai University; Northumbria University; Arcos Learning Abroad; Institute for Field Education (IFE); University Studies Abroad Consortium (USAC); University of Oviedo; and Queen's University Bader International Study Centre. More information about applying to participate in study abroad programs can be found on the Study Abroad Office website at [www.etown.edu/offices/study-abroad](http://www.etown.edu/offices/study-abroad).

In addition to these opportunities, Elizabethtown faculty members regularly lead short-term educational experiences to locations around the world to make international study more accessible to our students. These programs typically provide credits to students who successfully complete all the requirements. In past years, faculty-led, short-term programs have traveled to Bangladesh, China, Costa Rica, the Czech Republic, Denmark, Ecuador, France, Gambia, Iceland, Ireland, Japan, South Africa, Spain, Switzerland, Thailand, the United Kingdom, and Vietnam.

For more information about the Study Abroad Office, please visit [www.etown.edu/offices/study-abroad](http://www.etown.edu/offices/study-abroad).

## **Washington, D.C., Semester with The Washington Center or American University**

Elizabethtown College provides students an opportunity to "study away" in Washington, D.C., and take advantage of the resources of the nation's capital. Students participating will work with the policymakers and business professionals who play a vital role in American government and culture. Both, The Washington Center and American University programs include full-time internships and courses. Students interested in the program should contact the Study Abroad Office for more information. Students participating in the program must acquire study away approval from the Study Abroad Office, which includes completing off-campus course approvals from the Office of Registration and Records.

## **English Language Learning Program**

The English Language Learning Program at Elizabethtown supports an increasingly diverse group of students from around the world who wish to immerse themselves in the rich learning environment available at Elizabethtown College. Students will be taken from their current level of English language mastery to advanced levels of mastery, enabling full integration into the complete range of curricular and co-curricular programs. Specifically, the English Language Learning (ELL) courses will:

- Advance students' English speaking, writing, reading, and comprehension proficiency
- Foster critical thinking skills
- Instill intellectual curiosity and interest in further learning
- Introduce American culture and expectations of the Elizabethtown College community
- Provide opportunities for integration of diverse world views
- Prepare students for success in degree program coursework

International students who are non-native speakers of English are eligible for English Language Learning courses. A minimum official TOEFL (or equivalent test) score is required for admission as we do not offer Beginner or Low Intermediate English Language courses (see "Admission to the College"). Upon arrival at the campus, all students who are non-native speakers of English will be given a placement test to determine the appropriate level of ELL or EN classes. The following ELL courses are offered and are required of students whose placement test results indicate that greater proficiency is needed before full integration into degree coursework.

### **Courses Offered at the Intermediate Level:**

#### **ELL 111 - Intermediate Reading and Comprehension**

4.00 credits. The focus of this course is on developing reading skills and acquiring strategies to learn from texts. Students will be expected to read, take notes, and demonstrate comprehension through discussion and short written assignments. Students will read a variety of short selections, both fiction and nonfiction and will keep a weekly vocabulary journal. *Credits are not applicable to the 125 required for graduation with a bachelor's degree.* Fall semester.

**ELL 112 - Intermediate Writing and Composition**

4.00 credits. The focus of this course is on learning to write in order to effectively communicate ideas and opinions. Students will gain fluency in the process of writing with emphasis on mechanics and grammar. Students will learn how to organize ideas, write and revise drafts, and edit written material. Students will also be able to take notes and write summaries of information heard or read. *Credits are not applicable to the 125 required for graduation with a bachelor's degree.* Fall semester.

**ELL 113 - Intermediate Listening and Speaking**

4.00 credits. The focus of this course is on listening and speaking in academic and social settings. Students will learn to distinguish speaker's intentions, identify important spoken information from a variety of contexts (lecture, video, audio), infer meaning of unfamiliar words or phrases from the context of the conversation, and respond appropriately to spoken requests. Students will also learn to articulate clearly, infer whether their listener comprehends their speech, and make adjustments where needed to engage successfully in conversation. Students will also gain experience taking notes from oral presentations and video. *Credits are not applicable to the 125 required for graduation with a bachelor's degree.* Fall semester.

**ELL 114 - Intermediate Seminar on American Culture**

4.00 credits. This course focuses on American culture, with emphasis on the local heritage and customs. Students will have opportunities to experience, discuss, and interpret local culture through lectures, performances, discussions, and field trips. They will be introduced to all campus resources and will select a student club or organization to investigate or join. *Credits are not applicable to the 125 required for graduation with a bachelor's degree.* Fall semester.

**Courses Offered at the High Intermediate Level:**

**ELL 151 - High Intermediate Reading and Comprehension**

4.00 credits. The focus of this course is continued development of reading skills and comprehension. Students will be expected to read, take notes, and demonstrate comprehension through discussion and written assignments. Students will read from increasingly complex text sources. \**Prerequisite(s): Appropriate placement or completion of ELL 111 with a grade of B- or higher. Credits are not applicable to the 125 required for graduation with a bachelor's degree.*

**ELL 152 - High Intermediate Writing for Academic Purposes**

4.00 credits. The focus of this course is on strengthening students' writing for academic purposes. Students will write more complex essays and learn different styles of writing. They will begin to expand their writing to take into account their audience and their purpose. Editing and revision will be major components of the course.

\**Prerequisite(s): Appropriate placement or completion of ELL 112 with a grade of B- or higher. Credits are not applicable to the 125 required for graduation with a bachelor's degree.*

**ELL 153 - High Intermediate Conversation and Discussion**

4.00 credits. This course extends students' conversational abilities to a variety of settings and tasks. Students will be able to follow multi-step instructions, respond to oral requests for elaboration, and discuss ideas one-on-one and in small group settings. Students will also strengthen their English pronunciation and will be expected to do regular in-class oral presentations. \**Prerequisite(s): Appropriate placement or completion of ELL 113 with a grade of B- or higher. Credits are not applicable to the 125 required for graduation with a bachelor's degree.*

**ELL 154 - High Intermediate Seminar on Comparative Culture**

4.00 credits. This course focuses on changes over time in American culture and how American culture has been influenced by other cultures. Students will have opportunities to experience, discuss, and interpret a variety of

cultures through lectures, performances, discussions, film, and fieldtrips. They will write reflective essays on these activities and relate them to their own or another culture. \**Prerequisite(s)*: Appropriate placement or completion of ELL 114 with a grade of B- or higher. *Credits are not applicable to the 125 required for graduation with a bachelor's degree.*

**Courses Offered at the Advanced Level:**

Refer to the School of Arts and Humanities for ESL 111 / ESL 112 courses.

## **Joint Degree Programs**

In Joint Degree Programs, students study at Elizabethtown College and at affiliated academic institutions or clinical facilities in the United States. The College also offers a number of majors in which work at affiliated clinical facilities constitutes an important part of the student's education. In music therapy, occupational therapy, social work, and clinical laboratory sciences, students combine work at the College with first-hand experience in hospitals, clinics, and social work and therapy programs. For detailed descriptions, see the appropriate School for more information. The following programs are offered in conjunction with these academic institutions:

### **Drexel University College of Medicine**

Master of Science in Molecular Medicine/B.S. in Biotechnology 4+1 Program with Drexel University College of Medicine

### **Drexel University Thomas R. Kline School of Law**

Law Early Admission Program (LEAP) with Drexel University Thomas R. Kline School of Law

### **Duquesne University School of Law**

Law Early Admission Program (LEAP) with Duquesne University School of Law

### **Lake Erie College of Osteopathic Medicine**

Doctor of Dental Medicine/Baccalaureate 4+4 Program with Lake Erie College of Osteopathic Medicine

Doctor of Osteopathic Medicine/B.S. 3+4 or 4+4 Program with Lake Erie College of Osteopathic Medicine

Doctor of Pharmaceutical/B.S. 3+4 or 4+4 Program with Lake Erie College of Osteopathic Medicine

### **Penn State University College of Medicine**

Master of Public Health Program with Penn State University College of Medicine

### **Pennsylvania College of Optometry at Salus University**

Doctor of Optometry/B.S. 3+4 Program with Pennsylvania College of Optometry at Salus University

### **Pennsylvania State University College of Medicine**

Premedical Primary Care Program with Pennsylvania State University College of Medicine

### **Philadelphia College of Osteopathic Medicine**

Osteopathic Medicine/B.S. 3+4 or 4+4 Program with Philadelphia College of Osteopathic Medicine (Emphasis in Biology)

Osteopathic Medicine/B.S. 3+4 or 4+4 Program with Philadelphia College of Osteopathic Medicine (Emphasis in Chemistry/Biochemistry)

**Thomas Jefferson University**

Doctor of Physical Therapy/B.S. 4+3 Program with Thomas Jefferson University

**West Virginia University School of Dentistry**

Doctor of Dental Surgery/Baccalaureate 4+4 Program with West Virginia University School of Dentistry

**Widener University**

Doctor of Physical Therapy/B.S. 3+3 Program with Widener University

Law Early Admission Program (LEAP) with Widener University School of Law

## **School of Arts and Humanities**

### **Dean of the School of Arts and Humanities**

*Dr. Kevin Shorner-Johnson*

Zug Memorial Hall, Room 201

717-361-1212

**Faculty:** Adams, Arnold, Badgerow, Behrens, Bhattacharya, Bomberger, Borilot, Brown, Friedly, Fritz, Gross, Haines, Linares-Farras, Long, Lorenzen, Moore, Nolt, Ricci, Skillen, Takahashi, Webster Roberson

For more information, please visit the School's website or check your course syllabi, which are available through the course instructor or at the High Library.

The School of Arts and Humanities includes programs in English, Fine Art, History, Modern Languages, Music, and Religious Studies.

### **Honors in the Discipline**

The School of Arts and Humanities participates in the College Honors in the Discipline Program. For guidelines, students should consult their advisor.

### **Bachelor of Arts**

#### **Art Education (B.A.)**

**\*This program may not be declared after January 11, 2021.**

Admission to the Art Education program is dependent upon meeting the general requirements for admission to the undergraduate program. Please refer to the admission requirements under 'Admissions' in the catalog. Upon completion of this degree program, students are eligible to obtain the Pennsylvania Teaching Certification in Art PK-12.

Several Studio Art and Art History courses are double-counted to fulfill both Core and Art Education major requirements. Formal Acceptance must be met as a prerequisite to all ED 300 courses and ART 310 and ART 315.

PLEASE NOTE: A complete list of the foundational requirements (including a list of approved English Literature courses) can be found in the EDUCATION MANUAL.

To ensure that all students are prepared to apply for formal acceptance, it is recommended that students take a minimum of 16 credit hours per semester.

#### **FOUNDATIONAL REQUIREMENTS:**

Each teacher candidate is expected to meet the following criteria and to use the guidelines to ensure a successful application for formal acceptance:

- Provide updated clearances prior to starting Education courses including a record of Act 34 (PA Criminal Record), PA Child Abuse, FBI Criminal History Report, and TB test. These clearances must be less than one year old. Clearances are required to be updated every year.
- Declare their Education major by the end of their First Year.
- Submit a student life clearance by March of their First Year. (Complete the top portion only and bring to Nicarry 143)
- Complete ED 105 and ED 150/ED 151 with earned grades of C or better- this should be done within the first year (ED 105 Fall and ED 150/151 Spring). ED 161 should be taken within the first 4 semesters (FY and Second year- but recommend during FY). \*Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.
- Meet all requirements for Formal Acceptance as outlined in the manual.
- Submit a Student Life Clearance by March of first year (submit to Education office)

#### **PROGRESSION TO FORMAL ACCEPTANCE:**

Participate in a planning meeting with advisor if issues or concerns arise during three GPA checkpoints conducted by the Education Program.

- Checkpoint #1: GPA verification will be completed at the end of the first semester of First year (December of FY). A minimum cumulative 2.80 is recommended. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA.
- Checkpoint #2: GPA verification will be completed at the end of the second semester of First year (May of FY). A minimum cumulative 2.80 should be achieved. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA. Students will begin work on a professional electronic portfolio, to be submitted at the time of application for formal acceptance.
- Prior to Checkpoint #3- Students should have completed or be in the process of completing 27 credit hours. This will ensure that requirements for Formal Acceptance can be achieved.
- Checkpoint #3: GPA verification will be completed at the end of the first semester of Second year (December of Second year). A minimum 2.80 needs to be maintained with the goal of a minimum 3.0 being achieved by end spring of Second year.

#### **FORMAL ACCEPTANCE needed for 300-Level ED courses:**

- Complete two Mathematics (MA) courses and two English (EN) courses (one writing composition and one literature).
- Complete 54 credit hours with a cumulative grade point average of 3.00 or higher.
- Successfully complete at least three courses with ED prefixes.
- Receive a satisfactory on student life clearance (re-check of previous clearance)
- Provide a record of ACT 34 (PA Criminal Record), PA Child Abuse, ACT 24, FBI Criminal History Report, and a TB medical clearance. These clearances must be less than one year old.
- Receive passing scores on the Basic Skills Assessment (PAPA or Praxis Core) or the SAT/ACT equivalent score as mandated by PDE and submit a copy of your official score report (Basic Skills exam) to the Education office.
- Provide a completed electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting the required competencies as defined by Danielson's Domains.

Students will begin creating an electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting required competencies. Final portfolio will be submitted as part of the Formal Acceptance application. Students typically apply for Formal Acceptance in the spring of the second year.

Approval of the Education Program and any other appropriate major program is necessary for the application to be successful. Students are evaluated at the conclusion of each semester in accordance with the Education Program Teacher Dispositions/Foundational Competencies Policy. Students may be advised or required to withdraw from a program at any time the Education advisors determines such action to be appropriate.

### **Basic Skills Assessment Policy**

#### *General Requirements*

- 22 Pa. Code § 49.18 (Assessment) requires an assessment of basic skills, professional knowledge and practice and subject matter knowledge. The basic skills assessment is comprised of three individual tests covering reading, writing and mathematics.
- Candidates may combine individual tests from different vendors to meet the basic skills requirement.
- Basic Skills Assessments in Reading, Writing and Mathematics may be met using SAT, ACT, PAPA and/or Praxis Core scores or a combination thereof. (Students must pass the basic skills in order to receive formal acceptance into the program)
- Candidates electing to use tests from different vendors cannot use a composite score. They must meet the qualifying score for each individual test.

### **Approved Basic Skills Assessments**

#### *The Pre-service Academic Performance Assessment (PAPA) modules in Reading, Writing and Mathematics.*

- Visit [www.pa.nesinc.com](http://www.pa.nesinc.com) to register for PAPA tests.
- Reading test 8001, Mathematics test 8002, Writing test 8003
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 220 is required on the Reading module, 193 on the Mathematics module and 220 on the writing module. A composite scoring option is available.

#### *The Core Academic Skills for Educators (CORE) modules in Reading, Writing and Mathematics.*

- Visit [www.ets.org/praxis/pa](http://www.ets.org/praxis/pa) to register for CORE tests
- Reading test 5713, Mathematics test 5733, Writing test 5723
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 156 (Reading), 162 (Writing), and 142 (Mathematics) is required. A composite scoring option is available.

*The Scholastic Achievement Test (SAT)*

- The Scholastic Achievement Test (SAT) must achieve a minimum score of 27 (Reading), 26 (Mathematics), and 28 (Writing and Language). It is recommended that intended Education majors submit their SAT scores to Elizabethtown College. There is no composite scoring option. SAT scores may be combined with other tests.
- Submit official test scores in the vendor-sealed envelope and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

*The American College Test (ACT) Plus Writing. There is no composite scoring option.*

- The American College Test (ACT) Plus Writing must achieve a minimum score of 22 (Reading), 8 (Writing), 21 (Mathematics). \*Candidates that opt out of the Writing portion of the ACT will be required to take the writing portion of the Basic Skills Assessment.
- Submit official test scores and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality, in an envelope sealed by the test vendor. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

Older basic skills tests, such as the PPST Reading, Writing, and Mathematics, are accepted if taken at the time they were required in Pennsylvania. Refer to the testing CSPG 21 for more information about replaced tests.

**Basic Skills Assessment Exceptions**

- The basic skills assessment requirement is waived for all certificates as of November 1, 2014 if the applicant completed an approved post-baccalaureate certification program.
- Experienced Out-of-State Instructional Certificate Exception: As of July 1, 2011, applicants submitting a copy of a current and valid out-of-state instructional certificate that is comparable in grade and content area, plus verification of two years of full-time teaching experience, are not required to take the basic skills assessments.
- Vocational Certificate Exception: Effective July 1, 2014, candidates in post-baccalaureate vocational instructional programs are not required to take the basic skills assessment in reading and writing. The basic skills mathematics assessment is still required for vocational level II certification.
- PDE implemented an alternative means to achieve exemption from the Basic Skills assessment testing requirements. At this time, the alternative is for the mathematics portion of the assessment only. The Program will accept a grade of B (3.0) or higher in a specific college level math course. Program providers must identify the course(s) that best align with the competencies and best meet the PA Academic Standards.
  - The program provider can use the courses within their programs that satisfy the required six credits of mathematics for program entry as the coursework for meeting the basic skills assessment if the competencies are included in the coursework.
  - If a student has not met the exemption for the math portion of the basic skills assessment based on their ACT/SAT scores, they should consider the below courses on their schedule as these will meet the criteria put into place by PDE to be exempt from the mathematics portion of the Basic Skills Assessment. These are the only two approved courses that may be taken to meet the exemption. Students must achieve a grade of B or above in each course.

- MA 205: Mathematics for the Elementary Teacher
- MA 251: Probability and Statistics

### **Exit from the Programs**

Students seeking **award of the degree in the major only (without certification) must:**

- Receive approval of the Education Program and any other appropriate Program(s) for completion of their degree plan.
- Satisfy all requirements of the major, except the professional internship and Pennsylvania certification test results, with a cumulative/major grade point average of 2.00 or higher.
- Complete an alternative internship experience of at least six credits, as approved by the Education Program.

Students seeking **award of the degree in their major and certification must:**

- Satisfy all requirements of the major with the cumulative grade point average of 3.00 or higher.
- Earn a grade of Pass in the professional internship and senior seminar.
- Earn passing scores on the Pennsylvania Educator Certification Tests (PECT) and/or Praxis II series as it applies to your certification program. Students completing Early Childhood (PK-4) must take the PECT exam series, Elementary Middle Level (4-8) certifications take the Praxis series in core assessment and subject concentration, Secondary certification (7-12) take Praxis II in a content area and PK-12 (Music Education, Modern Languages – Spanish Education) must successfully complete the appropriate Fundamental Subjects: Content Knowledge Test and Praxis II in a content area. Graduate candidates in Special Education (PK-12) must take the PECT exam series in special education.

For a comprehensive listing of testing requirements in Pennsylvania, please see

<http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx#tab-1>.

Arrange for Basic Skills, PECT, and/or Praxis test scores to be sent to the Education Program showing passing scores on all required tests.

Complete two Mathematics (MA) courses and two English (EN) courses, one English Literature and one English Writing.

Formally and publicly present an electronic portfolio summarizing activities and experiences in professional education and demonstrating satisfaction of all required competencies.

Receive approval of the Education Program and appropriate major Program(s).

Submit the application for Pennsylvania certification to the Education Program.

### **For the Art Education major:**

- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- SED 222 - Foundations of Inclusive Education (MSE 522)
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 470 - Professional Internship

- ED 497 - Senior Seminar for Secondary Education
- Two English courses for Education certification, one literature and one writing (EN 100 or EN 150)
- Two Math courses for Education certification

Students must complete 10 foundational art courses:

- ART 105 - CE Drawing I
- ART 106 - CE Ceramics I
- ART 120 - CE Sculpture I
- ART 155 - WCH Introduction to the History of Art I
- ART 157 - WCH Introduction to the History of Art II
- ART 205 - Painting I
- ART 210 - Drawing II
- ART 207 - Introduction to Graphic Design or
- ART 209 - Typography and Text Design or
- ART 251 - Printmaking I
- ART 310 - Art Education Methodologies & Curriculum Development - Elementary
- ART 315 - Art Education Methodologies & Curriculum Development - Secondary

Eight credits of 200-300 level electives:

- ART 209 - Typography and Text Design
- ART 230 - American Art
- ART 240 - NCH History of Japanese Art and Aesthetics (JA 240)
- ART 350 - Neoclassicism and Romanticism
- ART 340 - Modernism
- ART 270 - Art of Africa, Asia, & Americas
- ART 280 - NCH World Architecture
- ART 360 - Italian Renaissance (HI 360)

In addition, students must complete one of the following concentrations:

Drawing

- ART 105 - CE Drawing I
- ART 210 - Drawing II
- ART 402 - Advanced Studies in Drawing

Sculpture:

- ART 120 - CE Sculpture I
- ART 320 - Sculpture II
- ART 405 - Advanced Studies in Sculpture

Painting:

- ART 205 - Painting I
- ART 204 - CE Fundamentals of Color and Design or
- ART 305 - Painting II
- ART 403 - Advanced Studies in Painting

Ceramics:

- ART 106 - CE Ceramics I
- ART 206 - Ceramics II
- ART 401 - Advanced Studies in Ceramics

Graphics/Media Arts (Select any three courses):

- ART 145 - CE Digital Photography (COM 145)
- ART 207 - Introduction to Graphic Design
- ART 209 - Typography and Text Design
- ART 251 - Printmaking I
- ART 325 - Designing for the Web and Social Media
- ART 352 - Printmaking II
- ART 404 - Advanced Studies in Printmaking
- ART 406 - Advanced Digital Arts

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
  - EN 100 - PLE Writing and Language or
  - EN 150 - PLE Advanced Writing and Language
  - ED 105 - Foundations of Teaching and Learning
  - ED 150 - Early Childhood Development
- Two of the following:
- ART 105 - CE Drawing I
  - ART 106 - CE Ceramics I
  - ART 120 - CE Sculpture I
  - ART 210 - Drawing II
  - One English Literature (Core and Guided-Writing and Research) course (4 credits)
  - Two Mathematics courses (8 credits total)

**Notes:**

Education majors may substitute ED 224 for their Western-Cultural Heritage Core.

ED 150 and ED 151 are approved to satisfy Social Science Core.

**Arts (B.A.)**

**Student Learning Outcomes for the Arts major:**

*Students will be able to:*

- Create original works of visual art that demonstrate knowledge of the techniques of two-dimensional and three-dimensional media.
- Write a personal Artist's Statement that describes current artistic direction and practice.
- Prepare and install works of art for a professional-level exhibition.
- Discuss concepts employed in the creation, analysis, and evaluation of visual art and articulate informed aesthetic judgments about works of visual art.
- Research and write about the major art movements in Europe and the United States and the artistic traditions of non-Western cultures in historical context.
- Demonstrate knowledge of the contemporary art world.
- Discuss the ways in which visual art conveys information, expresses experiences, and affirms personal and social values.

The Arts Program offers two major concentrations: Studio Art and Art History. To prepare for careers working in museums and galleries, or to pursue graduate study in the history of art, students should major in Art History.

Students who want to obtain certification as art teachers on the elementary or secondary levels should major in Art Education.

**For the Arts: Studio track, students must take the following ten foundational courses:**

- ART 105 - CE Drawing I
- ART 106 - CE Ceramics I
- ART 120 - CE Sculpture I
- ART 207 - Introduction to Graphic Design or
- ART 251 - Printmaking I
- ART 155 - WCH Introduction to the History of Art I
- ART 157 - WCH Introduction to the History of Art II
- ART 205 - Painting I
- ART 210 - Drawing II
- ART 497 - Senior Seminar
- ART 498 - Senior Exhibition

In addition, students must take one 200-300 level studio elective course:

- ART 204 - CE Fundamentals of Color and Design
- ART 206 - Ceramics II
- ART 209 - Typography and Text Design
- ART 305 - Painting II
- ART 320 - Sculpture II
- ART 325 - Designing for the Web and Social Media
- ART 352 - Printmaking II

One 200-300 level art history elective course:

- ART 230 - American Art
- ART 240 - NCH History of Japanese Art and Aesthetics (JA 240)
- ART 350 - Neoclassicism and Romanticism
- ART 340 - Modernism
- ART 270 - Art of Africa, Asia, & Americas
- ART 280 - NCH World Architecture
- ART 360 - Italian Renaissance (HI 360)

One 400-level studio elective course:

- ART 401 - Advanced Studies in Ceramics
- ART 402 - Advanced Studies in Drawing
- ART 403 - Advanced Studies in Painting
- ART 404 - Advanced Studies in Printmaking
- ART 405 - Advanced Studies in Sculpture
- ART 406 - Advanced Digital Arts
- ART 470-474 - Internship in Fine Arts

**\*For the Arts: Art History track, students must take the following nine foundational courses:**

**\*This program may not be declared after January 11, 2021.**

- ART 105 - CE Drawing I
- ART 106 - CE Ceramics I
- ART 120 - CE Sculpture I
  
- ART 207 - Introduction to Graphic Design or
- ART 251 - Printmaking I
  
- ART 155 - WCH Introduction to the History of Art I
- ART 157 - WCH Introduction to the History of Art II
- ART 205 - Painting I
- ART 497 - Senior Seminar
- ART 498 - Senior Exhibition

In addition, students must take three 200-400 level art history elective courses:

- ART 230 - American Art
- ART 240 - NCH History of Japanese Art and Aesthetics (JA 240)
- ART 350 - Neoclassicism and Romanticism
- ART 340 - Modernism
- ART 270 - Art of Africa, Asia, & Americas
- ART 280 - NCH World Architecture
- ART 360 - Italian Renaissance (HI 360)
- ART 470-474 - Internship in Fine Arts

One 200-400 level studio elective course:

- ART 206 - Ceramics II
- ART 210 - Drawing II
- ART 251 - Printmaking I (if not already taken as a foundational course)
- ART 305 - Painting II
- ART 320 - Sculpture II
- ART 325 - Designing for the Web and Social Media
- ART 352 - Printmaking II
- ART 406 - Advanced Digital Arts

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- ART 105 - CE Drawing I or
- ART 106 - CE Ceramics I or
- ART 120 - CE Sculpture I
- ART 155 - WCH Introduction to the History of Art I
- ART 157 - WCH Introduction to the History of Art II
- Core course (4 credits)

**English (B.A.)**

**Student Learning Outcomes for English:**

*Students will be able to:*

- Produce a variety of texts using creative, rhetorical, and analytical strategies.
- Communicate clearly, accurately and precisely in multiple modes.
- Identify appropriate primary and secondary research materials, apply them to support original arguments and correctly cite their sources.

- Explore and analyze the relationships among literature, language, culture, and history.
- Integrate and synthesize reading, writing and other communication skills in purposeful life work and professional settings.

English majors in all concentrations must complete the second semester at the introductory level of a modern language course at the 112 level or higher, or one course if the modern language placement is 200-level or higher. For ancient languages, the second course in a two-semester introductory sequence must be completed.

**The English Literature concentration requires:**

- EN 200 - Major British Writers
- EN 220 - WCH British Literature: Medieval, Renaissance, or 18th Century (Pre-1800)
- EN 230 - WCH British Literature: Romantic, Victorian, or Modern (Post-1800)
- EN 240 - WCH American Literature: Revolution to Civil War, Realist, or Modern
- One English elective (185 or higher)
- Ancient or Modern Language course (112 or higher)
- EN 496 - Seminar in Literary Theory
- One additional 300- or 400- level literature course

One additional American literature course:

- EN 240 - WCH American Literature: Revolution to Civil War, Realist, or Modern
- EN 245 - HUM Growing Up in America
- EN 251 - HUM Multicultural Literature
- EN 311 - Genre Studies
- EN 313 - Drama
- EN 315 - Poetry
- EN 317 - Narrative
- EN 319 - Themes
- EN 440 - American Authors

One Writing course:

- EN 185 - Introduction to Professional Writing
- EN 280 - Creative Writing - Poetry, Prose
- EN 281 - CE Writing and Analyzing the Short Story
- EN 282 - Technical Writing
- EN 283 - Legal Writing
- EN 285 - Business and Public Relations Writing
- EN 286 - Creative Non-Fiction
- EN 287 - Writing Children's Literature
- EN 302 - The English Language
- EN 381 - Advanced Fiction Writing
- EN 385 - Writing and Editing for Publication
- CW 386 - Word, Web, and Design

One 300-level genre or themes course:

- EN 311 - Genre Studies
- EN 313 - Drama
- EN 315 - Poetry
- EN 317 - Narrative
- EN 319 - Themes

One authors seminar:

- EN 420 - British Authors (Pre-1800)
- EN 430 - British Authors (Post-1800)
- EN 440 - American Authors
- EN 450 - World Authors

First Year Suggested Courses:

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- EN 200 - Major British Writers
- Power of Language: Other Core course (4 credits)
- Mathematics or Natural and Physical Science Core course (4 credits)

Note:

First year students in the English Literature concentration should take their initial English course at the 200 level in the spring semester. EN 200, EN 240, and EN 230 (Victorian) are good choices. Advanced first year students may take EN 220 or EN 230 (Romantic or Modern). English majors who are uncertain whether to declare the Literature or the Professional Writing concentrations are encouraged to take one of these 200-level literature classes along with EN 185 in the spring semester of their first year. If that does not work, one of the classes may be taken in the fall of the student's second year.

All English majors satisfy Core requirements for WCH and GWR with EN 220, 230, and/or 240, at least one of which is required for all English concentrations. They should not sign up for WCH and/or GWR classes in a discipline other than English.

With the exception of EN 185, no 100-level EN courses can be counted toward the English major, although EN 101, 104, and 180 satisfy Core requirements, and EN 180 can count toward a Creative Writing minor.

All English majors need to complete the second course at the introductory level in a modern language (112), or one course if the modern language placement is 200-level or higher. For ancient languages, the second course in a two-semester introductory sequence must be completed.

Two American courses are required EN 240 (which may be taken twice if the content is different), EN245, EN251, or EN440.

Two courses must be pre-1800 British Literature courses: EN 220, and either EN 420 or an appropriate 300-level literature course (EN 311-319).

The Signature Learning Experience requirement for Supervised Research is satisfied with EN 420-450 (Authors). The SLE Capstone requirement is satisfied with EN 494 (Seminar in Literary Theory). Both of these are requirements for the English Literature concentration.

EN 498 + EN 499 (4 credits total) may be substituted for one of the 300- or 400-level literature courses.

EN 480-89 (Independent Study, variable topics and credits) may be substituted where appropriate for English major requirements.

PW courses such as EN 185, EN 285, EN 302, EN 386, and EN 470-474 are recommended as career preparation for students in the Literature concentration. CW courses such as EN 280 and EN 286 enrich students' knowledge of literature and expand their writing skills. All these courses fulfill requirements for the Writing Elective and the English Elective in the Literature concentration.

**The English Professional Writing concentration requires:**

- EN 185 - Introduction to Professional Writing
- EN 200 - Major British Writers or
- EN 240 - WCH American Literature: Revolution to Civil War, Realist, or Modern
- EN 220 - WCH British Literature: Medieval, Renaissance, or 18th Century (Pre-1800) or
- EN 230 - WCH British Literature: Romantic, Victorian, or Modern (Post-1800)
- Ancient or Modern Language course (112 or higher)

Three writing in the workplace courses:

- COM 211 - Intro to Journalism
- EN 282 - Technical Writing
- EN 283 - Legal Writing
- EN 285 - Business and Public Relations Writing
- EN 385 - Writing and Editing for Publication

One creative genres course:

- EN 280 - Creative Writing - Poetry, Prose
- EN 281 - CE Writing and Analyzing the Short Story
- EN 286 - Creative Non-Fiction
- EN 287 - Writing Children's Literature
- EN 381 - Advanced Fiction Writing

One 300-level genre or themes course:

- EN 311 - Genre Studies

- EN 313 - Drama
- EN 315 - Poetry
- EN 317 - Narrative
- EN 319 - Themes

Capstone Course:

- CW 386 - Word, Web, and Design

One authors seminar:

- EN 420 - British Authors (Pre-1800)
- EN 430 - British Authors (Post-1800)
- EN 440 - American Authors
- EN 450 - World Authors

Internship Requirement

Students must take a 2-credit or 4-credit Internship. They may choose one 4-credit Internship, two 2-credit Internships, or a 2-credit Internship combined with another English elective of 2 or 4 credits. Students must participate in disciplinary internship modules.

- EN 470-474 - Internship in English

First Year Suggested Courses:

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- EN 185 - Introduction to Professional Writing
- EN 200 - Major British Writers or
- EN 240 - WCH American Literature: Revolution to Civil War, Realist, or Modern
- Power of Language: Other Core course (4 credits)
- Mathematics Core course (4 credits)

Note:

A third course from the Writing in the Workplace category or the Publishing category will fulfill the writing elective.

One course must be a pre-1800 British Literature course: EN 220, EN 420, or an appropriate 300-level literature course.

EN 104, EN 101, and EN 180 cannot be counted toward the English major, although each does satisfy a requirement for core, and EN 180 can count toward a Creative Writing minor.

## **French (B.A.)**

**\*This program may not be declared after January 11, 2021.**

### **Student Learning Outcomes for French:**

*Students will be able to:*

- Communicate (speak and comprehend) at the Advanced level according to ACTFL guidelines.
- Write at the Advanced level according to ACTFL guidelines.
- Write a research project in French focused on reading primary and secondary sources in French.
- Use appropriately and explain most grammatical structures of the French language.
- Demonstrate an understanding and appreciation of the perspectives and products of the cultures studied in themselves and in comparison with their own culture.
- Read, analyze and interpret literary texts in terms of themes, characters, structure, style, and overall textual strategies, and situate those texts in their cultural contexts.

**French majors** must complete a minimum of 20 credits (four courses) in residency (200-level or above) and a minimum of 15 credits over two semesters in an approved study-abroad program.

In exceptional cases, certain double majors who can prove that they cannot otherwise satisfy all requirements of both majors may apply for an exception of one semester for the full-year study-abroad requirement. Any double majors granted this exception still must obtain a minimum oral proficiency rating of Advanced.

### **Majors must complete the following courses in residency**

- FR 211 - PLO Intermediate French I
- FR 212 - PLO Intermediate French II
- Two 300-level elective courses
- FR 496 - French Senior Research Project I
- FR 497 - French Senior Research Project II

**A minimum of 15 credits must be completed during a one-year (two-semester) study-abroad experience.**

Students must complete courses at the 300 (advanced) level or above that include one conversation and composition in French; one French phonetics; one French history, art or culture; one French literature; and one French elective. After completing the required course work, majors must take an oral interview on campus and receive a minimum rating of advanced.

### **First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language

- FR 211 - PLO Intermediate French I
- FR 212 - PLO Intermediate French II
- Four Core/Elective courses (16 credits)

**Notes:**

Students with more than two years of French must take the online language placement exam before registering in a language course for academic credit, unless the student begins a new language. Students are not allowed to take FR 111 if they have completed high school level 3 or higher.

Language Incentive Placement Policy: Students who place into a modern language course at the 211-level or higher and earn a B- or better are eligible to receive credit for the previous course in the sequence.

**Language Placement Policy**

Language majors are required to participate in a BCA Study Abroad or another School-approved program for one academic year or equivalent of two separate semesters. Non-majors who have completed 212 or above also are encouraged to participate in the BCA or approved study-abroad programs.

All students with more than two full years of language preparation must take courses at the 112-level or above. The appropriate language level is determined by an online placement test. In the case of Japanese placement, students must contact the Japanese faculty.

If a student places into a modern language course at the 211-level or higher and earns a B- or better, then he or she will also receive credit for the previous course in the sequence. The course must be taken before the end of the student's second year. This policy is not applicable to native speakers who were formally educated in the language through the high school level.

Native and heritage speakers must contact their advisor if they plan to take courses in their native or heritage language.

For further information, please consult your advisor or the Dean of Arts and Humanities.

**German (B.A.)**

**\*This program may not be declared after January 11, 2021.**

**Student Learning Outcomes for German:**

*Students will be able to:*

- Communicate (speak and comprehend) at the Advanced level according to ACTFL guidelines.
- Write at the Advanced level according to ACTFL guidelines.
- Write a research project in German focused on reading primary and secondary sources in German.
- Use appropriately and explain most grammatical structures of the German language.
- Demonstrate an understanding and appreciation of the perspectives and products of the cultures studied in themselves and in comparison with their own culture.
- Read, analyze and interpret literary texts in terms of themes, characters, structure, style, and overall textual strategies, and situate those texts in their cultural contexts.

**German majors** must complete a minimum of 20 credits (four courses) in residency (200-level or above) and a minimum of 15 credits over two semesters in an approved study-abroad program.

In exceptional cases, certain double majors who can prove that they cannot otherwise satisfy all requirements of both majors may apply for an exception of one semester for the full-year study-abroad requirement. Any double majors granted this exception still must obtain a minimum oral rating of Advanced.

**Majors must complete the following courses in residency**

- GER 211 - PLO Intermediate German I
- GER 212 - PLO Intermediate German II
- Two 300-level elective courses
- GER 496 - German Senior Research Project I (senior year)
- GER 497 - German Senior Research Project II (senior year)

**A minimum of 15 credits must be completed during a one-year (two-semester) study-abroad experience.**

Students must complete courses at the 300 (advanced) level or above that include one conversation and composition in German; one German phonetics; one German history, art or culture; one German literature; and one German elective. After completing the required course work, majors must take an oral interview on campus and receive a minimum rating of Advanced.

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- GER 211 - PLO Intermediate German I
- GER 212 - PLO Intermediate German II
- Four Core/Elective courses (16 credits total)

**Notes:**

Students with more than two years of German must take the online language placement exam before registering in a language course for academic credit, unless the student begins a new language. Students are not allowed to take GER 111 if they have completed high school level 3 or higher.

**Language Incentive Placement Policy:** Students who place into a modern language course at the 211-level or higher and earn a B- or better are eligible to receive credit for the previous course in the sequence.

**Language Placement Policy**

Language majors are required to participate in a BCA Study Abroad or another School-approved program for one academic year or equivalent of two separate semesters. Non-majors who have completed 212 or above also are encouraged to participate in the BCA or approved study-abroad programs.

All students with more than two full years of language preparation must take courses at the 112-level or above. The appropriate language level is determined by an online placement test. In the case of Japanese placement, students must contact the Japanese faculty.

If a student places into a modern language course at the 211-level or higher and earns a B- or better, then he or she will also receive credit for the previous course in the sequence. The course must be taken before the end of the student's second year. This policy is not applicable to native speakers who were formally educated in the language through the high school level.

Native and heritage speakers must contact their advisor if they plan to take courses in their native or heritage language.

For further information, please consult your advisor or the Dean of Arts and Humanities.

## **Graphic Design (B.A.)**

### **Student Learning Outcomes for Graphic Design:**

*Students will be able to:*

- The student will learn the principles of two-dimensional design and techniques of composing effective graphic designs with them.
- The student will learn to produce original works of graphic design using Adobe Creative Suite software.
- The student will learn to use the terminology of graphic design in assignment critiques and in interactions with clients.
- The student will ideate and create graphic designs for a range of client-specific projects.
- The student will learn about copyright laws, fair use policies and copyright infringement regarding the use of text and images on the web and in print.
- The student will prepare a professional portfolio suitable for job applications in the graphic design profession.

### **The Graphic Design major requires:**

- ART 105 - CE Drawing I
- ART 106 - CE Ceramics I or
- ART 120 - CE Sculpture I
- ART 157 - WCH Introduction to the History of Art II
- ART 204 - CE Fundamentals of Color and Design
- ART 207 - Introduction to Graphic Design
- ART 209 - Typography and Text Design
- ART 325 - Designing for the Web and Social Media
- ART 406 - Advanced Digital Arts

One course from the following:

- ART 230 - American Art

- ART 240 - NCH History of Japanese Art and Aesthetics (JA 240)
- ART 350 - Neoclassicism and Romanticism
- ART 340 - Modernism
- ART 280 - NCH World Architecture
- ART 360 - Italian Renaissance (HI 360)

Two courses from the following:

- ART 145 - CE Digital Photography (COM 145)
- COM 130 - Visual Communications
- COM 310 - New Media Production
- CW 386 - Word, Web, and Design
- ART 470-474 - Internship in Fine Arts

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or  
EN 150 - PLE Advanced Writing and Language
- ART 105 - CE Drawing I
- ART 120 - CE Sculpture I
- ART 157 - WCH Introduction to the History of Art II
- ART 207 - Introduction to Graphic Design
- MA 121 - MA Calculus I or  
MA 251 - MA Probability and Statistics
- Core course (4 credits)

**History (B.A.)**

**Student Learning Outcomes for History:**

*Students will be able to:*

- Draw effectively on primary and secondary sources to analyze historical developments in the U.S., Europe, and/or non-western world.
- Analyze major issues in historiography.
- Communicate effectively orally and in writing, as appropriate to the discipline of history.

**The History major requires 40 credits of course work:**

Surveys - One course must be taken in two of the three following areas of emphasis

- HI 101 - HUM United States History to 1877 or
- HI 102 - HUM United States History Since 1877
  
- HI 111 - NCH History of Pre-Modern Asia or
- HI 112 - NCH History of Modern Asia
  
- HI 114 - WCH Western Civilization I or
- HI 115 - WCH Western Civilization II

Electives - No more than one may be at the 100-level

- Four History electives

Upper Division - All courses must be at the 300-level

- One U.S. History course
- One European History course
- One Non-Western History course

Capstone - Enrollment limited to seniors

- HI 450 - Topics in Historiography

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
  
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
  
- HI 111 - NCH History of Pre-Modern Asia or
- HI 112 - NCH History of Modern Asia
  
- HI 114 - WCH Western Civilization I or
- HI 115 - WCH Western Civilization II
  
- Power of Language: Other Core course (4 credits)
- 100/200- Level History Elective course (4 credits)
- Two Elective courses (8 credits total)

**History and Social Studies Education Double Major Track:**

The requirements for the History major in the History and Social Studies Education double major track are listed below. The Social Studies Education requirements are listed separately.

- HI 101 - HUM United States History to 1877
- HI 102 - HUM United States History Since 1877
- HI 114 - WCH Western Civilization I or
- HI 115 - WCH Western Civilization II
- 20 credits of electives, no more than one course at the 100-level and can include as many as two of the following 2-credit Public Heritage courses:
  - PHS 201 - Elizabethtown History: Campus and Community (HON 201)
  - PHS 202 - Museum Studies and Museum Education
  - PHS 203 - Archival Resources and Digital Humanities

**Notes:**

Students pursuing a major in History may double major in Social Studies Education. Students electing to double-major may take up to 20 credits for up to two semesters (fall or spring) at Elizabethtown College without paying a credit overload fee.

**Japanese (B.A.)**

**Student Learning Outcomes for Japanese:**

*Students will be able to:*

- Communicate (speak and comprehend) at the Intermediate level according to ACTFL guidelines.
- Write at the Intermediate level according to ACTFL guidelines.
- Write a research project in English using primary sources in Japanese.
- Receive a passing grade in the JLPT Level 3 (in-house version).
- Demonstrate an understanding and appreciation of the perspectives and products of the cultures studied in themselves and in comparison with their own culture.
- Read, analyze and interpret literary texts in terms of themes, characters, structure, style, and overall textual strategies, and situate those texts in their cultural contexts.

**Japanese majors** are expected to complete a minimum of 40 credits in the language, 12 of which may be earned in one of the discipline-approved study-abroad programs in Japan.

Students with no formal instruction in Japanese are advised to enroll in this program at the first semester of their study at the College. Those with a previous background in Japanese must take a placement test to determine their proficiency level in the language.

Japanese majors must study abroad for two semesters, and the courses taken abroad may be substituted for two of the courses listed below. However, in exceptional cases, certain double majors who can prove that they cannot otherwise satisfy all requirements of both majors may apply for a substitution of one semester for the two-semester, study-abroad requirement, in which case the courses taken abroad would count for one of the courses

listed below. Any double majors granted this exception must pass an exit exam, equivalent to the Level 3 of the Japanese Language Proficiency Test (in-house version).

Students are advised to study abroad in their junior year.

After completing the required course work, Japanese majors must pass an exit exam, equivalent to the Level 3 of the Japanese Language Proficiency Test (JLPT) offered by the Japan Foundation and Japan Educational Exchanges and Services.

**Modern language majors in Japanese must complete:**

- JA 111 - PLO First Year Japanese 1
- JA 112 - PLO First Year Japanese 2
- JA 211 - PLO Second Year Japanese 1
- JA 212 - PLO Second Year Japanese 2
- JA 311 - Third Year Japanese 1
- JA 312 - Third Year Japanese 2
- JA 411 - Fourth Year Japanese 1
- JA 412 - Fourth Year Japanese 2
- JA 496 - Japanese Senior Research Project I
- JA 497 - Japanese Senior Research Project II

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- JA 111 - PLO First Year Japanese 1
- JA 112 - PLO First Year Japanese 2
- Four Core/Elective courses (16 credits)

**Notes:**

Students with more than two years of Japanese must take the language placement exam administered by the Japanese program advisor before registering in a language course for academic credit. Appointments may be scheduled with Dr. Mahua Bhattacharya or Dr. Nobuaki Takahashi.

Language Incentive Placement Policy: Students who place into a modern language course at the 211-level or higher and earn a B- or better are eligible to receive credit for the previous course in the sequence.

**Language Placement Policy**

Language majors are required to participate in a BCA Study Abroad or another School-approved program for one academic year or equivalent of two separate semesters. Non-majors who have completed 212 or above also are encouraged to participate in the BCA or approved study-abroad programs.

All students with more than two full years of language preparation must take courses at the 112-level or above. The appropriate language level is determined by an online placement test. In the case of Japanese placement, students must contact the Japanese faculty.

If a student places into a modern language course at the 211-level or higher and earns a B- or better, then he or she will also receive credit for the previous course in the sequence. The course must be taken before the end of the student's second year. This policy is not applicable to native speakers who were formally educated in the language through the high school level.

Native and heritage speakers must contact their advisor if they plan to take courses in their native or heritage language.

For further information, please consult your advisor or the Dean of Arts and Humanities.

## **Music (B.A.)**

### **Student Learning Outcomes for Music:**

*Students will be able to:*

- Perform proficiently with the creative and performance skills appropriate to the student's principal instrument.
- Identify and synthesize key components of Western tonal music theory and music history.
- Demonstrate mastery of aural skills including sight-reading and dictation (melodic and harmonic).
- Demonstrate piano skills appropriate to the needs of a studio teacher.

The requirements for the **Music major** are flexible and are determined by the needs and interests of each student.

**Under the guidance of a discipline advisor, each student designs a program that includes 54 credits of music courses, but must include the following:**

- MU 100 - Repertoire Class
- MU 101 - Theory I
- MU 102 - Theory II
- MU 103 - Aural Skills I
- MU 104 - Aural Skills II
- MU 117 - Functional Keyboard Skills I
- MU 118 - Functional Keyboard Skills II
- MU 201 - Theory III
- MU 202 - Theory IV
- MU 203 - Aural Skills III
- MU 204 - Aural Skills IV
- MU 211 - Music History: 1600-1850
- MU 212 - Music History: 1850 to the Present
- MU 217 - Functional Keyboard Skills III
- MU 218 - Functional Keyboard Skills IV
- MU 321 - Conducting I
- MU 441 - History of Early Music

- MU 495 - Seminar in Musicology
- Eight credits in Applied Music
- Six credits of Ensemble with at least one term's enrollment in MU 360 (Search Course Descriptions listing for MU 360)
- Ten credits of Music free electives
- The student must complete Modern Language 112 (or a higher course, if so placed by testing)
- A senior recital

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or  
EN 150 - PLE Advanced Writing and Language
- MU 100 - Repertoire Class
- MU 101 - Theory I
- MU 102 - Theory II
- MU 103 - Aural Skills I
- MU 104 - Aural Skills II
- MU 111 - Voice Class or  
MU 117 - Functional Keyboard Skills I  
MU 118 - Functional Keyboard Skills II
- First Applied (MU 268- MU 286) (both semesters)
- One additional Core course (4 credits)
- Ensemble

**Notes:**

Eight credits in one primary instrument or voice are required. Students whose primary instrument is not piano or organ should enroll in MU 117 first semester and MU 118 second semester. Students whose primary instrument is piano or organ should enroll in MU 111 first semester.

Students in the music program should be in an ensemble in the first year. Three credits of ensemble are required in the four years. Students interested in concert choir must audition.

Students are encouraged to take their creative expression requirement in a non-music course.

Competency through the 112-level of a modern language is required.

All first-year students must be enrolled in MU 100B in the fall semester.

## **Music Policies**

### **Preparatory Music Division**

The School of Arts and Humanities also offers a Preparatory Music Division that offers instruction to pre-college students, adults, and college students who desire to take instruction without credit. Instruction is available from the Division's faculty and other qualified teachers. Interested persons should contact Prof. Grant Moore, Director of the Preparatory Division.

### **Applied Music Lessons**

Students who register for applied music for credit must meet minimum standards established by the School and should contact the School office for a list of standards for each applied area. Students who have not attained the level necessary for credit may study through the Preparatory Division. Students in applied music advance as rapidly as their abilities permit. They must study technical exercises and literature from various musical periods and styles.

Students may register with or without credit for the established music ensembles and for other ensembles organized under faculty supervision; ensemble registration for credit may be repeated. All students must meet the standards for attendance at rehearsals and public performances established by the faculty Directors.

Applied music lessons and certain music ensembles may be counted for the Creative Expression requirement of the Core Program if taken as letter-graded for four semesters. An additional fee is charged for applied music lessons. Fees are printed on the master course schedule.

### **Transfer Credit for Aural Skills and Functional Keyboard Skills**

The Division of Fine and Performing Arts reserves the right to administer a diagnostic exam to verify a student's skill level PRIOR to awarding academic transfer credit for Aural Skills and Functional Keyboard Skills. This policy was established to ensure academic success at the appropriate level. ALL students accepted into a music program should contact the Fine and Performing Arts Division for more information on assessment of transfer credits.

### **Additional Accreditation**

Elizabethtown College is an accredited institutional member of the National Association of Schools of Music. The Music Therapy program is approved by the American Music Therapy Association.

## **Religious Studies (B.A.)**

**\*This program may not be declared after January 11, 2021.**

### **Student Learning Outcomes for Religious Studies:**

*Students will be able to:*

- Analyze religion from different perspectives using primary and secondary literature.
- Apply diverse theories and methods to examine religion.
- Evaluate how their work in various courses and other learning contexts in the program has prepared them to put their learning to work in the world.
- Integrate religious studies literature into their own commentary on religion in the public sphere.

**The Religious Studies major consists of 40 credits.**

The following course is required:

- REL 495 - Capstone in Religious Studies

Choose one of the following (4 credits):

- REL 205 - SSC Theories and Methods in the Study of Religion
- REL 253 - Theology Through Film
- REL 320 - Philosophy of Religion (PH 320)
- ILS 330 - Comparative Theology and Interfaith Engagement
- SO 317 - Sociology of Religion

Choose two of the following (8 credits):

- REL 287 - The Story of Christianity
- REL 290 - NCH Dharma Traditions: Hindu, Buddhist, Jain, and Sikh
- REL 293 - Islam

Choose one of the following (4 credits):

- REL 295 - WCH Abrahamic Traditions: Judaism, Christianity, Islam
- REL 225 - NCH The Hebrew Bible and Ancient Near East
- REL 226 - WCH The New Testament

Choose one of the following (4 credits):

- REL 103 - HUM Religion and Nonviolence
- REL 252 - Vocation and Church in the 21st Century
- REL 261 - Peacemaking and Social Justice in the Bible
- REL 267 - HUM Progressive Religion
- REL 284 - Anabaptist and Pietist Movements
- HRE 285 - HNR WCH Amish, Brethren, and Mennonites in the U.S. Since 1875
- HRE 289 - HNR Communal and Utopian Societies

Choose one of the following (4 credits):

- REL 470-474 - Internship in Religious Studies
- REL 490 - Independent Research in Religious Studies

Choose electives totaling at least 16 credits from the list below or you may choose additional courses from the above categories:

- REL 151 - Life Meaning and Purposeful Work
- IC 204 - CE/HUM Artistic Peacebuilding
- REL 213 - PLO Biblical Hebrew I

- REL 214 - Biblical Hebrew II
- REL 215 - Koiné Greek I
- REL 216 - Koiné Greek II
- REL 217 - PLO Sanskrit I
- REL 218 - Sanskrit II
- HI 235 - SSC Citizenship and Conscience
- REL 313 - Intermediate Biblical Hebrew
- REL 321 - The Bible and Race in the United States of America
- REL 323 - Women, Gender, and the Hebrew Bible
- REL 331 - Ethnicity, Gender, and Religion
- REL 344 - The Nonviolent Ethics of Martin Luther King, Jr.
- REL 364 - Amish Society (SO 364)
- REL 370-378 - Special Topics in Religious Studies
- REL 391 - Modern Hinduism
- REL 392 - Religion in China and Japan
- REL 393 - Indian Philosophy
- REL 480-489 - Independent Study in Religious Studies

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- MA 121 - MA Calculus I or
- MA 251 - MA Probability and Statistics
- REL 103 - HUM Religion and Nonviolence or
- REL 295 - WCH Abrahamic Traditions: Judaism, Christianity, Islam or
- One 200-Level Religious Studies course (4 credits)
- One Power of Languages: Other Core course (could include REL 213 or REL 217) (4 credits)
- One Creative Expression Core course (4 credits)
- Two Elective courses (8 credits total)

**Spanish (B.A.)**

**Student Learning Outcomes for Spanish:**

*Students will be able to:*

- Communicate (speak and comprehend) at the Advanced level according to ACTFL guidelines.
- Write at the Advanced level according to ACTFL guidelines.
- Write a research project in Spanish focused on reading primary and secondary sources in Spanish.
- Use appropriately and explain most grammatical structures of the Spanish language.

- Demonstrate an understanding and appreciation of the perspectives and products of the cultures studied in themselves and in comparison with their own culture.
- Read, analyze and interpret literary texts in terms of themes, characters, structure, style, and overall textual strategies, and situate those texts in their cultural contexts.

**Spanish majors** must complete a minimum of 20 credits in residency (four 300-level courses and SP 496 and SP 497) and a minimum of 15 credits (five courses) at the 300 (advanced) level or above in an approved study-abroad program over two semesters. Double majors may request to study abroad for only one semester. Students must complete non-survey courses that include one Spanish syntax, morphology and/or phonetics; one Spanish writing and/or speaking; one Spanish history, art and/or culture, one Spanish Literature, and one Spanish elective.

Other requirements include two oral interviews and a student portfolio (due November 30th or April 30th of the student's final semester). An initial oral interview must be completed prior to going abroad and a rating of Intermediate must be obtained. A second oral interview will be completed after the study-abroad experience has been completed and a rating of Advanced must be obtained.

**Majors must complete the following courses in residency**

- SP 305 - Spanish Conversation
- SP 315 - Spanish Grammar and Composition
- SP 319 - Spanish Linguistics
- SP 496 - Spanish Senior Research Project I (senior year)
- SP 497 - Spanish Senior Research Project II (senior year)

And at least one of the following course electives:

- SP 312 - Modern Spain
- SP 314 - Modern Hispanic America
- SP 323 - Introduction to Literature
- SP 325 - Spanish Service Learning
- SP 370-378 - Special Topics in Spanish

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- SP 211 - PLO Intermediate Spanish I
- SP 212 - PLO Intermediate Spanish II
- Four Core/Elective/Second major courses (16 credits total)

**Notes:**

Students with more than two years of Spanish must take the online language placement exam before registering in a language course for academic credit, unless the student begins a new language. Students are not allowed to take SP 111 if they have completed high school level 3 or higher.

Language Incentive Placement Policy: Students who place into a modern language course at the 211-level or higher and earn a B- or better are eligible to receive credit for the previous course in the sequence.

**Language Placement Policy**

Language majors are required to participate in a BCA Study Abroad or another School-approved program for one academic year or equivalent of two separate semesters. Non-majors who have completed 212 or above also are encouraged to participate in the BCA or approved study-abroad programs.

All students with more than two full years of language preparation must take courses at the 112-level or above. The appropriate language level is determined by an online placement test. In the case of Japanese placement, students must contact the Japanese faculty.

If a student places into a modern language course at the 211-level or higher and earns a B- or better, then he or she will also receive credit for the previous course in the sequence. The course must be taken before the end of the student's second year. This policy is not applicable to native speakers who were formally educated in the language through the high school level.

Native and heritage speakers must contact their advisor if they plan to take courses in their native or heritage language.

For further information, please consult your advisor or the Dean of Arts and Humanities.

**Spanish Education (B.A.)**

**Student Learning Outcomes for Spanish Education:**

*Students will be able to:*

- Critically evaluate the historical development of current theories of foreign language learning.
- Select, adapt, and create materials for effective foreign language instruction.
- Evaluate and implement effective technology for foreign language instruction.
- Plan and execute effective, standards-based foreign language instruction and integrated assessments of foreign language learning.
- Become engaged in foreign language teacher professional development.

Spanish Education majors must complete a minimum of 20 credits in residency (four 300-level courses and SP 496 and SP 497) and a minimum of 15 credits (five courses) at the 300 (advanced) level or above in an approved study-abroad program over two semesters. Double majors may request to study abroad for only one semester. Students must complete non-survey courses that include one Spanish syntax, morphology and/or phonetics; one Spanish writing and/or speaking; one Spanish history, art and/or culture, one Spanish literature, and one Spanish elective.

Other requirements include qualifying scores in PAPA exams and Praxis II exams, two Mathematics courses, two English (EN – English literature and English writing) courses, two oral proficiency interviews and a portfolio (due November 30th or April 30th of the student's final semester). An initial interview must be completed prior to going abroad and a rating of Intermediate must be obtained. A second oral interview will be completed after the study-abroad experience has been completed and a rating of Advanced must be obtained.

PLEASE NOTE: A complete list of the foundational requirements (including a list of approved English Literature courses) can be found in the EDUCATION MANUAL.

To ensure that all students are prepared to apply for formal acceptance, it is recommended that students take a minimum of 16 credit hours per semester.

#### **FOUNDATIONAL REQUIREMENTS:**

Each teacher candidate is expected to meet the following criteria and to use the guidelines to ensure a successful application for formal acceptance:

- Provide updated clearances prior to starting Education courses including a record of Act 34 (PA Criminal Record), PA Child Abuse, FBI Criminal History Report, and TB test. These clearances must be less than one year old. Clearances are required to be updated every year.
- Declare their Education major by the end of their First Year.
- Submit a student life clearance by March of their First Year. (Complete the top portion only and bring to Nicarry 143)
- Complete ED 105 and ED 150/ED 151 with earned grades of C or better- this should be done within the first year (ED 105 Fall and ED 150/151 Spring). ED 161 should be taken within the first 4 semesters (FY and Second year- but recommend during FY). \*Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.
- Meet all requirements for Formal Acceptance as outlined in the manual.
- Submit a Student Life Clearance by March of first year (submit to Education office)

#### **PROGRESSION TO FORMAL ACCEPTANCE:**

Participate in a planning meeting with advisor if issues or concerns arise during three GPA checkpoints conducted by the Education Program.

- Checkpoint #1: GPA verification will be completed at the end of the first semester of First year (December of FY). A minimum cumulative 2.80 is recommended. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA.
- Checkpoint #2: GPA verification will be completed at the end of the second semester of First year (May of FY). A minimum cumulative 2.80 should be achieved. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA. Students will begin work on a professional electronic portfolio, to be submitted at the time of application for formal acceptance.
- Prior to Checkpoint #3- Students should have completed or be in the process of completing 27 credit hours. This will ensure that requirements for Formal Acceptance can be achieved.
- Checkpoint #3: GPA verification will be completed at the end of the first semester of Second year (December of Second year). A minimum 2.80 needs to be maintained with the goal of a minimum 3.0 being achieved by end spring of Second year.

**FORMAL ACCEPTANCE needed for 300-Level ED courses:**

- Complete two Mathematics (MA) courses and two English (EN) courses (one writing composition and one literature).
- Complete 54 credit hours with a cumulative grade point average of 3.00 or higher.
- Successfully complete at least three courses with ED prefixes.
- Receive a satisfactory on student life clearance (re-check of previous clearance)
- Provide a record of ACT 34 (PA Criminal Record), PA Child Abuse, ACT 24, FBI Criminal History Report, and a TB medical clearance. These clearances must be less than one year old.
- Receive passing scores on the Basic Skills Assessment (PAPA or Praxis Core) or the SAT/ACT equivalent score as mandated by PDE and submit a copy of your official score report (Basic Skills exam) to the Education office.
- Provide a completed electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting the required competencies as defined by Danielson's Domains.

Students will begin creating an electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting required competencies. Final portfolio will be submitted as part of the Formal Acceptance application. Students typically apply for Formal Acceptance in the spring of the second year.

Approval of the Education Program and any other appropriate major program is necessary for the application to be successful. Students are evaluated at the conclusion of each semester in accordance with the Education Program Teacher Dispositions/Foundational Competencies Policy. Students may be advised or required to withdraw from a program at any time the Education advisors determines such action to be appropriate.

**Basic Skills Assessment Policy**

*General Requirements*

- 22 Pa. Code § 49.18 (Assessment) requires an assessment of basic skills, professional knowledge and practice and subject matter knowledge. The basic skills assessment is comprised of three individual tests covering reading, writing and mathematics.
- Candidates may combine individual tests from different vendors to meet the basic skills requirement.
- Basic Skills Assessments in Reading, Writing and Mathematics may be met using SAT, ACT, PAPA and/or Praxis Core scores or a combination thereof. (Students must pass the basic skills in order to receive formal acceptance into the program)
- Candidates electing to use tests from different vendors cannot use a composite score. They must meet the qualifying score for each individual test.

**Approved Basic Skills Assessments**

*The Pre-service Academic Performance Assessment (PAPA) modules in Reading, Writing and Mathematics.*

- Visit [www.pa.nesinc.com](http://www.pa.nesinc.com) to register for PAPA tests.
- Reading test 8001, Mathematics test 8002, Writing test 8003
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.

- A minimum score of 220 is required on the Reading module, 193 on the Mathematics module and 220 on the writing module. A composite scoring option is available.

*The Core Academic Skills for Educators (CORE) modules in Reading, Writing and Mathematics.*

- Visit [www.ets.org/praxis/pa](http://www.ets.org/praxis/pa) to register for CORE tests
- Reading test 5713, Mathematics test 5733, Writing test 5723
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 156 (Reading), 162 (Writing), and 142 (Mathematics) is required. A composite scoring option is available.

*The Scholastic Achievement Test (SAT)*

- The Scholastic Achievement Test (SAT) must achieve a minimum score of 27 (Reading), 26 (Mathematics), and 28 (Writing and Language). It is recommended that intended Education majors submit their SAT scores to Elizabethtown College. There is no composite scoring option. SAT scores may be combined with other tests.
- Submit official test scores in the vendor-sealed envelope and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

*The American College Test (ACT) Plus Writing. There is no composite scoring option.*

- The American College Test (ACT) Plus Writing must achieve a minimum score of 22 (Reading), 8 (Writing), 21 (Mathematics). \*Candidates that opt out of the Writing portion of the ACT will be required to take the writing portion of the Basic Skills Assessment.
- Submit official test scores and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality, in an envelope sealed by the test vendor. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

Older basic skills tests, such as the PPST Reading, Writing, and Mathematics, are accepted if taken at the time they were required in Pennsylvania. Refer to the testing CSPG 21 for more information about replaced tests.

### **Basic Skills Assessment Exceptions**

- The basic skills assessment requirement is waived for all certificates as of November 1, 2014 if the applicant completed an approved post-baccalaureate certification program.
- Experienced Out-of-State Instructional Certificate Exception: As of July 1, 2011, applicants submitting a copy of a current and valid out-of-state instructional certificate that is comparable in grade and content area, plus verification of two years of full-time teaching experience, are not required to take the basic skills assessments.
- Vocational Certificate Exception: Effective July 1, 2014, candidates in post-baccalaureate vocational instructional programs are not required to take the basic skills assessment in reading and writing. The basic skills mathematics assessment is still required for vocational level II certification.
- PDE implemented an alternative means to achieve exemption from the Basic Skills assessment testing requirements. At this time, the alternative is for the mathematics portion of the assessment only. The

Program will accept a grade of B (3.0) or higher in a specific college level math course. Program providers must identify the course(s) that best align with the competencies and best meet the PA Academic Standards.

- The program provider can use the courses within their programs that satisfy the required six credits of mathematics for program entry as the coursework for meeting the basic skills assessment if the competencies are included in the coursework.
- If a student has not met the exemption for the math portion of the basic skills assessment based on their ACT/SAT scores, they should consider the below courses on their schedule as these will meet the criteria put into place by PDE to be exempt from the mathematics portion of the Basic Skills Assessment. These are the only two approved courses that may be taken to meet the exemption. Students must achieve a grade of B or above in each course.
  - MA 205: Mathematics for the Elementary Teacher
  - MA 251: Probability and Statistics

### **Exit from the Programs**

Students seeking **award of the degree in the major only (without certification) must:**

- Receive approval of the Education Program and any other appropriate Program(s) for completion of their degree plan.
- Satisfy all requirements of the major, except the professional internship and Pennsylvania certification test results, with a cumulative/major grade point average of 2.00 or higher.
- Complete an alternative internship experience of at least six credits, as approved by the Education Program.

Students seeking **award of the degree in their major and certification must:**

- Satisfy all requirements of the major with the cumulative grade point average of 3.00 or higher.
- Earn a grade of Pass in the professional internship and senior seminar.
- Earn passing scores on the Pennsylvania Educator Certification Tests (PECT) and/or Praxis II series as it applies to your certification program. Students completing Early Childhood (PK-4) must take the PECT exam series, Elementary Middle Level (4-8) certifications take the Praxis series in core assessment and subject concentration, Secondary certification (7-12) take Praxis II in a content area and PK-12 (Music Education, Modern Languages – Spanish Education) must successfully complete the appropriate Fundamental Subjects: Content Knowledge Test and Praxis II in a content area. Graduate candidates in Special Education (PK-12) must take the PECT exam series in special education.

For a comprehensive listing of testing requirements in Pennsylvania, please see

<http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx#tab-1>.

Arrange for Basic Skills, PECT, and/or Praxis test scores to be sent to the Education Program showing passing scores on all required tests.

Complete two Mathematics (MA) courses and two English (EN) courses, one English Literature and one English Writing.

Formally and publicly present an electronic portfolio summarizing activities and experiences in professional education and demonstrating satisfaction of all required competencies.

Receive approval of the Education Program and appropriate major Program(s).

Submit the application for Pennsylvania certification to the Education Program.

**Modern languages majors in Spanish Education (Certification PK-12) must complete the following Education courses:**

- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- ED 306 - Methods of Modern Language Education PK-12
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 470 - Professional Internship
- ED 497 - Senior Seminar for Secondary Education
- SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)
- SED 222 - Foundations of Inclusive Education (MSE 522)

**Majors also must complete the following course offerings:**

- SP 305 - Spanish Conversation
- SP 315 - Spanish Grammar and Composition
- SP 319 - Spanish Linguistics
- SP 496 - Spanish Senior Research Project I
- SP 497 - Spanish Senior Research Project II

And one of the following course electives:

- SP 312 - Modern Spain
- SP 314 - Modern Hispanic America
- SP 323 - Introduction to Literature
- SP 325 - Spanish Service Learning
- SP 370-378 - Special Topics in Spanish

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- SP 211 - PLO Intermediate Spanish I
- SP 212 - PLO Intermediate Spanish II
- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- MA 121 - MA Calculus I
- One English Literature (Core and Guided-Writing and Research) course (4 credits)

**Notes:**

Students with more than two years of Spanish must take the online language placement exam before registering in a language course for academic credit, unless the student begins a new language. Students are not allowed to take SP 111 if they have completed high school level 3 or higher.

All Spanish Education majors need to take a Spanish course their first semester.

To comfortably finish their degree in four years, Spanish Education majors should start in SP 211 or higher.

Language Incentive Placement Policy: Students who place into a modern language course at the 211-level or higher and earn a B- or better are eligible to receive credit for the previous course in the sequence.

Education majors may substitute ED 224 for their Western-Cultural Heritage Core.

ED 105, ED 150, and ED 151 are approved to satisfy Social Science Core.

**Language Placement Policy**

Language majors are required to participate in a BCA Study Abroad or another School-approved program for one academic year or equivalent of two separate semesters. Non-majors who have completed 212 or above also are encouraged to participate in the BCA or approved study-abroad programs.

All students with more than two full years of language preparation must take courses at the 112-level or above. The appropriate language level is determined by an online placement test. In the case of Japanese placement, students must contact the Japanese faculty.

If a student places into a modern language course at the 211-level or higher and earns a B- or better, then he or she will also receive credit for the previous course in the sequence. The course must be taken before the end of the student's second year. This policy is not applicable to native speakers who were formally educated in the language through the high school level.

Native and heritage speakers must contact their advisor if they plan to take courses in their native or heritage language.

For further information, please consult your advisor or the Dean of Arts and Humanities.

**Bachelor of Music**

**Music Education (B.M.)**

**Student Learning Outcomes for Music Education:**

*Students will be able to:*

- Perform proficiently with the creative and performance skills appropriate to the student's principal instrument.
- Identify and synthesize key components of western tonal music theory and music history.
- Demonstrate mastery of aural skills including sight-reading and dictation (melodic and harmonic).

- Demonstrate the ability to synthesize theoretical knowledge and practical skills in order to plan, teach, and assess classroom teaching in the PK–12 school environment.
- Perform on secondary instruments including piano, guitar, voice, and classroom instruments at a level appropriate to teach in the PK–12 school setting.
- Synthesize, integrate, and adapt past and current music teaching and learning theories in the context of varying teaching placements and situations.
- Display attitudes and attributes that are consistent with the level of professionalism expected from public and private school teachers.

For music education (PK-12) majors, MU 211 and MU 212 together will satisfy the Western Cultural Heritage Area of Understanding for Core. Admission to the Music Education program is dependent upon meeting the general requirements for admission to the undergraduate program. Please refer to the course catalog for the admission requirements for the undergraduate program of the School of Human and Health Services. Upon completion of this degree program, students are eligible to obtain the Pennsylvania Instructional I Teaching Certificate. The Music Education major is approved by the Pennsylvania Department of Education. This program can be completed in four years but may require additional summer coursework. Because of the requirements from the Pennsylvania Department of Education and National Association of Schools of Music, the Music Education curriculum requires one semester of overload in the spring semester of the junior year (19 credits).

PLEASE NOTE: A complete list of the foundational requirements (including a list of approved English Literature courses) can be found in the EDUCATION MANUAL.

To ensure that all students are prepared to apply for formal acceptance, it is recommended that students take a minimum of 16 credit hours per semester.

#### **FOUNDATIONAL REQUIREMENTS:**

Each teacher candidate is expected to meet the following criteria and to use the guidelines to ensure a successful application for formal acceptance:

- Provide updated clearances prior to starting Education courses including a record of Act 34 (PA Criminal Record), PA Child Abuse, FBI Criminal History Report, and TB test. These clearances must be less than one year old. Clearances are required to be updated every year.
- Declare their Education major by the end of their First Year.
- Submit a student life clearance by March of their First Year. (Complete the top portion only and bring to Nicarry 143)
- Complete ED 105 and ED 150/ED 151 with earned grades of C or better- this should be done within the first year (ED 105 Fall and ED 150/151 Spring). ED 161 should be taken within the first 4 semesters (FY and Second year- but recommend during FY). \*Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.
- Meet all requirements for Formal Acceptance as outlined in the manual.
- Submit a Student Life Clearance by March of first year (submit to Education office)

#### **PROGRESSION TO FORMAL ACCEPTANCE:**

Participate in a planning meeting with advisor if issues or concerns arise during three GPA checkpoints conducted by the Education Program.

- Checkpoint #1: GPA verification will be completed at the end of the first semester of First year (December of FY). A minimum cumulative 2.80 is recommended. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA.
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- Prior to Checkpoint #3- Students should have completed or be in the process of completing 27 credit hours. This will ensure that requirements for Formal Acceptance can be achieved.
- Checkpoint #3: GPA verification will be completed at the end of the first semester of Second year (December of Second year). A minimum 2.80 needs to be maintained with the goal of a minimum 3.0 being achieved by end spring of Second year.

**FORMAL ACCEPTANCE needed for 300-Level ED courses:**

- Complete two Mathematics (MA) courses and two English (EN) courses (one writing composition and one literature).
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- Successfully complete at least three courses with ED prefixes.
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- A minimum score of 220 is required on the Reading module, 193 on the Mathematics module and 220 on the writing module. A composite scoring option is available.

*The Core Academic Skills for Educators (CORE) modules in Reading, Writing and Mathematics.*

- Visit [www.ets.org/praxis/pa](http://www.ets.org/praxis/pa) to register for CORE tests
- Reading test 5713, Mathematics test 5733, Writing test 5723
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 156 (Reading), 162 (Writing), and 142 (Mathematics) is required. A composite scoring option is available.

*The Scholastic Achievement Test (SAT)*

- The Scholastic Achievement Test (SAT) must achieve a minimum score of 27 (Reading), 26 (Mathematics), and 28 (Writing and Language). It is recommended that intended Education majors submit their SAT scores to Elizabethtown College. There is no composite scoring option. SAT scores may be combined with other tests.
- Submit official test scores in the vendor-sealed envelope and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

*The American College Test (ACT) Plus Writing. There is no composite scoring option.*

- The American College Test (ACT) Plus Writing must achieve a minimum score of 22 (Reading), 8 (Writing), 21 (Mathematics). \*Candidates that opt out of the Writing portion of the ACT will be required to take the writing portion of the Basic Skills Assessment.
- Submit official test scores and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality, in an envelope sealed by the test vendor. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

Older basic skills tests, such as the PPST Reading, Writing, and Mathematics, are accepted if taken at the time they were required in Pennsylvania. Refer to the testing CSPG 21 for more information about replaced tests.

### Basic Skills Assessment Exceptions

- The basic skills assessment requirement is waived for all certificates as of November 1, 2014 if the applicant completed an approved post-baccalaureate certification program.
- Experienced Out-of-State Instructional Certificate Exception: As of July 1, 2011, applicants submitting a copy of a current and valid out-of-state instructional certificate that is comparable in grade and content area, plus verification of two years of full-time teaching experience, are not required to take the basic skills assessments.
- Vocational Certificate Exception: Effective July 1, 2014, candidates in post-baccalaureate vocational instructional programs are not required to take the basic skills assessment in reading and writing. The basic skills mathematics assessment is still required for vocational level II certification.
- PDE implemented an alternative means to achieve exemption from the Basic Skills assessment testing requirements. At this time, the alternative is for the mathematics portion of the assessment only. The Program will accept a grade of B (3.0) or higher in a specific college level math course. Program providers must identify the course(s) that best align with the competencies and best meet the PA Academic Standards.
  - The program provider can use the courses within their programs that satisfy the required six credits of mathematics for program entry as the coursework for meeting the basic skills assessment if the competencies are included in the coursework.
  - If a student has not met the exemption for the math portion of the basic skills assessment based on their ACT/SAT scores, they should consider the below courses on their schedule as these will meet the criteria put into place by PDE to be exempt from the mathematics portion of the Basic Skills Assessment. These are the only two approved courses that may be taken to meet the exemption. Students must achieve a grade of B or above in each course.
    - MA 205: Mathematics for the Elementary Teacher
    - MA 251: Probability and Statistics

### Exit from the Programs

Students seeking **award of the degree in the major only (without certification)** must:

- Receive approval of the Education Program and any other appropriate Program(s) for completion of their degree plan.
- Satisfy all requirements of the major, except the professional internship and Pennsylvania certification test results, with a cumulative/major grade point average of 2.00 or higher.
- Complete an alternative internship experience of at least six credits, as approved by the Education Program.

Students seeking **award of the degree in their major and certification** must:

- Satisfy all requirements of the major with the cumulative grade point average of 3.00 or higher.
- Earn a grade of Pass in the professional internship and senior seminar.
- Earn passing scores on the Pennsylvania Educator Certification Tests (PECT) and/or Praxis II series as it applies to your certification program. Students completing Early Childhood (PK-4) must take the PECT exam series, Elementary Middle Level (4-8) certifications take the Praxis series in core assessment and

subject concentration, Secondary certification (7-12) take Praxis II in a content area and PK-12 (Music Education, Modern Languages – Spanish Education) must successfully complete the appropriate Fundamental Subjects: Content Knowledge Test and Praxis II in a content area. Graduate candidates in Special Education (PK-12) must take the PECT exam series in special education.

For a comprehensive listing of testing requirements in Pennsylvania, please see  
<http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx#tab-1>.

Arrange for Basic Skills, PECT, and/or Praxis test scores to be sent to the Education Program showing passing scores on all required tests.

Complete two Mathematics (MA) courses and two English (EN) courses, one English Literature and one English Writing.

Formally and publicly present an electronic portfolio summarizing activities and experiences in professional education and demonstrating satisfaction of all required competencies.

Receive approval of the Education Program and appropriate major Program(s).

Submit the application for Pennsylvania certification to the Education Program.

**Music Education requires:**

- MU 100 - Repertoire Class
- MU 101 - Theory I
- MU 102 - Theory II
- MU 103 - Aural Skills I
- MU 104 - Aural Skills II
  
- MU 111 - Voice Class **Or**
- MU 133 - Diction for Singers
  
- MU 117 - Functional Keyboard Skills I
  
- MU 118 - Functional Keyboard Skills II **Or**
- MU 268 - CE Voice
  
- MU 119 - Guitar Class I
- MU 130 - Survey of Music Education
- MU 201 - Theory III
- MU 202 - Theory IV
- MU 203 - Aural Skills III
- MU 204 - Aural Skills IV
- MU 205 - NCH World Music
- MU 211 - Music History: 1600-1850
- MU 212 - Music History: 1850 to the Present
- MU 217 - Functional Keyboard Skills III
- MU 218 - Functional Keyboard Skills IV

- MU 230 - Music Teaching and Learning
- MU 231 - Brass Class
- MU 232 - Woodwind Class
- MU 234 - Percussion Class
- MU 237 - String Class
- MU 321 - Conducting I
- MU 322 - Conducting II
- MU 330 - General Music Methods and Materials
- MU 331 - General Music Field Experience
- MU 332 - Music Technology
- MU 433 - Secondary Music Techniques and Materials
- MU 434 - Secondary Music Techniques and Materials Lab
- MU 440 - Arranging
- MU 475 - Professional Internship in Music Education
- MU 495 - Seminar in Musicology
- A minimum of seven additional credits of Applied Music study
- Two semesters of MU 363 or MU 364
- Seven semesters of participation in other Ensemble(s) with at least one term's enrollment in MU 360 (Search Course Descriptions listing for MU 360)
- A senior recital
- Proficiency examinations in piano, voice and guitar
- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 497 - Senior Seminar for Secondary Education
- SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)
- SED 222 - Foundations of Inclusive Education (MSE 522)
- Two English courses for Education certification, one literature and one writing (EN 100 or EN 150)
- Two math courses for Education certification

**Additional Requirements for Music Education:**

A Music Education major may not enroll in a course required for that major unless a grade of C- or better has been earned in all prerequisite courses. To graduate, a Music Education major must maintain the following standards:

- A Music Education major must earn a grade of C- or better in all music and music education courses.
- A Music Education major must satisfy the standards and requirements of the educational practicum and student-teaching experiences.
- Provisional acceptance must be met as a prerequisite to all 200-level education courses.
- Formal acceptance must be met as a prerequisite to all 300-level education and methods courses.

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language **Or**
- EN 150 - PLE Advanced Writing and Language

- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- MU 100 - Repertoire Class
- MU 101 - Theory I
- MU 102 - Theory II
- MU 103 - Aural Skills I
- MU 130 - Survey of Music Education
- MU 332 - Music Technology
  
- MU 111 - Voice Class **Or**
- MU 133 - Diction for Singers
  
- MU 117 - Functional Keyboard Skills I **Or**
- MU 119 - Guitar Class I
  
- MU 118 - Functional Keyboard Skills II **Or**
- MU 268 - CE Voice
  
- MU 363 - CE Community Chorus **Or**
- MU 364 - CE Treble Choir
  
- MU 231 - Brass Class **Or**
- MU 237 - String Class
  
- MU 120 - Guitar Class II (Optional)
- One English Literature (Core and Guided-Writing and Research) course (4 credits)
- Ensemble
- First Applied Instruction (MU 268- MU 286)

**Notes:**

Students must take Applied Instruction and an Ensemble every semester.

Students whose primary instrument is not piano or organ must take MU 117A in the fall semester and MU 118 in the spring semester.

Given PDE regulations, two English and two Math courses must be completed by the end of the sophomore year.

English literature is recommended over math in the spring semester, because the sophomore curriculum is designed around the opportunity to complete the mathematics core. To ensure the English literature course is accepted by the PDE, students should refer to the Education Program Handbook.

The Praxis tests should be taken at the beginning of the Fourth year.

Education majors may substitute ED 224 for their Western-Cultural Heritage Core.

ED150 and ED 151 are approved to satisfy Social Science Core.

## **Music Policies**

### **Preparatory Music Division**

The School of Arts and Humanities also offers a Preparatory Music Division that offers instruction to pre-college students, adults, and college students who desire to take instruction without credit. Instruction is available from the Division's faculty and other qualified teachers. Interested persons should contact Prof. Grant Moore, Director of the Preparatory Division.

### **Applied Music Lessons**

Students who register for applied music for credit must meet minimum standards established by the School and should contact the School office for a list of standards for each applied area. Students who have not attained the level necessary for credit may study through the Preparatory Division. Students in applied music advance as rapidly as their abilities permit. They must study technical exercises and literature from various musical periods and styles.

Students may register with or without credit for the established music ensembles and for other ensembles organized under faculty supervision; ensemble registration for credit may be repeated. All students must meet the standards for attendance at rehearsals and public performances established by the faculty Directors.

Applied music lessons and certain music ensembles may be counted for the Creative Expression requirement of the Core Program if taken as letter-graded for four semesters. An additional fee is charged for applied music lessons. Fees are printed on the master course schedule.

### **Transfer Credit for Aural Skills and Functional Keyboard Skills**

The Division of Fine and Performing Arts reserves the right to administer a diagnostic exam to verify a student's skill level PRIOR to awarding academic transfer credit for Aural Skills and Functional Keyboard Skills. This policy was established to ensure academic success at the appropriate level. ALL students accepted into a music program should contact the Fine and Performing Arts Division for more information on assessment of transfer credits.

### **Additional Accreditation**

Elizabethtown College is an accredited institutional member of the National Association of Schools of Music. The Music Therapy program is approved by the American Music Therapy Association.

## **Music Therapy (B.M.)**

### **Student Learning Outcomes for Music Therapy:**

*Students will be able to:*

- Perform proficiently with the creative and performance skills appropriate to the student's principal instrument.
- Identify and synthesize key components of Western tonal music theory and music history.
- Demonstrate mastery of aural skills including sight-reading and dictation (melodic and harmonic).
- Implement music and non-music methods and techniques that effectively assist clients in modifying responses identified in their assessment, treatment, session, and termination plans.
- Communicate client progress through grammatically correct, detailed written and oral reports to colleagues, supervisors, and parents/caretakers.

- Perform proficient vocal, guitar, and keyboard skills to effectively lead and accompany clients during music therapy sessions.
- Demonstrate professional skills and physical and emotional stability necessary for working as a music therapist.
- Read, critique, and apply research to their music therapy work.

For Music Therapy majors, MU 211 and MU 212 together will satisfy the Western Cultural Heritage Area of Understanding for Core.

An approximately six-month long internship in an approved clinical facility is required for the Music Therapy degree and is taken after the completion of the four-year Music Therapy program. Upon completion of this degree program, students are eligible to sit for the Music Therapy Certification Board Exam leading to Board Certification as a Music Therapist. The Music Therapy program is approved by the American Music Therapy Association.

**Music Therapy requires:**

- MU 100 - Repertoire Class
- MU 101 - Theory I
- MU 102 - Theory II
- MU 103 - Aural Skills I
- MU 104 - Aural Skills II
- MU 111 - Voice Class or  
• MU 117 - Functional Keyboard Skills I
- MU 118 - Functional Keyboard Skills II or  
• MU 268 - CE Voice
- MU 119 - Guitar Class I or  
• MU 275 - CE Guitar
- MU 150 - Professional Seminar
- MU 151 - Introduction to Music Therapy
- MU 152 - Music Therapy and Clinical Populations
- MU 201 - Theory III
- MU 202 - Theory IV
- MU 203 - Aural Skills III
- MU 204 - Aural Skills IV
- MU 205 - NCH World Music
- MU 211 - Music History: 1600-1850
- MU 212 - Music History: 1850 to the Present
- MU 217 - Functional Keyboard Skills III
- MU 218 - Functional Keyboard Skills IV
- MU 236 - Percussion for Music Therapy
- MU 241 - Music Therapy Methods and Techniques I
- MU 253 - Music Therapy Methods and Techniques II
- MU 254 - Practical Experiences I: Music Therapy

- MU 321 - Conducting I
- MU 332 - Music Technology
- MU 353 - Clinical Improvisation and Composition I
- MU 354 - Clinical Improvisation and Composition II
- MU 355 - Practical Experiences II: Music Therapy
- MU 356 - Practical Experiences III: Music Therapy
- MU 357 - Music Therapy Methods and Techniques III
- MU 358 - Psychology of Music and Research Methods I
- MU 454 - Psychology of Music and Research Methods II
- MU 457 - Practical Experiences IV: Music Therapy
- MU 458 - Practical Experiences V: Music Therapy
- MU 459 - Music Therapy Methods and Techniques IV
- MU 479 - Professional Internship in Music Therapy
- MU 495 - Seminar in Musicology
  
- PSY 247 - Lifespan Development or
- PSY 240 - Child and Adolescent Development or
- PSY 245 - Adult Development and Aging or
- PSY 250 - Psychopathology
  
- A minimum of eight additional credits in Applied Music instruction
- A minimum of five credits in Ensemble with at least one term's enrollment in Music 360 (Search Course Descriptions listing for MU 360)
- Proficiency exams in piano, voice, and guitar
- A senior recital

Specific courses to be included in the student's Core Program are:

- PSY 105 - SSC Introduction to Psychology
- NEU 125 - NPS Introduction to Neuroscience
- BIO 200 - NPS Human Anatomy and Physiology: The Basics
- MA 251 - MA Probability and Statistics

### **Additional Requirements for Music Therapy**

A Music Therapy major may not enroll in a music or music therapy course required for that major unless a grade of C- or better has been earned in all prerequisite courses. To graduate, a Music Therapy major must maintain the following standards:

A Music Therapy major must earn a grade of C- or better in all music and music therapy courses.

A Music Therapy major must satisfy the standards and requirements in all fieldwork education, including clinical practicums and the internship.

**First Year Suggested Courses:**

- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- MU 100 - Repertoire Class B
- MU 101 - Theory I
- MU 103 - Aural Skills I
- MU 111 - Voice Class or
- MU 117 - Functional Keyboard Skills I
- MU 150 - Professional Seminar
- MU 151 - Introduction to Music Therapy
- MU 102 - Theory II
- MU 104 - Aural Skills II
- MU 118 - Functional Keyboard Skills II
- MU 119 - Guitar Class I
- MU 152 - Music Therapy and Clinical Populations
- MU 236 - Percussion for Music Therapy
- Primary Instrument (MU 268 - MU 286)
- Ensemble
- PSY 105 - SSC Introduction to Psychology

**Notes:**

MU 150 and MU 100 are required each semester.

Proficiency in piano, voice, and guitar is required. If piano or organ is the primary instrument, the student must take MU 269 or MU 270, and MU 111 for the fall semester. All other music therapy students must take MU 117.

Five credits in ensemble are required. Students need to be enrolled for one credit in the fall semester.

Students interested in Concert Choir must audition.

A minimum grade of C- is required in all courses required for the major.

Students in music therapy can take their Creative Expression core requirement as Applied lessons or Ensembles.

All first-year students need to be enrolled in MU 100B in the fall semester.

MU 211 and MU 212 count for Western Cultural Heritage core. The combination of two biology offerings -- BIO101 or 111, and BIO 200 or BIO 201 -- will satisfy the Natural and Physical Science core.

## **Music Policies**

### **Preparatory Music Division**

The School of Arts and Humanities also offers a Preparatory Music Division that offers instruction to pre-college students, adults, and college students who desire to take instruction without credit. Instruction is available from the Division's faculty and other qualified teachers. Interested persons should contact Prof. Grant Moore, Director of the Preparatory Division.

### **Applied Music Lessons**

Students who register for applied music for credit must meet minimum standards established by the School and should contact the School office for a list of standards for each applied area. Students who have not attained the level necessary for credit may study through the Preparatory Division. Students in applied music advance as rapidly as their abilities permit. They must study technical exercises and literature from various musical periods and styles.

Students may register with or without credit for the established music ensembles and for other ensembles organized under faculty supervision; ensemble registration for credit may be repeated. All students must meet the standards for attendance at rehearsals and public performances established by the faculty Directors.

Applied music lessons and certain music ensembles may be counted for the Creative Expression requirement of the Core Program if taken as letter-graded for four semesters. An additional fee is charged for applied music lessons. Fees are printed on the master course schedule.

### **Transfer Credit for Aural Skills and Functional Keyboard Skills**

The Division of Fine and Performing Arts reserves the right to administer a diagnostic exam to verify a student's skill level PRIOR to awarding academic transfer credit for Aural Skills and Functional Keyboard Skills. This policy was established to ensure academic success at the appropriate level. ALL students accepted into a music program should contact the Fine and Performing Arts Division for more information on assessment of transfer credits.

### **Additional Accreditation**

Elizabethtown College is an accredited institutional member of the National Association of Schools of Music. The Music Therapy program is approved by the American Music Therapy Association.

## **Bachelor of Arts + Bachelor of Science**

### **Individualized Major (B.A.)**

An Individualized Major at Elizabethtown College allows students to pursue unique disciplinary trajectories by working in close collaboration with faculty from multiple disciplines.

### **Program Requirements**

A student who wishes to declare an individualized major will ordinarily need to do so in writing only **after** completing 30 credit hours and **before** completing 48 credit hours.

A student seeking to pursue an individualized major will select faculty co-advisors from two different disciplines, or a faculty advisor and an advisor from the Academic Advising office

In consultation with the aforementioned co-advisors, the student will submit a program of study to the Registration and Records Office that includes:

- a personal statement of intent (300-word minimum) that explains the unique nature of the individualized major; the intellectual, career, and/or creative path; and the student learning outcomes that the student has in mind.
- explanation of how (at least) two Signature Learning Experiences will be completed as part of the proposed academic course of study.
- be composed of no less than 40 credit hours

Students cannot propose an individualized major necessitating certification by an external accrediting body. Upon formal approval, the Registration and Records Office will officially update the student's academic record with the individualized major.

Any changes to the program study must be approved by the Registration and Records Office and both co-advisors **before** additional and/or alternate courses will count toward the student's major requirements.

#### Course Requirements

- at least 4 courses at the 300- or 400- level
- no more than 4 courses at the 100-level
- ordinarily, the program of study should include at least 16 credit hours from each of two different disciplines

### Minors

#### Art History Minor

**\*This program may not be declared after January 11, 2021.**

**The Art History minor requires:**

- ART 155 - WCH Introduction to the History of Art I
- ART 157 - WCH Introduction to the History of Art II

Three 200- to 400-level Art History electives:

- ART 230 - American Art
- ART 240 - NCH History of Japanese Art and Aesthetics (JA 240)
- ART 350 - Neoclassicism and Romanticism
- ART 340 - Modernism
- ART 270 - Art of Africa, Asia, & Americas
- ART 280 - NCH World Architecture
- ART 360 - Italian Renaissance (HI 360)
- ART 470-474 - Internship in Fine Arts

## Arts Administration Minor

The minor curriculum requires the completion of 24 credits. There are five parts of the minor: Business courses, Arts courses, an internship, a MOOC, and a capstone course. For further information, contact the Arts Administration Minor Advisor, Dr. James Haines.

### Student Learning Outcomes:

*Upon completion of the minor, students will be able to:*

- Identify and explain the cultural role of the fine and performing arts in society.
- Articulate ways in which legal and business acumen and strategy address value to an arts/cultural institution through risk-management, business planning, and problem-solving.
- Demonstrate the ability to apply business principles to arts management.

### Business: 12 credits

- BA 101 - Business and Society
- BA 215 - Principles of Marketing
- BA 265 - Management and Organizational Behavior or
- FBE 380 - Entrepreneurship

### Fine and Performing Arts: Eight credits from the following:

- ART 145 - CE Digital Photography (COM 145)
- ART 157 - WCH Introduction to the History of Art II
- ART 204 - CE Fundamentals of Color and Design
- ART 230 - American Art
- ART 340 - Modernism
- DA 101 - CE Introduction to Modern Dance
- DA 102 - CE Introduction to Ballet
- DA 103 - CE Introduction to Jazz Dance
- MU 105 - WCH Introduction to Western Music Literature
- MU 125 - WCH American Popular Music from Ragtime to Rock
- MU 211 - Music History: 1600-1850
- MU 212 - Music History: 1850 to the Present
- Applied Music/Ensemble CE (Four one-credit courses maximum)

### Internship: 2 credits

May petition faculty for a portfolio as a substitute

- ART 470-474 - Internship in Fine Arts
- BA 470-474 - Internship in Business
- MU 470-474 - Internship in Music

**One MOOC Component:**

(The MOOC must be approved by the advisor.) Examples include:

- Intro to Music Business (Berklee)
- Creativity and Entrepreneurship (Berklee)
- Finance for Everyone: Tools for Smart Decision Making (Michigan)
- Intellectual Property Law (Penn)

**Capstone: 2 credits**

- FPA 490 - Arts Administration Strategy (BA 490)

**Arts Minor**

**The Arts minor requires:**

- ART 105 - CE Drawing I
- ART 106 - CE Ceramics I or
- ART 120 - CE Sculpture I
- ART 155 - WCH Introduction to the History of Art I or
- ART 157 - WCH Introduction to the History of Art II

One studio art elective course:

- ART 204 - CE Fundamentals of Color and Design
- ART 205 - Painting I
- ART 206 - Ceramics II
- ART 207 - Introduction to Graphic Design
- ART 209 - Typography and Text Design
- ART 210 - Drawing II
- ART 251 - Printmaking I
- ART 406 - Advanced Digital Arts

One 200-400 level art history elective course:

- ART 230 - American Art
- ART 240 - NCH History of Japanese Art and Aesthetics (JA 240)
- ART 350 - Neoclassicism and Romanticism
- ART 340 - Modernism
- ART 270 - Art of Africa, Asia, & Americas
- ART 280 - NCH World Architecture
- ART 360 - Italian Renaissance (HI 360)
- ART 470-474 - Internship in Fine Arts

## Asian Studies Minor

An **Asian Studies minor** offers students an opportunity for cohesive study of Asia. The interdisciplinary program allows students to advance their study of Asian history, culture, language, and society and can serve as preparation for a variety of careers and graduate school options.

### *Student Learning Outcomes*

*Students will be able to:*

- Reason, analyze and engage in critical thinking. Students will make, systematically evaluate, and, if necessary, refute arguments and claims—both their own and those of others.
- Apply and integrate different strands of interdisciplinary learning and comprehend interconnections in the process of gaining knowledge and experience.
- Demonstrate beginning-level communication skills, including writing, speaking, and listening, in at least one Asian language.

The requirements for an Asian Studies minor are:

#### **Asian language courses:**

- Two semesters (8 credits) of one Asian language (currently Japanese or Sanskrit). See Course Descriptions.

#### **Four electives (16 credits) in two different disciplines from the following:**

- FBE 280 - Global Family Business
- HI 111 - NCH History of Pre-Modern Asia
- HI 112 - NCH History of Modern Asia
- HI 226 - History of Modern China
- HI 225 - History of Modern Japan
- HI 318 - Greater China
- HI 490 - Independent Research in History
- JA 240 - NCH History of Japanese Art and Aesthetics (ART 240)
- JA 245 - NCH From Anime to Zen: Japanese Society, Business, and Culture
- JA 250 - Discovering Contemporary Japan: A Three-Week Cultural Immersion Experience
- JA 460 - From Murasaki to Murakami (EN 460)
- JA 496 - Japanese Senior Research Project I and
- JA 497 - Japanese Senior Research Project II
- REL 290 - NCH Dharma Traditions: Hindu, Buddhist, Jain, and Sikh
- REL 391 - Modern Hinduism
- REL 392 - Religion in China and Japan
- REL 393 - Indian Philosophy
- AS 490 - Capstone Directed Research Project

## **Creative Writing Minor**

The **Creative Writing minor** requires six courses from those listed below. All minors take CW 386 as an interdisciplinary capstone course their junior or senior year. Of the five elective courses, at least four must be writing-based. No more than three of the five elective courses can be from the same program. It is recommended that students with limited experience in creative writing take EN 180 early in their course of study.

### **Writing-based courses:**

- COM 424 - Script and Screenwriting (prerequisite waived for Creative Writing minors)
- EN 180 - CE Introduction to Creative Writing
- EN 280 - Creative Writing - Poetry, Prose
- EN 281 - CE Writing and Analyzing the Short Story
- EN 286 - Creative Non-Fiction
- EN 287 - Writing Children's Literature
- EN 288 - CE Young Adult Literature
- EN 381 - Advanced Fiction Writing

### **Image-based courses:**

- ART 105 - CE Drawing I
- ART 207 - Introduction to Graphic Design (prerequisite waived for Creative Writing minors)
- ART 145 - CE Digital Photography (COM 145)
- COM 145 - CE Digital Photography (ART 145)

### **Capstone course:**

- CW 386 - Word, Web, and Design

## **English Literature Minor**

### **The English Literature minor requires:**

- One 300-level genre or themes elective
- One 400-level authors elective
- One literature or writing elective, 185 or higher

### **Two courses from:**

- EN 200 - Major British Writers
- EN 220 - WCH British Literature: Medieval, Renaissance, or 18th Century (Pre-1800)
- EN 230 - WCH British Literature: Romantic, Victorian, or Modern (Post-1800)
- EN 240 - WCH American Literature: Revolution to Civil War, Realist, or Modern

**Note:**

- One 300-level or 400-level course must be a pre-1800 course.

## **English Professional Writing Minor**

**The English Professional Writing minor requires:**

- EN 185 - Introduction to Professional Writing
- Two 200- or 300-level writing electives (middle digit 8)
- One 200-level British or American literature elective
- One 300- or 400-level literature elective

## **French Minor**

**\*This program may not be declared after January 11, 2021.**

**The French minor requirements are:**

A minimum of four courses or 16 credits. At least two of the four courses below must be completed on the Elizabethtown College campus. The remaining two courses may be completed on campus, in a BCA program, or in another well-established study-abroad program. After completing the required course work, students must take an oral interview and receive a minimum rating of Intermediate High.

- FR 211 - PLO Intermediate French I
- FR 212 - PLO Intermediate French II
- Two 300-level French electives

## **Language Placement Policy**

Language majors are required to participate in a BCA Study Abroad or another School-approved program for one academic year or equivalent of two separate semesters. Non-majors who have completed 212 or above also are encouraged to participate in the BCA or approved study-abroad programs.

All students with more than two full years of language preparation must take courses at the 112-level or above. The appropriate language level is determined by an online placement test. In the case of Japanese placement, students must contact the Japanese faculty.

If a student places into a modern language course at the 211-level or higher and earns a B- or better, then he or she will also receive credit for the previous course in the sequence. The course must be taken before the end of the student's second year. This policy is not applicable to native speakers who were formally educated in the language through the high school level.

Native and heritage speakers must contact their advisor if they plan to take courses in their native or heritage language.

For further information, please consult your advisor or the Dean of Arts and Humanities.

## **Graphic Design Minor**

Graphic design is a form of visual communication vital to every industry and institution. Graphic designers create images and typography for digital and print media as well as computer-generated works of art. The interdisciplinary curriculum combines courses in Fine Arts, Communications, and Creative Writing that encourage experimentation with corporate, commercial, and personal applications of graphic expression. Students learn to design with up-to-date software and study copyright and infringement laws. Opportunities for internships are available. In the capstone course students produce a presentation portfolio suitable for job interviews. The 20-credit minor can expand the skill set of students in Communications, Marketing, Computer Science, Art Education, and Fine Arts or build a foundation for a career as a graphic designer.

For further information, contact the Graphic Design Minor Advisor, Dr. Patricia Likos Ricci.

The requirements for a Graphic Design minor are:

### **Required courses:**

- COM 130 - Visual Communications
- ART 207 - Introduction to Graphic Design
- ART 406 - Advanced Digital Arts

### **Two elective courses (8 credits) from the following:**

- ART 145 - CE Digital Photography (COM 145) or
- COM 145 - CE Digital Photography (ART 145)
  
- ART 209 - Typography and Text Design
- COM 310 - New Media Production
- ART 325 - Designing for the Web and Social Media
- CW 386 - Word, Web, and Design
  
- ART 470-474 - Internship in Fine Arts or
- COM 470-473 - Practicum

## **History Minor**

### **The History minor requires successful completion of six courses:**

One course must be taken in two of the following three groups:

- HI 101 - HUM United States History to 1877 or
- HI 102 - HUM United States History Since 1877
  
- HI 111 - NCH History of Pre-Modern Asia or
- HI 112 - NCH History of Modern Asia

- HI 114 - WCH Western Civilization I or
- HI 115 - WCH Western Civilization II

Four History electives:

No more than one course may be at the 100-level. At least two courses must be at the 300-level. Enrollment for 300- and 400-level courses limited to students with sophomore status or above.

## **Japanese Minor**

The minor in Japanese is accomplished with 24 credits in the six courses listed below. Although they are not required to study abroad, Japanese minors can also avail of the opportunity to study abroad in the approved programs.

Japanese minors must achieve the equivalent of the Level 4 of the Japanese Language Proficiency Test (in-house version).

**The Japanese minor requirements are:**

- JA 111 - PLO First Year Japanese 1
- JA 112 - PLO First Year Japanese 2
- JA 211 - PLO Second Year Japanese 1
- JA 212 - PLO Second Year Japanese 2
- JA 311 - Third Year Japanese 1
- JA 312 - Third Year Japanese 2

## **Language Placement Policy**

Language majors are required to participate in a BCA Study Abroad or another School-approved program for one academic year or equivalent of two separate semesters. Non-majors who have completed 212 or above also are encouraged to participate in the BCA or approved study-abroad programs.

All students with more than two full years of language preparation must take courses at the 112-level or above. The appropriate language level is determined by an online placement test. In the case of Japanese placement, students must contact the Japanese faculty.

If a student places into a modern language course at the 211-level or higher and earns a B- or better, then he or she will also receive credit for the previous course in the sequence. The course must be taken before the end of the student's second year. This policy is not applicable to native speakers who were formally educated in the language through the high school level.

Native and heritage speakers must contact their advisor if they plan to take courses in their native or heritage language.

For further information, please consult your advisor or the Dean of Arts and Humanities.

## **Music Minor**

The Music minor provides students with opportunities to acquire and develop skills in music theory, music performance, music history, and literature. **A student electing to minor in Music must consult with the Dean, who assigns a music faculty member to assess the student's readiness for admission to the program.**

### **The Music minor requires:**

- MU 101 - Theory I
- MU 102 - Theory II
- MU 103 - Aural Skills I
- MU 104 - Aural Skills II
  
- MU 211 - Music History: 1600-1850 or
- MU 212 - Music History: 1850 to the Present
  
- MU 205 - NCH World Music or
- MU 441 - History of Early Music
  
- Four credits of instruction on one instrument or in voice, with registration in MU 100 (Repertoire Class) in each of the same semesters
- A minimum of four credits of Music Ensemble participation

## **Music Policies**

### **Preparatory Music Division**

The School of Arts and Humanities also offers a Preparatory Music Division that offers instruction to pre-college students, adults, and college students who desire to take instruction without credit. Instruction is available from the Division's faculty and other qualified teachers. Interested persons should contact Prof. Grant Moore, Director of the Preparatory Division.

### **Applied Music Lessons**

Students who register for applied music for credit must meet minimum standards established by the School and should contact the School office for a list of standards for each applied area. Students who have not attained the level necessary for credit may study through the Preparatory Division. Students in applied music advance as rapidly as their abilities permit. They must study technical exercises and literature from various musical periods and styles.

Students may register with or without credit for the established music ensembles and for other ensembles organized under faculty supervision; ensemble registration for credit may be repeated. All students must meet the standards for attendance at rehearsals and public performances established by the faculty Directors.

Applied music lessons and certain music ensembles may be counted for the Creative Expression requirement of the Core Program if taken as letter-graded for four semesters. An additional fee is charged for applied music lessons. Fees are printed on the master course schedule.

### **Transfer Credit for Aural Skills and Functional Keyboard Skills**

The Division of Fine and Performing Arts reserves the right to administer a diagnostic exam to verify a student's skill level PRIOR to awarding academic transfer credit for Aural Skills and Functional Keyboard Skills. This policy was established to ensure academic success at the appropriate level. ALL students accepted into a music program should contact the Fine and Performing Arts Division for more information on assessment of transfer credits.

### **Additional Accreditation**

Elizabethtown College is an accredited institutional member of the National Association of Schools of Music. The Music Therapy program is approved by the American Music Therapy Association.

## **Religious Studies Minor**

The **Religious Studies minor** consists of 20 credits in the field of religious studies. Religious studies minors are encouraged to see a member of the School for advising.

### **Student Learning Outcomes for Religious Studies minor:**

*Students will be able to:*

- Analyze religion from different perspectives using primary and secondary literature.
- Apply diverse theories and methods to examine religion.
- Evaluate how their work in various courses and other learning contexts in the program has prepared them to put their learning to work in the world.
- Integrate religious studies literature into their own commentary on religion in the public sphere.

### **The following course is required:**

- REL 495 - Capstone in Religious Studies

### **Choose electives totaling at least 16 credits from the list below:**

- HI 235 - SSC Citizenship and Conscience
- IC 204 - CE/HUM Artistic Peacebuilding
- REL 103 - HUM Religion and Nonviolence
- REL 105 - HUM Exploring Interfaith Leadership and Service
- REL 151 - Life Meaning and Purposeful Work
- REL 213 - PLO Biblical Hebrew I
- REL 214 - Biblical Hebrew II
- REL 217 - PLO Sanskrit I
- REL 218 - Sanskrit II
- REL 225 - NCH The Hebrew Bible and Ancient Near East
- REL 226 - WCH The New Testament
- REL 261 - Peacemaking and Social Justice in the Bible
- REL 284 - Anabaptist and Pietist Movements
- REL 287 - The Story of Christianity
- REL 290 - NCH Dharma Traditions: Hindu, Buddhist, Jain, and Sikh
- REL 295 - WCH Abrahamic Traditions: Judaism, Christianity, Islam
- REL 320 - Philosophy of Religion (PH 320)
- REL 323 - Women, Gender, and the Hebrew Bible

- REL 330 - Comparative Theology and Interfaith Engagement
- REL 364 - Amish Society (SO 364)
- REL 370-378 - Special Topics in Religious Studies
- REL 391 - Modern Hinduism
- REL 392 - Religion in China and Japan
- REL 393 - Indian Philosophy
- REL 470-474 - Internship in Religious Studies
- REL 480-489 - Independent Study in Religious Studies
- REL 490 - Independent Research in Religious Studies
- SO 317 - Sociology of Religion

## **Spanish Minor**

The **Spanish minor** requirements are to include a minimum of 16 credits of course work completed at the 300-level or above. At least two of the courses must be completed on the Elizabethtown College campus. The remaining courses may be completed on campus or in an approved study-abroad program. After completing the required course work, students must take an oral interview and receive a minimum rating of Intermediate High.

### **Language Placement Policy**

Language majors are required to participate in a BCA Study Abroad or another School-approved program for one academic year or equivalent of two separate semesters. Non-majors who have completed 212 or above also are encouraged to participate in the BCA or approved study-abroad programs.

All students with more than two full years of language preparation must take courses at the 112-level or above. The appropriate language level is determined by an online placement test. In the case of Japanese placement, students must contact the Japanese faculty.

If a student places into a modern language course at the 211-level or higher and earns a B- or better, then he or she will also receive credit for the previous course in the sequence. The course must be taken before the end of the student's second year. This policy is not applicable to native speakers who were formally educated in the language through the high school level.

Native and heritage speakers must contact their advisor if they plan to take courses in their native or heritage language.

For further information, please consult your advisor or the Dean of Arts and Humanities.

## **Women and Gender Studies Minor**

The **Women and Gender Studies (WGS)** program is designed for students who want to understand the world about them using concepts such as gender, race/ethnicity, class, sexuality, and religion. It is also designed for students who are passionate about social change. Passion and practicality work together. This interdisciplinary minor draws on courses from WGS and programs such as Psychology, Sociology, Social Work, Communications, and English. Students can easily find classes that intrigue them and also count toward Core and major/minor requirements. WGS is a flexible minor that complements any major.

Our lives are shaped by "categories of difference": gender, race/ethnicity, class, sexuality, religion. Students in WGS use these categories to reflect on their own intersectional identities, others' experiences, and the impact of social forces. They study the struggles of women and other groups to achieve social justice and equality--in the past,

in the present, and across the globe. WGS courses make students ready for social action. They also inspire students' scholarship, develop their capacities for critical thinking, clear communication, and team work, and prepare them for careers in diverse workplaces. Possible careers include Government and Politics, Nonprofit and Advocacy Work, Business, Law and Human Rights, Teaching, Social Work, Occupational Therapy, Psychology.

The WGS minor requires a minimum of 20 credit hours, comprised of five courses: WGS 105, WGS 315, and three elective courses from the Humanities and Social Sciences lists. No more than two courses may be taken from the same list. Students may double-count a research project in their major for WGS 490/WGS 491, if that project deals with gender or multicultural issues and if they obtain permission from their major discipline and the WGS Director. Note that several WGS courses also satisfy Core requirements, and other courses may fulfill requirements for a student's major.

### **Student Learning Outcomes**

*Students will be able to:*

- Discuss the history, evolution, theoretical bases, and methods of inquiry of this interdisciplinary field;
- Discuss the statuses of women within and across various societies, and current and historical struggles to achieve social justice through individual and collective action;
- Explain the impact of perspectives on gender from various disciplines;
- Critically analyze the inequities, root causes, and reinforcing structures of categories of difference, which include, but are not limited to, gender and its intersections with class, race and ethnicity, sexuality, and religion;
- Critically reflect on their own identity, the social forces that impact it, and the ways that it informs their own worldview

For further information, contact the Women and Gender Studies Program Director, Dr. Kimberly Adams.

#### **Required courses:**

- WGS 105 - SSC Sex and Gender in Society
- WGS 315 - Feminist and Gender Theory

#### **Elective courses:**

Three courses – at least one and not more than two – from each category: Humanities and Social Sciences.

Humanities electives:

- COM 252 - HUM Multi-Cultural Communications
- COM 261 - HUM Film Studies
- EN 251 - HUM Multicultural Literature
- EN 317 - Narrative (Women Writers)
- HI 321 - North Africa in Modern Times
- REL 267 - HUM Progressive Religion
- REL 331 - Ethnicity, Gender, and Religion
- REL 323 - Women, Gender, and the Hebrew Bible

- WGS 490 - Directed Research Project or
- WGS 491 - Directed Research Project

Social Science electives:

- PS 365 - Women and Politics
- HPS 300 - HNR Gender and the Law (HWG 300)
- PSY 230 - Psychology of Women and Gender
- PSY 330 - Psychology of Prejudice (WGS 330)
- SO 204 - SSC Population and Global Issues
- SO 305 - Marriage and Family (WGS 305)
- SW 360 - International Social Development
- SW 339 - Human Sexuality
- SW 355 - Women in Society
- HWG 300 - HNR Gender and the Law (HPS 300)
- WGS 305 - Marriage and Family (SO 305)
  
- WGS 490 - Directed Research Project or
- WGS 491 - Directed Research Project

## **Master of Education**

### **Master of Music Education (M.M.E.)**

#### **Student Learning Outcomes**

*Students will be able to:*

1. Implement world music drumming curricula within eclectic and inclusive approaches to music education (includng Dalcroze, Orff, and Kodály);
2. Develop, articulate, and practice philosophies and applied pedagogies rooted in peacebuilding;
3. Construct curricular materials and pedagogies that engage student learning in diverse musical traditions, critical issues in ethnomusicology, and the study of self and other;
4. Develop classroom environment plans and skill sets that build social-emotional capacity, possibilities for conflict transformation, and the practice of peacebuilding; and
5. Explore, practice and develop plans and pedagogy that integrate key principles of curriculum and assessment

Students enrolling in the Master of Music Education program need (1) basic level of musicianship to be successful within world music drumming, (2) an undergraduate level of music, aural skills, and musicology to be successful in ethnomusicology coursework, (3) music theory skills; and (4) writing/research quality and experience.

#### **Entrance into the program for the committee consideration requires:**

1. Baccalaureate Degree in Music or Music Education from an accredited institution; and
2. Current teaching certification

**A Graduate Enrollment Committee will make a decision about admittance after reviewing:**

1. Undergraduate GPA (3.00 minimum)
2. Music theory entrance exam score
3. A writing sample about music
4. Two (2) current recommendations from immediate supervisors, music teachers, mentors, and/or undergraduate faculty addressing your leadership abilities in music education and potential for success in graduate studies
5. Official transcripts from all colleges and universities attended; and
6. Personal statement (1 page) describing your purpose in pursuing graduate work, career objectives, and particular interest in Elizabethtown College Master of Music Education.

**The Master of Music Education requires:**

- MME 501 - Introductory Seminar
- MME 511 - Peacebuilding and Philosophy
- MME 512 - Curriculum, Assessment, and Measurement
- MME 513 - World Music Drumming
- MME 521 - Peacebuilding Methodologies in Inclusive Settings
- MME 531 - Culminating Project and Thesis

**Two additional electives:**

- MCI 530 - Building Social and Community Capacity
- MCI 550 - Social Emotional Learning
- TIC 500 - Foundations of Trauma
- TIC 520 - The Impact of Trauma on Brain Architecture and Child Development
- TIC 530 - Sustaining Trauma-Sensitive Systems
- ASC 500 - Autism Across the Lifespan
- ASC 510 - Interoception Assessment and Intervention

**Certificates**

**Public Heritage Studies Certificate**

**Student Learning Outcomes for Public Heritage Studies Certificate:**

*Students will be able to:*

- Understand both theoretical and practical elements of historic preservation, museum studies, archival management, and/or digital humanities research
- Communicate effectively orally and in writing.
- Gain hands-on experience through an internship.

**The Public Heritage Studies Certificate requires 10 credits of coursework:**

- Six credits of PHS courses
- Four credits of PHS 470-474 - Internship in Public Heritage Studies

**Suggested First Year Courses:**

- One PHS offering

**TESOL (Teaching English as a Second or Other Language)**

The TESOL (Teaching English as a Second or Other Language) Program is an option for currently enrolled, degree-seeking students at Elizabethtown College who would like to learn how to teach English language classes. This program offers courses in second language acquisition and teaching and assessment methods.

Students completing the program also participate in a supervised field experience to gain real-world training in an English language classroom. The undergraduate certificate must be earned concurrently with an undergraduate degree. Students completing all requirements of the TESOL Certificate program will receive notation on their Elizabethtown College transcript.

**Student Learning Outcomes for Teaching English as a Second or Other Language (TESOL):**

*Students will be able to:*

- Demonstrate understanding of research-based practices and strategies related to planning, implementing and managing English as a Second Language (ESL) instruction.
- Identify principles of needs assessment apply these principles in delivering quality English language instruction.
- Design English language instruction adapted to the learner's age, proficiency level, linguistic background, communication and academic needs, native language and literacy development.
- Select appropriate teaching resources including computer technology resources to meet learners' needs.
- Contextualize critical and theoretical knowledge from field experiences and internships.

An undergraduate certificate must be earned concurrently with an undergraduate degree. For program information and requirements, please contact Dr. Matt Skillen or Dr. Carroll Tyminski.

**Students seeking the TESOL certificate will complete the following courses and experiences:**

- EN 201 - TESOL Second Language Acquisition & Cross-cultural Perspectives
- EN 301 - English Grammar and Linguistics
- EN 307 - TESOL Methods and Assessment
- EN 475 - TESOL Internship and Seminar

**Art Courses**

**ART 105 - CE Drawing I**

4.00 credits. (**Creative Expression Core Course**) An introduction to the basic concepts, materials and techniques of drawing. These elements will be discussed and practiced through an intensive program of drawing from perception. The basic materials we use will consist of charcoal, ink and paper. Drawing subjects will include still life, interior

## *School of Arts and Humanities*

space, portrait, self-portrait and the figure. The formal elements of line, shape, value, form, space, texture and composition will be explored through drawing done in class, on field trips and weekly homework assignments.

### **ART 106 - CE Ceramics I**

4.00 credits. (**Creative Expression Core Course**) Introduction to ceramic design and history, with emphasis on fundamental construction, decorating, glazing and firing techniques, and operation of the machinery of the medium.

### **ART 120 - CE Sculpture I**

4.00 credits. (**Creative Expression Core Course**) An exploration in the three-dimensional medium of traditional and contemporary ideas, basic problems in design, and instruction in the use of the sculptor's materials and techniques.

### **ART 145 - CE Digital Photography (COM 145)**

4.00 credits. (**Creative Expression Core Course**) This is a course in beginning digital photography. Photography will be dealt with as a photojournalistic form and an art form. No prior knowledge or experience in the arts or photography is expected. Demonstrations and supervised lab periods will be used to instruct students in basic camera and Photoshop techniques of digital photography. Individual and group critiques/discussions of student photography will be held. Discussion of photographic history, criticism and aesthetics will be used to help the student understand class projects and to increase appreciation of photographic traditions and contemporary trends.

### **ART 155 - WCH Introduction to the History of Art I**

4.00 credits. (**Western Cultural Heritage Core Course**) A survey of the architecture, painting and sculpture of Western civilization from pre-history through the 14th century, including the Paleolithic and Neolithic eras, the Ancient Near East, Egypt, Ancient Greece and Rome, and the Middle Ages. Fall semester.

### **ART 157 - WCH Introduction to the History of Art II**

4.00 credits. (**Western Cultural Heritage Core Course**) A continuation of ART 155, this course traces the development of the fine arts in Europe from the 14th to the 20th centuries, including the Renaissance, Baroque, Rococo, Neoclassical, Romantic and Modernist movements. Spring semester.

### **ART 204 - CE Fundamentals of Color and Design**

4.00 credits. (**Creative Expression Core Course**) This course introduces the principles of gestalt theory and color theory in the design of two- and three-dimensional works of art. Students will learn to compose with scale, perspective, geometric and organic form, line structure, texture, color, and value relationships. They will explore visualization and brainstorming techniques, the analysis of art historical prototypes, and the importance of art criticism in creating original works of art.

### **ART 205 - Painting I**

4.00 credits. Studio easel painting in opaque media, with stress on pictorial organization and application of color theories. \*Prerequisite(s): ART 105. Fall semester.

### **ART 206 - Ceramics II**

4.00 credits. An intermediate-level course with emphasis on developing and refining studio techniques and integration of form and idea. \*Prerequisite(s): ART 106. Spring semester.

### **ART 207 - Introduction to Graphic Design**

4.00 credits. An introductory studio/lecture course designed to increase visual literacy and vocabulary, to develop design skills and present the creative possibilities of the computer as an art making and editing tool. Historical, conceptual, technical and contemporary issues of digital imaging are explored. Spring semester.

**ART 209 - Typography and Text Design**

4.00 credits. Typography is integral to the total design of all visual communication. This course introduces students to the history of typography and its importance in print, fine arts, product design, logos, websites, blogs, and other visual media. Students will learn to identify the component parts of the letterform and experiment with a variety of design techniques from traditional calligraphy to digital applications. Graphic designers, artist and writers will develop an individualized typographic voice and creative style.

**ART 210 - Drawing II**

4.00 credits. An intermediate-level course that stresses further conceptual, pictorial and technical development beyond Drawing I, with an emphasis on personal theme and content. \**Prerequisite(s)*: ART 105, or permission of the instructor. Spring semester.

**ART 230 - American Art**

4.00 credits. A survey of American painting, sculpture and architecture from the Colonial era through the 20th century. Issues discussed include the artists' roles in representing national identity, the wilderness, the frontier and the city, and the American contributions to photography, the moving picture, and the skyscraper. Fall semester, even-numbered years.

**ART 240 - NCH History of Japanese Art and Aesthetics (JA 240)**

4.00 credits. (**Non-Western Cultural Heritage Core Course**) This course introduces students to the history of the art and aesthetic sensibilities of the Japanese people from prehistoric times to the modern period. Through this course, students will develop an appreciation for the major trends in Japanese art and the historical milieu in which these were produced. Major works of art from each historical era will be studied, including architecture, sculpture, painting and pottery, as well as some of the minor arts such as gardens, calligraphy, textiles, etc. Besides understanding the making of the actual works of art, students will also understand the aesthetic principles that inform the making of these objects, such as miyabi, yugen, wabi-sabi, that are central to Japanese cultural history. Spring semester.

**ART 251 - Printmaking I**

4.00 credits. Practice in the methods of relief, intaglio and monotype, and instruction in the use of the printer's machinery. \**Prerequisite(s)*: ART 105, or permission of the instructor. Spring semester.

**ART 270 - Art of Africa, Asia, & Americas**

4.00 credits. A survey of the artistic traditions of Africa, Asia, the Pacific Islands, and the Pre-Columbian civilizations of North and South America examined within their historical context. Topics include cultural exchanges between Western and Non-Western civilizations and the impact of trade, war and colonization on indigenous artistic traditions. Spring semester, odd-numbered years.

**ART 280 - NCH World Architecture**

4.00 credits. (**Non-Western Cultural Heritage Core Course**) History of World Architecture is an exploration of the history, theory and design of iconic buildings from pre-history to the 21st century. The course is organized by building function: sacred spaces (places of worship, monuments), civic architecture and urban planning; residential architecture and commercial and recreational architecture.

**ART 305 - Painting II**

4.00 credits. An intermediate-level course with emphasis on developing and refining technique and concept. A continuation of the formal issues surrounding color and composition presented in ART 205. \**Prerequisite(s)*: ART 204 or ART 205. Spring semester.

**ART 310 - Art Education Methodologies & Curriculum Development - Elementary**

4.00 credits. This course prepares Art Certification candidates to develop a visual arts curriculum for kindergarten through sixth grade that meets Pennsylvania Standards for the Arts & Humanities. Child-centered, society-centered and discipline-based theories of art education will be discussed in the elementary school context. Students write age-appropriate lesson plans and test their effectiveness in a classroom under the supervision of a certified art teacher. They learn to manage a safe instructional environment conducive to learning for a diverse population of students, including those with special needs. \*Prerequisite(s): ED 105 and ED 150, or ED 151, and SED 222, and formal acceptance into the Art Education program. Register by Instructor. Fall semester.

**ART 315 - Art Education Methodologies & Curriculum Development - Secondary**

4.00 credits. This course prepares Art Certification candidates to develop a visual arts curriculum for the seventh through the 12th grades that meets Pennsylvania Standards for the Arts & Humanities. Students will develop age-appropriate lesson plans for middle and secondary school that include two- and three-dimensional works of art, aesthetics and multicultural traditions of art history. They learn appropriate instructional methodologies and assessment strategies for a diverse population of adolescents, including those with special needs. Methods of managing a safe instructional environment conducive to creativity will be taught. Students will have the opportunity to participate in a classroom under the supervision of a certified art teacher. \*Prerequisite(s): ED 105 and ED 150, or ED 151, and SED 222, and formal acceptance into the Art Education program. Register by Instructor. Spring semester.

**ART 320 - Sculpture II**

4.00 credits. A continuation of Art 120 with further exploration of possible three-dimensional mediums and development of the methods used for traditional, modern and contemporary sculpture. \*Prerequisite(s): ART 120. Fall semester.

**ART 325 - Designing for the Web and Social Media**

4.00 credits. "Designing for the Web and Social Media" will teach students how to create websites in Illustrator and PhotoShop for a client. The course focuses on the design aspects and business issues entailed in creating a website, while teaching students how to work with and understand a web developer. Students also learn the basics of coding and how social media impacts the digital landscape. \*Prerequisite(s): ART 207 or permission of the instructor.

**ART 340 - Modernism**

4.00 credits. A history of the Modernist movement in painting, sculpture, architecture, design and film from 1870 to 1945. The course traces the revolutionary theories of Impressionism, Post-Impressionism, Expressionism, Cubism, Dada, Surrealism, Futurism and Suprematism. \*Prerequisite(s): ART 155 or ART 157, or permission of the instructor. Spring semester, even-numbered years.

**ART 350 - Neoclassicism and Romanticism**

4.00 credits. An in-depth study of European art and culture from 1750 to 1850 that examines the role of Neoclassicism and Romanticism in promoting social and political ideals, the aesthetics of the Beautiful and the Sublime, and cultural primitivism. \*Prerequisite(s): ART 155 or ART 157, or permission of the instructor. Fall semester, odd-numbered years.

**ART 352 - Printmaking II**

4.00 credits. A continuation of ART 251 with further exploration in the methods of relief, intaglio and monotype printmaking and further instruction in the use of the printer's machinery. \*Prerequisite(s): ART 251. Spring semester, as needed.

**ART 360 - Italian Renaissance (HI 360)**

4.00 credits. The Italian Renaissance seminar is an in-depth cultural history of the humanist movement in Italy from 1250 to 1550 and its impact on the fine arts, literature, politics, religion, education and science. The course includes reading and discussion of primary texts by Petrarch, Dante, Boccaccio, Alberti, Machiavelli, Da Vinci, Michelangelo and Vasari. Topics include the revival of Antiquity, the discovery of Nature, Statecraft, scientific innovation and new concepts of genius and creativity. \*Prerequisite(s): ART 155, ART 157 or HI 115. Enrollment limited to sophomore status or above.

**ART 370-378 - Special Topics in Fine Arts**

4.00 credits. This sequence of courses permits the School of Arts and Humanities to offer courses to any group of students who expresses interest in a particular area of study that is not a regular part of the curriculum. This course is repeatable for credit.

**ART 400 - Honors in the Discipline**

Variable (2.00 or 4.00) credits. Art majors of superior ability are invited to create a project or research paper in consultation with the student's faculty mentor. Work for ART 400 cannot be combined with any other course except ART 491 Student Exhibition, spring of the senior year. Students are encouraged to present their HID research papers at SCAD in the spring. \*Prerequisite(s): GPA of 3.5 or greater in their major concentration (Studio, Art Education, or Art History) by the end of the fall semester of the junior year. This course is repeatable for up to 4.00 credits. By invitation only. Register by Instructor.

**ART 401 - Advanced Studies in Ceramics**

4.00 credits. Advanced study with emphasis on conceptual, pictorial, thematic and technical development. This course is repeatable for credit for up to three semesters. **Signature Learning Experience: Supervised Research.** Spring semester.

**ART 402 - Advanced Studies in Drawing**

4.00 credits. Advanced study with emphasis on conceptual, pictorial, thematic and technical development. This course is repeatable for credit for up to three semesters. **Signature Learning Experience: Supervised Research.** Spring semester.

**ART 403 - Advanced Studies in Painting**

4.00 credits. Advanced study with emphasis on conceptual, pictorial, thematic and technical development. This course is repeatable for credit for up to three semesters. **Signature Learning Experience: Supervised Research.** Spring semester.

**ART 404 - Advanced Studies in Printmaking**

4.00 credits. Advanced study with emphasis on conceptual, pictorial, thematic and technical development. This course is repeatable for credit for up to three semesters. **Signature Learning Experience: Supervised Research.** Spring semester.

**ART 405 - Advanced Studies in Sculpture**

4.00 credits. Advanced study with emphasis on conceptual, pictorial, thematic and technical development. This course is repeatable for credit for up to three semesters. **Signature Learning Experience: Supervised Research.** Fall semester.

**ART 406 - Advanced Digital Arts**

4.00 credits. Advanced Digital Arts is a studio class that builds on the basic techniques of Adobe Photoshop and Illustrator. Students will experiment with advanced software techniques to master dynamic manipulation, color

filters, blending textures, lighting techniques, layers and masks in order to produce original works of computer-generated art and imaginative graphic design solutions. The course examines copyright laws and copyright infringement as it applies to work downloaded from the web and other sources. \**Prerequisite(s)*: COM 130 or ART 207. **Signature Learning Experience: Capstone**

**ART 470-474 - Internship in Fine Arts**

Variable (2.00 to 4.00) credits. An internship experience for students in one of the Fine Arts majors or minors, as recommended by the School. A maximum of four credit hours from Art 470-474 may count as art electives. Additional credits count as free electives. **Signature Learning Experience: Internship.** Register by Instructor. This course is repeatable for credit.

**ART 480-489 - Independent Study in Fine Arts**

Variable credits. Individual students are provided the opportunity to pursue work in an area of major interest under the guidance of a member of the Program. \**Prerequisite(s)*: Approval of Dean and the Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**ART 495 - Architectural Design Studio I (EGR 495)**

2.00 credits. Architectural Design studio course offered every Spring with rotating architectural case studies taught by full-time faculty and visiting Architects. Case studies are repeated no less than every two years so that students in Studio I and Studio II can participate in the same lectures. Independent student design work in Studio I and II is required to be documented in an electronic portfolio; and professional documentation, drawings, and oral defense of architectural designs are required. Register by Instructor. Spring semester.

**ART 496 - Architectural Design Studio II (EGR 496)**

2.00 credits. Architectural Design studio course offered every Spring with rotating architectural case studies taught by full-time faculty and visiting Architects. Case studies are repeated no less than every two years so that students in Studio I and Studio II can participate in the same lectures. Independent student design work in Studio I and II is required to be documented in an electronic portfolio; and professional documentation, drawings, and oral defense of architectural designs are required. **Signature Learning Experience: Capstone Experience.** Register by Instructor. Spring semester.

**ART 497 - Senior Seminar**

2.00 credits. A capstone course required for Fine Arts majors that provides opportunities for advanced research and development in studio and gallery/museum related work. The course builds and enhances the resumé and introduces the practical functions, operations, and workings for a career in art. \**Prerequisite(s)*: Senior status (Studio and Art History tracks) or permission of the instructor. Register by Instructor. Fall semester.

**ART 498 - Senior Exhibition**

2.00 credits. A capstone course required for Fine Arts majors that provides the opportunity for advanced development of personal expression in the studio. Students will work in their preferred media to create a coherent body of work which they will prepare for exhibition and install in the college art galleries. \**Prerequisite(s)*: Senior status (Studio and Art History tracks) or permission of the instructor. **Signature Learning Experience: Developmental Portfolio.** Register by Instructor. Spring semester.

**Asian Studies Courses**

**AS 490 - Capstone Directed Research Project**

Variable (1.00 - 4.00) credit(s). Students engage in an advanced level of research under the supervision of an Asian Studies faculty member to produce a thesis or other major research project. **Signature Learning Experience: Supervised Research.** Repeatable for credit for a maximum of 4.00 credits.

## Creative Writing Courses

**CW 386 - Word, Web, and Design**

4.00 credits. This advanced course instructs students in web writing and layout techniques. It provides opportunities to learn and practice messaging skills useful for future careers writing for nonprofit and company websites. The course focuses on the aesthetic and professional presentation of one's work. \**Prerequisite(s)*: Open to juniors and seniors. \*Professional Writing majors must have completed EN 185. **Signature Learning Experience: Capstone Experience.** Spring semester.

## Dance Courses

The School of Arts and Humanities offers several dance courses as elective options or to fulfill part of the Creative Expression Core requirement. If used for Creative Expression, two courses must be completed for a total of four credits.

**DA 101 - CE Introduction to Modern Dance**

2.00 credits. **(Creative Expression Core Course)** An introduction to modern dance techniques and aesthetics requiring athletic, creative and cognitive participation. Course work includes physical conditioning techniques, interpretive/creative movement experiences, and modern dance technique basics. Reading, discussion, writing and viewing contemporary dance facilitate an overall appreciation of dance as an art form.

**DA 102 - CE Introduction to Ballet**

2.00 credits. **(Creative Expression Core Course)** A basic introduction to ballet technique, including bar, center floor and traveling combinations. Class includes development of anatomically correct alignment and dance technique, dance conditioning, spatial clarity, coordination, rhythm, use of weight, time and space. Class work will include readings, discussions, viewing of dance films, short writing assignments and performances of rehearsed dance sequences. Fall semester.

**DA 103 - CE Introduction to Jazz Dance**

2.00 credits. **(Creative Expression Core Course)** Jazz dance techniques emphasizing a range of styles, incorporating the Limon technique, classical show jazz and funk for the beginner. Course work includes full jazz warm-ups, classical jazz technique/terminology, floor work, conditioning and performance of dance combinations. Class also includes reading, discussions, viewing and writing about jazz dance. Spring semester.

**DA 120 - Dance Improvisation and Composition**

2.00 credits. This course will use improvisation as well as a variety of movement techniques to gain a better understanding of how the body functions both anatomically and kinesthetically, and to explore the capabilities of movement as an expressive art form.

**DA 202 - CE Ballet II**

2.00 credits. **(Creative Expression Core Course)** A continuation of ballet techniques including bar, center floor, and traveling combinations. Class includes development of increasingly complex anatomically correct alignment and dance technique, dance conditioning, spatial clarity, coordination, rhythm, and use of weight, time, and space.

Class work includes readings, discussions, viewing dance films and live performances, short writing assignments, and research projects. Spring semester.

**DA 203 - CE Jazz Dance II**

2.00 credits. (**Creative Expression Core Course**) Jazz dance techniques emphasizing a range of styles, incorporating African, swing, classical show jazz, and hip-hop. The emphasis is on interpretation and performance of these styles on a more complex level. Course work includes jazz warm-ups, classic technique/terminology as it applies to jazz, floor work, conditioning for jazz dance and performance of dance combinations center and across the floor. Class also includes reading, discussions, viewing and writing about jazz dance. Fall semester.

**English Courses**

**EN 100 - PLE Writing and Language**

4.00 credits. (**Power of Language Core Course**) A writing course focusing on writing as a process of discovery concerning ideas, drafting, revising and editing. Students read, write and speak about a variety of aspects of the power of language. \*Note: Students assigned to EN 100 may not enroll in EN 150, and those placed in EN 150 may not enroll in EN 100.

**EN 101 - CE Literature: Form and Performance**

4.00 credits. (**Creative Expression Core Course**) An examination of various forms of literature with the purpose of understanding both how they produce distinct aesthetic experiences and how to use these forms creatively. Individual sections might focus on poetry, drama, Shakespeare, short story, film, and the novel, or some combination of these. This course does not count toward the English major or minor. This course is repeatable for credit.

**EN 102 - WCH Western Literary Culture**

4.00 credits. (**Western Cultural Heritage Core Course**) An exploration of Western culture via literary forms such as film, prose, and poetry, this course places cultural understandings in context and relates the past to the present. Since the course may vary in content, it may be repeated for credit, provided the content is not duplicated. This course does not count toward the English major or minor.

**EN 103 - NCH Literary Culture of the East**

4.00 credits. (**Non-Western Cultural Heritage Core Course**) An exploration of non-Western culture via literary forms such as film, prose, and poetry, this course places cultural understandings in context and relates the past to the present. Since the course may vary in content, it may be repeated for credit, provided the content is not duplicated. This course does not count toward the English major or minor.

**EN 104 - HUM Introduction to Literature**

4.00 credits. (**Humanities Core Course**) An exploration of ethical and moral dilemmas, values, and choices presented in literary works. Students evaluate and support their decisions concerning ethical conduct in the works, and make aesthetic (artistic) assessments. Topics may include the tragic consequences of valid actions in Greek drama and American and African narratives; legend and fantasy; and moral crises explored by British authors ranging from John Milton to Carol Ann Duffy. \*Since the course may vary in focus, it may be repeated for credit, provided the content is not duplicated. This course does not count toward the English major or minor.

**EN 150 - PLE Advanced Writing and Language**

4.00 credits. (**Power of Language Core Course**) A writing course designed to explore the writing process and the history of the English language, its past and present uses and powers. Students write, read and speak about a variety

of aspects of the history and power of language. \*Note: Students assigned to EN 100 may not enroll in EN 150, and those placed in EN 150 may not enroll in EN 100.

**EN 180 - CE Introduction to Creative Writing**

4.00 credits. (**Creative Expression Core Course**) This course encourages students' creative self-expression and develops their understanding and appreciation of the three principal genres of fiction, drama, and poetry. This course does not count toward the English major or minor.

**EN 185 - Introduction to Professional Writing**

4.00 credits. The varieties of discourse and research in professional writing, including instruction in basic journalism, feature writing, technical writing, and document design. \**Prerequisite(s)*: Power of Language - English requirement.

**EN 200 - Major British Writers**

4.00 credits. A survey course designed to introduce majors to British poetry and prose of three or more literary periods. Students will develop the broad and close reading skills essential to the discipline by considering the structures, literary devices, and biographical and historical contexts of primary works. Spring semester. \*Students in the literature and English Education concentrations should take this course as soon as possible after declaring an English major.

**EN 201 - TESOL Second Language Acquisition & Cross-cultural Perspectives**

2.00 credits. This course explores the basic foundations of second language acquisition in children and adolescents. Students will explore best practices in developing optimal settings for English foreign language or second language instruction and the complexity of the notion of "culture" as it corresponds with language. Students will practice applying intercultural communication principles to communicate with English language learners and their communities. Enrolled students will also work collaboratively to design classroom activities that aid in the development of a safe, friendly, and positive learning environment for all learners.

**EN 220 - WCH British Literature: Medieval, Renaissance, or 18th Century (Pre-1800)**

4.00 credits. (**Western Cultural Heritage Core Course**) \***A Guided Writing and Research Course**.

A study of the literature and culture of Britain before 1800, with emphasis on the ways the poetry, prose, and drama convey the world views, gender roles, and politics of this important era. Each section of the course focuses on works from a different period: 1) Medieval Literature--Romance and War; 2) The Renaissance Woman—and Man; and 3) 18th Century Wit and Wisdom. \*Since the course may vary in focus, it may be taken twice for credit, provided the content is not duplicated.

**EN 230 - WCH British Literature: Romantic, Victorian, or Modern (Post-1800)**

4.00 credits. (**Western Cultural Heritage Core Course**) \***A Guided Writing and Research Course**.

An examination of the prose, poetry, and drama of Britain and the Commonwealth after 1800, with attention to literary forms, the visual arts, biography, politics, class, and gender. Each section of the course covers works from a different period: 1) Romanticism—Nature and Revolution; 2) Victorian Literature--Gender, Ambition, Transgression; and 3) Modern Literature and the World Wars. \*Since the course may vary in focus, it may be taken twice for credit, provided the content is not duplicated.

**EN 240 - WCH American Literature: Revolution to Civil War, Realist, or Modern**

4.00 credits. (**Western Cultural Heritage Core Course**) \***A Guided Writing and Research Course**.

A study of the literature and culture of America from the beginnings to modern times. Each section of the course covers works from a different period: 1) Revolution to Civil War; 2) Realism--Gender, Race, and Money; and 3)

Modernism--The World Turned Upside Down. \*Since the course may vary in focus, it may be taken twice for credit, provided the content is not duplicated.

**EN 245 - HUM Growing Up in America**

4.00 credits. (**Humanities Core Course**) \*A Guided Writing and Research Course.

Through a careful reading of important American novels and biographies such as Tom Sawyer, Little Women, and Goodbye, Columbus, students will better understand the distinct experiences that comprise growing up in America. The particularities of American families, places, and cultures and the universality of shared problems, crises, challenges and joys will be explored.

**EN 251 - HUM Multicultural Literature**

4.00 credits. (**Humanities Core Course**) \*A Guided Writing and Research Course.

This course will examine cross-cultural experiences as reflected in contemporary American and world literature.

Sample authors: Louise Erdrich, Toni Morrison, Ha Jin, Chimamanda Ngozi Adichie.

**EN 280 - Creative Writing - Poetry, Prose**

4.00 credits. The writing of original poetry or prose. Graded Pass/No Pass. Register by Instructor.

**EN 281 - CE Writing and Analyzing the Short Story**

4.00 credits. (**Creative Expression Core Course**) \*A Guided Writing and Research Course.

Students will analyze classic short stories using the language and concepts of literary criticism through, discussion, oral presentation, and a major research paper. Emulating classic literary models, they will write original short stories, revising according to detailed critiques by their peers and the instructor. \*Prerequisite(s): Power of Language requirement.

**EN 282 - Technical Writing**

4.00 credits. A course emphasizing clarity and precision in writing and including instruction in oral and graphic presentation of technical and scientific information. \*Professional Writing majors must have completed EN 185.

**Signature Learning Experience: Community Based Learning.** Fall semester.

**EN 283 - Legal Writing**

4.00 credits. A survey of the types of writing common in government, politics and law. Students practice basic legal analysis, statistical analysis, persuasion and more advanced forms of legal writing, such as the appellate brief.

\*Professional Writing majors must have completed EN 185. Register by Instructor. Alternate fall semesters.

**EN 285 - Business and Public Relations Writing**

4.00 credits. Students will learn content related to the most common writing tasks in business and public relations writing. Content will cover messaging strategies, newsletters, social media plans, company-specific language, and crisis communication. Students work with clients to learn about writing briefs and crafting messages for business needs. \*Professional Writing majors must have completed EN 185. Spring semester.

**EN 286 - Creative Non-Fiction**

4.00 credits. A readings and workshop course in literary nonfiction, this course acquaints students with the research and writing techniques used by writers of nonfiction and with the history of the genre. Students select their own writing projects from a variety of genres. \*Professional Writing majors must have completed EN 185. Alternate years.

**EN 287 - Writing Children's Literature**

4.00 credits. An introductory survey of children's literature primarily from 19th and 20th century British and American authors. Students write fiction and nonfiction for a variety of current target markets in children's literature, such as picture books, early readers, chapter books, and middle-grade to young-adult level books. \*Professional Writing majors must have completed EN 185. Register by Instructor. Alternate spring semesters.

**EN 288 - CE Young Adult Literature**

4.00 credits. (**Creative Expression Core Course**) \***A Guided Writing and Research Course.**

A study of the development and current popular status of literature for young adults, with an emphasis on themes of radicalism, trauma, and identity, among others. The course will examine modern forms represented in young adult literature, including fantasy, the realistic novel, science fiction, and the graphic novel. We will examine and create works relevant to the current YA market. \**Prerequisite(s)*: EN 100 or EN 150. Spring semesters.

**EN 301 - English Grammar and Linguistics**

2.00 credits. A study of the four major approaches (i.e. prescriptive, descriptive, generative, and contextual) English grammar and English linguistics. This course includes a retrospective study of how the system of the English language was established and how the system has changed over time. Enrollees will extend their own knowledge of English grammar and linguistics and apply these concepts to their work in their selected fields of study. This course is intended for future English teachers; however, the course is open to all students. \**Prerequisite(s)*: EN 100 or EN 150. Alternate spring semesters.

**EN 302 - The English Language**

4.00 credits. This course considers the transformation of the English language from its formation in Anglo-Saxon England through modern times. Using cultural, political, historical, literary, and linguistic analyses, students will follow changes in vocabulary and syntax from Beowulf through Shakespeare and on to the many varieties of English spoken around the globe today. Alternate years.

**EN 306 - Methods Seminar in Teaching Language and Composition**

4.00 credits. The teaching of English grammar and usage with reference to teaching composition at the secondary school level and practical application of various methodologies through teaching internships in the classroom and/or the Learning Center. \*Must be completed prior to the professional semester.

**EN 307 - TESOL Methods and Assessment**

4.00 credits. This course will cover fundamental principles and theories of language instruction and acquisition to prepare students to work with English language learners in many contexts. Through a variety of exploratory activities, accompanied by an extensive reading and discussion of the research and practices related to language instruction, students will form a strong foundation to build a communicative teaching practice while learning how assessment can inform language instruction. The course provides opportunities for peer-teaching, TESOL class observation, and tutoring or teaching English to non-native speakers. \**Prerequisite(s)*: Modern or Ancient Languages 112 or higher, EN 201, and EN 301.

**EN 311 - Genre Studies**

4.00 credits. Focus on a distinctive genre or form, such as Autobiography, Travel Writing, or Narrative Cinema. Students may be asked to do their own writing in this genre. \*Since the course may vary in focus, it may be taken twice for credit, provided the content is not duplicated.

**EN 313 - Drama**

4.00 credits. An examination of a historical period or important theme in British, American, or world drama with an emphasis on the relationship between text and performance, page and stage. \*Since the course may vary in focus, it may be taken twice for credit, provided the content is not duplicated.

**EN 315 - Poetry**

4.00 credits. A study of particular poetic genres and forms and leading practitioners. The cover may cover the Metaphysical poetry of Donne and Herbert, the eighteenth-century lyric, or modern poetry by Frost, Hall, Olds, Kinnell, Collins, and Kooser. \*Since the course may vary in focus, it may be taken twice for credit, provided the content is not duplicated.

**EN 317 - Narrative**

4.00 credits. A study of narrative as a genre, with attention to both fictional and non-fictional examples. The course may cover Gothic fiction, anti-slavery narratives, or utopian and dystopian novels. Both literary and theoretical texts are assigned. \*Since the course may vary in focus, it may be taken twice for credit, provided the content is not duplicated.

**EN 319 - Themes**

4.00 credits. This course examines selected literary themes and traditions and utilizes a variety of critical perspectives. Recent topics include Irish literature and Magical Realism. \*Since the course may vary in focus, it may be taken twice for credit, provided the content is not duplicated.

**EN 320 - Advanced Multimedia Journalism (COM 320)**

4.00 credits. This is an advanced-level journalism class aimed at honing newsgathering, writing, and editing skills learned in previous courses. Students will apply multimedia skills to covering a variety of stories and publishing those stories across different media platforms. \*Corequisite(s): COM 211 and COM 230.

**EN 370-378 - Special Topics in English**

4.00 credits. Courses involving specific subjects chosen in response to student and faculty interest. This course is repeatable for credit.

**EN 381 - Advanced Fiction Writing**

4.00 credits. Advanced Fiction Writing will be a workshop-based class in which we discuss our own stories, and analyze 8-10 contemporary fictions. We'll each have an opportunity to build two fiction selections (1-2 full short stories or a portion of a novel-in-progress) for a final portfolio. This class will focus on building sophisticated techniques for both writing one's own fiction and discussing fiction from a "lab-based" perspective.

\*Prerequisite(s): EN 100, EN 180, or EN 281.

**EN 385 - Writing and Editing for Publication**

4.00 credits. Advanced study of writing nonfiction articles, copy editing and strategies for getting manuscripts published. \*Professional Writing majors must have completed EN 185 and either EN 282 or EN 285. Register by Instructor. Alternate fall semesters.

**EN 420 - British Authors (Pre-1800)**

4.00 credits. A seminar focused on the writings of one or more British authors active before 1800, such as Chaucer, Shakespeare, Milton, Donne and Herrick, Pope and Swift, or Thomson and Cowper. \*Since the course may vary in focus, it may be taken twice for credit, provided the content is not duplicated. **Signature Learning Experience: Supervised Research.**

**EN 430 - British Authors (Post-1800)**

4.00 credits. A seminar focused on the writings of one or more British authors active after 1800, such as Wordsworth and Coleridge, Byron and Shelley, Austen (book and film), or the Brontes. \*Since the course may vary in focus, it may be taken twice for credit, provided the content is not duplicated. **Signature Learning Experience: Supervised Research.**

**EN 440 - American Authors**

4.00 credits. A seminar focused on the writings of one or more American authors, such as Whitman, Twain, Donald Hall, Sharon Olds, or Toni Morrison and August Wilson. \*Since the course may vary in focus, it may be taken twice for credit, provided the content is not duplicated. **Signature Learning Experience: Supervised Research.**

**EN 450 - World Authors**

4.00 credits. A seminar focused on the writings of one or more Continental or non-Western authors, such as Dante, Tolstoy, Joyce, Beckett, Fugard, and Murakami. \*Since the course may vary in focus, it may be taken twice for credit, provided the content is not duplicated. **Signature Learning Experience: Supervised Research.**

**EN 460 - From Murasaki to Murakami**

4.00 credits. This course will introduce students to Japanese literature from the classical period to the modern, in a variety of genres, starting from the oral traditions of myth and poetry of Kojiki and Manyoshu, the great masterpieces of classical Japanese prose depicted in the Genji Monogatari, plays from the feudal period, Heike Monogatari and Sonezaki Shinjuu, early modern novels such as Kokoro and Hakai, and contemporary fiction and personal histories that have gained critical acclaim and popular success, such as Masks, Kitchen, Norwegian, Wood, and Black Rain, among others. Students will not only learn to understand the historical contexts of these works in terms of genre, intent, audience, themes, aesthetics, gender relations, religion and spirituality, but will also engage with literary theories that undergird our understanding of literary production and appreciation. Students will also learn how to apply that understanding in their own writing in the form of research papers and short reflective reaction papers. This course is an elective for declared English and English Education majors.

**EN 470-474 - Internship in English**

Variable (2.00 to 4.00) credits. Internships provide students with practical workplace experience at a newspaper office, magazine publisher, public relations firm, or other venue for professional writing. A maximum of twelve credit hours from English 470-474 may count as English electives. Additional credits count as free electives. Graded Pass/No Pass. **Signature Learning Experience: Internship.** Register by Instructor. This course is repeatable for credit.

**EN 475 - TESOL Internship and Seminar**

2.00 credits. This course is a culminating experience for those seeking the Elizabethtown College Teaching English as a Second or Other Language Certificate. The course has both a field internship requirement and a classroom seminar requirement. It is important to note that, as designed, the field internship is the critically important aspect of the course that will drive the content and discussion of the seminar component. Designing the course in this way contextualizes the fresh and transformational experiences the students have collected during their internships in a supportive and deeply informed environment. \**Prerequisite(s): EN 307.*

**EN 480-489 - Independent Study in English**

Variable credit. Individual students are provided the opportunity to pursue work in an area of major interest under the guidance of a member of the English Program. \**Prerequisite(s): Approval of the Dean and the Independent Study Committee.* Register by Instructor. This course is repeatable for credit.

**EN 490 - Directed Senior Research I**

2.00 credits. English majors of superior ability are allowed to explore a topic of their choosing and to produce a major work of 40 to 60 pages. \*Prerequisite(s): Senior standing, a grade point average of 3.60 or higher in the major and overall, and permission of the School. Two credits are awarded each semester of the senior year. See the Dean of the School of Arts and Humanities or Head of the English Directed Senior Research Program for more information. **Signature Learning Experience: Supervised Research.** Register by Instructor.

**EN 491 - Directed Senior Research Project II**

2.00 credits. English majors of superior ability are allowed to explore a topic of their choosing and to produce a major work of 40 to 60 pages. \*Prerequisite(s): Senior standing, a grade point average of 3.60 or higher in the major and overall, and permission of the School. Two credits are awarded each semester of the senior year. See the Dean of the School of Arts and Humanities or Head of the English Directed Senior Research Program for more information. **Signature Learning Experience: Supervised Research.** Register by Instructor.

**EN 495 - Seminar in Rhetorical Theory**

4.00 credits. A seminar for majors in the Professional Writing concentration focusing on reviewing classical and contemporary rhetoric, and preparing a professional writing portfolio. \*Prerequisite(s): Professional Writing concentration, EN 185, and one 200-level professional writing course. **Signature Learning Experience: Developmental Portfolio.** Fall semester.

**EN 496 - Seminar in Literary Theory**

4.00 credits. A seminar on literary theories and their applications to fiction. The paired writers may include Foucault and Orwell, Bakhtin and Achebe, and Butler and Woolf. \*Prerequisite(s): Literature concentration, and junior or senior status, or permission of the instructor. **Signature Learning Experience: Developmental Portfolio.** Alternate fall semesters.

**English as a Second Language Courses**

**ESL 111 - English as a Second Language and American Culture**

4.00 credits. Development and refinement of the student's functional proficiency through grammar and essay development, audio/video materials to improve listening comprehension, and extended oral discourse. Reading selections increase reading comprehension and awareness and understanding of American culture. \*Prerequisite(s): Placement by examination and TOEFL score.

**ESL 112 - English as a Second Language II**

4.00 credits. Focuses on the improvement of speech, listening, reading, and writing skills, emphasizing the descriptive and narrative paragraph. Media in the target language supplement the textbook and develop communicative competency. \*Prerequisite(s): ESL 111.

**Fine and Performing Arts Courses**

**FPA 490 - Arts Administration Strategy (BA 490)**

2.00 credits. Arts Administration Strategy is a project-based capstone course for the Minor in Arts Administration. It brings together the many strands and themes of the Arts Administration curriculum and gives students the opportunity to synthesize concepts and develop analytical, presentation, professional, and career readiness skills. **Signature Learning Experience: Capstone Project.**

## French Courses

### **FR 111 - PLO Elementary French I**

4.00 credits. (**Power of Language Core Course**) Basic elements of structure and the phonetic system in culturally authentic contexts. The development of communicative competence in five skill areas: speaking, listening, reading, writing, and sociocultural awareness. Media in the target language supplement proficiency-oriented textbooks.

### **FR 112 - PLO Elementary French II**

4.00 credits. (**Power of Language Core Course**) Expansion of basic elements of structure and the phonetic system in culturally authentic contexts. Additional development of communicative competency in five skill areas: listening, speaking, writing, reading, and sociocultural awareness. Media in the target language supplement proficiency-oriented textbooks. \**Prerequisite(s)*: FR 111, or placement by examination.

### **FR 211 - PLO Intermediate French I**

4.00 credits. (**Power of Language Core Course**) Emphasizes functional proficiency. A functional-notational syllabus expands use of linguistic tasks such as asking questions, stating facts, describing, narrating, and expressing feelings. Use of authentic cultural materials and contexts heightens sociocultural awareness. Media in the target language supplement text and written materials. \**Prerequisite(s)*: FR 112, or placement by examination.

### **FR 212 - PLO Intermediate French II**

4.00 credits. (**Power of Language Core Course**) Expanded use of linguistic functions. Introduction and development of more advanced tasks such as sustaining opinions, explaining, comparing, and hypothesizing. Use of authentic cultural materials and contexts heightens sociocultural awareness. Media in the target language supplement texts and written materials. \**Prerequisite(s)*: FR 211, or placement by examination.

### **FR 303 - Reading Authentic Texts**

3.00 credits. Development of and practice in reading authentic cultural, historical, and literary texts. Through the study of numerous strategies, training provided by textbook exercises, and immediate application to selections, students will learn how to read in order to read for the purpose of learning. \**Prerequisite(s)*: FR 212, or permission of the instructor.

### **FR 305 - Advanced French Conversation**

4.00 credits. In this course, you will develop and practice your oral skills in French through an extended French filmography. We will explore aspects of French and Francophone life and culture in XXth French society with discussions and presentation on French culture, politics, ethics, and history. This course is conducted solely in French. \**Prerequisite(s)*: FR 212 or placement test.

### **FR 311 - Making of Modern French Society**

4.00 credits. Analysis of important contemporary cultural phenomena and issues that have shaped and continue to shape the modern nation. Readings are taken from literary, sociological, and political sources. Media in the target language supplement written materials. \**Prerequisite(s)*: FR 212, or permission of the instructor.

### **FR 323 - Introduction to Literature**

4.00 credits. Development of students' ability to read thoroughly, analyze, and appreciate literature. Includes selected readings representative of different literary genres. \**Prerequisite(s)*: FR 212, or permission of the instructor.

**FR 370-378 - Special Topics in French**

Variable credit. Topics of special interest not otherwise covered in the curriculum. Topics depend upon student interest and faculty availability. \*Prerequisite(s): FR 212, or permission of the instructor. This course is repeatable for credit.

**FR 470-474 - Internship in French**

Variable (0.00 to 4.00) credit(s). Modern Language internships provide language students the opportunity to apply the skills and knowledge they have obtained in our classes and while abroad in professional settings, as they are mentored and supervised by practicing professionals. This opportunity fosters enhanced linguistic and cross-cultural proficiency, as well as individually tailored and specialized expertise for language learners. A maximum of four credit hours from French 470-474 may count as French electives. Additional credits count as free electives.

\*Prerequisite(s): At least junior standing. **Signature Learning Experience: Internship.** Graded Pass/No Pass.

Register by Instructor. This course is repeatable for credit.

**FR 480-489 - Independent Study in French**

Variable credit. For senior language majors. Independent projects in some area of language or literature.

\*Prerequisite(s): Approval of the Dean of Arts and Humanities and Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**FR 496 - French Senior Research Project I**

2.00 credits. For senior French majors. Involves researching a literary, linguistic, or cultural topic and the writing of a major paper in the French language. This capstone experience will be closely supervised by Program faculty. Fall semester.

**FR 497 - French Senior Research Project II**

2.00 credits. For senior French majors. Involves researching a literary, linguistic, or cultural topic and the writing of a major paper in the French language. This capstone experience will be closely supervised by Program faculty.

\*Pre/Corequisite(s): FR 496. **Signature Learning Experience: Supervised Research.** Spring semester.

## German Courses

**GER 111 - PLO Elementary German I**

4.00 credits. **(Power of Language Core Course)** Basic elements of structure and the phonetic system in culturally authentic contexts. The development of communicative competence in five skill areas: speaking, listening, reading, writing, and sociocultural awareness. Media in the target language supplement proficiency-oriented textbooks.

**GER 112 - PLO Elementary German II**

4.00 credits. **(Power of Language Core Course)** Expansion of basic elements of structure and the phonetic system in culturally authentic contexts. Additional development of communicative competency in five skill areas: listening, speaking, writing, reading, and sociocultural awareness. Media in the target language supplement proficiency-oriented textbooks. \*Prerequisite(s): GER 111, or placement by examination.

**GER 211 - PLO Intermediate German I**

4.00 credits. **(Power of Language Core Course)** Emphasizes functional proficiency. A functional-notational syllabus expands use of linguistic tasks such as asking questions, stating facts, describing, narrating, and expressing feelings. Use of authentic cultural materials and contexts heightens sociocultural awareness. Media in the target language supplement texts and written materials. \*Prerequisite(s): GER 112, or placement by examination.

**GER 212 - PLO Intermediate German II**

4.00 credits. (**Power of Language Core Course**) Expanded use of linguistic functions. Introduction and development of more advanced tasks such as sustaining opinions, explaining, comparing, and hypothesizing. Use of authentic cultural materials and contexts heightens sociocultural awareness. Media in the target language supplement texts and written materials. \**Prerequisite(s)*: GER 211, or placement by examination.

**GER 311 - Making of Modern German Society**

4.00 credits. Analysis of important contemporary cultural phenomena and issues that have shaped and continue to shape the modern nation. Readings are taken from literary, sociological, and political sources. Media in the target language supplement written materials. \**Prerequisite(s)*: GER 212, or permission of instructor.

**GER 323 - Introduction to German Literature**

4.00 credits. Development of students' ability to read thoroughly, analyze, and appreciate literature. Selected readings representative of different literary genres. \**Prerequisite(s)*: GER 212, or permission of the instructor.

**GER 370-378 - Special Topics in German**

Variable credit. Topics of special interest not otherwise covered in the curriculum. Topics depend upon student interest and faculty availability and may include "Business German" and "German Film." \**Prerequisite(s)*: GER 212, or permission of the instructor. This course is repeatable for credit.

**GER 470-474 - Internship in German**

Variable (0.00 to 4.00) credit(s). Modern Language internships provide language students the opportunity to apply the skills and knowledge they have obtained in our classes and while abroad in professional settings, as they are mentored and supervised by practicing professionals. This opportunity fosters enhanced linguistic and cross-cultural proficiency, as well as individually tailored and specialized expertise for language learners. A maximum of four credit hours from German 470-474 may count as German electives. Additional credits count as free electives.

\**Prerequisite(s)*: At least junior standing. **Signature Learning Experience: Internship**. Graded Pass/No Pass. Register by Instructor. This course is repeatable for credit.

**GER 480-489 - Independent Study in German**

Variable credit. For senior language majors. Independent projects in some area of language or literature. \**Prerequisite(s)*: Approval of the Dean and Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**GER 496 - German Senior Research Project I**

2.00 credits. For senior German majors. Involves researching a literary, linguistic, or cultural topic and the writing of a major paper in the German language. This capstone experience will be closely supervised by Program faculty. Fall semester.

**GER 497 - German Senior Research Project II**

2.00 credits. For senior German majors. Involves researching a literary, linguistic, or cultural topic and the writing of a major paper in the German language. This capstone experience will be closely supervised by Program faculty. \**Pre/Corequisite(s)*: GER 496. **Signature Learning Experience: Supervised Research**. Spring semester.

**History Courses**

**HI 101 - HUM United States History to 1877**

4.00 credits. (**Humanities Core Course**) This course traces the foundations of early American history from the Age of Discovery through the Civil War era. Included will be examinations of colonial society, the causes and

consequences of the American Revolution, the rise of mass democracy, and the growing sectionalism that tore the nation apart in 1861.

**HI 102 - HUM United States History Since 1877**

4.00 credits. (**Humanities Core Course**) This course examines the history of the United States from America's late nineteenth century industrial revolution to 9/11 and its aftermath. Emphasis will be on the nation's rise as an economic and military superpower, its political development, and its multicultural identity.

**HI 111 - NCH History of Pre-Modern Asia**

4.00 credits. (**Non-Western Cultural Heritage Core Course**) This course examines the history of Asia up to 1500. There will be a focus on cross-cultural contacts within Asia and with the larger world. By semester's end, students will have a factual understanding of Asia's role in the international community, including the cultural, political, intellectual and economic factors that have influenced this region's history. They also will learn to critically evaluate historical materials relevant to the study of Asia. \*Prerequisite(s): Power of Language English Core course.

**HI 112 - NCH History of Modern Asia**

4.00 credits. (**Non-Western Cultural Heritage Core Course**) This course examines the history of Asia from approximately 1500 until the present day. It will focus on cross-cultural contacts within Asia and with the West. By semester's end, students will have a better appreciation of Asia in our international community, and will better understand the cultural, political, intellectual and economic factors that have influenced this region's history.

\*Prerequisite(s): Power of Language English Core course.

**HI 114 - WCH Western Civilization I**

4.00 credits. (**Western Cultural Heritage Core Course**) This course will examine the evolution of Western civilization from its origins in ancient Mediterranean communities (c. 3000 BCE) to the end of the Thirty Years' War (1648). Emphasis will be placed on the role of politics, economics, culture, religion, and ideology in shaping European societies.

**HI 115 - WCH Western Civilization II**

4.00 credits. (**Western Cultural Heritage Core Course**) An exploration of historical developments that dominated Western civilization from 1500 through the present. Emphasis will be placed on the role of politics, economics, culture, religion and ideology in shaping modern society in Europe and the United States.

**HI 209 - Nineteenth-Century Europe**

4.00 credits. This course examines political, economic, social, and cultural developments in Europe from 1815 to 1914. Emphasis will be placed on the industrial revolution, conservatism, liberalism, socialism, romanticism, nationalism, imperialism, anti-Semitism, romanticism, realism, and modernism.

**HI 210 - Twentieth-Century Europe**

4.00 credits. This course examines political, economic, social, and cultural developments in Europe from 1914 to the present. Emphasis will be placed on World War I, the Russian Revolution, Fascism, Nazism, Communism, World War II, the Cold War, decolonization, the collapse of Communist regimes in Eastern Europe, and the evolution of the European Union.

**HI 225 - History of Modern Japan**

4.00 credits. This course traces Japan's history from the period of the Meiji Restoration in the mid-19th century to the present period. Upon completion of the course, the student will be able to describe, explain and analyze diplomatic, political, social, economic and technological interactions between Japan and its Asian neighbors as well as between Japan and the West for the modern period.

**HI 226 - History of Modern China**

4.00 credits. This course traces China's history from the turbulent close of the dynastic era at the end of the 19th century through the present Communist period. Upon completion of the course, the student will be able to describe, explain and analyze diplomatic, political, social, economic and technological interactions between China and its Asian neighbors as well as between China and the West for the modern period.

**HI 230 - American Minds I - From Puritanism to Transcendentalism**

4.00 credits. This course explores the development of American thought from the era of New England Puritanism to the age of sectionalism and Civil War. It will center on close readings of classic texts, essays and speeches penned by a number of significant thinkers including Anne Hutchinson, Thomas Paine, Henry David Thoreau, Harriet Jacobs, and Herman Melville. An analysis of "native" ideas, the class offers students fresh and original ways to think about the American past.

**HI 231 - American Minds II - From Victorianism to Multiculturalism**

4.00 credits. This course explores the development of American ideas from the post-Civil War Victorians to contemporary debates over multiculturalism and postmodernism. It will center on close readings of "classic" and controversial texts written by such original thinkers as Henry Adams, W.E.B. Du Bois, Charlotte Perkins Gilman, Reinhold Niebuhr and Richard Rorty.

**HI 235 - SSC Citizenship and Conscience**

4.00 credits. **(Social Science Core Course) \*A Guided Writing and Research Course.**

Explores issues of citizenship and civic responsibility through the lens of religious minorities—Amish, Brethren, Mennonites, and Hutterites—whose pacifist commitments have often placed them in conflict with political systems in the United States, but have also often led them to defend religious liberty or advocate for social justice. Student will each choose a historical or contemporary case study to research, write, and present as an academic paper.

**HI 300 - Brethren in China (REL 300)**

4.00 credits. This course investigates the history of Brethren missionary activities in China between 1908 and 1952, highlighting the impact of these activities on gender roles, national identity, and peacemaking.

**HI 301 - Contemporary China**

4.00 credits. In this course we will investigate contemporary Chinese society, defined as the post-Mao era, with a focus on history, politics, economics, social structures, and culture.

**HI 302 - World War II in the Pacific**

4.00 credits. In this course we will trace the history of World War II in the Pacific. We will focus on the years before, during, and after the war, including the war's impact on both military and civilian populations.

**HI 303 - Jeffersonian America**

4.00 credits. This course explores the formative years of the early American republic from the drafting of the Constitution to the age of sectionalism. Topics include the emergence of competitive political parties, the nation's divided reaction to the French Revolution, the unexpected growth of popular democracy, the War of 1812, and the expansion of slavery across the country's southwestern frontier. Enrollment limited to sophomore status or above.

**HI 304 - Sectionalism and Civil War**

4.00 credits. This course examines the causes, character, and consequences of America's Civil War. Topics include the failure of antebellum politics, the centrality of the slavery "question," arguments for and against secession, and an overview of the military campaigns that defeated the Confederacy. Enrollment limited to sophomore status or above.

**HI 306 - Recent History of the U.S.**

4.00 credits. An intensive analysis of the vexing economic, political, social and diplomatic forces responsible for shaping the American experience since 1900; conflicting interpretations emphasized. Enrollment limited to sophomore status or above.

**HI 308 - History in Literature**

4.00 credits. An exploration of recent history (1900-2000) through the novel. This course will analyze how race, myth, power and class in the modern world have been interpreted by writers from around the globe. It will further assess how literary movements have sometimes reflected and sometimes challenged the values of their societies. Enrollment limited to sophomore status or above.

**HI 309 - American Intellectual History**

4.00 credits. An examination of the major social and intellectual movements in the United States. Enrollment limited to sophomore status or above.

**HI 311 - The Ancient World**

4.00 credits. An examination of the history and interconnection of ancient regions, including Mesopotamia, Egypt, Assyria, Israel, Greece and Rome. Enrollment limited to sophomore status or above.

**HI 312 - Rise of Europe, 400 - 1400**

4.00 credits. An exploration of the growth of western Europe from its Greek and Roman heritage and the fall of Rome through the consolidation of the Church and Christianity, the rise of kingship and nationhood, the emergence of classes, and economic, social and cultural developments. Enrollment limited to sophomore status or above.

**HI 315 - The Early Modern World: Religion, Renaissance and Encounter**

4.00 credits. An examination of the religious, political, cultural and scientific changes in Europe between 1400 and 1750, with emphasis placed also on the Ottoman Empire, the encounter with America, the expansion into Asia and Africa, and other global realities. Enrollment limited to sophomore status or above.

**HI 316 - The Enlightenment and French Revolution (1600-1800)**

4.00 credits. An analysis of an emerging, world-dominating Europe, with emphasis on the Enlightenment, the nation-state, global conflicts, civil wars and revolutions, and social, cultural and economic developments. Enrollment limited to sophomore status or above.

**HI 318 - Greater China**

4.00 credits. In this course, we will trace the history of overseas Chinese communities during the modern era. Special attention will be paid to the Chinese communities in Hong Kong, Taiwan, Singapore and the United States. Upon completion of the course, each student will be able to describe, explain and analyze the effects of nationalism, citizenship and globalization on transnational groups in general and the overseas Chinese in particular. Enrollment limited to sophomore status or above.

**HI 320 - Middle East in Modern Times**

4.00 credits. This course examines the major political, social, economic, and intellectual movements that have shaped states and peoples in the modern Middle East. The class will survey the rise of Islam and the history of the region from the seventh through the eighteenth centuries, but primary attention will be devoted to the nineteenth and twentieth centuries, particularly the challenges presented by Euro-American encroachment and the Israeli-Palestinian Conflict. Enrollment limited to sophomore status or above.

**HI 321 - North Africa in Modern Times**

4.00 credits. This course examines the major political, social, economic, and intellectual movements that have shaped states and peoples in North Africa. The class will survey the rise of Islam and the history of the region from the 7th through the 18th centuries, but primary attention will be devoted to the 19th and 20th centuries, particularly the challenges presented by European colonialism and decolonization. Enrollment limited to sophomore status or above.

**HI 323 - France Since 1815**

4.00 credits. This course examines France since 1815 by focusing on political, economic, social, and cultural developments. Subjects covered include the Restoration, the industrial revolution, the Revolution of 1848, the Second Empire, the Commune, the Third Republic, imperialism, the Belle Époque, the First World War, the Great Depression, the Popular Front, the Second World War, the Fourth Republic, the Fifth Republic, the Trente Glorieuses, urban expansion, decolonization, and immigration. Enrollment limited to sophomore status or above.

**HI 324 - Empire and Nation in Eastern Europe**

4.00 credits. This course examines the transition from empire to nation in East Central and Southeastern Europe by focusing on political, economic, social, and cultural developments. Subjects covered include the rise and collapse of the Austro-Hungarian and Ottoman Empires; the national states of the interwar years; the experiences of these states and peoples during World War II; the rise and fall of Communist regimes in East Central and Southeastern Europe; the disintegration of Yugoslavia; and the transition to parliamentary democracy and market economies in the years since 1989. Enrollment limited to sophomore status or above.

**HI 325 - The Beatles: A Cultural History**

4.00 credits. More than a popular musical group, the Beatles (c. 1960-1970), embodied many of the deep changes moving through Western culture in the sixties. Their "long" hair, androgynous look, and genius for producing sounds and lyrics that established rather than followed trends, were all part of the Beatles' mystique. This course will evaluate the Beatles' music and how it came to be associated with youth, liberation, "choice," and, various forms of protest.

**HI 330 - Studies in U.S. History**

4.00 credits. An analytical inquiry into special period and topics in US history, including but not limited to World War I and World War II. Enrollment limited to sophomore status or above. This course is repeatable for credit.

**HI 331 - Peace and War in a Global World (INT 331, PCS 331)**

4.00 credits. Students will learn essentials about the history of war and peacemaking since 1500, as well as key concepts such as the military revolution, just war, non-violence, the liberal or democratic peace, the Kantian triad, and the Confucian and Westphalia international relations systems.

**HI 340 - Studies in European History**

4.00 credits. An analytical inquiry into special periods and topics in European history, including courses on World War I and World War II. Enrollment limited to sophomore status or above. This course is repeatable for credit.

**HI 360 - Italian Renaissance (ART 360)**

4.00 credits. The Italian Renaissance seminar is an in-depth cultural history of the humanist movement in Italy from 1250 to 1550 and its impact on the fine arts, literature, politics, religion, education and science. The course includes reading and discussion of primary texts by Petrarch, Dante, Boccaccio, Alberti, Machiavelli, Da Vinci, Michelangelo and Vasari. Topics include the revival of Antiquity, the discovery of Nature, Statecraft, scientific innovation and new concepts of genius and creativity. \*Prerequisite(s): ART 155, ART 157, or HI 115. Enrollment limited to sophomore status or above.

**HI 370-378 - Special Topics in History**

Variable credit. Special subjects chosen as a response to student and faculty interest (e.g. Technology and American Society, and Urban History). Enrollment limited to sophomore status or above. This course is repeatable for credit.

**HI 400 - Senior Honors Project**

Variable (2.00 or 4.00) credits. Students who have been invited and accepted to participate in the Honors in the Discipline Program may register for this course in the semester or semesters (no more than two) in which the research or creative project is initiated and/or completed. The total credit hours for the senior project shall not exceed 4 hours. Completion of this course does not assure recognition for Honors in the Discipline. See the Dean for additional information. \*Prerequisite(s): Invitation to Honors in the Discipline Program. Enrollment limited to sophomore status or above. **Signature Learning Experience: Supervised Research.**

**HI 450 - Topics in Historiography**

4.00 credits. This course provides each student with the opportunity to think critically about the writing of history. It also allows each student to practice his or her communication skills, both verbally and in writing. Rather than reading simply for content, we will spend much of our time analyzing the various approaches to history. We will attempt to understand the assumptions, biases, and interpretive paradigms that underlie each of these approaches. In short, we will focus not on the "what" of history but on the "why" and "how." \*Prerequisite(s): History majors during the senior year. **Signature Learning Experience: Capstone Experience.**

**HI 470-474 - Internship in Historical Studies**

Variable (2.00 to 4.00) credits. This course provides students with applied field instruction in history. Forty hours of on-site work is required for every credit hour granted. In addition to on-site work, students will complete writing assignments designed to promote reflection on the work experience. Enrollment limited to sophomore status or above. **Signature Learning Experience: Internship.** Register by Instructor. This course is repeatable for credit.

**HI 480-489 - Independent Study in History**

Variable credit. Designed to offer an opportunity to use techniques of historical interpretation in specific problem areas. \*Prerequisite(s): Approval of the Dean, the Independent Study Committee, and permission of the instructor. Enrollment limited to sophomore status or above. Register by Instructor. This course is repeatable for credit.

**HI 490 - Independent Research in History**

Variable (2.00 to 4.00) credits. This independent research course focuses on a topic of mutual interest to the History major and Program mentor. Enrollment is limited to junior status and above. The course must be registered during the semester in which it will be completed. **Signature Learning Experience: Supervised Research.** Register by Instructor.

**Honors English Courses**

**HEN 105 - HNR HUM Introduction to Literature: Utopian and Dystopian Literature**

4.00 credits. **(Humanities Core Course - Honors)** An introduction to narratives about utopian (ideal) and dystopian (horrific) societies. The reading includes religious descriptions of paradise, fictional and nonfictional utopian experiments in the New World (El Dorado, Fruitlands, Walden, Herland), and dark accounts of societies gone very wrong (1984, The Handmaid's Tale). Important questions include what makes a good society and whether gender, race/ethnicity, and class shape utopian visions and dystopian fears. This course does not count toward the English major/minor.

**HEN 252 - HNR HUM Irony, Humor, and Despair in Modern Literature**

4.00 credits. (**Humanities Core Course - Honors**) \***A Guided Writing and Research Course.** An exploration of the relationship among several quintessential modern writers and an investigation of their use of humor and irony to stave off despair and affirm at least the value of artistic creation and the need for each of us to assert meaning in life. Honors students only.

**HEN 253 - HNR WCH Gaelic and Anglo-Irish Ireland**

4.00 credits. (**Western Cultural Heritage Core Course - Honors**) \***A Guided Writing and Research Course.** A study of the intersection between the Gaelic and Anglo-Irish linguistic, cultural and literary traditions of Ireland. Besides exploring the past and present state of Gaelic language and culture, the class will focus on the impact of the older Gaelic heritage on English-language classics by writers such as Swift, Joyce, Yeats, Beckett and Heaney. Honors students only.

**Honors Religious Studies Courses**

**HRE 285 - HNR WCH Amish, Brethren, and Mennonites in the U.S. Since 1875**

4.00 credits. (**Western Cultural Heritage Core Course - Honors**) \***A Guided Writing and Research Course.** An interdisciplinary study of the Amish, Brethren, and Mennonite experience (beliefs, history, practices) in the context of modern American culture. Primary attention focuses on understanding how these communities responded to major modernizing developments in western culture since 1875—the industrial revolution, the modern state, individuation, conscription, the rise of technology, compulsory education, understandings of progress, and religious pluralism. The course will explore how such changes in western cultural heritage have encouraged assimilation, fragmentation, and in some cases reactionary (Old Order) movements within Anabaptist groups. Honors students only.

**HRE 289 - HNR Communal and Utopian Societies**

4.00 credits. This course will examine various types of communal societies, frequently known as utopian or intentional communities, that have sought to institute an ideal social order, a "heaven on earth." Historic and contemporary religious expressions of American communal development are emphasized. Case studies include the Ephrata Society, Brook Farm, Oneida, New Harmony, The Amana Colonies, the Hutterites, the Shakers, Reba Place Church and the Catholic Worker Movement, among others. Honors students only.

**Honors Women and Gender Studies Courses**

**HWG 300 - HNR Gender and the Law (HPS 300)**

4.00 credits. This interdisciplinary Honors course will examine issues of gender in the context of American statutory and constitutional law. Due to its interdisciplinary nature, course material will draw from the disciplines of history, law, political science, psychology, and sociology to better understand how law affects gendered groups in the United States. We will address such topics as sexual discrimination, sexual harassment, reproductive rights, same-sex marriage, and other issues. Honors students only.

**Japanese Courses**

**JA 111 - PLO First Year Japanese 1**

4.00 credits. (**Power of Language Core Course**) Introduction to contemporary Japanese language designed for the acquisition of basic communication skills in listening, speaking, reading, and writing. Two of the scripts, Hiragana and Katakana, will be introduced. Media in the target language supplement proficiency-oriented textbooks. Aimed at students with no prior knowledge of Japanese.

**JA 112 - PLO First Year Japanese 2**

4.00 credits. (**Power of Language Core Course**) Building upon JA 111, focus will be on furthering oral and aural proficiency already acquired. Students will be introduced to Kanji and proficiency in about 50 of them will be acquired. \**Prerequisite(s)*: JA 111, or placement by examination.

**JA 211 - PLO Second Year Japanese 1**

4.00 credits. (**Power of Language Core Course**) Further development of oral proficiency and reading and writing skills at the high elementary level of instruction. Proficiency in Kanji is increased to about 100. Japanese word processing is introduced. Designed to equip students with the ability to acquire Level Five of the Japanese Language Proficiency Test (JLPT) administered by the Japan Foundation. \**Prerequisite(s)*: JA 112, or placement by examination.

**JA 212 - PLO Second Year Japanese 2**

4.00 credits. (**Power of Language Core Course**) Building upon JA 211, this course further enhances skills in listening, speaking, reading, and writing and increases understanding of Japanese culture. Additionally, an e-mail exchange program is introduced with students at Nihon University, Japan. Proficiency in Kanji is aimed at 250.

\**Prerequisite(s)*: JA 211, or placement by examination.

**JA 240 - NCH History of Japanese Art and Aesthetics (ART 240)**

4.00 credits. (**Non-Western Cultural Heritage Core Course**) This course introduces students to the history of the art and aesthetic sensibilities of the Japanese people from prehistoric times to the modern period. Through this course, students will develop an appreciation for the major trends in Japanese art and the historical milieu in which these were produced. Major works of art from each historical era will be studied, including architecture, sculpture, painting, and pottery, as well as some of the minor arts such as gardens, calligraphy, textiles, etc. Besides understanding the making of the actual works of art, students will also understand the aesthetic principles that inform the making of these objects, such as miyabi, yugen, wabi-sabi, that are central to Japanese cultural history. Spring semester.

**JA 245 - NCH From Anime to Zen: Japanese Society, Business, and Culture**

4.00 credits. (**Non-Western Cultural Heritage Core Course**) \***A Guided Writing and Research course**. The course provides a broad introduction to Japanese society and culture by introducing students to daily life in Japan, discussing the importance of various Japanese religious, political, and economic institutions. It is designed to stimulate student interest in the study of Japan.

**JA 250 - Discovering Contemporary Japan: A Three-Week Cultural Immersion Experience**

Variable (0.00 - 2.00) credit(s). A three-week in-depth immersion in Japanese culture, conducted in Japan during the May term of each academic year. **Signature Learning Experience: Cross-Cultural Experience**. May term only.

**JA 311 - Third Year Japanese 1**

4.00 credits. Designed for student with credit in JA 212, this course aims at developing further control of the grammar, vocabulary, and idioms of spoken Japanese with a proficiency in Kanji reaching 350. \**Prerequisite(s)*: JA 212.

**JA 312 - Third Year Japanese 2**

4.00 credits. This course trains students in intermediate Japanese skills in speaking, listening, reading, and writing. With this course, the student will complete learning of all the basic grammatical patterns of Japanese language and will have the ability to acquire Level Four (in-house version) of the Japanese Language Proficiency Test (JLPT) administered by the Japan Foundation. \**Prerequisite(s)*: JA 311.

**JA 370-378 - Special Topics in Japanese**

Variable credit. Topics of special interest not otherwise covered in the curriculum. Topics depend upon student interest and faculty availability. This course is repeatable for credit.

**JA 411 - Fourth Year Japanese 1**

4.00 credits. Further development of proficiency in both rapid and close reading skills. This course focuses on readings from different fields such as anthropology, history, linguistics, and literature. \**Prerequisite(s)*: JA 312.

**JA 412 - Fourth Year Japanese 2**

4.00 credits. Analysis of important contemporary cultural phenomena and issues that have shaped and continue to shape the modern nation. Readings are taken from literary, sociological, and political sources. Media in the target language supplement written materials. With this course, the student will complete learning of most of the intermediate grammatical patterns of Japanese language and will have the ability to acquire Level Three (in-house version) of the Japanese Language Proficiency Test (JLPT). \**Prerequisite(s)*: JA 411.

**JA 460 - From Murasaki to Murakami (EN 460)**

4.00 credits. This course will introduce students to Japanese literature from the classical period to the modern, in a variety of genres, starting from the oral traditions of myth and poetry of Kojiki and Manyoshu, the great masterpieces of classical Japanese prose depicted in the Genji Monogatari, plays from the feudal period, Heike Monogatari and Sonezaki Shinjuu, early modern novels such as Kokoro and Hakai, and contemporary fiction and personal histories that have gained critical acclaim and popular success, such as Masks, Kitchen, Norwegian, Wood, and Black Rain, among others. Students will not only learn to understand the historical contexts of these works in terms of genre, intent, audience, themes, aesthetics, gender relations, religion and spirituality, but will also engage with literary theories that undergird our understanding of literary production and appreciation. Students will also learn how to apply that understanding in their own writing in the form of research papers and short reflective reaction papers.

**JA 470-474 - Internship in Japanese**

Variable (0.00 to 4.00) credit(s). Modern Language internships provide language students the opportunity to apply the skills and knowledge they have obtained in our classes and while abroad in professional settings, as they are mentored and supervised by practicing professionals. This opportunity fosters enhanced linguistic and cross-cultural proficiency, as well as individually tailored and specialized expertise for language learners. A maximum of four credit hours from Japanese 470-474 may count as Japanese electives. Additional credits count as free electives.

\**Prerequisite(s)*: At least junior standing. **Signature Learning Experience: Internship**. Graded Pass/No Pass.

Register by Instructor. This course is repeatable for credit.

**JA 480-489 - Independent Study in Japanese**

Variable credit. For senior language majors. Independent projects in some area of language or literature.

\**Prerequisite(s)*: Approval of the Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**JA 496 - Japanese Senior Research Project I**

2.00 credits. For Japanese majors. An extended research or translation project on a topic in Japanese literature, culture, or language utilizing some source materials in Japanese. This capstone experience will be closely supervised by Program faculty. Fall semester.

**JA 497 - Japanese Senior Research Project II**

2.00 credits. For Japanese majors. An extended research or translation project on a topic in Japanese literature, culture, or language utilizing some source materials in Japanese. This capstone experience will be closely supervised

by Program faculty. \*Pre/Corequisite(s): JA 496. **Signature Learning Experience: Supervised Research.** Spring semester.

## Latin Courses

### LAT 111 - PLO Elementary Latin 1

4.00 credits. (**Power of Language Core Course**) This class is designed to introduce students to the Latin language and the cultural/ historical contexts in which the language was used. Through a study of the history, philosophy, religion, literature of ancient Rome and Greece, students will learn to make culturally informed translations of Latin into English. Acquisition of Latin vocabulary and grammatical concepts will enhance English vocabulary and grammar. Class sessions will include introductions to and discussions of grammatical concepts, reading practice, review of homework assignments, and discussion of cultural nuances. Because the course is designed to develop an ability to read Latin, quizzes and exams will emphasize translation from Latin into English. Some homework exercises will also ask students to translate English into Latin. Fall semester.

### LAT 112 - PLO Elementary Latin 2

4.00 credits. (**Power of Language Core Course**) This class is designed for students to continue their study of the Latin language and the history, philosophy, religion, literature, and sentiments expressed by it. Students will build on the knowledge learned in Latin 1 by exploring more advanced concepts in the structure and grammar of the language. Additionally, this course will provide students with an understanding of Roman history and culture in order to further their ability to make informed translations of Latin into English. Class sessions will include discussion of new grammatical concepts, reading practice, review of homework assignments, and discussion of cultural nuances. Because the course is designed to develop the ability to read Latin, quizzes and exams will emphasize translation from Latin into English. Some homework exercises, however, will ask students to translate English into Latin. \**Prerequisite(s)*: LAT 111 or two years of high school Latin courses. Spring semester.

### LAT 211 - PLO Intermediate Latin I

4.00 credits. (**Power of Language Core Course**) Builds on grammar and vocabulary knowledge through translating primary texts by Latin authors. Extends education in history, religion, and culture through translation of authentic texts and study of the various time periods in which they were written. Reflection on cultural relevance of Greek mythology in the Roman and modern worlds. Class sessions will include review of grammatical concepts, reading practice, review of homework assignments, and discussion of cultural nuances in a Socratic seminar setting.

\**Prerequisite(s)*: LAT 112 or placement by interview with instructor.

## Master of Music Education Courses

### MME 501 - Introductory Seminar

1.00 credit. This course teaches fundamental skills necessary to complete coursework in the Masters in Music Education program including introduction to action research, the Elizabethtown College peacebuilding framework and Brethren heritage, ethics of studying and representing the other, and foundations of curriculum. Students will read and complete assignments on selected texts related to action research, peacebuilding frameworks, and foundations of curriculum. Offered Summer only.

### MME 511 - Peacebuilding and Philosophy

3.00 credits. This course explores the intersection of music education philosophy, peacebuilding literature, social psychology, sociology, and anthropology. Drawing from diverse disciplines, students examine peace, justice, mutuality, and relationship, agency and empowerment, and moral imagination. At the conclusion of the course,

students will construct philosophy of music education as peacebuilding. \*Prerequisite(s): MME 501. Summer semesters only.

**MME 512 - Curriculum, Assessment, and Measurement**

3.00 credits. This course explores issues of curriculum, assessment, and measurement as well as quantitative and qualitative inquiry within education settings. In an examination of measurement instruments within music education and peacebuilding, students will identify and explore the impact of reliability and validity within measurement. Students will identify the impact of different measures as means of assessing changes in interdependence, altruism, relationship, and musical learning. \*Prerequisite(s): MME 501. Offered every other year.

**MME 513 - World Music Drumming**

3.00 credits. This course studies world music drumming pedagogy and explores the application of this pedagogy to the classroom. Participants will attend the world music drumming workshop, dialogue about applications to the classroom, and construct curricular documents that demonstrate the integration of world music drumming pedagogy.

\*Prerequisite(s): MME 501. Every other Summer semester. This course is repeatable for up to six credits.

**MME 521 - Peacebuilding Methodologies in Inclusive Settings**

3.00 credits. This course examines how an eclectic approach to music methodologies enhances a curriculum that draws from World Music Drumming. Students will examine and apply curriculum and pedagogical approaches to instruction rooted within Dalcroze, Kodaly, Orff, Suzuki, and Music Learning Theory traditions. Students will examine and apply the integration of Dalcroze, Kodaly, and Orff to enhance World Music Drumming curriculum. From a peacebuilding perspective, students will examine the underlying philosophical aims of the Suzuki method and how those same values might be incorporated within music education as peacebuilding. \*Prerequisite(s): MME 501. Summer semesters.

**MME 531 - Culminating Project and Thesis**

3.00 credits. With the assistance of an advisor, the student will identify, plan, and execute a culminating project related to Master's coursework. The project may take the form of an action research study of pedagogical implementation, an ethnography of musical practice, or philosophical inquiry into issues of peacebuilding and/or ethnomusicology. The course grade will be determined by the successful defense of the culminating project to a panel of faculty. \*Prerequisite(s): Completion of all coursework in the Music Education Master's Program. Spring semester.

## Music Courses

### Special Notes Regarding Applied Music Lessons and Ensembles

Students who register for applied music for credit must meet minimum standards established by the Department and should contact the Department office for a list of standards for each applied area. Students who have not attained the level necessary for credit may study through the Preparatory Division. Students in applied music advance as rapidly as their abilities permit. They must study technical exercises and literature from various musical periods and styles.

Students may register with or without credit for the established music ensembles and for other ensembles organized under faculty supervision; ensemble registration for credit may be repeated. All students must meet the standards for attendance at rehearsals and public performances established by the faculty Directors.

Applied music lessons and certain music ensembles may be counted for the Creative Expression requirement of the Core Program if taken as letter-graded for four semesters. An additional fee is charged for applied music lessons. Fees are printed on the master course schedule.

**MU 100 - Repertoire Class**

0.00 credit. This class provides performance opportunities for students in applied music. It meets for one hour each week and is required for all music majors and minors who are enrolled in applied music instruction. Graded Pass/No Pass. This course is repeatable for credit.

**MU 101 - Theory I**

2.00 credits. This course is designed to introduce students to fundamental constructs and notational practices of music theory including clefs, meter signatures, scales/modes, key signatures, intervals, triads, and diatonic voice leading in two and four parts. \*Corequisite(s): MU 103. Fall semester.

**MU 102 - Theory II**

2.00 credits. This course is a continuation of MU 101, and focuses on diatonic melodic and harmonic practices of tonal music including melodic phrase analysis, four-part diatonic harmonic progressions, and an introduction to secondary chords. \*Prerequisite(s): MU 101. \*Corequisite(s): MU 104. Spring semester.

**MU 103 - Aural Skills I**

1.00 credit. Music reading and ear training according to the Kodaly concept using syllables based on moveable "Do," kinesthetically reinforced by hand signs. Study and drill in rhythm will include the use of the basic beat patterns. Linear dictation including rhythmic elements. Aural skills related to theoretical analytical materials covered in MU 101. \*Corequisite(s): MU 101. Spring semester.

**MU 104 - Aural Skills II**

1.00 credit. A continuation of MU 103 including chromaticism, modes and more difficult rhythms and intervals, C clefs. \*Prerequisite(s): MU 103, or permission of the instructor. \*Corequisite(s): MU 102. Fall semester.

**MU 105 - WCH Introduction to Western Music Literature**

4.00 credits. (**Western Cultural Heritage Core Course**) Introduction to the music of the Western world, major composers and selected famous compositions, with emphasis on listening to music from the Baroque era to the present.

**MU 111 - Voice Class**

1.00 credit. The fundamentals of breath control, tone production, and development of vocal technique. \*Open to all students. Fall semester.

**MU 115 - CE Fundamentals at the Keyboard**

4.00 credits. (**Creative Expression Core Course**) Basic skills in producing and reading music at the keyboard with attention to ear training, basic keyboard technique, and musicianship, as well as to sight reading. The School's digital piano laboratory is utilized. Daily practice is required. Spring semester.

**MU 117 - Functional Keyboard Skills I**

1.00 credit. Basic piano skills. Required of all music majors whose first applied instrument is not piano. \*Prerequisite(s): Music major. \*The School reserves the right to offer this course as private lessons if fewer than five students are enrolled. Fall semester.

**MU 118 - Functional Keyboard Skills II**

1.00 credit. A continuation of MU 117, including more difficult harmonic progressions and technical skills. Required of all music majors whose first applied instrument is not piano. \*Prerequisite(s): Music major. \*The School reserves the right to offer this course as private lessons if fewer than five students are enrolled. Spring semester.

**MU 119 - Guitar Class I**

1.00 credit. An introductory course emphasizing studies in basic chords and note reading. Course also surveys various guitar styles, the performers, music and types of guitars. \*The School reserves the right to offer this course as private lessons if fewer than five students are enrolled.

**MU 120 - Guitar Class II**

1.00 credit. A continuation of MU 119 with emphasis on bar chords, accompaniment patterns, and note reading. Includes an introduction to classical guitar technique, history, performers and classical literature. \*Prerequisite(s): MU 119, or permission of the instructor. \*The School reserves the right to offer this course as private lessons if fewer than five students are enrolled.

**MU 125 - WCH American Popular Music from Ragtime to Rock**

4.00 credits. (**Western Cultural Heritage Core Course**) This course traces the history of American popular music from the birth of ragtime in the 1890s through the ascendancy of rock in the 1970s. The survey will examine the most influential genres of popular music during this era, including jazz, blues, Gospel, and country. Students will witness the close connections between music and culture in this turbulent era of American history through recordings, video clips, and concerts.

**MU 130 - Survey of Music Education**

1.00 credit. This course is the future music educator's first exposure to the profession. Students study the history of music education in the United States and philosophical influences on the profession. Students begin to explore the role of teacher through peer-teaching episodes and discussions. Fall semester.

**MU 133 - Diction for Singers**

1.00 credit. An introduction to the fundamentals of singing in English, Italian, German and French with correct pronunciation, using the International Phonetic Alphabet. Fall semester.

**MU 150 - Professional Seminar**

1.00 credit. A weekly seminar for Music Therapy majors. Guest speakers, faculty and students present topics of mutual interest, including areas such as family, art, and dance/movement therapy; family support groups; student voice skills and voice work with individuals who have disabilities; multi-cultural counseling; and trauma therapy. Students also gain experience with structured and improvisational movement, application of music skills, career development, and professional service. \*Required of Music Therapy majors each semester. **Signature Learning Experience: Community-Based Learning.** This course is repeatable for credit.

**MU 151 - Introduction to Music Therapy**

2.00 credits. An introduction to the field of music therapy. Topics include theoretical, historical and sociological rationale supporting the field and an overview of basic clinical practice and research methods. Emphasis is on a broad knowledge of the field resulting in a generalized understanding of the current state of practice and research. Clinical observation and in-class simulations are included with emphasis given to two populations as the semester progresses. \*Prerequisite(s): Music major, or permission of the instructor. Hours: lecture 2, laboratory 1. Fall semester.

**MU 152 - Music Therapy and Clinical Populations**

2.00 credits. The use of music therapy within various clinical populations is emphasized. Content includes a survey of a variety of populations with whom music therapists work, focusing on the characteristics and needs of each group, general treatment approaches, and methods for incorporating music therapy. Students complete their first pre-practicum experience, observing one clinical experience throughout the semester. \*Prerequisite(s): MU 151, and Music Therapy majors only. Hours: lecture 2, laboratory 1. Spring semester.

**MU 201 - Theory III**

2.00 credits. This course is a continuation of MU 102, and focuses on chromatic melodic and harmonic practices of tonal music including applied chords, mode mixture, modulation, and chromatic predominant chords. Formal procedures will be examined including binary, ternary, variation, rondo and sonata. \*Prerequisite(s): MU 102.

\*Corequisite(s): MU 203. Fall semester.

**MU 202 - Theory IV**

2.00 credits. This course is a continuation of MU 201, and focuses on techniques and materials of music since 1900. This will include tonal, atonal, and serial methods and materials, rhythmic and metric practices, and post-tonal formal constructs. \*Prerequisite(s): MU 201. \*Corequisite(s): MU 204. Spring semester.

**MU 203 - Aural Skills III**

1.00 credit. Continued emphasis on reading and dictation skills with concentration on modulation and chromaticism using some 20th-century material. C clefs. \*Prerequisite(s): MU 104. \*Corequisite(s): MU 201. Spring semester.

**MU 204 - Aural Skills IV**

1.00 credit. A continuation of MU 203 with concentration on reading atonal melodies and 20th-century material.

\*Prerequisite(s): MU 203. \*Corequisite(s): MU 202. Fall semester.

**MU 205 - NCH World Music**

4.00 credits. **(Non-Western Cultural Heritage Core Course) \*A Guided Writing and Research course.** Music indigenous to eight non-Western geographic regions of the world is studied and compared in terms of tonal and rhythmic attributes, and as an approach to promoting sociocultural awareness.

**MU 211 - Music History: 1600-1850**

4.00 credits. A broad study of the technical, stylistic and social/historical developments related to Western music and musicians beginning around the year 1600, toward the end of the Renaissance Era, and continuing to the end of the 18th century. \*Prerequisite(s): MU 102, or permission of the instructor. Fall semester.

**MU 212 - Music History: 1850 to the Present**

4.00 credits. A broad study of the technical, stylistic and social/historical developments related to Western music and musicians beginning around the year 1850, and continuing to the present. \*Prerequisite(s): MU 102, or permission of the instructor. Spring semester.

**MU 217 - Functional Keyboard Skills III**

1.00 credit. Scale harmonizations, modal harmonizations, figured bass realization, and transposition of simple instrumental melodic lines. \*Prerequisite(s): MU 118, or permission of the instructor. Fall semester.

**MU 218 - Functional Keyboard Skills IV**

1.00 credit. A continuation of MU 217 involving further scale harmonizations, modulations, transpositions and emphasizing a variety of accompaniment styles. \*Prerequisite(s): MU 217. Spring semester.

**MU 230 - Music Teaching and Learning**

2.00 credits. Students discover how children learn music and the role of music learning theory in facilitating that process. The future music educator is also introduced to the process of curriculum development and the assessment of music teaching and learning. Model curricula based on national and state standards are reviewed. Students will develop the ability to assess aptitudes, backgrounds, and orientations of students and subject content and plan lessons that meet assessed needs. Peer teaching and field experiences will be an integral part of the course experience. Fall semester.

**MU 231 - Brass Class**

1.00 credit. This course will provide an overview of pedagogy for all brass instruments. Methods of tone production, fingerings or positions, care and repair, and methods and materials for teaching all brass instruments will be explored. Emphasis this semester will be on trumpet/cornet and trombone. \*The School reserves the right to offer this course as private lessons if fewer than five students are enrolled. Fall semester

**MU 232 - Woodwind Class**

1.00 credit. Methods of tone production, fingerings, maintenance, care and repair, and methods and materials for teaching flute, oboe, clarinet, bassoon and saxophone. \*The School reserves the right to offer this course as private lessons if fewer than five students are enrolled. Fall semester.

**MU 234 - Percussion Class**

1.00 credit. Methods of tone production, care and repair, and methods and materials for teaching snare drum, cymbals, timpani and other percussion instruments. \*The School reserves the right to offer this course as private lessons if fewer than five students are enrolled. Spring semester

**MU 236 - Percussion for Music Therapy**

1.00 credit. Students learn to play, teach and care for snare drum, trap set, barrel type drums, frame drums, and auxiliary percussion instruments. Individual and small ensemble performances are an integral part of this course and discussions about incorporating the skills and concepts into music therapy sessions. Register by Instructor. Spring semester.

**MU 237 - String Class**

1.00 credit. Method of tone production, fingerings, care and repair, and methods and materials for teaching violin and cello in individual and class settings. \*The School reserves the right to offer this course as private lessons if fewer than five students are enrolled. Fall semester

**MU 239 - Vocal Pedagogy**

1.00 credit. An introduction to the fundamentals of teaching singing. Students examine the physiology of the voice, vocal sound production, care of the voice, teaching techniques and other related topics. Spring semester.

**MU 240 - Conducting Laboratory**

0.00 credit. Students become familiar with standard instrumental and choral repertoire and observe advanced conducting techniques by performing in a laboratory ensemble for MU 322 (Conducting II). Graded Pass/No Pass. Spring semester.

**MU 241 - Music Therapy Methods and Techniques I**

4.00 credits. The development of music and non-music skills and concepts related to conducting entry-level music therapy sessions. Emphasis is on the development and application of assessment and observation skills, treatment planning and implementation, leadership, documentation and music performance skills in therapeutic settings. Includes lecture and clinical experiences. \*Prerequisite(s): MU 152. Fall semester.

**MU 253 - Music Therapy Methods and Techniques II**

3.00 credits. A continuation of MU 241 involving the further development of non-music and music skills and concepts related to conducting entry-level music therapy sessions. Includes the study of behavioral techniques, beginning counseling interaction skills, and other music and non-music methods and techniques employed within a music therapist's clinical work. \*Prerequisite(s): MU 241. Hours: lecture 2, laboratory 1. Spring semester.

**MU 254 - Practical Experiences I: Music Therapy**

1.00 credit. Supervised field experiences (observation and participation) in an approved clinical facility. A minimum of 13 planned sessions involving client contact and weekly processing with a supervisor are required for each clinical experience. During this practicum, students will achieve entry-level professional, preparation, delivery, and documentation skills related to the practice of music therapy. \**Prerequisite(s)*: MU 241 and a Pass on the pre-clinical proficiency assignment and Music Therapy majors only. **Signature Learning Experience: Field Placement and Practicum.**

**MU 268 - CE Voice**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 269 - CE Piano**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). \*Music majors whose principal instrument is NOT piano or organ must enroll in MU 117 before MU 269. This course is repeatable for credit.

**MU 270 - CE Organ**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 271 - CE Violin**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 272 - CE Viola**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 273 - CE Cello**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 274 - CE String Bass**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 275 - CE Guitar**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 276 - CE Flute**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 277 - CE Clarinet**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 278 - CE Oboe**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 279 - CE Bassoon**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 280 - CE Saxophone**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 281 - CE Trumpet**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 282 - CE French Horn**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 283 - CE Trombone**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 284 - CE Euphonium**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 285 - CE Tuba**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 286 - CE Percussion**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 287 - CE Harp**

1.00 credit. (**Creative Expression Core Course**) Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 290 - Composition**

1.00 credit. Development of skills in composing. Emphasis on creation of original works for a variety of media with performance as final product. \**Prerequisite(s)*: MU 101. For enrollment beyond two terms, MU 419 is required. Register by Instructor. This course is repeatable for credit.

**MU 300 - Jazz Improvisation**

1.00 credit. The primary aim of this course is to provide future music educators the basic knowledge and skills needed to achieve success as an instructor/performer of jazz improvisation. Towards this comprehensive purpose, students of this course will engage and demonstrate competency in a series of specific, measurable tasks to learn the melodic and harmonic foundations of jazz improvisation and solo performance. \**Prerequisite(s)*: MU 204.

**MU 321 - Conducting I**

2.00 credits. Instruction in the fundamentals of conducting. Topics include conducting techniques, instrumental and choral methods and problems, score reading, and interpretation. \**Prerequisite(s)*: MU 202 and MU 212, or permission of the instructor. Fall semester.

**MU 322 - Conducting II**

2.00 credits. A continuation of MU 321. \**Prerequisite(s)*: MU 321. Spring semester.

**MU 330 - General Music Methods and Materials**

2.00 credits. Preparation for students to teach elementary, middle and high school general music classes. Students are expected to plan and deliver general music lessons, interpret and apply contemporary music education pedagogies, and develop evaluative techniques and abilities that can be applied to the assessment of student progress and curriculum objectives. \**Corequisite(s)*: MU 331. Fall semester.

**MU 331 - General Music Field Experience**

1.00 credit. Practical application of the skills learned in MU 330. Observations and field placement in a general music setting is required. \**Corequisite(s)*: MU 330. **Signature Learning Experience: Field Placement**. Fall semester.

**MU 332 - Music Technology**

1.00 credit. Students develop and practice skills in music technology and technology needed for admittance to the education program. Students review current trends in music Computer Aided Instruction, develop skills in the use of audio- and video-recording equipment, and gain expertise in the use of various music production-related software and computer databases. Register by Instructor.

**MU 353 - Clinical Improvisation and Composition I**

2.00 credits. The first in a two-course sequence focusing on developing music improvisation and composition skills for use in the practice of music therapy. Basic improvisation skills on voice, piano and guitar will be addressed. Composition tasks will focus on song writing. \*Prerequisite(s): MU 218. Fall semester.

**MU 354 - Clinical Improvisation and Composition II**

2.00 credits. The second in a two-course sequence focusing on developing music improvisation and composition skills for use in the practice of music therapy. More advanced improvisation skills on voice, piano and guitar will be addressed with more emphasis on the clinical context. Composition tasks will focus on adapting and arranging existing and original pieces for use in the clinic. \*Prerequisite(s): MU 353. Spring semester.

**MU 355 - Practical Experiences II: Music Therapy**

1.00 credit. Supervised field experiences (observation and participation) in an approved clinical facility. A minimum of 13 planned sessions involving client contact and weekly processing with a supervisor are required for each clinical experience. During this practicum, students will apply previously learned music therapy skills to a new population and continue to develop their professional, preparation, delivery, and documentation skills related to the practice of music therapy. \*Prerequisite(s): MU 253 and MU 254. **Signature Learning Experience: Field Placement and Practicum.**

**MU 356 - Practical Experiences III: Music Therapy**

1.00 credit. Supervised field experiences (observation and participation) in an approved clinical facility. A minimum of 13 planned sessions involving client contact and weekly processing with a supervisor are required for each clinical experience. During this practicum, students will apply previously learned music therapy skills to a new population. They will become more independent in the application of music therapy skills related to the preparation, delivery, and documentation of clinical work. \*Prerequisite(s): MU 355. **Signature Learning Experience: Field Placement and Practicum.**

**MU 357 - Music Therapy Methods and Techniques III**

3.00 credits. A study of various philosophies and practices of music therapy as related to the implementation of music therapy within specific clinical populations and preparation for clinical internship. Emphases are on the integration of the knowledge and skills associated with the practice of music therapy, verbal interaction skills, and interviewing for internships. \*Prerequisite(s): MU 253 and MU 254. Fall semester.

**MU 358 - Psychology of Music and Research Methods I**

3.00 credits. Beginning with a brief introduction to the research literature that the students read and an overview of the research process, the course then examines the literature on various topics related to acoustics and the psychology of music while discussing how the information applies to the practice of music therapy. Students review the literature on topics related to their chosen future research study, which will be conducted the following semester. \*Prerequisite(s): MU 253 and MU 254, MA 251, BIO 101 and BIO 201. Spring semester.

**MU 360A - Chamber Music**

0.50 credit. General chamber music course from which groups such as the Brass Chamber Ensemble (B), Woodwind Ensemble (C), Flute Choir (E), Percussion Ensemble (F), Piano Ensemble (P), String Ensemble (S), Vocal Ensemble (V), and Wind Ensemble (W) will be formed as need arises. Graded Pass/No Pass. This course is repeatable for credit.

**MU 360B - Chamber Ensemble Brass**

0.50 credit. General chamber music course from which groups such as Brass Ensemble, Wind Ensemble, String Ensemble, Woodwind Ensemble, Chorale, Piano Trio, and Piano Ensemble will be formed as need arises. Graded Pass/No Pass. This course is repeatable for credit.

**MU 360C - Woodwind Ensemble**

0.50 credit. General chamber music course from which groups such as Brass Ensemble, Wind Ensemble, String Ensemble, Woodwind Ensemble, Chorale, Piano Trio, and Piano Ensemble will be formed as need arises. Graded Pass/No Pass. This course is repeatable for credit.

**MU 360E - Flute Choir**

0.50 credit. General chamber music course from which groups such as Brass Ensemble, Wind Ensemble, String Ensemble, Woodwind Ensemble, Chorale, Piano Trio, and Piano Ensemble will be formed as need arises. Graded Pass/No Pass. This course is repeatable for credit.

**MU 360F - Percussion Ensemble**

0.50 credit. General chamber music course from which groups such as Brass Ensemble, Wind Ensemble, String Ensemble, Woodwind Ensemble, Chorale, Piano Trio, and Piano Ensemble will be formed as need arises. Graded Pass/No Pass. This course is repeatable for credit.

**MU 360P - Piano Ensemble**

0.50 credit. General chamber music course from which groups such as Brass Ensemble, Wind Ensemble, String Ensemble, Woodwind Ensemble, Chorale, Piano Trio, and Piano Ensemble will be formed as need arises. Graded Pass/No Pass. This course is repeatable for credit.

**MU 360S - String Ensemble**

0.50 credit. General chamber music course from which groups such as Brass Ensemble, Wind Ensemble, String Ensemble, Woodwind Ensemble, Chorale, Piano Trio, and Piano Ensemble will be formed as need arises. Graded Pass/No Pass. This course is repeatable for credit.

**MU 360V - Vocal Ensemble**

0.50 credit. General chamber music course from which groups such as Brass Ensemble, Wind Ensemble, String Ensemble, Woodwind Ensemble, Chorale, Piano Trio, and Piano Ensemble will be formed as need arises. Graded Pass/No Pass. Register by Instructor. This course is repeatable for credit.

**MU 360W - Wind Ensemble**

0.50 credit. General chamber music course from which groups such as Brass Ensemble, Wind Ensemble, String Ensemble, Woodwind Ensemble, Chorale, Piano Trio, and Piano Ensemble will be formed as need arises. Graded Pass/No Pass. This course is repeatable for credit.

**MU 361 - CE Concert Choir**

1.00 credit. **(Creative Expression Core Course)** Acceptance based upon auditions by appointment. Several performances on campus each year, and this group performs in churches and schools on its annual tour. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 363 - CE Community Chorus**

1.00 credit. **(Creative Expression Core Course)** Vocal ensemble open to any member of the student body and local community without audition. Literature performed will include works from the standard choral repertoire,

contemporary selections, and music of varying cultures and periods. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 364 - CE Treble Choir**

1.00 credit. (**Creative Expression Core Course**) Vocal ensemble open to any member of the student body who sings in the treble range (soprano/alto) by audition. Literature performed will include works from the standard choral repertoire, contemporary selections, and music of varying cultures and periods. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 365 - CE Orchestra**

1.00 credit. (**Creative Expression Core Course**) Open to all qualified students; acceptance subject to approval by Director. Presentation of several concerts during the year. String, chamber and full orchestra music is performed. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). \*Prerequisite for winds and percussion: permission of the instructor. This course is repeatable for credit.

**MU 368 - Jazz Band**

0.50 credit. The jazz band is open to all qualified students who play instruments which constitute a traditional big band. Acceptance is subject to the approval of the director. The jazz band performs at least one concert per semester on campus and may perform off-campus concerts. This ensemble typically goes on tour with the concert choir in the spring term. The band rehearses once weekly for two hours. Graded Pass/No Pass. This course is repeatable for credit.

**MU 369 - CE Symphonic Band**

1.00 credit. (**Creative Expression Core Course**) Open to all qualified students; acceptance subject to approval by Director. Performances include the annual winter and spring concerts and a number of off-campus appearances. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). This course is repeatable for credit.

**MU 370-378 - Special Topics in Music**

Variable credit. This sequence of courses permits the School of Arts and Humanities to offer courses that are not part of the regular curriculum. This course is repeatable for credit.

**MU 419 - Counterpoint**

2.00 credits. A study of contrapuntal techniques of the 16th through 20th centuries through representative composers and original compositions. \*Pre/Corequisite(s): MU 204. Fall semester.

**MU 431 - Piano Methods and Materials I**

2.00 credits. Modern methods in teaching piano to children, youth and adults. Course includes a survey of teaching materials for various stages of progress, teaching demonstrations, and experience. \*Prerequisite(s): Two semesters of MU 269.

**MU 432 - Piano Methods and Materials II**

2.00 credits. A continuation of MU 431. \*Prerequisite(s): MU 431.

**MU 433 - Secondary Music Techniques and Materials**

2.00 credits. The development of instrumental teaching skills for individual, small group and ensemble instruction will be the focus of this course. Philosophical considerations related to the role of instrumental music education and applications of Music Learning Theory provides the framework for this course. Selection of appropriate method book materials, ensemble literature and materials, rehearsal planning and techniques, and the development of a curricular approach to performance ensembles will be emphasized. \*Corequisite(s): MU 434. Fall semester.

**MU 434 - Secondary Music Techniques and Materials Lab**

0.00 credit. This course will provide practical application of the skills learned in MU 433. Observation and field placement in an instrumental music setting will be required. \*Corequisite(s): MU 433. **Signature Learning Experience: Field Placement.** Fall semester.

**MU 440 - Arranging**

2.00 credits. Arranging and transcribing music for large and small ensembles. Class performance of student works is combined with a study of the characteristics of the human voice and each standard orchestral instrument/instrumental group. \*Prerequisite(s): MU 204.

**MU 441 - History of Early Music**

2.00 credits. A broad chronological study of the technical, stylistic and social/historical developments related to Western music and musicians, beginning with the music of the ancient Greek civilizations and especially emphasizing the development of polyphony until about the year 1600. \*Prerequisite(s): MU 102, or permission of the instructor. Spring semester.

**MU 454 - Psychology of Music and Research Methods II**

3.00 credits. A continuation of MU 358. Students will develop a more specific understanding of the concepts involved in conducting, reading and evaluating research in music therapy. Students will apply the concepts to the studies they designed the previous semester while conducting these studies. A few topics related to acoustics and the psychology of music also are included. \*Prerequisite(s): MU 358. **Signature Learning Experience: Supervised Research.** Fall semester.

**MU 457 - Practical Experiences IV: Music Therapy**

1.00 credit. Supervised field experiences (observation and participation) in an approved clinical facility. A minimum of 13 planned sessions involving client contact and weekly processing with a supervisor are required for each clinical experience. During this practicum, students will apply previously learned music therapy skills to a new population. They will further develop their independence in the application of music therapy skills related to the preparation, delivery, and documentation of clinical work. \*Prerequisite(s): MU 356 and MU 357. **Signature Learning Experience: Practicum.**

**MU 458 - Practical Experiences V: Music Therapy**

1.00 credit. Supervised field experiences (observation and participation) in an approved clinical facility. A minimum of 13 planned sessions involving client contact and weekly processing with a supervisor are required for each clinical experience. During this practicum, students will apply previously learned music therapy skills to a new population. By the end of this practicum, they will display a level of independence in music therapy skills related to the preparation, delivery, and documentation of clinical work that demonstrates readiness for the clinical internship. \*Prerequisite(s): MU 457. **Signature Learning Experience: Practicum.**

**MU 459 - Music Therapy Methods and Techniques IV**

3.00 credits. A study of various philosophies, theories and practices as related to the implementation of treatment within music therapy. Emphasis is on the integration of the theories and concepts/skills associated with various

music and non-music methods and techniques to the practice of music therapy, as well as professional employment issues. \*Prerequisite(s): MU 357.

**MU 470-474 - Internship in Music**

Variable (2.00- 4.00) credits. An internship experience for students in a music setting, for music majors or minors, as approved by the music faculty. A maximum of four credit hours from Music 470-474 may count as music electives. Additional credits count as free electives. Signature Learning Experience: Internship. Register by Instructor. This course is repeatable for credit.

**MU 475 - Professional Internship in Music Education**

12.00 credits. Teaching experience and observation in elementary and secondary music classes. Instrumental and vocal emphases vary with student strengths and needs. \*Corequisite(s): ED 497. **Signature Learning Experience: Internship.** Graded Pass/No Pass. Register by Instructor.

**MU 478 - Non-Roster Professional Internship in Music Therapy**

0.00 credit. A supervised practicum experience of varying length completed at a College-approved facility. The student is supervised by a board-certified faculty member from the Music Therapy program and an on-site board-certified music therapist. A minimum of 1,200 hours of clinical training is required at the completion of the internship. \*Prerequisite(s): Completion of all other Music Therapy degree requirements. **Signature Learning Experience: Internship.** Graded Pass/No Pass. Offered as needed. Register by Instructor. This course is repeatable for credit.

**MU 479 - Professional Internship in Music Therapy**

0.00 credit. An approximately six-month, supervised practical experience with a board-certified registered music therapist in an AMTA-approved facility. Total number of clinical training hours must equal 1,200. Taken only after completion of all other Music Therapy degree requirements. **Signature Learning Experience: Internship.** Graded Pass/No Pass. Register by Instructor. This course is repeatable for credit.

**MU 480-489 - Independent Study in Music**

Variable credit. Individual students are offered opportunities for musical composition, arranging, performance or research under faculty supervision. \*Prerequisite(s): Approval of the Dean of the School of Arts and Humanities and Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**MU 490 - Independent Research in Music**

Variable (1.00 to 4.00) credit(s). An independent research project in music under the close supervision of a faculty member. Topics for research are chosen in an area of interest to both persons. **Signature Learning Experience: Supervised Research.** Register by Instructor. This course is repeatable for credit.

**MU 495 - Seminar in Musicology**

2.00 credits. A capstone course for all Music majors offering experience in the techniques of research about music, including bibliography, analysis of materials, and communication of conclusions. A substantial research project is required. \*Prerequisite(s): Junior standing in music; completion of all music courses in basic musicianship: MU 203, MU 204, MU 212, and MU 218. **Signature Learning Experience: Supervised Research.** Fall semester.

**MU 503 - Music of African Diasporas**

3.00 credits. This course explores and examines the intersection of culture, history, and music within the African Diaspora. Studied musical traditions may include traditions from sub-saharan West Africa, East Africa, South Africa, the Caribbean, Central America, South America, and African-American experience. Students will encounter,

analyze, and describe issues of acculturation, power, migration, identity, authenticity, religious ritual, expression and meaning, individualism/collectivism, and transmission. \*Prerequisite(s): MME 501. Fall semester only.

**MU 504 - Form and Analysis in Diverse Musics**

3.00 credits. This course develops aural and analytic skills within diverse musical contexts. Students will encounter challenges of transcribing and analyzing musics in ways that are responsive to idiosyncratic structures of each studied tradition. In particular, students will study the analysis and organization of musical traditions within the African Diaspora in ways that inform work within World Music Drumming Curriculum. Students will also form an analysis within Arabic traditions, Central Asian timbre-dominant traditions, Indian traditions, Gamelan, and a selected Southeast or Eastern Asian tradition. \*Prerequisite(s): MME 501. Summer semester.

**MU 505 - Musics of the Silk Road**

3.00 credits. This course explores and examines the intersection of culture, history, and music within areas connected historically by the silk road. Within selected musical traditions, students will encounter, analyze, and describe issues of acculturation, power, migration, identity, authenticity, religious ritual, expression and meaning, individualism/collectivism, and transmission. \*Corequisite(s): MME 501. Fall semester.

**Public Heritage Studies Courses**

**PHS 201 - Elizabethtown History: Campus and Community (HON 201)**

2.00 credits. This research seminar will provide sophomores in the Honors program with an understanding of the practice of local history and an understanding of local history's relationship to other branches of historical studies as well as a wide variety of academic disciplines. The course is based on the study of local history as a means for Honors students to examine the people who built the local community while they, as sophomores, discern the path of their own educational and life journey. Honors students will research local history, write about local history, reflect on their research about local history and their own lives, and share their knowledge of local history and what they have learned about their own personal development both as individuals and as leaders on campus. Through the study of local history, students will gain an appreciation of the importance and context of place and how their own contributions impact the larger community. In keeping with the themes of real world learning, signature learning experiences, and community-based learning, students will have the opportunity to develop their own hands-on projects in areas such as oral history, archival research, and grant writing and personally engage with members of the campus and local communities through field trips, site visits, and guest lectures. As a primary feature of this course, the local community (the College campus, Elizabethtown Borough, and Lancaster County) will serve as a learning laboratory. Honors students will learn how to take notice of the environment in which they live, recognize how it developed, and offer ideas about how it should grow. **Signature Learning Experience: Community-Based Learning.**

**PHS 202 - Museum Studies and Museum Education**

2.00 credits. This course explores the history of museums as well as theory, methods, and debates within museum studies, with an emphasis on practical applications of learning. Particular attention is devoted to the development of collections and interpretive exhibitions as well as the engagement of audiences through educational programs. This course is suited to individuals seeking an overview of museum studies and an understanding of the ways in which museums position themselves as educational institutions.

**PHS 203 - Archival Resources and Digital Humanities**

2.00 credits. Students enrolled in this course will be introduced to the theoretical assumptions and methodologies associated with archival management, the digital humanities, and the intersection between the two (e.g., sharing archival sources in digital spaces).

**PHS 470-474 - Internship in Public Heritage Studies**

Variable (0.00 to 4.00) credit(s). This course provides students with applied field instruction in public heritage studies. Forty hours of on-site work is required for every credit hour granted. In addition to on-site work, students will complete writing assignments designed to promote reflection on the work experience. **Signature Learning Experience: Internship.** Register by Instructor. This course is repeatable for credit.

**Religious Studies Courses**

**REL 103 - HUM Religion and Nonviolence**

4.00 credits. (**Humanities Core Course**) This course examines the interplay between religion and violence, the challenge of nonviolence in religious traditions, and the practice of religious nonviolence in US history. Special attention will also be granted to religious terrorism.

**REL 151 - Life Meaning and Purposeful Work**

2.00 credits. This course will explore what it means to live purposefully in terms of traditional and contemporary understandings of vocation and life calling. Emphasis will be placed on the nexus between theological and philosophical understandings of the meaning of life and the moral life. Students will be invited to think about specific life work and career choices within the context of larger theological, ethical, aesthetic or philosophical commitments.

**REL 205 - SSC Theories and Methods in the Study of Religion**

4.00 credits. (**Social Sciences Core Course**) \*A Guided Writing and Research Core Course.

"Religion" is a concept that people frequently talk about without much precision. In this class we will introduce humanistic theories and social scientific methods to raise the level of discourse around religion. Elizabethtown College and the news of the day will serve as our laboratory where we will learn to seek answers and ask better questions about religion.

**REL 213 - PLO Biblical Hebrew I**

4.00 credits. (**Power of Language Core Course**) A beginning study of the alphabet, grammar, and vocabulary of Biblical Hebrew, designed to develop basic reading competence and an understanding of the challenges of translating the Hebrew Scriptures into English. Offered as needed.

**REL 214 - Biblical Hebrew II**

4.00 credits. Continues the study of Biblical Hebrew grammar and vocabulary. \*Prerequisite(s): REL 213, or permission of the instructor.

**REL 215 - Koiné Greek I**

4.00 credits. A beginning study of the alphabet, grammar and vocabulary of New Testament Greek, designed to develop basic reading competence and an understanding of some of the challenges one faces when translating the New Testament into English.

**REL 216 - Koiné Greek II**

4.00 credits. Continued study of Koiné Greek grammar and vocabulary. Translation exercises are taken from the Septuagint and the New Testament. \*Prerequisite(s): REL 215, or permission of instructor. Offered as needed.

**REL 217 - PLO Sanskrit I**

4.00 credits. (**Power of Language Core Course**) This course is an introduction to Sanskrit, designed to develop basic reading competence as well as a general knowledge of grammatical principles, an elementary vocabulary, and a sense of the relationship of the structure of the Sanskrit language to classical Indian culture and philosophy. This

course, if completed successfully, can also serve as a basis for further study of Sanskrit and other South Asian languages (i.e. Hindi, Bengali, etc.). It can also serve as a basis for the study of other ancient languages (given its cultivation of skills common to the study of a variety of such languages—the mastery of an alphabet other than the Roman, classical grammatical terms, etc.). Offered as needed.

**REL 218 - Sanskrit II**

4.00 credits. This course is a continuation of Sanskrit I, designed to further develop and enhance basic reading competence and to broaden general knowledge of grammatical principles, an elementary vocabulary, and a sense of the relationship of the structure of the Sanskrit language to classical Indian culture and philosophy. \**Prerequisite(s)*: REL 217. Offered as needed.

**REL 225 - NCH The Hebrew Bible and Ancient Near East**

4.00 credits. (**Non-Western Cultural Heritage Core Course**) \***A Guided Writing and Research course**. An introduction to the Hebrew Bible (Old Testament or Tanakh), with emphasis on its ancient Near Eastern context.

**REL 226 - WCH The New Testament**

4.00 credits. (**Western Cultural Heritage Core Course**) An introduction to the literature of the New Testament, with emphasis on the first-century Mediterranean context.

**REL 252 - Vocation and Church in the 21st Century**

4.00 credits. This course invites students to reflect theologically on vocation and the church within the context of the changing landscape of the postmodern world. Emphasis will be placed on the trends and issues that challenge the church in the 21st century. While the course and its readings will focus primarily on the Christian church in the United States, the course also will discuss trends, issues and methods that may apply to synagogue, temple or mosque.

**REL 253 - Theology Through Film**

4.00 credits. This course invites students to reflect theologically on the content of contemporary films. While film style and technique will be discussed to a limited extent, the course will be oriented unapologetically toward viewing narrative, plot, character development, imagery, symbols and values in the light of implicit and explicit religious, spiritual, mythological, ideological and ethical themes. Some attention will be given to various methodologies and theoretical issues in the field of religion and film.

**REL 261 - Peacemaking and Social Justice in the Bible**

4.00 credits. An examination of biblical texts relating to peacemaking and social justice and the ways in which those texts have been interpreted by Christian ethicists and theologians.

**REL 267 - HUM Progressive Religion**

4.00 credits. (**Humanities Core Course**) This course will explore radical Christian thought in the United States since the latter half of the twentieth century, granting special attention to ethical methodologies and perennial issues in Christian social ethics—for example, sexuality, politics, animals, race, and poverty.

**REL 284 - Anabaptist and Pietist Movements**

4.00 credits. An introduction to the major events, personalities, beliefs and cultural life of representative Anabaptist and Pietist movements. Primary focus will be given to the European origins and immigration to America of the Mennonites, Amish, Brethren and Moravians. Special attention will be given to the background of these movements in the Protestant Reformation, and their place within the wider Believer's Church, or Free Church, wing of European and American religious life.

**REL 287 - The Story of Christianity**

4.00 credits. The course introduces selected themes in the history of Christianity and Christian thought in a broad overview from its origins to the present. Students will explore some aspects of Christian ritual and spirituality, and the activity of women in Christianity.

**REL 290 - NCH Dharma Traditions: Hindu, Buddhist, Jain, and Sikh**

4.00 credits. (**Non-Western Cultural Heritage Core Course**) This course is an introduction to and overview of the four major religions, or dharma traditions, that originated in the Indian subcontinent: Vedic dharma (popularly known as Hinduism), Buddhism, Jainism, and Sikhism. The course will examine the distinctive beliefs and practices of each tradition, while also emphasizing the common features, historical interactions, and close interconnections—both social and theological—among all four. Students who have received credit for either REL 291 OR REL 292 will receive 2.00 credits for the completion of this course. Students who have received credit for REL 291 AND REL 292 may not enroll in this course.

**REL 293 - Islam**

4.00 credits. An introduction to the teachings, practices and history of Islam.

**REL 295 - WCH Abrahamic Traditions: Judaism, Christianity, Islam**

4.00 credits. (**Western Cultural Heritage Core Course**) **Guided Writing and Research course.** This course surveys Judaism, Christianity, and Islam through the examination and comparison of sacred texts and traditions, beliefs, rituals and practice, sacred space, and ethics. \**Prerequisite(s)*: FYS 100 and EN 100 or EN 150.

**REL 300 - Brethren in China (HI 300)**

4.00 credits. This course investigates the history of Brethren missionary activities in China between 1908 and 1952, highlighting the impact of these activities on gender roles, national identity, and peacemaking.

**REL 313 - Intermediate Biblical Hebrew**

Variable (1.00 to 4.00) credit(s). This course is designed to develop students' ability to read and translate Biblical Hebrew. The class meets weekly to read, translate and discuss a short passage from the Bible. Students will prepare the passage in advance of the session. Students may choose to take this course for one to four credits, with there being one hour of class time for every credit earned. Assignments will be determined based on the number of credits chosen. The course may be repeated for a maximum of eight credits. \**Prerequisite(s)*: REL 214. Offered as needed.

**REL 320 - Philosophy of Religion (PH 320)**

4.00 credits. A study of various rational efforts, from within multiple religious traditions, to establish the validity of religious perspectives. Topics will include: the nature of religious experience, the relationship between faith and reason, arguments for the existence of God, the problem of evil, beliefs about the afterlife, religious pluralism, and the relationship between religion and ethics, and religion and science.

**REL 321 - The Bible and Race in the United States of America**

4.00 credits. Since the nation's inception, the Bible has factored into the politics of who may realize the American Dream. The Promised Land motif has enticed many, but numerous communities have gone to great lengths to transfigure themselves into one of the chosen people's tribes. We will study the Bible's role in the politics of who is and isn't properly American. Our exploration will lead us to questions about the invention of religion, scriptures, and race.

**REL 323 - Women, Gender, and the Hebrew Bible**

4.00 credits. A seminar in biblical studies examining texts that reflect attitudes about women, sexuality and gender. Readings will include selections from both the Hebrew Bible and related secondary literature. Emphasis is on the

study of women and gender in the Hebrew Bible, and students will read primarily feminist scholarship. Some attention is given to gender from the perspective of the more recent fields of gender studies and men's studies.

\*Prerequisite(s): REL 225.

**REL 331 - Ethnicity, Gender, and Religion**

4.00 credits. This course examines the relationship between ethnicity, gender, and religion as categories through which humans make meaning. Taking an interdisciplinary approach, we explore the subject through primary texts, theoretical analyses, and historical studies. Our goal is to gain a deeper understanding of the diversity of the human condition.

**REL 344 - The Nonviolent Ethics of Martin Luther King, Jr.**

4.00 credits. An introduction to the social ethics of Martin Luther King Jr., the course explores the sources, substantive content and evolution of King's reflections on social institutions (the state and market), social actions (peacemaking and redistributing resources), social roles (prophet and politician), and moral character. King's social ethics in relationship to his theological beliefs and personal practices are examined.

**REL 364 - Amish Society (SO 364)**

4.00 credits. The history, culture and social organization of the Old Order Amish. Sociological theories and models utilized by social scientists to describe and analyze the Amish will be presented. Special attention will be paid to recent social changes among the Amish.

**REL 370-378 - Special Topics in Religious Studies**

4.00 credits. Topics not included in the regular curriculum. Offered as needed. Register by Instructor. This course is repeatable for credit.

**REL 391 - Modern Hinduism**

4.00 credits. An in-depth exploration, building on the foundation established in Religious Studies 291, of issues facing contemporary Hinduism. This course covers the British colonization of India; the Bengal Renaissance; Hindu reform movements; the life and teachings of such figures as Sri Ramakrishna, Swami Vivekananda, Mahatma Gandhi and Sri Aurobindo; Hinduism and science; and Hindu nationalism in the late 20th and early 21st centuries. Particular attention will be paid to issues arising from the spread of Hinduism beyond the subcontinent, especially in the West, and the impact of Hinduism upon Western culture, from the transcendentalists to the theosophists to the Beatles. \*Prerequisite(s): REL 290.

**REL 392 - Religion in China and Japan**

4.00 credits. An in-depth exploration, building on the foundation established in Religious Studies 292, of the religious traditions of China and Japan: Daoism, Confucianism, Shinto, and Chinese and Japanese forms of Buddhism. Readings will be drawn mainly from primary sources in English translation, such as the Daodejing, the Chuang-tzu, the Analects of Confucius, the Kojiki, and the Shobogenzo of Dogen, as well as writings by modern Zen masters and scholars such as D.T. Suzuki and Alan Watts. \*Prerequisite(s): REL 290.

**REL 393 - Indian Philosophy**

4.00 credits. An in-depth exploration of classical Indian philosophy: Hindu, Buddhist and Jain. Readings will be drawn mainly from primary sources in English translation, such as the Upanishads, the Tripitaka, the Bhagavad-Gita and the Tattvartha Sutra, and the writings of such central figures of the Indic philosophical tradition as Nagarjuna, Vasubandhu, Shankara, Ramanuja and Haribhadrasuri. \*Prerequisite(s): REL 290.

**REL 470-474 - Internship in Religious Studies**

Variable (0.00 to 12.00) credits. Students spend one full day a week working in a church, nonprofit institution or research organization with religious-based interests in return for three academic hours of credit. Internships are primarily unpaid experiences, but some organizations may offer a stipend or form of payment. Course requirements are decreased or increased as deemed appropriate by the Internship Advisor. A maximum of four credit hours from Religious Studies 470-474 may count toward the Religious Studies major or minor. Additional credits count as free electives. **Signature Learning Experience: Internship.** Register by Instructor. This course is repeatable for credit.

**REL 480-489 - Independent Study in Religious Studies**

Variable credit. Individual study in areas of interest for students capable of conducting independent research.

\**Prerequisite(s):* Approval of the Dean and the Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**REL 490 - Independent Research in Religious Studies**

Variable (0.00 to 4.00) credits. Students engage in an advanced level of research under the supervision of a religious studies faculty member to produce a thesis or other major research project. \**Prerequisite(s):* Junior or Senior status. A maximum of four credit hours from REL 490 may count toward the Religious Studies major or minor. Additional credits count as free electives. **Signature Learning Experience: Supervised Research.** Register by Instructor. This course is repeatable for credit.

**REL 495 - Capstone in Religious Studies**

Variable (2.00 or 4.00) credits. Majors and minors will have the opportunity to engage with peers to reflect on their entire academic program of study of religion. Gathered around the theme of "religion in public life," seminar participants will develop a broad and clear view of the relevance and usefulness of religious studies for their future purposeful-life work and as citizens of a nation and of the world. This course is repeatable for a maximum of four credits. \**Prerequisite(s):* Junior or Senior status. **Signature Learning Experience: Capstone.** Register by Instructor.

## Spanish Courses

**SP 111 - PLO Elementary Spanish I**

4.00 credits. **(Power of Language Core Course)** Basic elements of structure and the phonetic system in culturally authentic contexts. The development of communicative competence in five skill areas: speaking, listening, reading, writing, and sociocultural awareness. Media in the target language and computer work supplement proficiency-oriented textbooks.

**SP 112 - PLO Elementary Spanish II**

4.00 credits. **(Power of Language Core Course)** Expansion of basic elements of structure and the phonetic system in culturally authentic contexts. Additional development of communicative competency in five skill areas: listening, speaking, writing, reading, and sociocultural awareness. Media in the target language and computer work supplement proficiency-oriented textbooks. \**Prerequisite(s):* SP 111, or placement by examination.

**SP 211 - PLO Intermediate Spanish I**

4.00 credits. **(Power of Language Core Course)** Review and expansion of basic Spanish grammar and vocabulary at the intermediate level in the four skills of speaking, listening, writing, and reading. In-class work develops oral proficiency at the intermediate level; out-of-class work, including online assignments and work with carefully selected website materials, enhances writing and reading proficiencies. Sociocultural awareness is developed through media in the target language that supplement proficiency-oriented materials. \**Prerequisite(s):* SP 112, or placement by examination.

**SP 212 - PLO Intermediate Spanish II**

4.00 credits. (**Power of Language Core Course**) Continued review and expansion of basic grammar and vocabulary introduced in Spanish 211 in the four skills of speaking, listening, writing, and reading. Development of more advanced tasks such as describing, narrating, and hypothesizing. In-class work develops oral proficiency at the intermediate level; out-of-class work, including online assignments and continued work with selected website materials, enhances writing and reading proficiencies. Sociocultural awareness is developed through media in the target language that supplement proficiency-oriented materials. \**Prerequisite(s)*: SP 211, or placement by examination.

**SP 215 - PLO Spanish for Heritage Speakers**

4.00 credits. (**Power of Language Core Course**) Spanish for Heritage Speakers is devoted to the development and improvement of spelling, grammar, vocabulary, reading, writing, and oral skills in Spanish. This is for those students whose schooling was in English the U.S., but whose first language or home language is Spanish. \**Prerequisite(s)*: Placement exam or interview with the instructor.

**SP 305 - Spanish Conversation**

4.00 credits. Development and practice of oral skills for self-expression in Spanish. Emphasis on aural comprehension and fluency in the use of everyday Spanish. Small group discussions and oral presentations in Spanish based on current cultural, ethical, and political topics will be the principal means of accomplishing this goal. \**Prerequisite(s)*: SP 212, placement by examination, or permission of the instructor.

**SP 312 - Modern Spain**

4.00 credits. A selective study of Spain's cultural heritage to an understanding and appreciation of contemporary Spanish society. The course offers an interdisciplinary treatment of diverse aspects of modern Spanish society, including geography, politics/government, regionalism, cultural identity, immigration, language policy, popular culture, and societal structure, to name a few. The course examines cultural adaptations and changes, drawing upon historical precedent wherever appropriate. Films and internet/mass media resources support topics under discussion. \**Prerequisite(s)*: SP 212 or placement. Alternating spring semesters.

**SP 314 - Modern Hispanic America**

4.00 credits. A selective study of the shared cultural heritages among Hispanic American societies to an understanding and appreciation of contemporary life. The course offers an interdisciplinary treatment of diverse aspects of modern society, including geography, politics/government, religion, Indigenismo, regionalism, cultural identity, language policy, popular culture, and societal structure, to name a few. Films and internet/mass media resources support topics under discussion. \**Prerequisite(s)*: SP 212 or placement. Alternating spring semesters.

**SP 315 - Spanish Grammar and Composition**

4.00 credits. This course builds on the Spanish grammar previously studied at the Intermediate level to improve students' reading, speaking, and writing skills in Spanish through an in-depth study of standard Spanish grammar. Special attention will be given to the more problematic aspects of Spanish grammar for English speakers. Students will develop advanced writing skills through composition assignments. \**Prerequisite(s)*: SP 212, placement by examination, or placement by examination.

**SP 319 - Spanish Linguistics**

4.00 credits. Surveys current linguistic research on the structure and dialectal (sociological and geographic) variation of the Spanish language. A contrastive analysis of Spanish and English phonology, morphology, syntax, and semantics develops the student's ability to understand the major structural differences between these languages. Students develop an appreciation of native speakers' perceptions regarding their own language. \**Prerequisite(s)*: SP 212, placement by examination, or permission of the instructor.

**SP 323 - Introduction to Literature**

4.00 credits. Development of students' ability to read thoroughly, analyze, and appreciate literature. Selected readings representative of different literary genres. \**Prerequisite(s)*: SP 212, placement by examination, or permission of the instructor.

**SP 325 - Spanish Service Learning**

4.00 credits. This Spanish service-learning course fosters students' conversational proficiency in Spanish and their intercultural competence in Spanish-speaking settings. Students apply these skills in educational settings, experience the mutual benefits of community service-learning, and discover opportunities for becoming civically engaged and employing their Spanish skills in the broader community. \**Prerequisite(s)*: SP 212, placement by examination, or permission of the instructor. **Signature Learning Experience: Community-Based Learning.** Offered every semester.

**SP 370-378 - Special Topics in Spanish**

Variable credit. Topics of special interest not otherwise covered in the curriculum. Topics depend upon student interest and faculty availability. \**Prerequisite(s)*: SP 212, placement by examination, or permission of the instructor. This course is repeatable for credit.

**SP 470-474 - Internship in Spanish**

Variable (0.00 to 4.00) credit(s). Modern Language internships provide language students the opportunity to apply the skills and knowledge they have obtained in our classes and while abroad in professional settings, as they are mentored and supervised by practicing professionals. This opportunity fosters enhanced linguistic and cross-cultural proficiency, as well as individually tailored and specialized expertise for language learners. A maximum of four credit hours from Spanish 470-474 may count as Spanish electives. Additional credits count as free electives.

\**Prerequisite(s)*: At least junior standing. **Signature Learning Experience: Internship.** Graded Pass/No Pass. Register by Instructor. This course is repeatable for credit.

**SP 480-489 - Independent Study in Spanish**

Variable credit. Independent projects in some area of Spanish language or literature. \**Prerequisite(s)*: Approval of the Dean and Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**SP 496 - Spanish Senior Research Project I**

2.00 credits. For senior Spanish majors. Involves researching a literary, linguistic, or cultural topic and the writing of a major paper in the Spanish language. This capstone experience will be closely supervised by Program faculty. Fall semester.

**SP 497 - Spanish Senior Research Project II**

2.00 credits. For senior Spanish majors. Involves researching a literary, linguistic, or cultural topic and the writing of a major paper in the Spanish language. This capstone experience will be closely supervised by Program faculty.

\**Prerequisite(s)*: SP 496. **Signature Learning Experience: Supervised Research.** Spring semester.

**Women and Gender Studies Courses**

**WGS 105 - SSC Sex and Gender in Society**

4.00 credits. **(Social Sciences Core Course)** Serving as an introduction to the fields of gender and women's studies, this course is designed to help students understand the social construction of gender and its influence on women's and men's lives. The course addresses historical perspectives about women and gender, the structure of public and private institutions, and contemporary issues such as discrimination and harassment, health, and violence. Feminist

theory and feminist research methods as well as broader social science methods of inquiry will be addressed. Offered every semester.

**WGS 305 - Marriage and Family (SO 305)**

4.00 credits. A study of cross-cultural marriage and family patterns and the comparison of these frameworks to premarital, marital, postmarital and nonmarital aspects of family life in our society.

**WGS 315 - Feminist and Gender Theory**

4.00 credits. An interdisciplinary study of theory and research methods, this course continues students' investigation of fundamental concepts (e.g., sex, gender, race/ethnicity and class). It also covers the political positions that have defined the American women's movement, such as individual rights; the appropriations and revisions of major theories by feminist thinkers (e.g. Marxism, psychoanalysis); and the grounding of theories in experiences unique to women, such as motherhood. \*Prerequisite(s): WGS 105 and junior or senior standing. Register by Instructor. Offered alternate years.

**WGS 330 - Psychology of Diversity (PSY 330)**

4.00 credits. This course will center on understanding social difference and social inequality, and will examine the cognitive and emotional underpinnings of stereotyping, prejudice, discrimination, and identity. We will consider how conscious and unconscious bias influence people's judgments and affinities, and will also closely examine the development of meaningful group identities (e.g., race, ethnicity, gender, sexual orientation). Learning will take place through in-class lectures, activities, and discussion, class readings, and engagement with a community-based placement. \*Prerequisite(s): PSY 105 and junior status or permission of instructor. *Signature Learning Experience: Community-Based Learning.*

**WGS 490 - Directed Research Project**

2.00 credits. This required capstone course allows students to design a project integrating previous course work and their own interests in the interdisciplinary field of Women and Gender Studies. Each student produces a major research paper or equivalent project (such as an internship) and is encouraged to present the results publicly. Students take either the two-credit or four-credit version of this course. \*Prerequisite(s): WGS 105, WGS 315, and two WGS elective courses from different Programs. See the Director of Women and Gender Studies for more information. Register by Instructor. Offered every semester. This course is repeatable for credit.

**WGS 491 - Directed Research Project**

4.00 credits. This required capstone course allows students to design a project integrating previous course work and their own interests in the interdisciplinary field of Women and Gender Studies. Each student produces a major research paper or equivalent project (such as an internship) and is encouraged to present the results publicly. Students take either the two-credit or four-credit version of this course. \*Prerequisite(s): WGS 105, WGS 315, and two WGS elective courses from different Programs. See the Director of Women and Gender Studies for more information. Register by Instructor. Offered every semester. This course is repeatable for credit.

## **School of Business**

### **Dean of the School of Business**

**Faculty:** Ciocirlan, Gabriel, Greenberg, Krichevskiy, Melvin, Miller, Neuhauser, Paul, Riportella, Sandu, Varamini

For more information, please visit the School's website or check your course syllabi, which are available through the course instructor or at the High Library.

### **Vision and Mission**

The School of Business is committed to providing students with cutting-edge business skills, a personalized learning experience, and strong ties to the business community. Our vision is "to be nationally recognized as a premier business undergraduate program with a distinctive blend of the liberal arts and professional studies." Our mission is "preparing students for an ever-changing business world through enhancement of critical thinking skills and practical business application."

The School of Business offers programs in Accounting, Business Administration, Business Analytics, Economics, Finance, Financial Economics, International Business, and Marketing.

### **Honors in the Discipline**

The School of Business participates in the College Honors in the Discipline (HID) Program. HID guidelines are listed here: <https://www.etown.edu/depts/business/honors.aspx>

### **Accreditation and Assessment**

#### **Professional Accreditation**

The School of Business is globally accredited by the Association of Collegiate Business Schools and Programs (ACBSP). This requires the School of Business to adhere to international standards of excellence and undergo peer review of our programs and practices. Specifically, ACBSP has accredited our Accounting, Business Administration, and International Business majors. The Business Analytics, Finance, Financial Economics and Marketing programs are not yet accredited.

#### **Outcome Assessment**

The School uses feedback from a variety of measures –student assignments, presentations, alumni surveys, results of the Major Field Test (MFT) in business, and employer surveys – to gauge the effectiveness of its academic programs and institute curricular improvements. Data from these instruments is gathered and reviewed by the School's Assessment Committees. Based upon this review, the committees submit an annual report to the School's faculty and discuss any changes to the curriculum or program.

The School of Business is committed to enhancing students' written communication skills: generally, the quality of writing is graded in all 200-level or higher classes that require writing assignments (essays, discussion papers, etc.).

Students entering college in Fall 2020 or later are required to complete a professional development program titled, Backpack-to-Briefcase. This program helps students to strengthen the skills that companies look for in college graduates (e.g., soft skills, leadership, teamwork, professionalism) and to transition smoothly from an undergraduate

career to the professional workplace. Students will manage progress toward completion via a JayWeb form. Please see here for more information: <https://www.etown.edu/depts/business/advising/backpack-to-briefcase.aspx>

## **Bachelor of Arts**

### **Economics (B.A.)**

Preparation for a career in economics requires a broad background in basic economic theory and an in-depth study of the quantitative tools important to the economist. In light of the emphasis on the quantitative approach to economic theory, students are advised to select courses in mathematics and computer science beyond those specifically required in the economics curriculum. Please refer to the School of Business website for additional information and requirements: [www.etown.edu/depts/business/advising](http://www.etown.edu/depts/business/advising).

#### **Student Learning Outcomes for Economics:**

*Students will be able to:*

- Demonstrate an understanding of economic theory, institutions, and policy making.
- Communicate ideas effectively.
- Employ quantitative and analytical skills.

#### **An Economics major requires:**

- A non-credit program, Backpack-to-Briefcase (completion is managed via JayWeb)
- BA 105 - Managerial Communication and Student Career Preparedness
- BA 260 - Introduction to Data Visualization
- EC 101 - SSC Principles of Macroeconomics
- EC 102 - SSC Principles of Microeconomics
- MA 121 - MA Calculus I
- MA 251 - MA Probability and Statistics
- BA 270 - Strategic Managerial Decision-Making and Critical Analysis I
- BA 271 - Strategic Managerial Decision-Making and Critical Analysis II
- EC 301 - Intermediate Microeconomics
- EC 302 - Intermediate Macroeconomics
- EC 309 - Introduction to Mathematical Economics
- MA 252 - Statistical Methods in Research
- Three additional Economics electives (eleven credits minimum)

#### **First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- BA 105 - Managerial Communication and Student Career Preparedness
- EC 101 - SSC Principles of Macroeconomics

- EC 102 - SSC Principles of Microeconomics
- MA 121 - MA Calculus I
- Two Core courses (8 credits total)

**Notes:**

Students may take EC 101 and EC 102 in any sequence.

EC 101 or EC 102 will fulfill both the Economics major requirement and the Social Sciences core requirement.

MA 251 will fulfill both the Economics major requirement and the Mathematics core requirement.

For a suggested Four-Year Plan for the Economics major, visit [www.etown.edu/depts/business/advising/four-year-economics.aspx](http://www.etown.edu/depts/business/advising/four-year-economics.aspx).

**Bachelor of Science**

**Accounting (B.S.)**

Preparation for entrance into the profession of accounting (public, private, or government) requires a basic business core in addition to a proficiency in accounting. Because of the importance of critical thinking, communication, technology, and quantitative techniques, students are urged to elect additional courses that strengthen these skills areas. Please refer to the School of Business website for additional information and requirements: [www.etown.edu/depts/business/advising](http://www.etown.edu/depts/business/advising).

**Student Learning Outcomes for Accounting:**

*Students will be able to:*

- Demonstrate knowledge of fundamental theories and principles in each functional area.
- Integrate and apply knowledge across functional areas.
- Communicate clearly and concisely in written and verbal forms.

**The Accounting Major requires:**

- A non-credit program, Backpack-to-Briefcase (completion is managed via Jayweb)
- AC 101 - Introduction to Accounting
- AC 205 - Intermediate Accounting I
- AC 206 - Intermediate Accounting II
- AC 270 - Cost Management Accounting
- AC 301 - Introduction to Taxation
- AC 310 - Accounting Information Systems
- AC 405 - Auditing
- One 300- or 400- level Accounting elective
- BA 101 - Business and Society
- BA 105 - Managerial Communication and Student Career Preparedness
- BA 215 - Principles of Marketing
- BA 260 - Introduction to Data Visualization

- BA 265 - Management and Organizational Behavior
- BA 270 - Strategic Managerial Decision-Making and Critical Analysis I
- BA 271 - Strategic Managerial Decision-Making and Critical Analysis II
- BA 331 - Business and Commercial Law for Accounting/Financial Professionals
- BA 495 - Business Policy and Corporate Strategy
- EC 101 - SSC Principles of Macroeconomics
- EC 102 - SSC Principles of Microeconomics
- FIN 325 - Corporate Finance
- MA 251 - MA Probability and Statistics

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- AC 101 - Introduction to Accounting
- BA 101 - Business and Society
- BA 105 - Managerial Communication and Student Career Preparedness
- EC 101 - SSC Principles of Macroeconomics
- Three Core courses (12 credits)

**Notes:**

Students may take EC 101 and EC 102 in any sequence.

EC 101 or EC 102 will fulfill both the Accounting major requirement and the Social Sciences core requirement.

MA 251 should be taken in the sophomore year. Students should take any necessary prerequisites in the first year depending on their math placement.

MA 251 will fulfill both the Accounting major requirement and the Mathematics core requirement.

BA 270 and BA 271 are to be taken in the sophomore year. Students should take BA 270 in the fall and BA 271 in the spring.

AC 205 and AC 206 should be taken in sequence normally beginning the fall of sophomore year.

For a suggested Four-Year Plan for the AC major, visit [www.etown.edu/depts/business/advising/four-year-accounting.aspx](http://www.etown.edu/depts/business/advising/four-year-accounting.aspx).

**CPA Certification/150-Hour Accounting Program**

In order to become licensed as a certified public accountant (CPA), most states now require individuals to complete 150 credits of course work in addition to obtaining a bachelor's degree and passing the CPA exam. For those students planning to pursue this certification, the student's advisor will work with them to develop an individual plan to earn 150 credits that incorporates their state's specific requirements. Most students are able to complete the additional credits within their four years at Elizabethtown through a combination of AP credits, additional semester

courses, internships, and/or summer courses. Alternatively, students wishing to pursue a master's degree can obtain the additional credit hours as part of their course of study in their master's program. Several colleges and universities have developed one-year master's degree programs for students who wish to pursue this option.

For further information: Contact Ms. Terrie Riportella, Edgar T. Bitting Professor of Accounting and Director of the Accounting Program.

## **Business Administration (B.S.)**

Preparation to become a business leader requires a broad background in business, a global perspective, a knowledge of the behavioral and social sciences, and the ability to use quantitative and qualitative techniques in solving problems. The business core, the Core Program, and specific quantitative and qualitative requirements provide this background. A student will gain further understanding of specific areas of business by concentrating in one of six areas: **Accounting, Economics, Family Business and Entrepreneurship, Finance, HR & Talent Management, Marketing**. Please refer to the School of Business website for additional information and requirements: [www.etown.edu/depts/business/advising](http://www.etown.edu/depts/business/advising).

### **Student Learning Outcomes for Business Administration:**

*Students will be able to:*

- Demonstrate knowledge of fundamental theories and principles in each functional area.
- Integrate and apply knowledge across functional areas.
- Communicate clearly and concisely in written and verbal forms.

### **A Business Administration major requires:**

- A non-credit program, Backpack-to-Briefcase (completion is managed via JayWeb)
- AC 101 - Introduction to Accounting
- BA 101 - Business and Society
- EC 101 - SSC Principles of Macroeconomics
- EC 102 - SSC Principles of Microeconomics
- BA 105 - Managerial Communication and Student Career Preparedness
- BA 215 - Principles of Marketing
- BA 248 - Quantitative Methods/Operations Management (EGR248)
- MA 251 - MA Probability and Statistics
- BA 265 - Management and Organizational Behavior
- AC 270 - Cost Management Accounting
- BA 270 - Strategic Managerial Decision-Making and Critical Analysis I
- BA 271 - Strategic Managerial Decision-Making and Critical Analysis II
- FIN 325 - Corporate Finance
- BA 330 - Legal Environment of Business
- BA 495 - Business Policy and Corporate Strategy

**A student also must choose one of the concentrations described below:**

A minimum of 11 credits beyond those listed above must be taken in the concentration area (at least eight of those 11 credits must be taken on the Elizabethtown College campus). If students choose to complete two or more concentrations, double counting across concentrations is not permitted.

Accounting concentration:

- AC 205 - Intermediate Accounting I
- AC 206 - Intermediate Accounting II
- One other Accounting elective

Economics concentration:

- EC 301 - Intermediate Microeconomics
- EC 302 - Intermediate Macroeconomics
- One other Economics elective

Entrepreneurship and Family Business concentration:

- FBE 380 - Entrepreneurship
- Two other Entrepreneurship electives

Finance concentration:

- FIN 424 - Investments
- FIN 425 - Advanced Financial Management
- One other Finance elective

HR & Talent Management concentration:

- BA 499 - People Analytics Seminar

Two of the following electives:

- BA 365 - Human Resource Management
- BA 430 - Advanced Legal Issues for Managers
- FBE 450 - Entrepreneurship in Emerging Economy
- PSY 235 - Social Psychology

Marketing concentration:

- BA 416 - Marketing Management
- Two other Marketing electives

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language **Or**
- EN 150 - PLE Advanced Writing and Language
- AC 101 - Introduction to Accounting
- BA 101 - Business and Society
- BA 105 - Managerial Communication and Student Career Preparedness
- EC 101 - SSC Principles of Macroeconomics
- EC 102 - SSC Principles of Microeconomics
- Core course (4 credits)

**Notes:**

Students may take EC 101 and EC 102 in any sequence.

EC 101 or EC 102 will fulfill both the Business Administration major requirement and the Social Sciences core requirement.

MA 251 will fulfill both the Business Administration major requirement and the Mathematics core requirement.

MA 251 should be taken in the sophomore year. Students should take any necessary prerequisites in the first year depending on their math placement.

BA 270 and BA 271 are to be taken in the sophomore year. Students should take BA 270 in the fall and BA 271 in the spring.

For a suggested Four-Year Plan for the BA major, visit [www.etown.edu/depts/business/advising/four-year-business-admin.aspx](http://www.etown.edu/depts/business/advising/four-year-business-admin.aspx).

**Business Data Science (B.S.)**

**Student Learning Outcomes for Business Data Science:**

*Students will be able to:*

- Apply a strong knowledge related to computing, business, and mathematics in managerial decision-making.
- Define and quantify business problems for the purposes of analytical investigation and decision-making.
- Analyze the interpretation of results and outputs from statistical analysis operations.
- Communicate statistical and analytical results and reports for the purpose of decision-making

**The Business Data Science major requires:**

- A non-credit program, Backpack-to-Briefcase (completion is managed via JayWeb)
- AC 101 - Introduction to Accounting
- BA 101 - Business and Society

- BA 105 - Managerial Communication and Student Career Preparedness
- BA 215 - Principles of Marketing or
- BA 265 - Management and Organizational Behavior
- BA 495 - Business Policy and Corporate Strategy or
- DS 495 - Data Science Capstone
- DS 200 - Introduction to Data Science
- DS 300 - Data Mining
- DS 420 - Big Data
- EC 101 - SSC Principles of Macroeconomics or
- EC 102 - SSC Principles of Microeconomics
- EC 410 - Econometrics or
- MA 252 - Statistical Methods in Research
- BA 330 - Legal Environment of Business
- FIN 325 - Corporate Finance
- MA 121 - MA Calculus I
- MA 200 - Applied Matrix Algebra
- MA 251 - MA Probability and Statistics
- CS 121 - Computer Science I
- CS 221 - Data Structures
- CS 309 - Database Systems
- DAT 315 - Machine Learning
- BA 470-474 - Internship in Business
- Two additional Business Administration, Computer Science, or Mathematics courses
- One MOOC

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- AC 101 - Introduction to Accounting
- BA 101 - Business and Society
- BA 105 - Managerial Communication and Student Career Preparedness
- CS 121 - Computer Science I
- MA 121 - MA Calculus I
- MA 200 - Applied Matrix Algebra

## Finance (B.S.)

A Finance major should demonstrate the ability to organize financial information and data, in order to solve complex financial problems. They should also be able to communicate financial information in written and oral forms.

Please refer to the School of Business website for additional information and requirements:  
[www.etown.edu/depts/business/advising](http://www.etown.edu/depts/business/advising).

### **Student Learning Outcomes for the Finance major:**

*Students will be able to:*

- Demonstrate ability to organize and analyze financial information.
- Apply financial information to solve financial problems.
- Demonstrate ability to communicate to others complex financial information, in written and verbal forms.

### **The Finance major requires:**

- A non-credit program, Backpack-to-Briefcase (completion is managed via JayWeb)
- AC 101 - Introduction to Accounting
- EC 101 - SSC Principles of Macroeconomics
- EC 102 - SSC Principles of Microeconomics
- BA 215 - Principles of Marketing
- MA 251 - MA Probability and Statistics
- BA 265 - Management and Organizational Behavior
- AC 270 - Cost Management Accounting
- BA 270 - Strategic Managerial Decision-Making and Critical Analysis I
- BA 271 - Strategic Managerial Decision-Making and Critical Analysis II
- BA 330 - Legal Environment of Business or
- BA 331 - Business and Commercial Law for Accounting/Financial Professionals
- FIN 325 - Corporate Finance
- FIN 327 - International Financial Management
- FIN 412 - Financial Derivatives - Futures and Options
- FIN 420 - Financial Institution Management
- FIN 424 - Investments
- FIN 425 - Advanced Financial Management
- BA 470-474 - Internship in Business or
- FIN 470-474 - Internship in Finance

### **6 credits from the following:**

- AC 205 - Intermediate Accounting I
- AC 206 - Intermediate Accounting II
- FIN 415 - Applied Financial Analysis

- FIN 426 - Student Managed Investment Portfolio
- MA 252 - Statistical Methods in Research
- EC 410 - Econometrics

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or  
• EN 150 - PLE Advanced Writing and Language
- AC 101 - Introduction to Accounting
- EC 101 - SSC Principles of Macroeconomics
- EC 102 - SSC Principles of Microeconomics
- Five Core courses (20 credits)

**Notes:**

Students may take EC 101 and EC 102 in any sequence.

EC 101 or EC 102 will fulfill both the Finance major requirement and the Social Sciences core requirement.

MA 251 will fulfill both the Finance major requirement and the Mathematics core requirement.

MA 251 should be taken in the sophomore year. Students should take any necessary prerequisites in the first year depending on their math placement.

BA 270 and BA 271 are to be taken in the sophomore year. Students should take BA 270 in the Fall and BA 271 in the Spring.

FIN 325 should be taken either in the 2nd or 3rd year, as it is a prerequisite for many upper level classes.

For a suggested Four-Year Plan for the Finance major, visit <https://www.etown.edu/depts/business/advising/four-year-finance.aspx>.

**Financial Economics (B.S.)**

The Financial Economics major provides students with knowledge and understanding of economic theory, financial principles and institutions, and quantitative and computational techniques. The major prepares students for a wide range of careers in business, but especially in financial institutions, and government organizations, as well as graduate study in Economics, Finance, and Business.

**Student Learning Outcomes for Financial Economics:**

*Students will be able to:*

- Demonstrate knowledge and understanding of principles of economics, finance, and statistics.
- Demonstrate proficiency in the use of statistical and business-related software.
- Write business documents clearly, concisely, and analytically.
- Speak in public clearly, concisely, and analytically, with appropriate use of visual aids.

**The Financial Economics major requires:**

- A non-credit program, Backpack-to-Briefcase (completion is managed via JayWeb)
- AC 101 - Introduction to Accounting
- BA 260 - Introduction to Data Visualization
- BA 320 - Introduction to Data Analytics in Business
- EC 101 - SSC Principles of Macroeconomics
- EC 102 - SSC Principles of Microeconomics
- EC 301 - Intermediate Microeconomics
- EC 302 - Intermediate Macroeconomics
- EC 309 - Introduction to Mathematical Economics
- FIN 325 - Corporate Finance
- FIN 420 - Financial Institution Management
- FIN 424 - Investments
- FIN 426 - Student Managed Investment Portfolio
- MA 121 - MA Calculus I
- MA 251 - MA Probability and Statistics
- MA 252 - Statistical Methods in Research
- One additional Economics elective
- One additional Finance elective

**First Year Suggested Courses:**

- AC 101 - Introduction to Accounting
- EC 101 - SSC Principles of Macroeconomics
- EC 102 - SSC Principles of Microeconomics
- MA 251 - MA Probability and Statistics

**Notes:**

Students may take EC 101 and EC 102 in any sequence.

EC 101 or EC 102 will fulfill both the Financial Economics major requirement and the Social Sciences core requirement.

MA 251 will fulfill both the Financial Economics major requirement and the Mathematics core requirement.

MA 251 should be taken in the sophomore year. Students should take any necessary prerequisites in the first year depending on their math placement.

For a suggested Four-Year Plan for the FE major, visit the Business Dept. website at [www.etown.edu/business](http://www.etown.edu/business).

**International Business (B.S.)**

Preparation for a career in international business requires an understanding of foreign cultures, language, and cross-cultural interaction skills, a broad background in business, an internship, and skills in a functional area of business. A student will gain further understanding of specific areas of business by concentrating in one of six areas: **Accounting, Data Analytics, Economics, Family Business and Entrepreneurship, Finance, HR &**

**Talent Management, Marketing, or a self-designed concentration.** Please refer to the School of Business website for additional information and requirements: [www.etown.edu/depts/business/advising](http://www.etown.edu/depts/business/advising).

**Student Learning Outcomes for International Business:**

- Demonstrate knowledge of fundamental theories and principles in each functional area.
- Integrate and apply knowledge across functional areas.
- Communicate clearly and concisely in written and verbal forms.
- Develop proficiency in a foreign language.
- Demonstrate awareness of cross-cultural differences and application of cross-cultural skills.

An international business major must complete the following requirements in the four components of the program:

**Foreign Culture and International Interaction**

Requirements for the foreign culture and international interaction component include:

- BA 197 - Introduction to International Business
- BA 257 - Exporting and Importing
- BA 258 - Global Business Negotiations
- PS 150 - NCH Introduction to Comparative Politics or
- PS 245 - NCH International Relations
- EC 307 - International Economics or
- EC 311 - Economic Development
- FIN 327 - International Financial Management
- BA 337 - International Legal and Ethical Environment of Business
- BA 497 - International Business Seminar

**Business Studies**

Requirements for the business studies component include:

- A non-credit program, Backpack-to-Briefcase (completion is managed via JayWeb)
- AC 101 - Introduction to Accounting
- EC 101 - SSC Principles of Macroeconomics
- EC 102 - SSC Principles of Microeconomics
- BA 105 - Managerial Communication and Student Career Preparedness
- DAT 200 - Data Analytics
- BA 215 - Principles of Marketing
- MA 251 - MA Probability and Statistics
- BA 260 - Introduction to Data Visualization
- BA 265 - Management and Organizational Behavior
- BA 270 - Strategic Managerial Decision-Making and Critical Analysis I
- BA 271 - Strategic Managerial Decision-Making and Critical Analysis II
- AC 270 - Cost Management Accounting

- FIN 325 - Corporate Finance
- BA 470-474 - Internship in Business

**And a minimum of 11 credits in one of the following concentrations:**

If students choose to complete two or more concentrations, double counting of courses across concentrations is not permitted.

Accounting concentration:

- AC 205 - Intermediate Accounting I
- AC 206 - Intermediate Accounting II
- One additional Accounting elective

Data Analytics Concentration

- MA 252 - Statistical Methods in Research
- DAT 300 - Big Data and Statistical Analysis
- DAT 315 - Machine Learning
- DAT 400 - Data Analytics Capstone

Economics concentration:

- EC 301 - Intermediate Microeconomics
- EC 302 - Intermediate Macroeconomics
- One additional Economics elective

Entrepreneurship and Family Business Concentration

- FBE 380 - Entrepreneurship
- Two additional Entrepreneurship and Family Business Electives

Finance concentration:

- FIN 424 - Investments
- Two additional Finance electives

HR & Talent Management concentration:

- BA 499 - People Analytics Seminar

Two of the following electives:

- BA 365 - Human Resource Management
- BA 430 - Advanced Legal Issues for Managers
- FBE 450 - Entrepreneurship in Emerging Economy
- PSY 235 - Social Psychology

Marketing concentration:

- BA 416 - Marketing Management
- Two additional Marketing electives

Self-Designed Concentration:

A student who is majoring in International Business and wishes to declare a self-designed concentration will ordinarily need to do so in writing **after** completing 48 credit hours. The student will consult with his/her faculty advisor to prepare the proposal and the supporting documents. The student will submit a program of study and the supporting documents to the Dean of the School of Business, who will review it together with the Curriculum Review Committee (School committee). If approved by the Curriculum Review Committee, the proposal will be reviewed by all business faculty via School meeting. Once the proposal is discussed and voted on by the school faculty, the Dean informs the student and faculty advisor about the decision.

The proposal for a self-designed concentration must have the following components:

- A personal statement of intent (300-word minimum) that explains the reason for requesting the self-designed concentration; the statement of intent should include the reason/rationale for the request and the expected learning outcomes;
- List of the courses the student intends to complete

For the self-designed concentration to be approved, it should meet the following criteria:

- Be composed of no less than 11 credit hours
- Include at least 8 credit hours taken at Elizabethtown College
- Include at least 8 credit hours unique to this concentration (cannot be counted for any other major, minor, concentration, or CORE)
- Demonstrate a cohesive plan of rigorous study (for instance, through taking the 300- or 400-level courses/and or courses related to a common theme/field of study)

The Dean of the School of Business and the faculty advisor must approve any changes to the self-designed concentration.

See more information on concentrations here: <https://www.etown.edu/dept/business/advising/ibconcentrations.aspx>

### **Modern Languages**

Requirements for the modern language component include 211 and 212 of a modern language and a minimum rating of Intermediate High/1+ on the American Council on the Teaching of Foreign Languages (ACTFL) scale for French, German or Spanish. Those pursuing the Japanese language must achieve the designated level of the Japanese Foundation Proficiency Test. For the Chinese language, the requirements include CHN 211 and CHN 212 and at least six additional credit hours of Chinese language completed in China during the semester of study abroad.

### **Experiential Learning**

To meet requirements of the experiential learning component, a student must complete an internship, and study abroad in a foreign country where the target language is spoken. The study-abroad requirement is at least one semester with a program approved by the School of Business and the Office of Registration and Records.

Admission to the International Business major is limited to 25 first-year students each year in order to maintain the quality of the program and to provide the necessary assistance for each student. Transfers are permitted from within the College or from other institutions on a space-available basis.

First-year international business majors are selected by the School of Business faculty. The selection process includes consideration of: 1) academic accomplishments, 2) motivation and aptitude, 3) preparation for international business study, 4) leadership and communications, and 5) interest in international business.

A prospective student must submit an application with all supporting documents to the Admissions Office before March 15. Applications received after March 15 only will be considered on a space-available basis.

Foreign students who are majoring in International Business should consult with the Director of the program during their first year to discuss their specific course requirements.

Admission to the International Business program does not imply that a student is guaranteed completion of the entire course of study. Generally, a student needs a 3.00 grade point average to qualify for a study-abroad program which is a requirement for graduation in this major.

For further information: Contact Dr. Hossein Varamini, Program Director.

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- AC 101 - Introduction to Accounting
- BA 105 - Managerial Communication and Student Career Preparedness
- BA 197 - Introduction to International Business
- EC 101 - SSC Principles of Macroeconomics
- EC 102 - SSC Principles of Microeconomics
- Two Language courses (211 and 212) (8 credits total)

**Notes:**

Specific entry-level course in language will be determined after results of language placement test are received. Students interested in completing a Spanish minor should speak with the Language Program regarding the specific Spanish minor language level requirements.

Refrain from fulfilling the Western Cultural Heritage, Non-Western Cultural Heritage or Creative Expression requirements of the core before going abroad. This suggestion is because an International Business major could take some of the courses in these core areas during the study-abroad period.

If a student has an interest in accounting, he or she should enroll in the beginning accounting course (AC 101) in the first year.

Normally, by the junior year, a major in International Business chooses one of the following as an area of concentration: Accounting, Data Analytics, Economics, Family Business and Entrepreneurship, Finance, HR & Talent Management, Marketing, or a self-designed concentration.

International students are not required to take foreign language courses for their International Business major. However, students are required to take an Ancient or Modern Language to satisfy their core Power of Language - Other requirement.

EC 101 or EC 102 will fulfill both the International Business major requirement and the Social Sciences core requirement.

PS 150 or PS 245 will fulfill both the International Business major requirement and the Non-Western Cultural Heritage core requirement.

MA 251 will fulfill both the International Business major requirement and the Mathematics core requirement.

BA 270 and BA 271 should be taken in the second year. Students should take BA 270 in the fall and BA 271 in the spring.

For a suggested Four-Year Plan for the International Business major, visit  
[www.etown.edu/depts/business/advising/four-year-int-business.aspx](http://www.etown.edu/depts/business/advising/four-year-int-business.aspx).

## **Marketing (B.S.)**

Preparation to become a successful marketer requires both a strong foundation in marketing as well as a broad background in general business topics, a global perspective, a knowledge of the behavioral and social sciences, and the ability to use quantitative techniques in solving problems. The Business core, the Core Program, and specific quantitative and qualitative requirements provide this background. Please refer to the School of Business website for additional information and requirements: [www.etown.edu/depts/business/advising](http://www.etown.edu/depts/business/advising).

### **Student Learning Outcomes:**

*Students will be able to:*

- Demonstrate an understanding of fundamental and advanced marketing concepts.
- Integrate and apply marketing concepts.
- Identify the nature and scope of the specific tasks and decisions facing marketing managers.

### **The Marketing major requires:**

- A non-credit program, Backpack-to-Briefcase (completion is managed via JayWeb)
- AC 101 - Introduction to Accounting
- BA 101 - Business and Society
- EC 101 - SSC Principles of Macroeconomics
- EC 102 - SSC Principles of Microeconomics
- BA 105 - Managerial Communication and Student Career Preparedness
- BA 215 - Principles of Marketing
- MA 251 - MA Probability and Statistics
- BA 265 - Management and Organizational Behavior
- BA 270 - Strategic Managerial Decision-Making and Critical Analysis I
- BA 271 - Strategic Managerial Decision-Making and Critical Analysis II
- AC 270 - Cost Management Accounting
- FIN 325 - Corporate Finance

- BA 330 - Legal Environment of Business
- BA 495 - Business Policy and Corporate Strategy

**Students must also choose one of the tracks described below:**

Category Management Track:

- BA 311 - Marketing Research or
- BA 320 - Introduction to Data Analytics in Business
- BA 312 - Promotional Management
- BA 313 - Services and Retail Marketing
- BA 319 - Consumer Behavior
- BA 496 - Category Management Seminar
- Approved Elective course (4 credits)

Advertising and Promotional Management Track:

- BA 312 - Promotional Management
- BA 315 - Internet Marketing
- BA 319 - Consumer Behavior
- COM 130 - Visual Communications
- COM 351 - Intro to Public Relations or
- EN 285 - Business and Public Relations Writing
- Approved Elective course (4 credits)

Sales Management Track:

- BA 313 - Services and Retail Marketing
- BA 314 - Sales and Sales Management
- BA 319 - Consumer Behavior
- FBE 380 - Entrepreneurship or
- FBE 385 - New Venture Creation
- Two approved Elective courses (8 credits total)

Marketing Analytics Track:

- BA 248 - Quantitative Methods/Operations Management (EGR248)
- BA 311 - Marketing Research
- BA 320 - Introduction to Data Analytics in Business
- DAT 200 - Data Analytics
- DAT 300 - Big Data and Statistical Analysis
- DAT 320 - Advanced SQL

- Approved Elective course (4 credits)

Self-Designed Track:

- BA 319 - Consumer Behavior
- Five Approved Elective courses (20 credits total)

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- AC 101 - Introduction to Accounting
- BA 101 - Business and Society
- BA 105 - Managerial Communication and Student Career Preparedness
- BA 215 - Principles of Marketing
- EC 101 - SSC Principles of Macroeconomics
- Core course (4 credits)

**Minors**

**Business Administration Minor**

Please refer to the School of Business website for additional information and requirements:  
[www.etown.edu/depts/business/advising](http://www.etown.edu/depts/business/advising).

**The Business Administration minor requires 24 credits of course work:**

- AC 101 - Introduction to Accounting
- EC 101 - SSC Principles of Macroeconomics
- BA 265 - Management and Organizational Behavior
- BA 330 - Legal Environment of Business
- Two Business electives at the 200-level or above

**Data Analytics Minor**

For further information, contact the Data Analytics Minor Advisor, Dr. Dmitriy Krichevskiy.

**Student Learning Outcomes for Data Analytics Minor:**

*Students will be able to:*

- Students will learn to independently apply the appropriate statistical procedure and use technical skills in predicative and prescriptive modeling to support decision-making.

- Students will demonstrate effective communication skills that facilitate the effective presentation of analysis results.
- Students will demonstrate the ability to think critically in making decisions based on data analytics.

**The following courses are required:**

- DAT 200 - Data Analytics or
- CS 309 - Database Systems
- DAT 300 - Big Data and Statistical Analysis
- DAT 315 - Machine Learning
- DAT 400 - Data Analytics Capstone
- CS 113 - NPS The Power and Beauty of Computing or
- CS 121 - Computer Science I
- MA 251 - MA Probability and Statistics
- MA 252 - Statistical Methods in Research **Or**
- EC 410 - Econometrics
- Approved MOOC (on Python, Hadoop, Business Intelligence, etc.)

**SAS Joint Certificate in Data Analytics**

The SAS Joint Certificate in Data Analytics is available to degree-seeking students enrolled in the Data Analytics minor. Students must complete all of the graduation requirements to receive the certification. Students must take the following courses to obtain the SAS Joint Certificate in Data Analytics. Please refer to the SAS Joint Certificate in Data Analytics for the course requirements.

**Economics Minor**

Please refer to the School of Business website for additional information and requirements:  
[www.etown.edu/depts/business/advising](http://www.etown.edu/depts/business/advising).

**The Economics minor requires 20 credits of course work:**

- EC 101 - SSC Principles of Macroeconomics
- EC 102 - SSC Principles of Microeconomics
- EC 301 - Intermediate Microeconomics
- EC 302 - Intermediate Macroeconomics
- One Economics elective

## **Family Business and Entrepreneurship Program**

The focus of the Family Business and Entrepreneurship minor is on entrepreneurial family businesses and new ventures and their use of innovation as the main growth engine. The minor develops the skills needed to lead and perform effectively as a member of a family business and to recognize and capitalize on opportunities to launch new ventures. The program provides students with hands-on skills through internship and externship activities, mentoring and networking opportunities, applied projects and live case studies and guest speaker lectures offered by enterprising families and new ventures. The S. Dale High Center for Family Business at Elizabethtown College strongly supports the minor. Students who plan on pursuing a career in a family business or entrepreneurial sector after graduation are particularly encouraged to enroll. Ultimately, the capabilities learned through the minor are essential for the success of any business regardless of its size and scope. Open to all majors.

For further information, contact the Family Business and Entrepreneurship Program Director, Dr. Petru Sandu.

### **Student Learning Outcomes for Family Business and Entrepreneurship Program:**

*Students will be able to:*

- Demonstrate an entrepreneurial mindset that allows them to identify and capitalize on opportunities.
- Identify strategies for turning the unique traits of family businesses into sustainable competitive advantage.
- Demonstrate knowledge of succession planning, best practices in governing a family business, and effective communication and conflict resolution in family firms.

### **The Family Business and Entrepreneurship minor requires 20 credits of course work:**

The following courses are required:

- FBE 380 - Entrepreneurship
- FBE 384 - The Family as Entrepreneur
- FBE 385 - New Venture Creation
- FBE 494 - Family Business Governance and Succession Planning

Choose one of the following:

- AC 101 - Introduction to Accounting
- EC 102 - SSC Principles of Microeconomics
- PSY 105 - SSC Introduction to Psychology
- BA 265 - Management and Organizational Behavior
- BA 330 - Legal Environment of Business
- FBE 450 - Entrepreneurship in Emerging Economy
- FBE 470-474 - Internship in Family Business and Entrepreneurship

## **Finance Minor**

### **The Finance minor requires:**

- AC 101 - Introduction to Accounting
- FIN 325 - Corporate Finance

**Choose any four courses from the following:**

- FIN 327 - International Financial Management
- FIN 412 - Financial Derivatives - Futures and Options
- FIN 420 - Financial Institution Management
- FIN 424 - Investments
- FIN 425 - Advanced Financial Management

**SAS Joint Certificate in Data Analytics**

The SAS Joint Certificate in Data Analytics is available to degree-seeking students enrolled in the Data Analytics minor. Students must complete all of the graduation requirements to receive the certification. Students must take the following courses to obtain the SAS Joint Certificate in Data Analytics.

**The SAS Joint Certificate in Data Science requires:**

- MA 252 - Statistical Methods in Research
- DAT 300 - Big Data and Statistical Analysis
- DAT 315 - Machine Learning
- DAT 400 - Data Analytics Capstone
- One 0-credit MOOC

**Accounting Courses**

**AC 101 - Introduction to Accounting**

4.00 credits. An introduction to the basic accounting methods, principles and financial statements used for external reporting. This course introduces students to accounting in a way that demonstrates its importance to society and relevance to their future careers. In addition to developing an adequate technical knowledge of accounting principles; critical thinking, communications, organizational, and interpersonal competencies will be developed and reinforced through a combination of class discussion and problems.

**AC 205 - Intermediate Accounting I**

4.00 credits. A study of generally accepted accounting principles and international standards as applied to asset transactions in the corporate financial reporting environment. Beginning with a brief review of introductory topics including the accounting cycle and financial statements and quickly moving to more challenging and complex topics regarding how to properly record transactions for different types of assets, acceptable alternatives, and the accounting treatment of related income statement transactions. Emphasis on valuation, classification, disclosure and cutoff. \*Prerequisite(s): AC 101.

**AC 206 - Intermediate Accounting II**

4.00 credits. A continuation of AC 205. The course includes an in-depth examination of the liabilities and stockholder's equity sections of the balance sheet with detailed discussion of how to account for bonds payable, long-term notes, employee pensions and benefits, and the issuance of stock. Calculation of earnings per share, how to correct errors in the financial statements, preparation of the statement of cash flows and deferred income taxes also are discussed. \*Prerequisite(s): AC 205.

**AC 270 - Cost Management Accounting**

4.00 credits. An understanding of how costs behave - cost-volume and profit analysis; are collected - job costing and process costing; are assigned - activity-based costing; are managed - strategic-based responsibility accounting; are measured - budgets and variance analysis; and are used in decision making - pricing and alternative use of capital. Multinational considerations also are included. \*Prerequisite(s): AC 101.

**AC 301 - Introduction to Taxation**

4.00 credits. Following the American Institute of Certified Public Accountants (AICPA) recommended Model Tax Curriculum, this course introduces a broad range of tax topics and principles of federal income taxation of individuals, corporations, and partnerships. Understanding various types of taxes in the U.S. system and the basis for the federal income tax system is emphasized. Tax concepts that relate to individual taxpayers, and identifying the similarities and differences of individual taxation items to the taxation of business entities are learned, emphasizing the role of taxation in the business decision-making process, tax law and research, and concepts application.

\*Prerequisite(s): AC 101 or permission of instructor.

**AC 302 - Advanced Studies in Taxation**

4.00 credits. This course follows the American Institute of Certified Public Accountants (AICPA) recommended Model Tax Curriculum. Students will develop advanced technical and technological skills in entity taxation, the tax effects of multijurisdictional commerce and advanced issues facing individual taxpayers, including retirement, estate/gift issues, and financial planning. Advanced skills with tax research materials are developed, as is an appreciation for the work ethic and professional responsibilities. Emphasis will be placed on learning to employ tax law in various financial and tax-planning techniques. \*Prerequisite(s): AC 301.

**AC 304 - Forensic Accounting**

4.00 credits. This course introduces students to the specialty practice area of forensic accounting. Students will study the growing role of the forensic accountant, what differentiates forensic accountants from traditional auditors, the causes of fraud, and the perpetrator's motivations. Topics include: money laundering, identity theft, fraudulent investment schemes, litigation support, and the importance of internal controls. Students will examine the ethical issues in accounting, risk assessment and how to investigate and respond to fraud in the workplace. \*Prerequisite(s): AC 206. Spring semester.

**AC 307 - International Accounting**

2.00 credits. The course examines a variety of accounting and business issues encountered by multi-national organizations. Specific topics include: comparative worldwide accounting diversity, international financial statement analysis, global strategic accounting issues, international corporate governance and social responsibility, international taxation, transfer pricing and auditing. \*Prerequisite(s): AC 206 or permission of instructor.

**AC 310 - Accounting Information Systems**

4.00 credits. An introduction to the components of an accounting information system and its relationship to the overall management information system. The use of information to support the planning, analysis, and reporting of business activities using fully integrated information systems is discussed. Students are introduced to system design and documentation, including flowcharting and control procedures. The course utilizes practical case problems, contemporary readings, and exercises incorporating accounting software to reinforce classroom theory with hands-on knowledge. All major transaction processing cycles and the effect on the accuracy of accounting information are reviewed. \*Prerequisite(s): AC 206.

**AC 370-378 - Special Topics in Accounting**

Variable credit. Courses of special interest to the student and the instructor offered on an occasional basis. This course is repeatable for credit.

**AC 405 - Auditing**

4.00 credits. A study of auditing theory and standards, professional ethics, auditor's legal liability, and the audit process. Students learn about risk assessment, internal control systems, audit evidence, working papers, quality control, statistical sampling, implications of computer-based systems to the audit process, and the preparation of audit reports. \*Prerequisite(s): AC 310 or permission of instructor.

**AC 406 - Advanced Accounting**

4.00 credits. A study of advanced accounting topics including business combinations, consolidated financial reporting according to US GAAP, worldwide accounting practices and foreign currency transactions, partnerships, and special accounting topics such as business liquidations and reorganizations, joint ventures, and accounting for derivatives. \*Prerequisite(s): AC 206.

**AC 471 - Internship in Accounting**

Variable (0.00 to 12.00) credit(s). Students gain accounting experience working for either a public accounting firm, a business organization, or a governmental agency. A maximum of four credit hours from AC 471 may count as an accounting elective. Additional credits count as free electives. A total of 12 credits may be earned from internship/co-op courses taken through the School of Business during a student's college career. \*Prerequisite(s): Approval of Accounting Director or Dean of the School of Business. **Signature Learning Experience: Internship.** Register by Instructor. This course is repeatable for credit.

**AC 474 - Volunteer Income Tax Assistance Program**

2.00 credits. A hands-on opportunity to apply knowledge that was learned in Accounting 301 by preparing income tax returns under the Volunteer Income Tax Assistance (VITA) Program of the Internal Revenue Service in an experiential-learning environment. Students interact with clients, accumulate their tax information and prepare their federal, state and local income tax returns using tax software. \*Prerequisite(s): AC 301. **Signature Learning Experience: Community-Based Learning.** Register by Instructor.

**AC 480-489 - Independent Study in Accounting**

Variable credit. Independent study and research on a problem or topic in the field of accounting. \*Prerequisite(s): Approval of the Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**Business Administration Courses**

**BA 101 - Business and Society**

4.00 credits. Managers function within an environment and their actions influence a number of stakeholders who in turn influence managerial decision making. Environmental awareness is increased by describing and analyzing seven sub-environments: stakeholder, economic, political, social, ethical, competitive and ecological. The course provides a context for other courses in the program and acquaints students with the dynamics of managing in the business, public and nonprofit sectors of the U.S. economy. Register by Instructor.

**BA 105 - Managerial Communication and Student Career Preparedness**

1.00 credit. Students will study written communication techniques used in the business world. They will learn the basics of memorandums, emails, and business letters. They will also learn how to find and apply effectively for internships with real organizations. The course also provides students with skills for using data to support business communication. \*Prerequisite(s): This course is restricted to Business majors only and must be taken in the first year.

**BA 161 - Career Planning Seminar**

1.00 credit. This seminar will provide students the opportunity to assess their strengths and weaknesses in order that they may be better able to determine an appropriate career choice. In addition, they will become acquainted with career opportunities available to them in business and the types of companies with whom they may wish to be employed. Finally, they will be introduced to career planning techniques that will assist them in creating their own plan. Spring semester.

**BA 165 - Personal Financial Planning**

2.00 credits. This course provides students with detailed information, methods, and techniques to effectively evaluate alternative courses of action and make informed financial decisions regarding basic personal finance. The course focuses on situations that students will encounter as they become financially independent. Topics include: budgeting, credit and money management, tax basics, purchasing and insurance issues, and basic investment concepts.

**BA 197 - Introduction to International Business**

4.00 credits. An introduction to the international business environment, including the political, social, economic and cultural dimensions of foreign countries. Introduces theories and practical aspects of international business from both a cultural and functional perspective. Students develop their understanding of the differences between foreign cultures and their own culture and improve the interaction skills necessary to function effectively in the global community. Register by Instructor.

**BA 215 - Principles of Marketing**

4.00 credits. An introductory course emphasizing key concepts and issues underlying the marketing process and how it operates in today's dynamic organizations. The marketing mix is examined on a broad scale, with students developing an understanding of how decisions in each element impact and influence the others. Among the topics covered are segmentation, consumer behavior, product development, promotional campaigns, marketing research, distribution planning and pricing strategies. The course will culminate in a final project or major case study, with students developing and presenting a marketing plan.

**BA 248 - Quantitative Methods/Operations Management (EGR248)**

4.00 credits. Usage of quantitative methods and operations management concepts to optimize business decisions is learned. The quantitative methods covered are forecasting, decision making, decision analysis, and inventory management. The operations management concepts are project management, statistical process control, materials requirement planning, enterprise resource planning, scheduling, reliability, acceptance sampling and learning curves.  
*\*Prerequisite(s): MA 251.*

**BA 255A - Advanced Ethics: Business (PH 255A)**

4.00 credits. Business Ethics is part of a four-course sequence in Applied Ethics. In each course, a theoretical foundation for ethical discourse within the respective field is established. This course then proceeds to a detailed treatment of central ethical dilemmas in the actual practice of business.

**BA 257 - Exporting and Importing**

2.00 credits. Focus on the management of flow of goods and services across national borders to enhance the competitiveness of small- and medium-size firms, including market research, agent selection, export financing, government regulation, transportation, insurance and documentation. Register by Instructor.

**BA 258 - Global Business Negotiations**

2.00 credits. Students acquire knowledge about effective negotiation techniques across national borders. A framework is provided to guide students in understanding the process of developing negotiation skills in business

transactions and learning to close deals, create value, resolve disputes and reach lasting agreements with counterparts in other countries. Register by Instructor.

**BA 260 - Introduction to Data Visualization**

2.00 credits. This course provides an introduction to data visualization. It introduces students to design principles for creating meaningful displays of quantitative and qualitative data to facilitate managerial decision-making. The course uses data visualization tools, including Tableau, Power BI and R.

**BA 265 - Management and Organizational Behavior**

4.00 credits. Critical management issues in planning, organizing, leading and controlling -within the framework of understanding why and how people interact with one another, in groups, and with the organization itself - are examined, with opportunities to enhance communication and interpersonal skills through learning at multiple levels, including individual reading, study and analysis, in-class lectures and exercises, and small discussion groups, in which newly acquired knowledge can be applied to the analysis of real-world scenarios.

**BA 270 - Strategic Managerial Decision-Making and Critical Analysis I**

2.00 credits. This class will provide an introductory level exploration of Microsoft Excel. Various functions, worksheet navigation, and uses of Excel will be major components. \*Prerequisite(s): any one of the following courses: BA 101, BA 197, EC 101, or EC 102. Restricted to majors in the School of Business. Must be taken in the sophomore year.

**BA 271 - Strategic Managerial Decision-Making and Critical Analysis II**

2.00 credits. The course will provide an advanced level exploration of Microsoft Excel through problem solving, analysis, and evaluation. Advanced capabilities, various business/mathematical functions, and applications to business decision-making will be major components. This course aims to prepare students for the Microsoft Office User Specialist certification exam in Excel. \*Prerequisite(s): BA 270.

**BA 311 - Marketing Research**

4.00 credits. An introduction to the theories and techniques behind the development, execution and dissemination of marketing research. Taught through a hands-on approach, students will have the opportunity to explore a variety of research methodologies and techniques, both quantitative and qualitative. The course will culminate in a final project conducted in conjunction with an actual client. \*Prerequisite(s): BA 215 and MA 251.

**BA 312 - Promotional Management**

4.00 credits. An overview of the advertising process from both an agency and client perspective. Students will receive a strong foundation in research and strategy development, the building blocks upon which successful campaigns are built. The course will culminate in a final project encompassing research, strategy, creative and media planning, with results pitched to an actual client. \*Prerequisite(s): BA 215.

**BA 313 - Services and Retail Marketing**

4.00 credits. The service sector is the bulk of all marketing activities and faces a set of challenges that product marketers do not encounter. This course examines service marketing's unique characteristics and frames strategic marketing considerations in terms of these characteristics. In addition, special focus is placed on retailing as a major contributor of economic growth. \*Prerequisite(s): BA 215.

**BA 314 - Sales and Sales Management**

4.00 credits. An introduction to the principles of salesmanship as practiced in the modern business organization and an examination of the role of the sales manager in organizing and directing a sales force. Topics include the relationship-selling process, developing and making a sales presentation, use of contact management software, and

principles of sales management (including recruiting, territory allocation, client contact management, and compensation). \*Prerequisite(s): BA 215.

**BA 315 - Internet Marketing**

4.00 credits. A development of understanding the complexity of marketing goods and services over the Internet. Developing strategic business models for e-commerce, and planning and implementing an Internet-focused organization are covered. Development or revision of a webpage for a business client - including the home page and at least two child pages - is required as a group project. \*Prerequisite(s): BA 215.

**BA 319 - Consumer Behavior**

4.00 credits. Development of an understanding of the explanations, based on behavioral sciences, for consumer purchasing activities. Subjects include the consumer's role in society, group influences on consumers, the nature of individual consumers as determinants of buying behavior, and consumer decision-making models. \*Prerequisite(s): BA 215.

**BA 320 - Introduction to Data Analytics in Business**

4.00 credits. The course will introduce students to a variety of databases, primarily in economics and marketing. Students will extract data necessary for their purpose, and conduct data analysis in Excel and R. They will work in teams on projects and present their findings. The databases of particular interest include IMPLAN (economic impact data), PolicyMap (GIS mapping and demographic data), Bureau of Labor Statistics databases (employment and prices) and Claritas (customer profiles).

**BA 330 - Legal Environment of Business**

4.00 credits. The study and evaluation of legal, ethical and global issues as they pertain to understanding how a business organization operates in a changing socio-economic environment.

**BA 331 - Business and Commercial Law for Accounting/Financial Professionals**

4.00 credits. Legal concepts applicable to the formation and execution of contracts for the business environment are studied with examination of the evolution of contract law and the institution of uniform standards to simplify its applications across geographic boundaries.

**BA 337 - International Legal and Ethical Environment of Business**

4.00 credits. An introduction to the study of international business law, the function and importance of public international law, the role of public and private international organizations, and public policy and ethics in setting standards and guidelines for international business. An understanding of the legal problems associated with economic integration within the European Union and North America is emphasized.

**BA 345 - Managing Innovation and Technology**

4.00 credits. This course focuses on commercializing technology and creating innovation. Topics covered include the drivers of innovation, technology-driven entrepreneurship, managing different types of innovation, and the construction of technology strategy for a firm or business unit. Students learn how to understand both technology and business perspectives as well as how to formulate a profitable technology strategy. Students should come away from this class with a theoretical understanding of these issues and with practical skills to allow you to use innovation and technology management to make your organization succeed. Alternate years. **Signature Learning Experience: Internship.**

**BA 347 - Global Supply Chain Management (EGR 347)**

4.00 credits. This course focuses on the management of supply chain processes and performance. It will be valuable for students who would like to pursue a career in supply chain, operations, logistics of a manufacturing or

distribution firm. We explore important supply chain metrics, primary tradeoffs in making supply chain decisions, and basic tools for effective and efficient supply chain management, production planning and inventory control, order fulfillment and supply chain coordination. We will also investigate topics such as global supply chain design, logistics, and outsourcing, several other recent supply chain innovations. The class format includes lectures, case discussions, guest speakers, and simulation games. The content covers both quantitative and qualitative materials. The cases will feature companies in the service industry, as well as firms in more traditional industries such as apparel and manufacturing. \*Prerequisite(s): BA 248. Spring semester.

**BA 350 - European Union Simulation I (PS 350)**

4.00 credits. Study of the principles and theories of European integration; the history of the current European Union (E.U.), from the Treaty of Rome to the present; and the structure and functioning of the European Union, including class participation representing an E.U. Member State in the annual Mid-Atlantic European Union Consortium E.U. Simulation in Washington, D.C. **Signature Learning Experience: Field Experience.** Fall semester.

**BA 360 - Washington Institute (PS 360)**

4.00 credits. The course highlights relationships between the legislative, executive, independent agencies, and third-party institutions that directly affect how policy is made in the United States. The course exposes students to the mechanism that is used to formulate policy for the United States. The Institute will focus heavily on international policy and the inner workings of the various institutional agents that participate in the process of making policy. Students will observe and develop a critical sense of how to weigh the various interests before policy is ultimately made. Students will learn to examine the purpose of policy and evaluate how it will impact on various industries.

\*Prerequisite(s): BA 101. **Signature Learning Experience: Community-Based Learning.** Register by Instructor.

**BA 365 - Human Resource Management**

4.00 credits. A unique overview of the Human Resource Management (HRM) function in terms of practicality and real-world application, the processes and methods used in HRM planning, along with techniques for conducting job analysis, writing job descriptions, equal employment opportunity compliance, recruiting and selecting employees, orientation, training and development, appraising employee performance, and maintaining employee discipline are examined. Varied instructional methods include lecture, small group discussion, document creation and case-study analysis. \*Prerequisite(s): BA 265.

**BA 367 - International Management**

4.00 credits. An approach to global economy through the analysis of managerial practices in international companies regardless of their sizes, focusing upon the key success factors of managing a company across national boundaries. The students' understanding of the field of international business from a managerial perspective is based on the integration of the learned concepts and tools with real-world applications. \*Prerequisite(s): BA 265.

**BA 370-378 - Special Topics in Business**

Variable credit. Courses of special interest to the student and the instructor offered on an occasional basis. This course is repeatable for credit.

**BA 382 - Entrepreneurial Marketing**

4.00 credits. This course provides students the opportunity to assess and develop their entrepreneurial skills. The class emphasizes essential marketing concepts and tools and their real-life application by entrepreneurs. The topics covered in class include innovative and informal marketing approaches, which will enable students to understand the marketing side of a successful entrepreneurial business. This hands-on approach is based on class discussion and interaction, executive speakers (entrepreneurs, investors and consultants), case studies on entrepreneurial ventures, and experiential exercises and applications. \*Prerequisite(s): BA 215.

**BA 400 - Senior Project in Business**

Variable (0.00 to 4.00) credit(s). Students who have been invited and accepted to participate in the Honors in the Discipline Program may register for this course in the semester in which the research or creative project is completed. Completion of this course does not assure recognition for Honors in the Discipline. **Signature Learning Experience: Supervised Research.** Register by Instructor.

**BA 416 - Marketing Management**

4.00 credits. Integrating marketing theories and concepts for strategic planning and implementation. This course draws on previous course work in marketing, with special emphasis on the application of marketing theories. Case studies will be primary learning tools. \**Prerequisite(s)*: BA 215 and FIN 325. **Signature Learning Experience: Capstone Experience.**

**BA 430 - Advanced Legal Issues for Managers**

4.00 credits. This course builds on the foundations from Legal Environment of Business by exploring more advanced concepts in the American legal system through a managerial approach with an analytical focus on legal, regulatory, and ethical issues that impact business entities. The advanced course allows students to develop a more sophisticated level of legal acumen and deeper understanding of how managers use the law to add value to the firm in business operations and planning. This course builds on fundamental concepts introduced in the 300-level courses. \**Prerequisite(s)*: BA 330 or BA 337.

**BA 470-474 - Internship in Business**

Variable (0.00 to 4.00) credit(s). Combined academic goals, abstract/theoretical and experiential learning through an internship assist in the reflection, analysis and integration of experiences and insights gained through internships with the academic theory, principles, concepts, and social and ethical dimensions of the discipline and subject area. This strengthens students' lifelong-learning skills, professional and public-speaking skills, personal and professional values and ethics, and self-confidence and clarifies personal and career goals. Students must complete at least 125 hours of internship assignment over a 12-week period (eight weeks in summer). A total of 12 credits may be earned from internship/co-op courses taken through the School of Business during a student's college career. Graded Pass/No Pass. **Signature Learning Experience: Internship.** Register by Instructor. This course is repeatable for credit.

**BA 475 - Business Co-Operative Fellowship**

0.00 credits. Business students are eligible to supplement their academic coursework with experiential learning through a business cooperative (co-op) fellowship. The fellowship is normally conducted in a student's junior year and is typically completed within the four-year time frame of a Bachelor's degree. Business co-op fellows work full time (35+ hours/week) at an approved co-op site while still maintaining their status as full time students. During the co-op semester, students are charged an administrative fee. A total of 12 credits may be earned from internship/co-op courses taken through the School of Business during a student's college career. Graded Pass/No Pass. Register by Instructor.

**BA 476 - Business Cooperative**

Variable (5.00-12.00 credits). Classroom education cannot teach all the elements of knowledge required for a successful career. On-the-job experience can enhance student learning and is a valuable supplement to classroom instruction. The purpose of this course is to assist students in the learning process of reflection, analysis, and integration of experiences and insights gained through their internships/co-ops with the academic theory, principles, concepts, and social and ethical dimensions of the discipline and subject area. In addition to academic goals, this course combining abstract/theoretical and experiential learning through an internship setting- is intended to further students' lifelong learning skills, professional and public speaking skills, strengthening of personal and professional values and ethics, clarification of personal and career goals, and achievement of self-confidence. Complete between

200-480 hours on the internship assignment satisfactorily over a minimum of 12 weeks. A total of 12 credits may be earned from internship/co-op courses taken through the School of Business during a student's college career. All majors and minors in the School of Business are eligible to apply, junior or senior standing, with at least a GPA of 2.75 in the major. Graded Pass/No Pass. **Signature Learning Experience: Internship.** Register by Instructor.

**BA 480-489 - Independent Study in Business**

Variable credit. Opportunity for students to engage in independent study in some area of business administration.

\**Prerequisite(s):* Approval of the Dean and the Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**BA 490 - Arts Administration Strategy (FPA 490)**

2.00 credits. Arts Administration Strategy is a project-based capstone course for the Minor in Arts Administration. It brings together the many strands and themes of the Arts Administration curriculum and gives students the opportunity to synthesize concepts and develop analytical, presentation, professional, and career readiness skills.

**BA 495 - Business Policy and Corporate Strategy**

4.00 credits. A comprehensive and integrative course that builds on knowledge acquired in the prior business classes, this class offers the opportunity to integrate the knowledge through a cross-functional approach. The focus is understanding how companies craft and implement strategies that create and enhance sustainable competitive advantage. \**Prerequisite(s):* Senior status. **Signature Learning Experience: Capstone Experience.** Register by Instructor.

**BA 496 - Category Management Seminar**

4.00 credits Successful retail companies today look to their suppliers to act as partners to help them grow their business. Category management is a collaborative process established between buyer and seller where manufacturers and retailers demonstrate an appreciation for the other's business objectives and together leverage business understanding to build customer volume, loyalty, and consumption habits. In consumer packaged goods this practice has become known as category management. \**Prerequisite(s):* BA 215, BA 312, and BA 313.

**BA 497 - International Business Seminar**

4.00 credits. As a capstone course in international business, the course is designed to provide both the theoretical perspectives and the practical applications of global business. The course integrates concepts, principles and practices from prior courses in accounting, management, finance and marketing to prepare students for a successful career in international business. \**Prerequisite(s):* Senior status and International Business majors. **Signature Learning Experience: Capstone Project.** Register by Instructor.

**BA 498 - Seminar in Marketing**

4.00 credits. Drawing on students' foundational course work in marketing, this course examines current marketing topics in more depth and with more rigor. Research and/or projects are primary learning tools. \**Prerequisite(s):* BA 215. This course is repeatable for credit.

**BA 499 - People Analytics Seminar**

4.00 credits. Capstone course in management. We will explore research questions formulated around antecedents of employee engagement, job satisfaction, absenteeism, or turnover. Students will learn to build causal models, collect and analyze data in a systematic way, and interpret results to improve decisions about talent and the organization as a whole. The course focuses on the hard and soft skills necessary in people analytics.

\**Prerequisite(s):* BA 265 and senior status. **Signature Learning Experience: Capstone Experience.**

## Economics Courses

### **EC 101 - SSC Principles of Macroeconomics**

4.00 credits. (**Social Sciences Core Course**) An introduction to a country's gross domestic product. Topics covered include factors affecting a country's output of goods and services, the role of fiscal policy and monetary policy in dealing with inflation and unemployment, the Federal Reserve system and the goal of price stability, causes and consequences of budget deficits, and factors affecting trade deficits and exchange rates.

### **EC 102 - SSC Principles of Microeconomics**

4.00 credits. (**Social Sciences Core Course**) Topics covered include the basis for decision-making by economic agents, utility maximization by consumers, the demand curve, profit maximization by firms, diminishing returns and input choice, optimal output and price for a firm in various market structures, market failure, income inequality, and comparative advantage and international trade.

### **EC 280 - International Organizations Seminar**

Variable (2.00 or 3.00) credits. The course deals with the subject of development and the role of international organizations in promoting it around the world. We study the origins of the United Nations, the World Bank, the International Monetary Fund and the World Trade Organization; trace their evolution through the decades; and explore the (changing) role of the multilateral institutions in promoting development. We consider, in particular, the major problems of development facing the world today, and how these organizations can tackle them. **Signature Learning Experience: Community-Based Learning.** Register by Instructor. Spring semester.

### **EC 301 - Intermediate Microeconomics**

4.00 credits. Description of the theory of the consumer and the firm. Topics include analytical treatment of maximization of utility and profits, resource use and allocation, market structures and welfare analysis.

\**Prerequisite(s): EC 102.*

### **EC 302 - Intermediate Macroeconomics**

4.00 credits. The course describes macroeconomic theories to explain the business cycle. Factors affecting major macroeconomic variables such as gross domestic product, inflation and interest rates. Policies for attaining full employment and price stability. \**Prerequisite(s): EC 101.*

### **EC 307 - International Economics**

4.00 credits. The basic concepts of international trade and payments. Impact of globalization. Commercial policy. Role of multilateral institutions. \**Prerequisite(s): EC 101.*

### **EC 309 - Introduction to Mathematical Economics**

4.00 credits. The course provides an introduction to techniques of mathematical modeling in economics and business. Linear algebra. Cramer's Rule. Comparative statics. Differential calculus. Unconstrained and constrained optimization. First order and second order conditions for an extremum. Dynamic optimization. Use of mathematical software. Several applications in microeconomics, macroeconomics, operations management and finance.

\**Prerequisite(s): MA 121.*

### **EC 311 - Economic Development**

4.00 credits. Theories of international trade and economic growth. Capital flows. Migration. Role of institutions and NGOs. Policies for improving social welfare. Emphasis on developing countries. \**Prerequisite(s): EC 101.*

**EC 370-378 - Special Topics in Economics**

Variable credit. Courses of special interest to the student and the instructor offered on an occasional basis. This course is repeatable for credit.

**EC 400 - Senior Project in Economics**

0.00 credit. Students who have been invited and accepted to participate in the Honors in the Discipline Program may register for this course in the semester in which the research or creative project is completed. Completion of this course does not assure recognition for Honors in the Discipline. See the Dean for additional information.

\**Prerequisite(s)*: Invitation to Honors in the Discipline Program. **Signature Learning Experience: Supervised Research.** Graded Pass/No Pass. Register by Instructor.

**EC 402 - Game Theory**

4.00 credits. A study of strategic interactions game theory offers an extensive toolbox useful for analysis of various competitive and cooperative settings. Course covers static, dynamic as well as different information situations.

\**Prerequisite(s)*: MA 251.

**EC 410 - Econometrics**

4.00 credits. The course provides an introduction to econometrics, a branch of economics associated with statistical methods and applied data analysis. It provides both theoretical and applied frameworks necessary for data analyses. Both mathematical statistics and basic Stata programing are introduced. Simple and multiple regression models, problems with regression such as causality, heteroskedasticity, multicollinearity and omitted variables are discussed along with time series and instrumental variables. \**Prerequisite(s)*: MA 251, EC 101, and EC 102. **Signature Learning Experience: Supervised Research.**

**EC 480-489 - Independent Study in Economics**

Variable credit. Independent study and research on a problem or topic in the field of economics. \**Prerequisite(s)*: Permission of the Dean and Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**Family Business and Entrepreneurship Courses**

**FBE 280 - Global Family Business**

4.00 credits. This course help students develop an understanding of family businesses in a global marketplace and their cultural differences as an important factor in educating global leaders. As the backbone of the global economy, family businesses are not only vital to the economy, but they are also significant for job creation and sustainable development around the world. It involves a study tour in China. Previous knowledge of Chinese or business background is not necessary to succeed in this course. **Signature Learning Experience: Cross Cultural Experience.** Register by instructor. May term.

**FBE 380 - Entrepreneurship**

4.00 credits. An assessment and development of entrepreneurial skills, emphasizing a "hands-on" approach based on case studies on entrepreneurial ventures, writing feasibility plans on opportunities identified by students, experiential exercises and executive speakers (entrepreneurs, investors and consultants). In-class topics enable students to understand the entrepreneur's profile, and to acquire the knowledge and skills necessary to create, start, finance, manage and grow a new venture. Fall semester.

**FBE 384 - The Family as Entrepreneur**

4.00 credits. This course systematically explores the entrepreneurial process within the context of the family. It provides students with an integrated theory and practice approach to the family as entrepreneur. Families who act as

entrepreneurs must learn how to pass on the mindset and methods for creating new streams of wealth across many generations rather than simply pass the business to the next generation. Spring semester.

**FBE 385 - New Venture Creation**

4.00 credits. This class provides students the opportunity to demonstrate the skills necessary to write a business plan for a new venture and to exhibit the capacity to develop sustainable business models on identified entrepreneurial opportunities. The class emphasizes a "hands-on" approach based on class discussion and interaction, a final project, presentations, case studies, experiential exercises, and guest speakers who have gone beyond the "what if...?" stage to actually creating a venture where nothing existed before. Spring semester.

**FBE 450 - Entrepreneurship in Emerging Economy**

4.00 credits. This course is targeted towards students who plan to become involved with entrepreneurial ventures across the emerging global economy either immediately after graduation, or at some future point in their careers. The course is meant to help students evaluate and analyze international opportunities in their capacity as 1) founders of or early hires in international ventures; and/or 2) investors in, or advisors to, international ventures; and/or 3) Potential partners or acquirers of international ventures. \*Pre/Corequisite(s): **Signature Learning Experience: Community-Based Learning**. Register by Instructor.

**FBE 470-474 - Internship in Family Business and Entrepreneurship**

Variable (0.00 to 4.00) credit(s). Combined academic goals, abstract/theoretical and experiential learning through an internship assist in the reflection, analysis and integration of experiences and insights gained through internships with the academic theory, principles, concepts, and social and ethical dimensions of the discipline and subject area. This strengthens students' lifelong-learning skills, professional and public-speaking skills, personal and professional values and ethics, and self-confidence and clarifies personal and career goals. Students must complete at least 125 hours of internship assignment over a 12-week period (eight weeks in summer or four weeks in the winter). A total of 12 credits may be earned from internship/co-op courses taken through the School of Business during a student's college career. **Signature Learning Experience: Internship**. Register by Instructor. This course is repeatable for credit.

**FBE 494 - Family Business Governance and Succession Planning**

4.00 credits. Family Business Governance and Succession Planning tackles some of the most important issues faced by family companies. The continuity, renewal, and growth of a family business depends on the professionalization of its family business practices. This is an advanced family business course, which addresses topics such as: navigating generational differences, succession planning, family governance, boards of directors and advisors, family constitution, and inter-generational leadership development. The course is project-based. **Signature Learning Experience: Capstone Experience**. Spring semester.

**Finance Courses**

**FIN 325 - Corporate Finance**

4.00 credits. An introduction to fundamental tools and concepts used in short-term and long-term financial decision making. An overview of the major financial markets is provided. Financial statements, discounted cash flow analysis, bond and stock valuation models, risk and return for assets and portfolios, cost of capital, financing decisions, capital budgeting, capital structure of the firm and dividend policy are covered. \*Prerequisite(s): AC 101.

**FIN 327 - International Financial Management**

4.00 credits. Development of an understanding of the international financial environments in which economic policy and business decisions are made. Specifically, the course covers the spot and forward exchange markets, the Eurocurrency market and the international capital markets. The impact of exchange rate behavior on

corporations, the foreign exchange risk management, and multinational corporations are covered. \*Prerequisite(s): FIN 325.

**FIN 412 - Financial Derivatives - Futures and Options**

4.00 credits. This course introduces derivative markets and their primary instruments with emphasis on real-world applications of theoretical models. The fundamental of derivatives, valuations of typical derivatives such as futures, forwards, swaps, and options, plus using derivatives in risk hedging and speculations will be discussed. At the conclusion of this course, students will gain an understanding of the theoretical underpinnings of derivatives and the practical skills in constructing and evaluating dynamic hedging strategies using futures and options.

\*Prerequisite(s): FIN 325.

**FIN 415 - Applied Financial Analysis**

2.00 credits. This advanced financial analysis course is specifically designed to engage students in equity research activities before a buy, sell, or hold investment decision is made on an assigned publicly traded company. Students will review the company's SEC filings, gather data on the company's external and internal environment, analyze the company's current financial position, forecast the future profitability and valuation of the company, propose an investment recommendation, and present their analysis to financial professionals. \*Prerequisite(s): FIN 325 and an Intermediate level of Excel skills required.

**FIN 420 - Financial Institution Management**

4.00 credits. This course seeks to provide students with a solid understanding of: terms, facts, and perspectives useful in financial institutions' management; concepts, tools, and objectives financial institution managers use in framing and resolving various issues; forces shaping the financial service industry environment for financial institution managers, e.g., changes in the information and contracting technologies, changes in the mixture of domestic and global competitors, and interactions of innovations with rules enforced by self-regulatory organizations and government agencies. \*Prerequisite(s): MA 251 and FIN 325.

**FIN 424 - Investments**

4.00 credits. This course emphasizes the various classes of investments available to the investor, sources and uses of investment information, and security and capital market valuation. Fundamental concepts, theories and techniques of investing in different assets are provided. Portfolio management is introduced. \*Prerequisite(s): FIN 325.

**FIN 425 - Advanced Financial Management**

4.00 credits. An advanced course in corporation/business finance, in which major topic areas such as capital budgeting, working capital management, leasing, mergers and financing are examined in depth. Cases, readings and problems are used to illustrate the concepts covered. \*Prerequisite(s): FIN 325. **Signature Learning Experience: Capstone Experience.**

**FIN 426 - Student Managed Investment Portfolio**

2.00 credits. This course provides real-time management of assets and an introduction to the investment management business. Emphasis is on information analysis, security selection, fund management, teamwork and communication. \*Prerequisite(s): FIN 424.

**FIN 470-474 - Internship in Finance**

Variable (0.00-4.00) credit(s). Internships lead to a culminating learning experience for students studying in the fields of finance. This experience allows students the opportunity to practice the application of theory and apply the knowledge acquired through academic course work to practical real world business issues in a formal business setting. Students are able to gain the skills leading to a successful career. Starting from an entry level with broader exposure of business experiences to a higher level in which advanced knowledge and skills are expected, internship

experience not only draws on major and minor course offerings in finance, but allows the integration of course work from other fields of study during the development of professional skills. Ultimately, an internship is an in-depth, supervised, hands-on work and study experience, in which the student has a degree of responsibility for planning, directing, collaborating, and supervising the work of others. The Internship in Finance is design is to stimulate good judgment and sound decision making while improving problem solving, communication, human development, and relation building skills. The course is repeatable and can be taken for academic credits varying from 0 to 4 credits depending on the academic work completed and detailed in Section VI of the syllabus. A total of 12 credits may be earned from internship/co-op courses taken through the School of Business during a student's college career.

**Signature Learning Experience: Internship.** Graded Pass/No Pass. Register by Instructor.

## **School of Continuing and Professional Studies**

### **Dean of the School of Continuing and Professional Studies**

*Mr. Jack Rice*

Hoover Business Building, Room 100  
717-361-1411

**Advisors:** Cassidy, Hughes

For more information, please visit the School's website or check your course syllabi, which are available through the course instructor or at the High Library.

The School of Continuing and Professional Studies (SCPS) offers a variety of academic degree programs at the undergraduate and graduate level for adults. The SCPS delivers its programming at Elizabethtown main campus and online.

The School extends the boundaries of the College's learning community to include a wider and more diverse population. The School expresses the values of the College's mission through a commitment to and advocacy of degree and non-degree academic programs for adult learners. In particular, the School embraces the values of human dignity and social justice by widening access to quality higher education for adults. In its programs and outreach, the School fosters a learner-centered academic culture that expresses the School's belief that learning is lifelong and most noble when used to benefit others.

The Middle States Association of Colleges and Secondary Schools accredits SCPS programs.

For more information, please call (717) 361-1411 or visit [www.etown.edu/scps](http://www.etown.edu/scps).

## **School of Engineering, Mathematics, and Computer Science**

### **Dean of the School of Engineering, Mathematics, and Computer Science**

*Dr. Sara Atwood*

Esbenshade Hall, Room 160C  
717-361-1434

**Faculty:** Batakci, Batista Abreu, Brinton, Daily, DeGoede, Doytchinov, Estrada, Hughes, Leap, Li, McDevitt, Sanchis, Scanlin, Sigdel, Soltys, Stuckey, Thorsen, Yolleck, Wang, Wunderlich

For more information, please visit the School's website or check your course syllabi, which are available through the course instructor or at the High Library.

The School of Engineering, Mathematics, and Computer Science at Etown emphasizes collaboration, creativity, and societal impact. We enrich a strong technical foundation with collaborative projects, personalized advising, and a long tradition of thinking deeply, analyzing critically, and communicating effectively.

The School of Engineering, Mathematics, and Computer Science includes programs in Actuarial Science, Computational Physics, Computer Engineering, Computer Science, Data Science, Engineering, Information Systems, Mathematical Business, Mathematics, and Mathematical Secondary Education.

### **Honors in the Discipline**

The School of Engineering, Mathematics, and Computer Science participates in the College Honors in the Discipline Program. For guidelines, students should consult their advisor.

### **Bachelor of Science**

#### **Actuarial Science (B.S.)**

##### **Student Learning Outcomes for Actuarial Science:**

*Students will be able to:*

- Use inductive or deductive reasoning to formulate and evaluate arguments.
- Model real-world phenomena mathematically.
- Utilize mathematics effectively in problem-solving strategies.
- Combine and apply different strands of learning in a meaningful and substantial way.

##### **Actuarial Science majors are required to take:**

- MA 121 - MA Calculus I
- MA 122 - Calculus II
- MA 130 - Creative Problem Solving I
- MA 201 - Linear Algebra
- MA 222 - Calculus III
- MA 235 - Introduction to Mathematical Proofs

- MA 251 - MA Probability and Statistics
- MA 252 - Statistical Methods in Research
- MA 255 - Financial Mathematics
- MA 351 - Theory of Probability
- MA 352 - Mathematical Statistics
- Two from the following:
- MA 457 - Investment and Financial Markets
- MA 458 - Long Term Actuarial Mathematics
- MA 459 - Short Term Actuarial Mathematics
  
- AC 101 - Introduction to Accounting
- EC 101 - SSC Principles of Macroeconomics
- EC 102 - SSC Principles of Microeconomics
- FIN 325 - Corporate Finance
  
- CS 113 - NPS The Power and Beauty of Computing or
- CS 121 - Computer Science I (should be taken as early as possible)

**Also required:**

- Evidence of successful completion, prior to graduation, of the Exam P or Exam FM examination of the Society of Actuaries (SOA). The completion of additional examinations is encouraged.

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
  
- AC 101 - Introduction to Accounting
- CS 113 - NPS The Power and Beauty of Computing
- EC 101 - SSC Principles of Macroeconomics
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- MA 130 - Creative Problem Solving I
- MA 262 - Financial Mathematics with Excel
- Natural and Physical Science Core course (4 credits)

**Notes:**

A student who achieved a score of 4 or better on the College Board Advanced Placement Calculus AB Examination should be placed in MA 122 in the first semester and MA 222 in the second semester. Credit will be given for MA 121.

A student who achieved a score of 4 or better on the College Board Advanced Placement Calculus BC Examination should be placed in MA 222 in the first semester consider taking MA 201 in the second semester. Credit will be given for both MA 121 and MA 122.

A student who achieved a score of 4 or better on the College Board Advanced Placement Probability and Statistics Examination will receive credit for a 3-credit course that substitutes for MA 251.

All Actuarial Science majors should take a math course every semester, even if they have AP or transfer credit for one or more calculus courses.

A C- or better is required to advance from MA 121 to MA 122 and from MA 122 to MA 222.

Courses with a \* are offered every other year. Students should take them in their Junior or Senior year.

## **Computational Physics (B.S.)**

### **Student Learning Outcomes for Computational Physics:**

*Students will be able to:*

#### **Technical Computing Skills**

- Process data
- Represent data visually
- Prepare professional documents and presentations

#### **Computational Physics Skills**

- Translate a model into code
- Choose scales and units
- Subdivide a model into a set of manageable computational tasks
- Choose algorithms and computational tools
- Debug, test, and validate code
- Extract physical insight

The **Computational Physics major** provides baseline preparation either for graduate school or for the technical job market.

Computational Physics majors may substitute PHY 201 for one of their Natural and Physical Science Core courses. Engineering and Physics students must earn a C- or better in ALL prerequisite Engineering and Physics courses to continue in the major.

#### **Computational Physics majors are required to take:**

- PHY 201 - College Physics I
- PHY 202 - College Physics II
- PHY 203 - College Physics III
- CS 121 - Computer Science I
- CS 122 - Computer Science II
- CS 221 - Data Structures

- CS 322 - Algorithms
- CS 341 - Software Engineering
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- MA 222 - Calculus III
- MA 321 - Differential Equations
  
- MA 201 - Linear Algebra or
- MA 200 - Applied Matrix Algebra and
- MA 460 - Numerical Methods and Matlab

Two of the following:

- EGR 312 - Electromagnetism
- EGR 360 - Dynamics
- EGR 467 - Thermodynamics
- PHY 361 - Applied Quantum Mechanics/Advanced Topics in Applied Physics

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
  
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
  
- PHY 120 - Introductory Mathematics for Physics
- PHY 201 - College Physics I
- MA 251 - MA Probability and Statistics
- Creative Expression Core course (4 credits)
- Power of Language: Other Core course (4 credits)
- One Elective course (4 credits)

**Computer Engineering (B.S.)**

**Student Learning Outcomes for Computer Engineering:**

*Students will be able to:*

- identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- communicate effectively with a range of audiences
- recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

- function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- acquire and apply new knowledge as needed, using appropriate learning strategies.

The **Computer Engineering major** combines engineering and computer science, including both hardware and software development. The Computer Engineering degree is accredited by the Engineering Accreditation Commission of ABET ([www.abet.org](http://www.abet.org)). Our computer engineering program is designed to prepare graduates who will:

1. Demonstrate a working knowledge of both the theory and application of mathematics, physics, electrical engineering, computer science, and sustainable technologies by developing distinguished careers and/or postgraduate study relating to digital system design, embedded systems, computer architecture, software design and development, robotics and automation, intelligent systems, sustainable technologies, project management, and/or leadership in shaping related public or industry policy;
2. Meet the demands and challenges of the ever-changing computer-related professions by developing problem-definition skills, assessing multiple design solutions, finding creative applications of fundamental engineering principles, and communicating results in a professional manner. Learn to adapt and redesign as needed while adhering to, and perhaps influence change in, developing industry standards;
3. Adopt the scientific method as the cornerstone of lifelong learning, and use a broad understanding of human institutions, achievements, and values to become leaders in a chosen field. Contribute to relevant societies and strongly consider seeking Professional Licensing;
4. Display unwavering high ethical standards, and develop character that demonstrates the School's and institution's mission to "Educate for Service" including becoming stewards of our world with personal accountability and humility;
5. Contribute to the needs of, and in other ways enhance, local communities and the world at large by applying problem-solving skills and critical and independent thinking to a broad range of projects that can produce technical innovation aimed at satisfying the future needs of society. Help develop technologies that have a long-term benefit for humanity, and even help limit technologies when necessary for the common good.

Computer Engineering majors may substitute PHY 201 for one of their Natural and Physical Science Core courses. PH 275 is approved to satisfy Humanities Core. Students may take up to 19 credits in up to three semesters at Elizabethtown without paying a credit overload fee. Engineering and Physics students must earn a C- or better in ALL prerequisite Engineering and Physics courses to continue in the major.

**Computer Engineering majors are required to take:**

- PHY 201 - College Physics I
- PHY 202 - College Physics II
- CS 121 - Computer Science I
- CS 122 - Computer Science II
- EGR 191 - Introduction to Engineering I
- EGR 192 - Introduction to Engineering II
- EGR 210 - Circuit Analysis
- EGR 222 - Systems Programming (CS 222)
- EGR 230 - Computer Architecture and Hi-Tech Fundamentals (CS 230)

- EGR 310 - Signals and Systems
- EGR 311 - Electronics
- EGR 332 - Digital Design I (CS 332)
- EGR 333 - Digital Design II, Assembly Language, and Interfacing (CS 333)
- EGR 410 - Control Systems
- EGR 422 - Operating Systems (CS 422)
- EGR 433 - Advanced Computer Engineering (CS 433)
  
- EGR 315 - Telecommunication Systems or
- EGR 434 - Green Robotics, Automation, and Machine Intelligence (CS 434) or
- CS 342 - Computer Networking
  
- EGR 401 - Senior Project in Engineering I
- EGR 402 - Senior Project in Engineering II
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- MA 222 - Calculus III
- MA 321 - Differential Equations
- PH 275 - HUM Science and Values
- One additional 4-credit Math or Science elective, for math/science majors. PHY 120 counts toward the 4-credit Math or Science elective. (*Cannot be satisfied by an NPS Core course for non-science majors, i.e. BIO 111 is okay, BIO 103 is not.*)

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
  
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
  
- EGR 191 - Introduction to Engineering I
- EGR 192 - Introduction to Engineering II
- PHY 120 - Introductory Mathematics for Physics
- PHY 201 - College Physics I
- CS 121 - Computer Science I
- MA 121 - MA Calculus I
- Power of Language: Other Core course (4 credits)

**Co-Operative Opportunity**

Engineering students are also eligible to complete their degree under a co-op option. The Co-Op Program extends the 4-year degree into a 5-year program. Under this option, the students typically complete two 7 month co-op rotations. During these rotations the students work full-time at an approved co-op site, also maintaining their status as enrolled students at Elizabethtown College. During co-op semesters, students are charged \$500 administrative fee and are registered for a zero credit, EGR 475 - Engineering Co-Op.

Scholarships and grants are deferred during co-op semesters. Financial aid is not awarded during co-op semesters. Any student participating in the co-op program should notify the Financial Aid Office as soon as possible. Students may choose to live on campus with standard room and board fees during co-op rotations, but must live in off-campus housing during the 5th year.

## **Computer Science (B.S.)**

### **Student Learning Outcomes for Computer Science:**

*Students will be able to:*

- Apply knowledge of computing and mathematics appropriate to the discipline, including common data structures and basic algorithms.
- Analyze a problem and identify and define the computing requirements appropriate to its solution.
- Explain computer hardware ranging from the basic logic gates and combinational logic circuits through high level computer organization.
- Design, implement, and evaluate a computer-based system, process, component or program, including operating systems and database systems, to meet desired needs.
- Function effectively on teams and use software engineering principles to accomplish a common goal.
- Communicate effectively with a broad range of audiences.
- Explain the local and global impact of computing and the associated professional, ethical, legal, security, and social responsibilities.
- Engage in continuing professional development.
- Use current techniques, skills, and tools necessary for computing practice, including theory and design of computer languages and their translation into machine operations, programming paradigms including procedural, object oriented and parallel programming, and hardware and software elements of data communications and computer networking.
- Explain processes that support the delivery and management of information systems within a specific application environment.

### **The Computer Science major requirements are:**

- CS 121 - Computer Science I
- CS 122 - Computer Science II
- CS 221 - Data Structures
- CS 222 - Systems Programming (EGR 222)
- CS 309 - Database Systems
- CS 322 - Algorithms
- CS 332 - Digital Design I (EGR 332)
- CS 341 - Software Engineering
- CS 342 - Computer Networking
- CS 421 - Compiler Design
- CS 422 - Operating Systems (EGR 422)
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- MA 235 - Introduction to Mathematical Proofs

- Two Computer Science, Data Analytics, or Data Science courses (6 credits minimum) at or above the 200-level (Students can elect to complete CS 400 or CS 495 as one of the elective options in this major.)

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- CS 121 - Computer Science I
- CS 122 - Computer Science II
- MA 121 - MA Calculus I
- MA 122 - Calculus II

**Notes:**

1. CS 121 and CS 122 are prerequisites to upper-level courses in Computer Science and must be taken before upper-level course can be attempted. Placement above CS 121/CS 122 for incoming students is done either by AP exam credit or through discussion with the course instructor and the Dean.
2. MA121 and MA 122 are required of Computer Science majors, and should be taken in the first year, if possible. A student who achieved a score of 4 or better on the College Board Advanced Placement Calculus AB Examination should be placed MA 122 in the first semester. Credit will be given for MA 121. A student who achieved a score of 4 or better on the College Board Advanced Placement Calculus BC Examination receives credits for both MA 121 and for MA 122.
3. A C- or better is required to advance from MA 121 to MA 122.

**Data Science (B.S.)**

**Student Learning Outcomes for Data Science:**

*Students will be able to:*

- Apply a strong knowledge related to computing, business, and mathematics in managerial decision making.
- Analyze practical problems, and identify and define the computing requirements appropriate to their solution.
- Design, implement, and evaluate computer-based systems, processes, components, or programs that should meet established national and international standards and specific requirements.
- Communicate effectively with a broad range of people representing different audiences involved in the IS development or implementation processes by using appropriate electronic software products for presentations, data processing, data visualization, and groupware software.
- Analyze the local and global impact of computing on individuals, organizations, and society.
- Choose appropriate hardware and software for specific applications.
- Quickly adapt to new software products and recently developed hardware.
- Develop information systems within a specific application environment by implementing appropriate software engineering methodologies.
- Work effectively as a member of a team to accomplish a common goal.

- Demonstrate a commitment to professional, ethical, legal, security, social, and moral issues and responsibilities.
- Be engaged in professional development activities.

**The Data Science major requires:**

- CS 121 - Computer Science I
- CS 122 - Computer Science II
- CS 221 - Data Structures
- CS 309 - Database Systems
- DS 200 - Introduction to Data Science
- DS 300 - Data Mining
- DS 315 - Statistical Learning
- DS 420 - Big Data
- DS 495 - Data Science Capstone
- MA 121 - MA Calculus I
- MA 200 - Applied Matrix Algebra
- MA 222 - Calculus III
- MA 251 - MA Probability and Statistics
- MA 252 - Statistical Methods in Research

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or  
EN 150 - PLE Advanced Writing and Language
- CS 121 - Computer Science I
- CS 122 - Computer Science II
- MA 121 - MA Calculus I
- MA 222 - Calculus III

**Engineering (B.S.)**

**Student Learning Outcomes for Engineering:**

*Students will be able to:*

- identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- communicate effectively with a range of audiences
- recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

- function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- acquire and apply new knowledge as needed, using appropriate learning strategies.

The **Engineering major** is a rigorous program designed to lead to a technical career in industry or graduate school in engineering. The Engineering degree with concentrations in **Biomedical, Civil, Electrical, Environmental, Industrial and Systems, Mechanical, and Mechatronics Engineering** is accredited by the Engineering Accreditation Commission of ABET ([www.abet.org](http://www.abet.org)).

The Engineering & Physics Program's principal goal is to prepare graduating students to successfully enter desired professional positions or graduate programs. This is achieved by challenging our students with a holistic education in engineering, the sciences, and the liberal arts. Our programs are born of a sense of cooperation between professors and students, and between student peers. In this supportive environment, we guide students to become increasingly self-aware of their strengths and to develop teamwork and communication skills. While theoretical and applied competence is the bedrock of our students' competitiveness, students also develop distinctive traits of caring and collaboration to move the world toward peace, non-violence, human dignity and social justice.

Our Engineering program is designed around attention to the needs of individual students and a breadth of engineering knowledge and skills. The Program Education Objectives encapsulate the values and goals of Elizabethtown College within the current and emerging needs of industry and society:

1. Our graduates become industry and civic leaders, framing and defining the new challenges emerging in the 21st century. Elizabethtown graduates apply critical thinking skills developed in a broad liberal arts context to understand and communicate emerging problems.
2. Prepared for a lifelong career, Elizabethtown engineers will thrive in a constantly changing world. They use their multidisciplinary engineering science foundation to move beyond conventional solutions to design, develop, and implement sustainable and innovative solutions.
3. Our graduates utilize their personal and professional strengths and ethical reasoning to meet the needs of their local communities and our shared global community, creating social and economic value. Graduates embrace, persist through, and learn from challenges.

Engineering majors may substitute PHY 201 for one of their Natural and Physical Science Core courses. PH 275 is approved to satisfy Humanities Core. Students may take up to 19 credits in up to three semesters at Elizabethtown without paying a credit overload fee. Engineering and Physics students must earn a C- or better in ALL prerequisite Engineering and Physics courses to continue in the major.

**Engineering majors are required to take:**

- PHY 201 - College Physics I
- PHY 202 - College Physics II
- EGR 191 - Introduction to Engineering I
- EGR 192 - Introduction to Engineering II
- EGR 210 - Circuit Analysis
- EGR 255 - Sustainable Resource Engineering and Design
- EGR 260 - Statics
- EGR 201 - Community-Based Project
- EGR 310 - Signals and Systems

- EGR 360 - Dynamics
- EGR 301 - Engineering Design and Junior Project
- EGR 395 - Fall Seminar
- EGR 396 - Spring Seminar
- EGR 401 - Senior Project in Engineering I
- EGR 402 - Senior Project in Engineering II
- 3.00-4.00 credit Engineering Elective
  
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CS 121 - Computer Science I
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- MA 222 - Calculus III
- One additional 3- or 4-credit Math or Science elective, for math/science majors. BIO 111 is required for the Biomedical Concentration. PHY 120 counts for this elective (\*Cannot be satisfied by an NPS Core course for non-science majors, i.e. BIO 101, CH 101, PHY 105, ES 113).
- PH 275 - HUM Science and Values

**Engineering majors also must either:**

(1) Select one of the following concentrations and complete all the courses in it, or (2) Earn the degree without a concentration by completing any six of the engineering courses and one of the math courses listed under the seven concentrations.

Biomedical Concentration:

- EGR 264 - Mechanics of Materials
- EGR 323 - Biomechanics of Human Movement
- EGR 324 - Structural Aspects of Biomaterials
- EGR 328 - Bio-Electric Signals in Engineering
- EGR 368 - Fluid Mechanics and Hydrology
- EGR 410 - Control Systems
- MA 321 - Differential Equations

Civil Concentration:

- EGR 251 - Introduction to Environmental Engineering
- EGR 256 - Environmental Site Engineering and Design
- EGR 264 - Mechanics of Materials
- EGR 353 - Green Architectural Engineering
- EGR 364 - Structural Engineering
- EGR 366 - Steel and Reinforced Concrete Design
- MA 321 - Differential Equations

Electrical Concentration:

- EGR 311 - Electronics
- EGR 312 - Electromagnetism
- EGR 315 - Telecommunication Systems
- EGR 317 - Physics of Semiconductor Devices
- EGR 318 - Fiber Optics Communication Systems
- EGR 410 - Control Systems
- MA 321 - Differential Equations

Environmental Concentration:

- EGR 251 - Introduction to Environmental Engineering
- EGR 256 - Environmental Site Engineering and Design
- EGR 351 - Water and Wastewater Engineering
- EGR 353 - Green Architectural Engineering
- EGR 368 - Fluid Mechanics and Hydrology
- EGR 467 - Thermodynamics
- MA 321 - Differential Equations

Industrial and Systems Concentration:

- EGR 248 - Quantitative Methods/Operations Management (BA 248)
- EGR 341 - Industrial and Systems Engineering Methods
- EGR 345 - Fundamentals of Process Improvement
- EGR 347 - Global Supply Chain Management (BA 347)
- EGR 348 - Introduction to Manufacturing Processes
- EGR 410 - Control Systems
- MA 251 - MA Probability and Statistics
- PSY 105 - SSC Introduction to Psychology

Mechanical Concentration:

- EGR 264 - Mechanics of Materials
- EGR 348 - Introduction to Manufacturing Processes
- EGR 368 - Fluid Mechanics and Hydrology
- EGR 410 - Control Systems
- EGR 463 - Analytical Mechanics and Vibrations
- EGR 467 - Thermodynamics
- MA 321 - Differential Equations

Mechatronics Concentration:

- EGR 311 - Electronics
- EGR 332 - Digital Design I (CS 332)
- EGR 410 - Control Systems

- EGR 434 - Green Robotics, Automation, and Machine Intelligence (CS 434)
- EGR 463 - Analytical Mechanics and Vibrations
- CS 122 - Computer Science II
- MA 321 - Differential Equations

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or  
EN 150 - PLE Advanced Writing and Language
- EGR 191 - Introduction to Engineering I  
EGR 192 - Introduction to Engineering II
- PHY 120 - Introductory Mathematics for Physics or  
MA 121 - MA Calculus I
- MA 122 - Calculus II
- PHY 201 - College Physics I
- Power of Language: Other Core course (4 credits)

**Co-Operative Opportunity**

Engineering students are also eligible to complete their degree under a co-op option. The Co-Op Program extends the 4-year degree into a 5-year program. Under this option, the students typically complete two 7 month co-op rotations. During these rotations the students work full-time at an approved co-op site, also maintaining their status as enrolled students at Elizabethtown College. During co-op semesters, students are charged \$500 administrative fee and are registered for a zero credit, EGR 475 - Engineering Co-Op.

Scholarships and grants are deferred during co-op semesters. Financial aid is not awarded during co-op semesters. Any student participating in the co-op program should notify the Financial Aid Office as soon as possible. Students may choose to live on campus with standard room and board fees during co-op rotations, but must live in off-campus housing during the 5th year.

**Information Systems (B.S.)**

**Student Learning Outcomes for Information Systems:**

*Students will be able to:*

- Apply a strong knowledge related to computing, business, and mathematics in managerial decision making.
- Analyze practical problems, and identify and define the computing requirements appropriate to their solution.
- Design, implement, and evaluate computer-based systems, processes, components, or programs that should meet established national and international standards and specific requirements.

- Communicate effectively with a broad range of people representing different audiences involved in the IS development or implementation processes by using appropriate electronic software products for presentations, data processing, data visualization, and groupware software.
- Analyze the local and global impact of computing on individuals, organizations, and society.
- Choose appropriate hardware and software for specific applications.
- Quickly adapt to new software products and recently developed hardware.
- Develop information systems within a specific application environment by implementing appropriate software engineering methodologies.
- Work effectively as a member of a team to accomplish a common goal.
- Demonstrate a commitment to professional, ethical, legal, security, social, and moral issues and responsibilities.
- Be engaged in professional development activities.

**The Information System major requirements are:**

- CS 121 - Computer Science I
- CS 122 - Computer Science II
- CS 221 - Data Structures
- CS 230 - Computer Architecture and Hi-Tech Fundamentals (EGR 230)
- CS 309 - Database Systems
- CS 310 - Web Development
- CS 341 - Software Engineering
- CS 342 - Computer Networking
- CS 363 - Computer Security
- CS 409 - Advanced Database Systems
- BA 265 - Management and Organizational Behavior
- BA 330 - Legal Environment of Business
  
- EC 101 - SSC Principles of Macroeconomics or
- EC 102 - SSC Principles of Microeconomics
  
- MA 251 - MA Probability and Statistics
- Two Computer Science or Data Science courses from the Computer Science major requirements at or above the 200-level.

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
  
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
  
- CS 121 - Computer Science I
- CS 122 - Computer Science II

**Note:**

CS 121 and CS 122 are prerequisites to upper-level courses in Computer Science and must be taken before upper-level courses can be attempted. Placement above CS 121/CS 122 for incoming students is done either by AP exam credit or through discussion with the course instructor and the Dean.

## **Mathematical Business (B.S.)**

### **Student Learning Outcomes for Mathematical Business:**

*Students will be able to:*

- Use inductive or deductive reasoning to formulate and evaluate arguments.
- Model real-world phenomena mathematically.
- Utilize mathematics effectively in problem-solving strategies.
- Combine and apply different strands of learning in a meaningful and substantial way.

### **Mathematical Business majors are required to take the following mathematics and computer science courses:**

- CS 113 - NPS The Power and Beauty of Computing or
- CS 121 - Computer Science I
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- MA 130 - Creative Problem Solving I
- MA 201 - Linear Algebra
- MA 222 - Calculus III
- MA 251 - MA Probability and Statistics
- MA 252 - Statistical Methods in Research
- MA 331 - Operations Research I or
- MA 332 - Operations Research II

### **Mathematical Business majors are also required to take the following business and economics courses:**

- AC 101 - Introduction to Accounting
- AC 270 - Cost Management Accounting
- BA 215 - Principles of Marketing or
- BA 265 - Management and Organizational Behavior
- FIN 325 - Corporate Finance
- BA 330 - Legal Environment of Business
- EC 101 - SSC Principles of Macroeconomics or
- EC 102 - SSC Principles of Microeconomics

**12 credits selected from:**

- MA 235 - Introduction to Mathematical Proofs
- MA 255 - Financial Mathematics
- MA 262 - Financial Mathematics with Excel
- MA 331 - Operations Research I
- MA 332 - Operations Research II
- MA 351 - Theory of Probability
- MA 352 - Mathematical Statistics
- MA 457 - Investment and Financial Markets
- MA 458 - Long Term Actuarial Mathematics
- MA 459 - Short Term Actuarial Mathematics
- MA 460 - Numerical Methods and Matlab
- MA 463 - Advanced Financial Mathematics with Excel
- MA 470-474 - Internship in Mathematics
- MA 490 - Research in Mathematics
- CS 310 - Web Development
- CS 409 - Advanced Database Systems
- EC 309 - Introduction to Mathematical Economics
- MA 170/370 experimental course offerings upon approval by the Mathematical Business Program Advisor.

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or  
EN 150 - PLE Advanced Writing and Language
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- MA 130 - Creative Problem Solving I
- MA 262 - Financial Mathematics with Excel
- AC 101 - Introduction to Accounting
- CS 113 - NPS The Power and Beauty of Computing or  
CS 121 - Computer Science I
- EC 101 - SSC Principles of Macroeconomics
- Natural and Physical Science Core course (4 credits)

**Notes:**

A student who achieved a score of 4 or better on the College Board Advanced Placement Calculus AB Examination should be placed in MA 122 in the first semester and MA 222 in the second semester. Credit will be given for MA 121.

A student who achieved a score of 4 or better on the College Board Advanced Placement Calculus BC Examination should be placed in MA 222 in the first semester consider taking MA 201 in the second semester. Credit will be given for both MA 121 and MA 122.

All Mathematics majors should take a 4-credit math course every semester, even if they have AP or transfer credit for one or more calculus courses.

A C- or better is required to advance from MA 121 to MA 122 and from MA 122 to MA 222.

## **Mathematics (B.S.)**

### **Student Learning Outcomes for Mathematics:**

*Students will be able to:*

- Use inductive or deductive reasoning to formulate and evaluate arguments.
- Model real-world phenomena mathematically.
- Utilize mathematics effectively in problem-solving strategies.
- Combine and apply different strands of learning in a meaningful and substantial way.

**Mathematics majors are required to take a minimum of 52 credits in mathematics courses, including:**

- MA 121 - MA Calculus I
- MA 122 - Calculus II
- MA 130 - Creative Problem Solving I
- MA 201 - Linear Algebra
- MA 222 - Calculus III
- MA 235 - Introduction to Mathematical Proofs
- MA 301 - Abstract Algebra
- MA 351 - Theory of Probability
- MA 421 - Real Analysis
- MA 430 - Creative Problem Solving II
  
- CS 113 - NPS The Power and Beauty of Computing or
- CS 121 - Computer Science I (should be taken as early as possible)

As part of these requirements, students may elect one of the following concentrations:

Applied Mathematics concentration

The **Applied Mathematics concentration** provides a background in applied mathematics and statistics, enabling graduates to seek careers in government and industry, or to pursue graduate work in applied mathematics or statistics. The Applied Mathematics concentration requires:

- MA 252 - Statistical Methods in Research
- MA 321 - Differential Equations

- MA 331 - Operations Research I or
- MA 332 - Operations Research II
  
- At least four credits of acceptable mathematics electives (courses number 251 and above)

Pure Mathematics concentration

The **Pure Mathematics concentration** is designed to provide a foundation for successful graduate study in mathematics. The Pure Mathematics concentration requires:

- MA 341 - Modern Geometry
- MA 425 - Complex Variables
- MA 441 - Topology
- At least four credits of acceptable mathematics electives (courses numbered 251 and above)

If no concentration is selected:

- At least 12 credits from acceptable mathematics electives (courses numbered 251 and above)

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- CS 113 - NPS The Power and Beauty of Computing or
- CS 121 - Computer Science I
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- MA 130 - Creative Problem Solving I
- Two Core courses (8 credits total)

**Notes:**

A student who achieved a score of 4 or better on the College Board Advanced Placement Calculus AB Examination should be placed in MA 122 in the first semester and MA 222 in the second semester. Credit will be given for MA 121.

A student who achieved a score of 4 or better on the College Board Advanced Placement Calculus BC Examination should be placed in MA 222 in the first semester consider taking MA 201 in the second semester. Credit will be given for both MA 121 and MA 122.

All Mathematics majors should take a 4-credit math course every semester, even if they have AP or transfer credit for one or more calculus courses.

A C- or better is required to advance from MA 121 to MA 122 and from MA 122 to MA 222.

\*MA 301 and MA 421 are offered alternating years (MA 301 in odd years. MA 421 in even years.). Students are advised to take them during their Junior or Senior year.

\*\*MA 332 and MA 441 are offered even-numbered years. MA 331, MA 425, and MA 341 are offered odd-numbered years.

## **Mathematics - Secondary Education (B.S.)**

### **Student Learning Outcomes for Secondary Education concentration:**

*Students will be able to:*

- Use inductive or deductive reasoning to formulate and evaluate arguments.
- Model real-world phenomena mathematically.
- Utilize mathematics effectively in problem-solving strategies.
- Combine and apply different strands of learning in a meaningful and substantial way.

The **Secondary Education concentration** (Mathematics Education) is required for secondary education certification. Students in this concentration are given a solid foundation in geometry, algebra and statistics essential for effective teaching and analysis of the secondary school mathematics curriculum. The required math courses will satisfy the requirement of two math courses for Education certification.

PLEASE NOTE: A complete list of the foundational requirements (including a list of approved English Literature courses) can be found in the EDUCATION MANUAL.

To ensure that all students are prepared to apply for formal acceptance, it is recommended that students take a minimum of 16 credit hours per semester.

### **FOUNDATIONAL REQUIREMENTS:**

Each teacher candidate is expected to meet the following criteria and to use the guidelines to ensure a successful application for formal acceptance:

- Provide updated clearances prior to starting Education courses including a record of Act 34 (PA Criminal Record), PA Child Abuse, FBI Criminal History Report, and TB test. These clearances must be less than one year old. Clearances are required to be updated every year.
- Declare their Education major by the end of their First Year.
- Submit a student life clearance by March of their First Year. (Complete the top portion only and bring to Nicarry 143)
- Complete ED 105 and ED 150/ED 151 with earned grades of C or better- this should be done within the first year (ED 105 Fall and ED 150/151 Spring). ED 161 should be taken within the first 4 semesters (FY and Second year- but recommend during FY). \*Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.
- Meet all requirements for Formal Acceptance as outlined in the manual.
- Submit a Student Life Clearance by March of first year (submit to Education office)

### **PROGRESSION TO FORMAL ACCEPTANCE:**

Participate in a planning meeting with advisor if issues or concerns arise during three GPA checkpoints conducted by the School of Human and Health Professions.

- Checkpoint #1: GPA verification will be completed at the end of the first semester of First year (December of FY). A minimum cumulative 2.80 is recommended. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA.
- Checkpoint #2: GPA verification will be completed at the end of the second semester of First year (May of FY). A minimum cumulative 2.80 should be achieved. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA. Students will begin work on a professional electronic portfolio, to be submitted at the time of application for formal acceptance.
- Prior to Checkpoint #3- Students should have completed or be in the process of completing 27 credit hours. This will ensure that requirements for Formal Acceptance can be achieved.
- Checkpoint #3: GPA verification will be completed at the end of the first semester of Second year (December of Second year). A minimum 2.80 needs to be maintained with the goal of a minimum 3.0 being achieved by end spring of Second year.

**FORMAL ACCEPTANCE needed for 300-Level ED courses:**

Cumulative GPA at 54 credits, >= 3.00 \_\_\_\_\_

Passing scores on Basic Skills Assessment \_\_\_\_\_

Submit electronic portfolio \_\_\_\_\_

Two Math: MA\_\_\_\_\_ and MA\_\_\_\_\_

Two English: EN 100 or EN 150 (comp) \_\_\_\_\_ and EN Literature \_\_\_\_\_

Students will begin creating an electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting required competencies. Final portfolio will be submitted as part of the Formal Acceptance application. Students typically apply for Formal Acceptance in the spring of the second year.

Approval of the Education Program and any other appropriate major program is necessary for the application to be successful. Students are evaluated at the conclusion of each semester in accordance with the Education Program Teacher Dispositions/Foundational Competencies Policy. Students may be advised or required to withdraw from a program at any time the Education advisors determines such action to be appropriate.

**Basic Skills Assessment Policy**

*General Requirements*

- 22 Pa. Code § 49.18 (Assessment) requires an assessment of basic skills, professional knowledge and practice and subject matter knowledge. The basic skills assessment is comprised of three individual tests covering reading, writing and mathematics.
- Candidates may combine individual tests from different vendors to meet the basic skills requirement.
- Basic Skills Assessments in Reading, Writing and Mathematics may be met using SAT, ACT, PAPA and/or Praxis Core scores or a combination thereof. (Students must pass the basic skills in order to receive formal acceptance into the program)
- Candidates electing to use tests from different vendors cannot use a composite score. They must meet the qualifying score for each individual test.

### **Approved Basic Skills Assessments**

*The Pre-service Academic Performance Assessment (PAPA) modules in Reading, Writing and Mathematics.*

- Visit [www.pa.nesinc.com](http://www.pa.nesinc.com) to register for PAPA tests.
- Reading test 8001, Mathematics test 8002, Writing test 8003
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 220 is required on the Reading module, 193 on the Mathematics module and 220 on the writing module. A composite scoring option is available.

*The Core Academic Skills for Educators (CORE) modules in Reading, Writing and Mathematics.*

- Visit [www.ets.org/praxis/pa](http://www.ets.org/praxis/pa) to register for CORE tests
- Reading test 5713, Mathematics test 5733, Writing test 5723
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 156 (Reading), 162 (Writing), and 142 (Mathematics) is required. A composite scoring option is available.

*The Scholastic Achievement Test (SAT)*

- The Scholastic Achievement Test (SAT) must achieve a minimum score of 27 (Reading), 26 (Mathematics), and 28 (Writing and Language). It is recommended that intended Education majors submit their SAT scores to Elizabethtown College. There is no composite scoring option. SAT scores may be combined with other tests.
- Submit official test scores in the vendor-sealed envelope and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

*The American College Test (ACT) Plus Writing. There is no composite scoring option.*

- The American College Test (ACT) Plus Writing must achieve a minimum score of 22 (Reading), 8 (Writing), 21 (Mathematics). \*Candidates that opt out of the Writing portion of the ACT will be required to take the writing portion of the Basic Skills Assessment.
- Submit official test scores and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality, in an envelope sealed by the test vendor. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

Older basic skills tests, such as the PPST Reading, Writing, and Mathematics, are accepted if taken at the time they were required in Pennsylvania. Refer to the testing CSPG 21 for more information about replaced tests.

### **Basic Skills Assessment Exceptions**

- The basic skills assessment requirement is waived for all certificates as of November 1, 2014 if the applicant completed an approved post-baccalaureate certification program.

- Experienced Out-of-State Instructional Certificate Exception: As of July 1, 2011, applicants submitting a copy of a current and valid out-of-state instructional certificate that is comparable in grade and content area, plus verification of two years of full-time teaching experience, are not required to take the basic skills assessments.
- Vocational Certificate Exception: Effective July 1, 2014, candidates in post-baccalaureate vocational instructional programs are not required to take the basic skills assessment in reading and writing. The basic skills mathematics assessment is still required for vocational level II certification.
- PDE implemented an alternative means to achieve exemption from the Basic Skills assessment testing requirements. At this time, the alternative is for the mathematics portion of the assessment only. The Program will accept a grade of B (3.0) or higher in a specific college level math course. Program providers must identify the course(s) that best align with the competencies and best meet the PA Academic Standards.
  - The program provider can use the courses within their programs that satisfy the required six credits of mathematics for program entry as the coursework for meeting the basic skills assessment if the competencies are included in the coursework.
  - If a student has not met the exemption for the math portion of the basic skills assessment based on their ACT/SAT scores, they should consider the below courses on their schedule as these will meet the criteria put into place by PDE to be exempt from the mathematics portion of the Basic Skills Assessment. These are the only two approved courses that may be taken to meet the exemption. Students must achieve a grade of B or above in each course.
    - MA 205: Mathematics for the Elementary Teacher
    - MA 251: Probability and Statistics

#### **Exit from the Programs**

Students seeking **award of the degree in the major only (without certification)** must:

- Receive approval of the Education Program and any other appropriate Program(s) for completion of their degree plan.
- Satisfy all requirements of the major, except the professional internship and Pennsylvania certification test results, with a cumulative/major grade point average of 2.00 or higher.
- Complete an alternative internship experience of at least six credits, as approved by the Education Program.

Students seeking **award of the degree in their major and certification** must:

- Satisfy all requirements of the major with the cumulative grade point average of 3.00 or higher.
- Earn a grade of Pass in the professional internship and senior seminar.
- Earn passing scores on the Pennsylvania Educator Certification Tests (PECT) and/or Praxis II series as it applies to your certification program. Students completing Early Childhood (PK-4) must take the PECT exam series, Elementary Middle Level (4-8) certifications take the Praxis series in core assessment and subject concentration, Secondary certification (7-12) take Praxis II in a content area and PK-12 (Music Education, Modern Languages – Spanish Education) must successfully complete the appropriate Fundamental Subjects: Content Knowledge Test and Praxis II in a content area. Graduate candidates in Special Education (PK-12) must take the PECT exam series in special education.

For a comprehensive listing of testing requirements in Pennsylvania, please see  
<http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx#tab-1>.

Arrange for Basic Skills, PECT, and/or Praxis test scores to be sent to the Education Program showing passing scores on all required tests.

Complete two Mathematics (MA) courses and two English (EN) courses, one English Literature and one English Writing.

Formally and publicly present an electronic portfolio summarizing activities and experiences in professional education and demonstrating satisfaction of all required competencies.

Receive approval of the Education Program and appropriate major Program(s).

Submit the application for Pennsylvania certification to the Education Program.

**Required courses:**

- MA 121 - MA Calculus I
- MA 122 - Calculus II
- MA 130 - Creative Problem Solving I
- MA 201 - Linear Algebra
- MA 222 - Calculus III
- MA 235 - Introduction to Mathematical Proofs
- MA 251 - MA Probability and Statistics
- MA 301 - Abstract Algebra
- MA 341 - Modern Geometry
- MA 351 - Theory of Probability
- MA 421 - Real Analysis
- MA 430 - Creative Problem Solving II
- At least four credits of acceptable mathematics electives (courses numbered above 251)
- CS 121 - Computer Science I  
(should be taken as early as possible)

**Education Courses:**

- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- SED 222 - Foundations of Inclusive Education (MSE 522)
- ED 305 - Methods of Secondary Education
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 470 - Professional Internship
- ED 497 - Senior Seminar for Secondary Education
- Two English courses for Education certification, one literature and one writing (EN 100 or EN 150)
- Two Math courses for Education certification

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- MA 130 - Creative Problem Solving I
- CS 121 - Computer Science I
- Power of Language Core course (4 credits)

**Notes:**

A student who achieved a score of 4 or better on the College Board Advanced Placement Calculus AB Examination should be placed in MA 122 in the first semester and MA 222 in the second semester. Credit will be given for MA 121.

A student who achieved a score of 4 or better on the College Board Advanced Placement Calculus BC Examination should be placed in MA 222 in the first semester consider taking MA 201 in the second semester. Credit will be given for both MA 121 and MA 122.

PHY 201 is required and will fulfill one of the two Natural and Physical Sciences core requirements. Unless a student has a special interest in PHY 201, students are advised to wait to take PHY 201 until after they have completed MA 222.

Students considering a Mathematics Secondary Education major should not take MA 105 or MA 117.

All Mathematics Secondary Education majors should take a math course every semester, even if they have AP or transfer credit for one or more calculus courses.

A C- or better is required to advance from MA 121 to MA 122 and from MA 122 to MA 222.

Education majors may substitute ED 224 for their Western-Cultural Heritage Core.

ED150 and ED 151 are approved to satisfy Social Science Core.

**Minors**

**Architectural Studies Minor**

The interdisciplinary minor in Architectural Studies provides a general introduction to careers in architecture. The curriculum includes architectural design, sustainability, engineering principles and the history of the built environment. Students learn to design original buildings for real-world contexts with client and community involvement. They research, document, and render their original designs and present and defend them in critiques.

Stewardship of natural resources, innovations in sustainability, LEED standards and certification are emphasized in courses and projects. Prior knowledge of physics and advanced mathematics is not required.

**Student Learning Outcomes**

*Students will be able to:*

- Students will design and produce models for an original project for a specific client that includes architectural plans, materials, cost and sustainability and defend their design to a panel of judges composed of faculty, architects, artists, engineers and investors.
- Students will be able to demonstrate knowledge of the historical and contemporary architecture built throughout the world for sacred, civic, commercial, cultural, and domestic environments.
- Students will be able to explain the national standards of LEED (Leadership in Energy and Environmental Design), and their incorporation within buildings and landscape architecture.
- Students who have completed the Architectural Studies minor will prepare a professional portfolio that includes selected design works from EGR353 Green Architectural Engineering, ART/EGR499A Architecture Studio I, ART/EGR499B Architectural Studio II, and other courses and creative works of their choosing. Students must post their portfolios online.

For further information, contact Dr. Joseph Wunderlich, School of Engineering, Computer Science and Mathematics or Dr. Patricia Ricci, School of Art and Humanities.

The requirements for Architectural Studies minor are:

**23 credits are required, including:**

- ART 105 - CE Drawing I
- ART 280 - NCH World Architecture
- ART 120 - CE Sculpture I or
- ART 210 - Drawing II
- EGR 353 - Green Architectural Engineering
- ART 470-474 - Internship in Fine Arts (emphasis in architecture) or
- EGR 470-474 - Internship in Engineering (emphasis in architecture)  
OR
- ART 480-489 - Independent Study in Fine Arts (emphasis in architecture) or
- EGR 480-489 - Independent Study in Engineering (emphasis in architecture)  
OR
- ART 370-378 - Special Topics in Fine Arts (emphasis in architecture) or
- EGR 370-378 - Special Topics in Engineering (emphasis in architecture)  
OR
- EGR 200 - Engineering Research/Project (emphasis in architecture)  
OR
- EGR 255 - Sustainable Resource Engineering and Design and
- EGR 396 - Spring Seminar

- EGR 495 - Architectural Design Studio I (ART 495) or
- ART 495 - Architectural Design Studio I (EGR 495)  
AND
- EGR 496 - Architectural Design Studio II (ART 496) or
- ART 496 - Architectural Design Studio II (EGR 496)

## **Computer Science Minor**

**The Computer Science minor requirements are:**

- CS 121 - Computer Science I
- CS 122 - Computer Science II
- CS 221 - Data Structures
- CS 222 - Systems Programming (EGR 222)
- Two Computer Science, Data Analytics, or Data Science courses (6 credits minimum) from the Computer Science major or Data Science major requirements at or above the 200-level.

## **Information Systems Minor**

**The Information Systems minor requirements are:**

- CS 121 - Computer Science I
- CS 122 - Computer Science II
- CS 309 - Database Systems
- CS 341 - Software Engineering
- Two Computer Science or Data Science electives (6 credits minimum) from the Information Systems major requirements at or above the 200-level.

## **Mathematics Minor**

**The Mathematics minor requirements are:**

- MA 121 - MA Calculus I
- MA 122 - Calculus II
- MA 201 - Linear Algebra
- MA 235 - Introduction to Mathematical Proofs
- Eight credits of mathematics electives MA 222 or higher

## **Physics Minor**

**Physics minors are required to take:**

- PHY 201 - College Physics I
- PHY 202 - College Physics II
- PHY 203 - College Physics III
- Ten additional credits in physics, PHY 105 and higher.

**Note:**

Students must earn a C- or better in ALL prerequisite Engineering and Physics courses to continue in the minor.

**Technical Design Minor**

Students will learn to solve complex real world problems on multidisciplinary teams.

**Technical Design Minors are required to take:**

- PHY 101 - General Physics I or
- PHY 201 - College Physics I
- PHY 102 - General Physics II or
- PHY 202 - College Physics II
- EGR 191 - Introduction to Engineering I or
- PHY 105 - NPS How Things Work
- EGR 192 - Introduction to Engineering II
- EGR 301 - Engineering Design and Junior Project
- EGR 395 - Fall Seminar
- EGR 396 - Spring Seminar
- EGR 401 - Senior Project in Engineering I
- EGR 402 - Senior Project in Engineering II
- EGR 201 - Community-Based Project or
- EGR 200 - Engineering Research/Project

**Note:**

Students must earn a C- or better in ALL prerequisite Engineering and Physics courses to continue in the minor.

**Master of Organizational Analytics (M.S.)**

**Student Learning Outcomes for Master of Organizational Analytics**

*Students will be able to:*

- Students will learn to independently apply the appropriate statistical procedure and use technical skills in predicative and prescriptive modeling to support decision-making.
- Students will demonstrate effective communication skills that facilitate the effective presentation of analysis results.
- Students will demonstrate the ability to think critically in making decisions based on data analytics.

**Business Administration Track:**

- MOA 500 - Data Analytics (DAT200)
- MOA 510 - Big Data and Statistical Analysis (DAT 300)
- MOA 515 - Machine Learning (DAT 315)
- MOA 532 - Introduction to Data Analytics in Business (BA 320)
- MOA 552 - Statistical Methods in Research
- MOA 560 - Business Data Visualization (BA 260)
- MOA 600 - Data Analytics Thesis (DAT 400)
- MOA 670 - Applied Programming

**Health Care Track:**

- MOA 500 - Data Analytics (DAT200)
- MOA 510 - Big Data and Statistical Analysis (DAT 300)
- MOA 515 - Machine Learning (DAT 315)
- MOA 552 - Statistical Methods in Research
- MOA 600 - Data Analytics Thesis (DAT 400)
- MOA 670 - Applied Programming
- MHA 510 - Leadership and Management in Healthcare
- MHA 550 - Health Informatics
- MHA 580 - Healthcare Finance and Decision Making
  
- PP 561 - Public Administration (PS 361) or
- PP 563 - American Domestic Policy (PS 363)

**Leadership Track:**

- MOA 500 - Data Analytics (DAT200)
- MOA 510 - Big Data and Statistical Analysis (DAT 300)
- MOA 515 - Machine Learning (DAT 315)
- MOA 542 - Design Thinking for Leaders (MSL 570)
- MOA 552 - Statistical Methods in Research
- MOA 600 - Data Analytics Thesis (DAT 400)
- MOA 670 - Applied Programming

**Logistics Track:**

- MOA 500 - Data Analytics (DAT200)
- MOA 510 - Big Data and Statistical Analysis (DAT 300)
- MOA 515 - Machine Learning (DAT 315)
- MOA 532 - Introduction to Data Analytics in Business (BA 320)
- MOA 545 - Fundamentals of Process Improvement (EGR 345)
- MOA 547 - Global Supply Chain Management (BA 347, EGR 347)
- MOA 548 - Quantitative Methods/Operations Management (BA 248)
- MOA 552 - Statistical Methods in Research
- MOA 560 - Business Data Visualization (BA 260)
- MOA 600 - Data Analytics Thesis (DAT 400)
- MOA 670 - Applied Programming

**Note:**

If students take MOA 520 offered online over the summer, they will additionally be prepared to pass the Oracle® Certification Exam.

## Computer Science Courses

### CS 113 - NPS The Power and Beauty of Computing

4.00 credits. (**Natural and Physical Sciences Core Course**) A broad introduction to the discipline of computer science is given with a focus on its deep concepts and powerful impact. An emphasis is placed on seven "big ideas" developed by the CS Principles initiative: creativity, abstraction, data, algorithms, programming, the Internet, and impact. Examples and problems are drawn from other scientific fields and include DNA processing, particle simulation, and projectile motion. Programming projects are done in the introductory Scratch language and Python.

### CS 121 - Computer Science I

4.00 credits. The fundamental concepts of computer organization, machine-level representation of data, algorithmic development and structured programming are presented with an emphasis on the syntactic and execution characteristics of an object-oriented programming language, including data types; arithmetic operators and assignment; input/output, selection and iteration constructs; elementary data structures; and procedural abstraction.

### CS 122 - Computer Science II

4.00 credits. A continuation of the presentation of the computer software essentials. The course surveys fundamental data structures for information processing and corresponding algorithm construction. The implementation of these data structures is considered. Additional topics include recursion, file processing, classes and advanced object-oriented programming techniques. \**Prerequisite(s)*: CS 121.

### CS 221 - Data Structures

4.00 credits. The design of algorithms for handling abstract data types, including stacks, queues, linked lists, trees and graphs is coupled with an introduction to complexity analysis, storage allocation and management.

\**Prerequisite(s)*: CS 122. Fall semester.

### CS 222 - Systems Programming (EGR 222)

4.00 credits. This course covers advanced programming and machine representation of data and data structures, including dynamic structures and files. Topics include memory allocation, run-time data organization, function linkage and parameter passing, interrupt processing and the relationship between high level and machine language.

\**Prerequisite(s)*: CS 122. Spring semester.

### CS 230 - Computer Architecture and Hi-Tech Fundamentals (EGR 230)

4.00 credits. An introduction to computer engineering including hi-tech fundamentals, trends, and computer architectures. Ethical impacts in global, economic, environmental, and societal contexts. \**Prerequisite(s)*: CS 121 or permission by instructor. Spring semester.

### CS 309 - Database Systems

4.00 credits. An introduction to concepts of databases and database management systems including the storage, processing, evaluation, display and security of data. The course represents a study of the database logical and physical design; of the basic management techniques using the most popular data languages, SQL and QBE; and of the different methodologies for database development - the relational approach and the object-oriented approach. Practical skills to create concrete databases and the corresponding information systems using some of the most used

software products (Oracle, MS SQL Server, MySQL and MS Access) are considered. \**Prerequisite(s)*: CS 121. Fall Semester.

**CS 310 - Web Development**

4.00 credits. A study of the architecture and functionality of the Internet and the World Wide Web is followed by an in-depth study of website design, including comprehensive coverage of HTML, XML, and other tools needed to establish an interactive website with a database back-end. Client-side programming will be done in JavaScript. Server-side programming will be done in a variety of languages that may include PHP, JSP, ASP.NET, or frameworks such as Rails. \**Prerequisite(s)*: CS 122. Fall semester.

**CS 322 - Algorithms**

4.00 credits. This course provides an introduction to theoretical computer science with an emphasis on algorithm design and analysis. Divide-and-conquer approaches, dynamic programming, NP-completeness, and graph algorithms are covered. Techniques including asymptotic analysis, solving recurrence relations, and amortized analysis are discussed. The final section of the course is dedicated to theory of computation, including regular expressions and finite automata, context-free grammars, Turing machines, and decidability. \**Prerequisite(s)*: CS 221. Spring semester, even-numbered years.

**CS 332 - Digital Design I (EGR 332)**

4.00 credits. Introduction to Boolean Algebra and Discrete Math. Design of combinational and sequential digital logic circuits, and their use in computer architectures. Introduction to machine instructions and assembly language programming. Design of a simple microprogrammed computer. \**Prerequisite(s)*: CS 121 or permission of the instructor. Fall semester.

**CS 333 - Digital Design II, Assembly Language, and Interfacing (EGR 333)**

4.00 credits. Advanced digital logic design and circuit implementations. Assembly language programming. Design, testing, and construction of interfaces, and design and testing of supporting software. Field Programmable Gate Arrays (FPGA's), Programmable Logic Controllers (PLC's), Microcontroller development systems. Breadboarded TTL circuit implementations. Circuit simulators. Raspberry pi's, Arduino's, and similar simple devices. Custom lab manuals. \**Prerequisite(s)*: CS 332/EGR 332, or permission of the instructor. Hours: lecture 3, laboratory 3. Spring semester, odd-numbered years.

**CS 341 - Software Engineering**

4.00 credits. An introduction to software development methodologies including requirements specification, design, testing, maintenance, and documentation. Students will participate in a large software development project using version control software. \**Prerequisite(s)*: CS 122. **Signature Learning Experience: Capstone**. Spring semester.

**CS 342 - Computer Networking**

4.00 credits. Theory and knowledge of computer networks, the operation of the network, the characteristics of network architecture as it relates to the ISO model and administration, and the security and management of networks are provided. Other topics include network hardware requirements, such as routers, repeaters, gateways, interface cards, file servers, network topology options, and the Internet. \**Prerequisite(s)*: CS 122. Spring semester.

**CS 361 - Computer Graphics**

4.00 credits. This course gives an overview of the fundamentals of computer graphics with an emphasis on the real-time rendering done in modern video games. Key topics include the rendering pipeline, transformations, texturing, shading, lighting, hidden surface removal, and other advanced techniques. Related material in geometry and linear algebra will be reviewed as needed. \**Prerequisite(s)*: CS 221. Spring semester, odd-numbered years.

**CS 363 - Computer Security**

4.00 credits. This course introduces the student to the fundamentals of computer security. Foundational concepts such as confidentiality, integrity, and availability are discussed in the context of both designing systems and evaluating existing systems for vulnerabilities. Cryptography is explored as a tool that can be applied to many aspects of computer security. Theoretical discussions of security principles are enriched by examples from real world systems and protocols. \*Prerequisite(s): CS 122. Spring semesters, even years.

**CS 370-378 - Special Topics in Computer Science**

4.00 credits. A course designed to allow students to examine topics and problems of current relevance in computer science. \*Prerequisite(s): Permission of the instructor. This course is repeatable for credit.

**CS 400 - Projects in Computing**

Variable (0.00 or 2.00 or 4.00) credits. A directed project or study requiring faculty acceptance of a proposal with a final report and defense of work. \*Prerequisite(s): Senior status, or permission of the instructor. **Signature Learning Experience: Supervised Research.** Register by Instructor.

**CS 409 - Advanced Database Systems**

4.00 credits. A study of advanced database systems, data warehousing, and data mining. The XML language is considered as a data exchange tool. Security and privacy aspects in databases are discussed. The World Wide Web is used as a database application platform to create web-driven databases working with different visual environments and commercial DBMSs. Practical skills in the design and development of information systems and their application are involved. \*Prerequisite(s): CS 309. Spring semester, even years.

**CS 421 - Compiler Design**

4.00 credits. Design and construction of system software such as compilers, interpreters and assemblers. Topics include command and statement parsing techniques, symbol tables, code generation and code optimization. A project involving design and construction of a working systems program is assigned. \*Prerequisite(s): CS 222. Fall semester, even years.

**CS 422 - Operating Systems (EGR 422)**

4.00 credits. Principles and theories behind the design of operating systems and their practical implementation, including executives and monitors, task handlers, scheduling algorithms, file handlers, device drivers and interrupt handlers, theories of resource allocation and sharing, multiprocessing and interprocess communication.

\*Prerequisite(s): CS 222 / EGR 222 and CS 332 / EGR 332. Spring semester.

**CS 433 - Advanced Computer Engineering (EGR 433)**

4.00 credits. Lectures include design of embedded systems, microcontrollers, microprocessors, and supercomputers. Cache designs, parallel processing topics, instruction set designs, neurocomputer designs, IBM research. Major digital design laboratory projects require students to design, build, test, and demonstrate prototype computer hardware. Custom lab manuals. \*Prerequisite(s): CS 332/EGR 332. Hours: lecture 3, laboratory 3. Spring semester, even-numbered years.

**CS 434 - Green Robotics, Automation, and Machine Intelligence (EGR 434)**

4.00 credits. Cutting-edge innovations in robotics, automation, and machine intelligence that result in the most environmentally-friendly and humanity-sensitive use of technology and resources to manufacture products or aid humans. Various forms of machine intelligence including symbolic AI which uses programmed rules, heuristics, and forms of knowledge representation; and artificial neural networks which are connectionist computer architectures (hardware or software) where many computational nodes are connected to solve problems requiring rapid adaptation, or where governing equations are not known or cannot be easily computed. Mobile-robot and robotic-

arm theory, applications, simulations, real-time control, and path-planning. Human Computer Interactions (HCI). Periodic creation of large mobile robots. \*Prerequisite(s): CS 121 and MA 121. Fall semester, odd-numbered years.

**CS 470-474 - Internship in Computing**

Variable (0.00 to 8.00) credit(s). Work experience designed to supplement course work. By working for business, school or government, the student gains valuable knowledge unavailable from textbooks. **Signature Learning Experience: Internship.** Graded Pass/No Pass. Register by Instructor. This course is repeatable for credit.

**CS 480-489 - Independent Study in Computer Science**

Variable credit. Independent study and research on a problem or topic in the field of computer science.

\*Prerequisite(s): Approval of the Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**CS 495 - Honors Projects in Computing**

Variable (2.00 to 4.00) credits. The course consists of the development of an intensive individual project that must involve computing topics not covered in regular course offerings. The project should be approved and guided by a faculty member. Students must prepare a written report describing original exposition, research, and/or computing applications. Oral presentation of the results is also required. Restrictive acceptance for taking this course applies. Completion of this course does not assure recognition for Honors in the Discipline. **Signature Learning Experience: Supervised Research.** Register by Instructor.

## Data Analysis Courses

**DAT 200 - Data Analytics**

2.00 credits. An introduction to databases and SQL queries. Topics include how to create, read, and use Structured Query Language (SQL), design, population, query, and use of databases.

**DAT 300 - Big Data and Statistical Analysis**

2.00 credits. Big Data and Statistical Analysis provides an introduction to the fundamentals of data preparation and management, data mining, and forecasting using SAS® Enterprise Miner. This is an application-driven course allowing students to gain an understanding of Enterprise Miner software environment, statistical basics of data mining and forecasting, and the practical issues involved in applied forecasting in a business setting. Upon completion of this course, students shall be able to independently carry out data analysis and forecasting projects.

\*Prerequisite(s): MA 251.

**DAT 315 - Machine Learning**

2.00 credits. An overview of machine learning techniques using R. Topics include an introduction to programming in R, the use of nearest neighbor and naive Bayes algorithms, support vector machines, hidden Markov models, and market basket analysis as well as model evaluation and improvement. \*Prerequisite(s): MA 252, and CS 113 or CS 121.

**DAT 320 - Advanced SQL**

2.00 credits. Get ready to acquire some seriously marketable computer skills! A company's biggest asset is their data and most companies' databases use the Structured Query Language (SQL) to manage data. DAT 200 teaches students to extract data from a database, and DAT 320 adds to this by teaching students to design and build databases with plenty of progressively challenging assignments with the goal of preparing successful students to pass the Oracle® Certification Exam. Oracle is the most popular relational database in the world, and the national average salary for a database administrator is \$89,626 (glassdoor.com, November 8, 2017). \*Prerequisite(s): DAT 200.

**DAT 400 - Data Analytics Capstone**

4.00 credits. Under the supervision of a faculty mentor, students use their knowledge of data analytics to complete a project contributing to research in an academic area or to solve a problem for a local business. Projects will involve data collection, data cleaning, data analysis, and reporting results both orally and in writing to a domain expert or business leader. \*Prerequisite(s): Students must have completed 14 credits in the minor. **Signature Learning Experience: Capstone.** Register by Instructor.

**Data Science courses**

**DS 200 - Introduction to Data Science**

4.00 credits. This project-based course introduces students to data science. Data science is an interdisciplinary field that applies computer science and statistics to extract useful knowledge from data collected in an almost unlimited range of other disciplines, including business, biology, physics, medicine, meteorology, and many others. In this course, students will apply tools such as k-nearest neighbors, regression, neural networks, and clustering to real data. \*Prerequisite(s): CS 113, CS 122 and MA 121.

**DS 300 - Data Mining**

4.00 credits. Data preprocessing and the analysis and application of data mining algorithms to various types of data. A particular emphasis is placed on applications to large data sets or databases, including processing on distributed systems. \*Prerequisite(s): CS 309 and DS 200.

**DS 315 - Statistical Learning**

4.00 credits. An analysis and implementation of statistical learning algorithms for regression and classification. Topics include GLMs, penalty methods, kNN, LDA, CART, random forests, SVMs and neural networks.

\*Prerequisite(s): MA 252.

**DS 420 - Big Data**

4.00 credits. This course covers techniques needed to collect, store, analyze, and visualize big data, particularly for applications in machine learning. The MapReduce paradigm will be taught using the popular Hadoop framework. Both batch and real-time analysis of massive quantities of data will be applied to machine learning problems such as clustering, regression, and classification. Although the relational database model will be discussed, NoSQL models will have primary focus. \*Prerequisite(s): DS 200 and CS 309.

**DS 495 - Data Science Capstone**

4.00 credits. Under the supervision of a faculty mentor, students use their knowledge of data science to complete a high level project contributing to research in an academic area or to solve a problem for a local business. Projects will involve data collection, data cleaning, data analysis, and reporting results both orally and in writing to a domain expert or business leader. All problems are unstructured with no predetermined solution. \*Prerequisite(s): DS 300 and DS 315.

**Earth Science Courses**

**ES 113 - NPS Earth in Space: Evolution of a Planet**

4.00 credits. **(Natural and Physical Science Core Course)** A broad introduction to Earth System Science that integrates basic topics in geology and astronomy as a means to understand the origin and evolution of planet Earth. Dramatic events and processes that shaped Earth's history, such as big bang cosmology, stellar evolution, planetary formation, plate tectonics, the rock cycle, crustal deformation and mountain building, the evolution of continents and ocean basins, earthquakes and volcanism are explored. Includes discovery-oriented exercises, including field trips to local geological sites, the local planetarium and several stargazing sessions for firsthand study of materials

containing evidence for the processes and events studied in class. \*Corequisite(s): ES 113L. Hours: lecture 3, laboratory 2. Fall semester.

**ES 114 - NPS Geosystems: Landscapes, Oceans and Atmosphere**

4.00 credits. (**Natural and Physical Science Core Course**) Introduction to geology and meteorology, presenting Earth as an intricately coupled system that makes life possible. Landscapes, plate tectonics, oceans and atmosphere, chaos and weather prediction, climates and patterns of change, and landscape modification by the hydrologic system. Discovery-oriented lab includes field trips to geological sites. \*Corequisite(s): ES 114L. Hours: lecture 3, laboratory 2. Spring semester.

**ES 117 - NPS Climate Change and the Fate of Civilization**

4.00 credits. (**Natural and Physical Science Core Course**) This course explores the science of climate change and its impact on past and future civilizations. Students will learn how the Earth's climate system works; the factors responsible for climate change and how those factors interact; the impact of past climate changes on civilizations; climate models, observations, and hypotheses utilized to predict future climate. Finally, the course examines the connection between human activity and the current warming trend and the potential environmental, economic, and social consequences of climate change. Offered as needed.

**ES 216 - Physical Geography**

3.00 credits. Introduction to the physical bases for geography, including earth/sun relationships, map projections, weather patterns, climates and landforms. Register by Instructor. Fall semester, even-numbered years. Offered as needed.

## **Engineering Courses**

**EGR 191 - Introduction to Engineering I**

3.00 credits. Introduction to the engineering profession and application of the engineering design process. Development of fundamental engineering skills and competencies including problem solving, teamwork, experimental design, computer-aided design, prototyping, experimentation, data analysis, technical writing and lifelong learning. Multidisciplinary team project includes fabrication, troubleshooting and use of devices to solve authentic open-ended problem. \*Corequisite(s): EGR 191L. Hours combined: studio/laboratory. Register by Instructor. Fall semester.

**EGR 191L - Introduction to Engineering I Lab**

1.00 credit. An introduction to prototyping. Students are trained for the general safe use of the Bolman Fabrication Laboratory while being introduced to the specific prototyping tools and equipment available in our facility. This course covers specific techniques and knowledge required for the proper use of the tools, materials and equipment in the lab including 3D printing and CNC machining. Pass/No Pass. Register by Instructor. Fall semester.

**EGR 192 - Introduction to Engineering II**

2.00 credits. Collaborative problem solving through the application of the engineering design process in a semester-long project. This course focuses on project management, problem definition, product design specifications, conceptual design, decision making, fabrication, testing and redesign. Discussion of engineering ethics, moral dilemmas and issues encountered in academic and professional settings. Effective oral technical communication. \*Prerequisite(s): EGR 191 and EGR 191L or permission by instructor. Hours: combined studio/lecture 4. Spring semester.

**EGR 200 - Engineering Research/Project**

Variable credit. A student may participate in an ongoing research or design project for academic credit. Registration for this course must be approved by the supervising faculty member and the Dean. Juniors and seniors are encouraged to submit proposals for Independent Study (Engineering 480-489). Can be taken Pass/No Pass. Register by Instructor. This course may be repeated for credit.

**EGR 201 - Community-Based Project**

2.00 credits. Engineering projects performed in small teams to meet the requirements of community-based clients, under the supervision of a faculty mentor. Progress reports and a final report and presentation are required.

\*Prerequisite(s): EGR 192 or permission by instructor. **Signature Learning Experience: Community-Based Learning.** Spring semester.

**EGR 210 - Circuit Analysis**

4.00 credits. Introduction to linear circuit analysis and basic electric circuit components. Topics covered include DC analysis, AC analysis and transient analysis for circuits containing resistors, inductors, and capacitors.

\*Prerequisite(s): MA 121. \*Corequisite(s): EGR 210L and PHY 202. Hours: lecture 3, laboratory 2. Fall semester.

**EGR 222 - Systems Programming (CS 222)**

4.00 credits. This course covers advanced programming and machine representation of data and data structures, including dynamic structures and files. Topics include memory allocation, run-time data organization, function linkage and parameter passing, interrupt processing and the relationship between high level and machine language.

\*Prerequisite(s): CS 122. Spring semester.

**EGR 230 - Computer Architecture and Hi-Tech Fundamentals (CS 230)**

4.00 credits. An introduction to computer engineering including hi-tech fundamentals, trends, and computer architectures. Ethical impacts in global, economic, environmental, and societal contexts. \*Prerequisite(s): CS 121 or permission by instructor. Spring semester.

**EGR 248 - Quantitative Methods/Operations Management (BA 248)**

4.00 credits. Usage of quantitative methods and operations management concepts to optimize business decisions is learned. The quantitative methods covered are forecasting, decision making, inventory management, and linear programming. The operations management concepts are project management, statistical process control, materials requirement planning, enterprise resource planning, scheduling, reliability, acceptance sampling and learning curves. \*Prerequisite(s): MA 251.

**EGR 251 - Introduction to Environmental Engineering**

3.00 credits. Introduction to environmental chemistry, chemical and biological kinetics, chemical process engineering, and risk assessment. Design and analysis of water, wastewater, solid waste, and air quality treatment systems. \*Prerequisite(s): MA 121. Fall semester, even-numbered years.

**EGR 255 - Sustainable Resource Engineering and Design**

3.00 credits. Engineering and design practices to make use of natural resources such that environmental impacts are minimized and benefits to human civilization are maximized. Design of sustainable habitats and infrastructure for developing nations. \*Prerequisite(s): EGR 210. Spring semester.

**EGR 256 - Environmental Site Engineering and Design**

3.00 credits. The theory and application of geophysical imaging methods to the investigation of subsurface materials and structures that are likely to have significant engineering and environmental implications. A wide variety of methods including seismic reflection, seismic refraction, electromagnetic, ground-penetrating radar, potential fields,

electrical resistivity, and borehole logging will be introduced and examined. Natural and man-made disasters will be discussed. Includes a surveying and soil laboratory. \*Prerequisite(s): PHY 201. Fall semester.

**EGR 256L - Surveying Lab**

1.00 credit. This laboratory provides a solid foundation in surveying fundamentals, and sufficient practice to develop the necessary skills to determine the position of, and the distance and angles between natural and man-made objects. It also explores methods to compute and depict surfaces using traditional and modern surveying equipment, field procedures and software. \*Corequisite(s): EGR 256. Fall semester.

**EGR 260 - Statics**

3.00 credits. Equilibria of particles and rigid bodies subject to concentrated and distributed forces with practical applications to the design of mechanical structures. Topics include structural analysis of trusses and frames, internal forces in beams, friction, and machines. \*Prerequisite(s): PHY 201 and MA 121. Fall semester.

**EGR 264 - Mechanics of Materials**

4.00 credits. Behavior of solids under pure (axial, torsional, flexural, shear) and combined loading. Formulation and application of equilibrium, kinematic and constitutive relations to determine forces, stresses, strains and deformations. Analysis of statically-indeterminate systems. Member strength and stability assessment. Includes a two-hour weekly lab. \*Prerequisite(s): EGR 260 and MA 122. \*Corequisite(s): EGR 264L. Fall semester.

**EGR 301 - Engineering Design and Junior Project**

2.00 credits. This course explores design methodology and practice under the supervision of a team of faculty. Progress reports including a final report and presentation are required. For this course, the scope of the project typically includes problem definition, development of requirements, and preliminary design work. Students work in groups of 3-5 students. Progress reports, a final report and a public seminar are required. \*Prerequisite(s): EGR 192 or permission by instructor. Hours: lecture 1 and project work. Spring semester.

**EGR 310 - Signals and Systems**

3.00 credits. Analysis of continuous-time linear systems, discrete-time linear systems, and methods of signal sampling and reconstruction. Applications of Fourier Series, Fourier Transform and Laplace Transform. Exploration of digital signal processing using Matlab programming. \*Prerequisite(s): PHY 202 and MA 122. Fall semester.

**EGR 311 - Electronics**

4.00 credits. Practical and theoretical study of fundamental components and circuits, including transistors, diodes, integrated circuits, power supplies, filters, amplifiers, control circuits and some digital electronics. \*Prerequisite(s): EGR 210. \*Corequisite(s): EGR 311L. Hours: lecture 3, laboratory 2. Spring semester, odd-numbered years.

**EGR 312 - Electromagnetism**

3.00 credits. An intermediate course in electromagnetism including vector calculus in Cartesian, cylindrical, and spherical coordinates, electrostatics, dielectrics, Laplace's equation, and Poisson's equation. \*Prerequisite(s): PHY 202. Spring semester, odd-numbered years.

**EGR 315 - Telecommunication Systems**

3.00 credits. An introduction to the broad area of telecommunication systems including the analysis and transmission of signals, modulation and demodulation, sampling and analog-to-digital conversion, and an introduction to both digital data transmission and wireless communications. \*Prerequisite(s): EGR 310. Spring semester, even-numbered years.

**EGR 317 - Physics of Semiconductor Devices**

3.00 credits. An introduction to semiconductor crystals and their properties; carrier modeling and action; fundamentals of carrier generation, transport, recombination and storage in semiconductors; principles of operation of p-n junction diodes, bipolar junction transistors, MOS field-effect transistors, MOS capacitors and some semiconductor photonic/optoelectronic devices. Device modeling is performed at a level that addresses basic physical principles and, at the same time, provides notions useful for integrated circuit analysis and design.

\*Prerequisite(s): PHY 202. Fall semester, even-numbered years.

**EGR 318 - Fiber Optics Communication Systems**

3.00 credits. Course includes an introduction to optics, fiber optics and optical communications. Among the topics covered in the course: an overview of geometric and wave optics; the optical fiber, optical confinement; step-index fibers and graded-index fibers; single-mode and multimode fibers; numerical aperture; loss, dispersion and nonlinearities in fibers; splices, connectors, couplers and gratings; optical transmitters, light sources and electronic driving circuits; optical receivers, detectors and noise, optical amplifiers; optic-link design, single-wavelength fiber-optic network topologies, standard fiber networks; wavelength-division multiplexing; solution-link design.

\*Prerequisite(s): EGR 210. Fall semester, odd-numbered years.

**EGR 323 - Biomechanics of Human Movement**

3.00 credits. An introduction to the theory and practice of Biomechanics. Topics include functional anatomy and kinesiology; dynamics of muscle and tendon; models of muscle contraction; mechanics of proprioceptors and other sensors; analysis of human movement, including gait, running, jumping and lifting; computer simulations and exploration of experimental measurement techniques. \*Prerequisite(s): EGR 360 and CS 121. Spring semester, even-numbered years.

**EGR 324 - Structural Aspects of Biomaterials**

3.00 credits. The structure and mechanical functions of biological materials and their replacements, biocompatibility of biomaterials and host response, material selection for load bearing applications including reconstructive surgery, orthopedics, dentistry, and cardiology. Mechanical design for longevity including topics of fatigue, wear, and fracture are addressed through case studies that examine failures of devices. \*Prerequisite(s): EGR 264. Spring semester, odd-numbered years.

**EGR 328 - Bio-Electric Signals in Engineering**

3.00 credits. This course surveys the types of electrical signals produced by the human body and how those signals are useful for medical diagnosis, clinical treatment and scientific research. Using bio-electric signals, students will gain hands on experience proposing and answering scientific questions and applying principles of engineering to medicine and physiology. Previous experience with MATLAB will be very useful, but not required.

\*Prerequisite(s): EGR 210. Fall semester, even-numbered years.

**EGR 332 - Digital Design I (CS 332)**

4.00 credits. Introduction to Boolean Algebra, and Discrete Math. Design of combinational and sequential digital logic circuits, and their use in computer architectures. Introduction to machine instructions and assembly language programming. Design of a simple microprogrammed computer. \*Prerequisite(s): CS 121 or permission of the instructor. Fall semester.

**EGR 333 - Digital Design II, Assembly Language, and Interfacing (CS 333)**

4.00 credits. Advanced digital logic design and circuit implementations. Assembly language programming. Design, testing, and construction of interfaces, and design and testing of supporting software. Field Programmable Gate Arrays (FPGA's), Programmable Logic Controllers (PLC's), Microcontroller development systems. Breadboarded

TTL circuit implementations. Circuit simulators. Raspberry pi's, Arduino's, and similar simple devices. Custom lab manuals. \*Prerequisite(s): CS 332/EGR 332. Hours: lecture 3, laboratory 3. Spring semester, odd-numbered years.

**EGR 341 - Industrial and Systems Engineering Methods**

3.00 credits. Production management with emphasis on process improvement, cost reduction, incentives and ergonomics. Students also conduct preliminary work for their senior project. \*Prerequisite(s): MA 251. Fall semester, even-numbered years.

**EGR 345 - Fundamentals of Process Improvement**

3.00 credits. This course introduces current approaches to improve work processes and establish effective control systems for ensuring the quality of process outputs. The six sigma methodology for reduction of process variability is explored. The use of financial management systems, engineering economics, and change management principles are introduced to measure improvement, make informed decisions, and encourage organizational change. Students use statistical software to achieve incremental and breakthrough improvement on a semester project.

\*Prerequisite(s): MA 251. Fall semester, odd-numbered years.

**EGR 347 - Global Supply Chain Management (BA 347)**

4.00 credits. This course focuses on the management of supply chain processes and performance. It will be valuable for students who would like to pursue a career in supply chain, operations, logistics of a manufacturing or distribution firm. We explore important supply chain metrics, primary tradeoffs in making supply chain decisions, and basic tools for effective and efficient supply chain management, production planning and inventory control, order fulfillment and supply chain coordination. We will also investigate topics such as global supply chain design, logistics, and outsourcing, several other recent supply chain innovations. The class format includes lectures, case discussions, guest speakers, and simulation games. The content covers both quantitative and qualitative materials. The cases will feature companies in the service industry, as well as firms in more traditional industries such as apparel and manufacturing. \*Prerequisite(s): BA 248/EGR 248 or MA 251. Spring semester, odd-numbered years.

**EGR 348 - Introduction to Manufacturing Processes**

3.00 credits. This course explores subtractive and additive manufacturing processes with a primary focus on solidification processes, metal forming and sheet metalworking, material removal processes, property enhancing and surface processing operations, and joining and assembly processes. Students will specify manufacturing process for both low and high volume production in a semester project. \*Prerequisite(s): PHY 201. Fall semester.

**EGR 351 - Water and Wastewater Engineering**

3.00 credits. The design and operation of water and wastewater treatment facilities will be examined with an emphasis on quantitative problem-solving. Physical, chemical, and biological treatment processes used in modern water and wastewater treatment will be explored. \*Prerequisite(s): EGR 260. Fall semester, odd-numbered years.

**EGR 353 - Green Architectural Engineering**

3.00 credits. Green architectural engineering methods for residential, commercial, and industrial architectures and land development in industrialized countries. Green building design methods for active and passive heating and cooling including solar design. Natural day-lighting. Illumination engineering. Acoustical engineering. LEED standards for green buildings and neighborhoods. Regional and College Master plans. Case studies from the US, EU, and Asia. Related thermodynamic, fluid mechanics, optics, and acoustical fundamentals. Fall semester, even-numbered years.

**EGR 360 - Dynamics**

3.00 credits. Newtonian mechanics of rigid bodies in fixed and moving reference frames in two and three dimensions. Topics also include kinematics, energy and momentum analyses, inelastic collisions, non-constant mass systems, computer simulation, and the simple oscillator. \*Prerequisite(s): PHY 201 and MA 122. Fall semester.

**EGR 364 - Structural Engineering**

3.00 credits. Idealization, discretization and analysis of structures using the Principle of Virtual Work, Direct Stiffness Method and influence lines. Introduction to the Finite Element Method and computational analysis using open-source and commercial software. Overview of iconic structures around the world. \*Prerequisite(s): EGR 264. It is recommended to take MA 321 before EGR 364. Spring semester, odd-numbered years.

**EGR 366 - Steel and Reinforced Concrete Design**

3.00 credits. Design of structural steel (tension members, compression members, beams and simple connections) and reinforced concrete (columns, beams, slabs, footings). Discussion of material properties, design philosophies and load combinations, and application of current standard specifications and building codes. Design of structural systems and open-ended design projects. Discussion of case studies on structural failure. \*Prerequisite(s): EGR 264. Spring semester, even-numbered years.

**EGR 368 - Fluid Mechanics and Hydrology**

3.00 credits. Topics include fluid properties, fluid statics, control volume analysis, steady and unsteady Bernoulli equation, and introduction to differential analysis of fluid flow. Laminar and turbulent flow in pipes and channels and in external flow. The boundary layer concept, lift and drag. Runoff and catchment. \*Prerequisite(s): EGR 260 and MA 222. Spring semester.

**EGR 370-378 - Special Topics in Engineering**

Variable credit. An opportunity to offer courses that are not part of the regular curriculum. This course is repeatable for credit.

**EGR 395 - Fall Seminar**

1.00 credit. Seminar series with weekly presentations of topics of current interest in engineering and related fields. Speakers include practicing engineers and researchers from industry or other academic institutions, Elizabethtown faculty, and invited campus-wide speakers from a variety of disciplines. Fall semester.

**EGR 396 - Spring Seminar**

1.00 credit. Seminar series with weekly presentations of topics of current interest in engineering and related fields. Speakers include practicing engineers and researchers from industry or other academic institutions, Elizabethtown faculty, and invited campus-wide speakers from a variety of disciplines. Spring semester.

**EGR 400 - Engineering Portfolio**

1.00 credit. The portfolio will provide students with a vehicle for documenting their achievements and competencies in engineering. **Signature Learning Experience: Developmental Portfolio.** Graded Pass/No Pass.

**EGR 401 - Senior Project in Engineering I**

2.00 credits. A demanding, and perhaps original, engineering project performed under the supervision of a team of faculty. For this course, the scope of the project typically includes detail and final design work and construction or a working prototype. Students work in groups of 3-5 students. Progress reports, a final report and a public seminar are required. \*Prerequisite(s): EGR 301 or permission by instructor. Fall semester.

**EGR 402 - Senior Project in Engineering II**

2.00 credits. A demanding, and perhaps original, engineering project performed under the supervision of a team of faculty. For this course, the scope of the project typically includes testing, analysis and redesign, with the potential fabrication of an improved prototype or preliminary scaled manufacturing process design. Students work in groups of 3-5 students. Progress reports, a final report and a public seminar are required. \*Prerequisite(s): EGR 401 or permission by instructor. **Signature Learning Experience: Capstone Experience.** Spring semester.

**EGR 410 - Control Systems**

4.00 credits. Design and analysis of continuous time-domain control systems using system modeling techniques and simulation software for control algorithms. Evaluation of control system performance and design criteria including feedback, stability, sensitivity, time and frequency response. Introduction to similar topics in the discrete-time domains. Includes a two-hour laboratory each week applying the theory to physical systems. \*Prerequisite(s): EGR 310. \*Corequisite(s): EGR 410L. Spring semester.

**EGR 422 - Operating Systems (CS 422)**

4.00 credits. Principles and theories behind the design of operating systems and their practical implementation, including executives and monitors, task handlers, scheduling algorithms, file handlers, device drivers and interrupt handlers, theories of resource allocation and sharing, multiprocessing and interprocess communication.

\*Prerequisite(s): CS 222 / EGR 222 and CS 332 / EGR 332. Spring semester, even-numbered years.

**EGR 433 - Advanced Computer Engineering (CS 433)**

4.00 credits. Lectures include design of embedded systems, microcontrollers, microprocessors, and supercomputers. Cache designs, parallel processing topics, instruction set designs, neurocomputer designs, IBM research. Major digital design laboratory projects require students to design, build, test, and demonstrate prototype computer hardware. Custom lab manuals. \*Prerequisite(s): CS 332/EGR 332. Hours: lecture 3, laboratory 3. Spring semester, even-numbered years.

**EGR 434 - Green Robotics, Automation, and Machine Intelligence (CS 434)**

4.00 credits. Cutting-edge innovations in robotics, automation, and machine intelligence that result in the most environmentally-friendly and humanity-sensitive use of technology and resources to manufacture products or aid humans. Various forms of machine intelligence including symbolic AI which uses programmed rules, heuristics, and forms of knowledge representation; and artificial neural networks which are connectionist computer architectures (hardware or software) where many computational nodes are connected to solve problems requiring rapid adaptation, or where governing equations are not known or cannot be easily computed. Mobile-robot and robotic-arm theory, applications, simulations, real-time control, and path-planning. Human Computer Interactions (HCI). Periodic creation of large mobile robots. \*Prerequisite(s): CS 121 and MA 121. Fall semester, odd-numbered years.

**EGR 463 - Analytical Mechanics and Vibrations**

3.00 credits. Lagrangian formulations for the two and three-dimensional motion of particles and rigid bodies. Linear free and forced responses of one and multi degree of freedom systems and simple continuous systems. Introduction to vibration control/absorption and experimental analysis and modeling of oscillatory systems. \*Prerequisite(s): EGR 360 and MA 321. Spring semester.

**EGR 467 - Thermodynamics**

3.00 credits. Properties of ideal gases and liquid-vapor mixes and the laws of thermodynamics applied to analysis of closed and open systems, including power and refrigeration cycles, psychrometrics and combustion. Emphasis on macroscopic thermodynamics and engineering applications. \*Prerequisite(s): EGR 260 and MA 222. Spring semester.

**EGR 468 - Heat Transfer**

3.00 credits. This course introduces the three modes of heat transfer - conduction, convection, and radiation. These concepts will be applied to analyze problems of practical interest including fins and heat exchangers. There will be a strong emphasis placed on deriving the governing equations. Since it is difficult to obtain analytical solutions to most practical heat transfer problems and numerical solution methods. \*Prerequisite(s): EGR 368, EGR 467, and MA 321. Offered as needed.

**EGR 470-474 - Internship in Engineering**

Variable credit. Opportunity for students to explore engineering, apply knowledge, and develop relevant skills through supervised professional experiences. Students are expected to invest a minimum of three hours a week per credit. **Signature Learning Experience: Internship.** Graded Pass / No Pass. Register by Instructor. This course is repeatable for credit.

**EGR 475 - Engineering Co-Op**

0.00 credits. Students with a declaration of engineering, computer engineering, and industrial engineering management are eligible to complete their degree under a Co-Op Program. The Co-Op Program extends the 4-year degree into a 5-year program. Under this option, students typically complete one or two seven-month co-op rotations: Spring/Summer and Summer/Fall. For more information, please refer to the School's page outlining the Engineering and Physics Programs in the online catalog. **Signature Learning Experience: Internship.** Graded Pass/No Pass. Register by Instructor. This course is repeatable for credit.

**EGR 480-489 - Independent Study in Engineering**

Variable credit. Study and experimentation in an area of interest to the student and faculty member.

\*Prerequisite(s): Permission of the Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**EGR 495 - Architectural Design Studio I (ART 495)**

2.00 credits. Architectural design studio course with rotating architectural case studies and lectures taught by full-time faculty and visiting architectural professionals. Course content is repeated no less than every four years so that students in Studio I and Studio II can participate in the same lectures. Professional documentation, drawings, and oral defense of architectural designs. Register by Instructor. Spring semester.

**EGR 496 - Architectural Design Studio II (ART 496)**

2.00 credits. Architectural design studio course with rotating architectural case studies and lectures taught by full-time faculty and visiting architectural professionals. Course content is repeated no less than every four years so that students in Studio I and Studio II can participate in the same lectures. Professional documentation, drawings, and oral defense of architectural designs. **Signature Learning Experience: Capstone Experience.** Register by Instructor. Spring semester.

**Honors Mathematics Courses**

**HMA 251 - HNR MA Probability and Statistics**

4.00 credits. **(Mathematics Core Course - Honors)** Covers the basic principles of descriptive statistics, experimental design and statistical inference. The purpose of this course is to explore the fundamental concepts of probability and statistics through applications in the natural and social sciences that require students to interpret results, provide written explanations, find patterns, and make decisions.

**HMA 275 - HNR CE Mathematics in Music**

4.00 credits. (**Creative Expression Core Course - Honors**) Participants will deepen and enrich their creative experience of music by learning about the principal ways that mathematical ideas are applied to the creation of music, and incorporating these ideas into their own creative repertoires. Of particular interest will be basic acoustical phenomena, tuning systems, and (especially) music theory and composition. Honors students only.

**Master of Organizational Analytics Courses**

**MOA 500 - Data Analytics (DAT200)**

3.00 credits. An introduction to databases and SQL queries. Topics include how to create, read, and use Structured Query Language (SQL), design, population, query, and use of databases. Register by Instructor.

**MOA 510 - Big Data and Statistical Analysis (DAT 300)**

3.00 credits. Big Data and Statistical Analysis provides an introduction to the fundamentals of data preparation and management, data mining, and forecasting using SAS® Enterprise Miner. This is an application-driven course allowing students to gain an understanding of Enterprise Miner software environment, statistical basics of data mining and forecasting, and the practical issues involved in applied forecasting in a business setting. Upon completion of this course, students shall be able to independently carry out data analysis and forecasting projects. Register by Instructor.

**MOA 515 - Machine Learning (DAT 315)**

3.00 credits. An overview of machine learning techniques using R. Topics include an introduction to programming in R, the use of nearest neighbor and naive Bayes algorithms, support vector machines, hidden Markov models, and market basket analysis as well as model evaluation and improvement. \*Prerequisite(s): MOA 670. Register by Instructor.

**MOA 520 - Advanced SQL (DAT 320)**

3.00 credits. Get ready to acquire some seriously marketable computer skills! A company's biggest asset is their data and most companies' databases use the Structured Query Language (SQL) to manage data. DAT 200 teaches students to extract data from a database, and DAT 320 adds to this by teaching students to design and build databases with plenty of progressively challenging assignments with the goal of preparing successful students to pass the Oracle® Certification Exam. Oracle is the most popular relational database in the world, and the national average salary for a database administrator is \$89,626 (glassdoor.com, November 8, 2017). \*Prerequisite(s): MOA 500.

**MOA 532 - Introduction to Data Analytics in Business (BA 320)**

3.00 credits. The course will introduce students to a variety of databases, primarily in economics and marketing. Students will extract data necessary for their purpose, and conduct data analysis in Excel and R. They will work in teams on projects and present their findings. The databases of particular interest include IMPLAN (economic impact data), PolicyMap (GIS mapping and demographic data), Bureau of Labor Statistics databases (employment and prices) and Claritas (customer profiles).

**MOA 542 - Design Thinking for Leaders (MSL 570)**

3.00 credits. In this course, students will explore the fundamentals of design thinking and how it can be applied to improve their performance. Students will be immersed in a problem space, and use the design thinking process to develop a solution. Students will establish a framework for collaborative problem solving and learn the steps involved in creating an innovative organizational environment. Through case studies of design thinking in action, students will explore the opportunities and challenges of this approach. The relationship of design thinking and adaptive leadership will be integrated as students demonstrate that design thinking can be applied to multiple fields.

**MOA 545 - Fundamentals of Process Improvement (EGR 345)**

3.00 credits. This course introduces current approaches to improve work processes and establish effective control systems for ensuring the quality of process outputs. The six sigma methodology for reduction of process variability is explored. The use of financial management systems, engineering economics, and change management principles are introduced to measure improvement, make informed decisions, and encourage organizational change. Students use statistical software to achieve incremental and breakthrough improvement on a semester project. Fall semester.

**MOA 547 - Global Supply Chain Management (BA 347, EGR 347)**

3.00 credits. This course focuses on the management of supply chain processes and performance. It will be valuable for students who would like to pursue a career in supply chain, operations, logistics of a manufacturing or distribution firm. We explore important supply chain metrics, primary tradeoffs in making supply chain decisions, and basic tools for effective and efficient supply chain management, production planning and inventory control, order fulfillment and supply chain coordination. We will also investigate topics such as global supply chain design, logistics, and outsourcing, several other recent supply chain innovations. The class format includes lectures, case discussions, guest speakers, and simulation games. The content covers both quantitative and qualitative materials. The cases will feature companies in the service industry, as well as firms in more traditional industries such as apparel and manufacturing. \*Corequisite(s): MOA 548. Spring semester.

**MOA 548 - Quantitative Methods/Operations Management (BA 248)**

3.00 credits. Usage of quantitative methods and operations management concepts to optimize business decisions is learned. The quantitative methods covered are forecasting, decision making, inventory management, and linear programming. The operations management concepts are project management, statistical process control, materials requirement planning, enterprise resource planning, scheduling, reliability, acceptance sampling and learning curves.

\*Corequisite(s): MOA 547.

**MOA 552 - Statistical Methods in Research**

3.00 credits. A second course in Statistics, introducing students to major statistical methods for research in the physical and life sciences, business, economics, and the social sciences. Topics include comparison of means, design of experiments and ANOVA, categorical analysis, regression, time series, and nonparametric methods. Statistical software is used, and students pursue a research project that requires statistical analysis, culminating in a written research report, and an oral presentation.

**MOA 560 - Business Data Visualization (BA 260)**

3.00 credits. This course provides an introduction to data visualization. It introduces students to design principles for creating meaningful displays of quantitative and qualitative data to facilitate managerial decision-making. The course uses data visualization tools, including Tableau, Power BI and R.

**MOA 600 - Data Analytics Thesis (DAT 400)**

3.00 credits. Under the supervision of a faculty mentor, students use their knowledge of data analytics to complete a project contributing to research in an academic area or to solve a problem for a local business. Projects will involve data collection, data cleaning, data analysis, and reporting results both orally and in writing to a domain expert or business leader. Register by Instructor.

**MOA 670 - Applied Programming**

3.00 credits This course will cover the required programming concepts for data analytics.

## **Mathematics Courses**

### **MA 120 - Foundations for Calculus**

4.00 credits. Foundations for Calculus includes the study of polynomial, rational, exponential, logarithmic and trigonometric functions, along with conic sections, coordinate geometry and sigma notation, emphasizing associated skills and properties. Understanding functions and graphs without, and also with, the use of technology will be emphasized. Students without a recent math course and/or those with little or no background in trigonometry will benefit from this course. Successful completion of MA120 prepares students for MA121.

### **MA 121 - MA Calculus I**

4.00 credits. (**Mathematics Core Course**) A thorough introduction to the basic concepts and techniques of the differential and integral calculus of elementary functions, including a study of limits and continuity. Applications to the physical, biological and social sciences are studied in detail. \**Corequisite(s)*: MA 121L.

### **MA 121L - Calculus I Lab**

0.00 credits. A thorough review of precalculus topics necessary for success in calculus. Topics include simplifying and solving algebraic equations and inequalities; graphs of lines, parabolas and circles; midpoint and distance formulas; basic trigonometry using the unit circle; solving equations involving trig, log, and exponential functions; finding inverses of functions; composition of functions; evaluating difference quotients. \**Corequisite(s)*: MA 121.

### **MA 122 - Calculus II**

4.00 credits. A continuation of MA 121 involving the calculus of the trigonometric, exponential, logarithmic and rational functions. Analytic geometry in the plane, parametric equations, polar coordinates, sequences and series are included, and an in-depth study of integration is completed. \**Prerequisite(s)*: Grade of C- or better in MA 121.

### **MA 130 - Creative Problem Solving I**

2.00 credits. An introduction to mathematical problem solving at the college level. Students are challenged to solve math problems using their own creativity instead of relying upon standard methods and algorithms, and to communicate their solutions clearly and concisely to others. Register by Instructor. Fall semester.

### **MA 200 - Applied Matrix Algebra**

2.00 credits. A presentation of the basic concepts and techniques of matrix algebra including vectors, matrices, determinants, systems of linear equations, eigenvectors, and linear transformations. Emphasis is placed on applications of matrix algebra to various fields. \**Prerequisite(s)*: MA 121 and (CS 113 or CS 121).

### **MA 201 - Linear Algebra**

4.00 credits. A presentation of the basic concepts and techniques of linear algebra including vectors, vector spaces, matrices, determinants, systems of linear equations, eigenvectors and linear transformations. Students will be expected to do mathematical proofs. \**Prerequisite(s)*: MA 121.

### **MA 205 - Mathematics for the Elementary Teacher**

4.00 credits. A course designed to build understanding of K-8 math concepts. Students are required to explain their reasoning, learn multiple representations of concepts, and create alternative algorithms.

### **MA 222 - Calculus III**

4.00 credits. A continuation of MA 122, that completes the topics of the calculus sequence, including three-dimensional analytic geometry, vectors and vector valued functions, and calculus of functions of several variables. \**Prerequisite(s)*: Grade of C- or better in MA 121. MA 122 is highly recommended.

**MA 235 - Introduction to Mathematical Proofs**

4.00 credits. Topics include logic, sets, functions, relations, mathematical induction, combinatorics and other counting techniques, graphs and trees. Special emphasis will be given to writing correct mathematical proofs.

\*Prerequisite(s): 8 credits of mathematics, MA 121 or higher. Fall semester.

**MA 251 - MA Probability and Statistics**

4.00 credits. (**Mathematics Core Course**) Covers the basic principles of descriptive statistics, experimental design and statistical inference. The primary objective of this course is to introduce students to statistical thinking and methodology, and their use in the natural and social sciences.

**MA 252 - Statistical Methods in Research**

4.00 credits. A second course in Statistics, introducing students to major statistical methods for research in the physical and life sciences, business, economics, and the social sciences. Topics include comparison of means, design of experiments and ANOVA, categorical analysis, regression, time series, and nonparametric methods. Statistical software is used, and students pursue a research project that requires statistical analysis, culminating in a written research report, and an oral presentation. \*Prerequisite(s): MA 251.

**MA 255 - Financial Mathematics**

4.00 credits. This course introduces the mathematical foundations of financial mathematics. Topics include time value of money; annuities; loans; bonds; general cash flows and portfolios; immunization; interest rate swaps; and determinants of interest rates. This course is aimed at students preparing for the Actuarial Examination FM.

\*Prerequisite(s): MA 121. Spring semester.

**MA 260 - Introductory Mathematica and Cryptology**

2.00 credits. This course provides an introduction to the use of Mathematica and elementary cryptology.

Mathematica is powerful, all-purpose, mathematical software that can be used in a variety of academic, research, and business settings and its utility will be demonstrated in the context of historical encryption algorithms and public key cryptography. \*Prerequisite(s): MA 121. Spring semester, even-numbered years.

**MA 262 - Financial Mathematics with Excel**

2.00 credits. In this course we will use Excel to study concepts and solve problems from financial mathematics. Topics will include: simple and compound interest, present and future value, discount rate, nominal rate, effective rate, force of interest, annuities, perpetuities, amortized loans, sinking funds, bonds, yield rate, life contingencies and financial derivatives. Fall semester.

**MA 301 - Abstract Algebra**

4.00 credits. A study of algebraic structures, such as groups, rings, integral domains, fields, polynomial rings and ideals. Also included are topics from number theory, divisibility, congruence and construction of number systems. Selected advanced topics - such as series of groups, Sylow Theorems, unique factorization domains, and field extensions - also may be covered. \*Prerequisite(s): MA 201 and MA 235. Fall semester, odd-numbered years.

**MA 321 - Differential Equations**

4.00 credits. A study of analytical and numerical approaches to ordinary differential equations and related topics and applications including complex arithmetic, matrix algebra, Fourier series, Fourier transforms, Laplace transforms, mechanical vibrations, and RLC circuits. \*Prerequisite(s): Grade of C- or better in MA 122.

**MA 331 - Operations Research I**

4.00 credits. A study of mathematical techniques and models used to solve problems from business, management, and various other areas. Topics include the structure of linear programming, the simplex method to solve linear

programming, sensitivity analysis, linear programming duality and complementary slackness, linear programming modeling techniques; blending problems, minimum cost network flow problems, transportation problems, shortest path problems, and the structure of integer programming modeling. \*Prerequisite(s): MA 200, MA 201, or MA 321. Fall semester, odd-numbered years.

**MA 332 - Operations Research II**

4.00 credits. A study of mathematical techniques and models used to solve problems from business, management, and various other areas. Topics include the branch-and-bound method, decision-making under uncertainty, two-person-zero sum games, Markov chains, basic dynamic programming, inventory problems, and Queuing theory.

\*Prerequisite(s): MA 251 and (MA 200 or MA 201 or MA 321). Fall semester, even-numbered years.

**MA 341 - Modern Geometry**

4.00 credits. The concept of geometry as a logical system based upon postulates and undefined elements, along with an appreciation of the historical evolution of geometries. Topics include incidence geometries, planes and space, congruence, inequalities, parallel postulates, parallel projections, similarities, circles and additional theorems.

\*Prerequisite(s): MA 235. Fall semester, odd-numbered years.

**MA 351 - Theory of Probability**

4.00 credits. A comprehensive development of the theory of probability. Topics include the basic principles of combinatorial analysis useful in computing probabilities, conditional probability, independence of events, Bayes' Rule, discrete and continuous random variables, jointly distributed random variables, expected values and variances, and limit theorems involving sums of independent random variables. \*Prerequisite(s): MA 222 and MA 235. Spring semester.

**MA 352 - Mathematical Statistics**

4.00 credits. A study of principles of statistical inference in the theory of statistics, with an emphasis on estimation, hypothesis testing and nonparametric statistics. The objective of this course is to build a solid undergraduate foundation in statistical theory and to provide an indication of the relevance and importance of the theory in solving practical problems. \*Prerequisite(s): MA 201 and MA 351. Fall semester, odd-numbered years.

**MA 370-378 - Special Topics in Mathematics**

Variable credit. Topics of special interest to advanced undergraduate mathematics students. \*Prerequisite(s): Permission of the Dean. Register by Instructor. This course is repeatable for credit.

**MA 400 - Senior Project**

Variable (2.00 to 4.00) credits. Students invited and accepted for participation in the School's Honors in the Discipline Program may register for this course. An intensive, individual project, which must involve material not covered in regular course offerings and be approved and guided by a faculty member. The student writes a paper (involving original exposition, original research, or both) and presents her/his findings orally in a venue outside of Elizabethtown College. Recognition for Honors in the Discipline is not assured by completion of this course. See Program Director for additional information. This course is repeatable for credit for a maximum of four credits.

\*Prerequisite(s): Permission of Instructor, senior status, and participation in the College-wide Honors Program.

**Signature Learning Experience: Supervised Research.** Graded Pass/No Pass. Register by Instructor.

**MA 421 - Real Analysis**

4.00 credits. A rigorous study of the fundamental concepts of analysis, including such topics as sequences of real numbers, limits, continuity, differentiation and integration. \*Prerequisite(s): MA 222 and MA 235. Fall semester, even-numbered years.

**MA 425 - Complex Variables**

4.00 credits. A study of complex numbers, analytic functions, Cauchy's Theorem, the maximum modulus theorem, harmonic functions, power series, Laurent's series, calculation of residues, evaluation of real integrals, and conformal mappings. \*Prerequisite(s): MA 222 and MA 235. Spring semester, odd-numbered years.

**MA 430 - Creative Problem Solving II**

2.00 credits. A culmination of learning in the Mathematics major in which students integrate, synthesize, and apply concepts and techniques from required major courses to solve mathematical problems at an advanced level.

\*Prerequisite(s): Must have taken 30 credits of Math classes. **Signature Learning Experience: Capstone Experience.** Register by Instructor.

**MA 441 - Topology**

4.00 credits. A rigorous introduction to the elements of point-set topology, including infinite cardinalities; abstract topological spaces; abstract continuity; separation and closure of sets in topological spaces; connectedness and compactness. More advanced topics in topology will be explored through required oral presentations.

\*Prerequisite(s): MA 235. Spring semester, even-numbered years.

**MA 457 - Investment and Financial Markets**

4.00 credits. A comprehensive development of the theoretical basis of certain financial models used by actuaries. Topics include mean-variance portfolio theory; asset pricing models; market efficiency and behavioral finance; investment risk and project analysis; capital structure; forwards and futures; options; binomial pricing models; Black-Scholes option pricing model; Option Greeks and risk management. This course is aimed at students preparing for the Actuarial Examination IFM. \*Prerequisite(s): MA 255. \*Corequisite(s): MA 351. **Signature Learning Experience: Capstone Experience.** Spring semester, odd-numbered years.

**MA 458 - Long Term Actuarial Mathematics**

4.00 credits. A comprehensive development of the theoretical basis of certain actuarial models and the application of long-term insurance. Topics include long-term insurance coverages; survival models and their estimation; present value random variables; premium calculation; reserves; pension plan and retirement benefits. This course is aimed at students preparing for the Actuarial Examination LTAM. \*Prerequisite(s): MA 255 and MA 351. **Signature Learning Experience: Capstone Experience.** Fall semester, even-numbered years.

**MA 459 - Short Term Actuarial Mathematics**

4.00 credits. A comprehensive development of the various models useful for short term actuarial applications. Topics include severity models; frequency models; aggregate models; coverage modifications; risk measures; construction and selection of parametric models; credibility; insurance and reinsurance coverages; pricing and reserving for short-term insurance coverages. This course is aimed at students preparing for the Actuarial Examination STAM. \*Prerequisite(s): MA 255 and MA 351. **Signature Learning Experience: Capstone Experience.** Spring semester, even-numbered years.

**MA 460 - Numerical Methods and Matlab**

2.00 credits. A study of numerical methods using the powerful software package Matlab. Topics include solutions of nonlinear equations in one or more variables, optimization, interpolation, numerical differentiation and integration, matrix algebra, and differential equations. Emphasis is placed on the use of routines built into Matlab.

\*Prerequisite(s): MA 200 or MA 201 or MA 321. Fall semester, odd-numbered years.

**MA 463 - Advanced Financial Mathematics with Excel**

2.00 credits. In this course we will learn to use advanced features of Excel to solve problems in mathematics. Topics will include Excel formulas, using the Solver, pivot tables, performing spreadsheet what-if analysis, graphing, and an introduction to VBA programming. \*Prerequisite(s): MA 122 and MA 222. Fall semester, odd-numbered years.

**MA 464 - Geogebra**

2.00 credits. In this course we will explore Geogebra, a free software package developed for teaching and learning mathematics in schools at both the high school and collegiate level. Topics will include geometric constructions, algebraic input, the spreadsheet feature, animations, custom tools, creating dynamic interactive worksheets for the web using Javascript, and creating slide shows for presentations. \*Prerequisite(s): MA 122.

**MA 470-474 - Internship in Mathematics**

Variable (0.00 to 8.00) credit(s). Opportunity for students to intern in a mathematical setting. **Signature Learning Experience: Internship.** Register by Instructor. This course is repeatable for credit.

**MA 480-489 - Independent Study in Mathematics**

Variable credit. \*Prerequisite(s): Approval of the Dean and Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**MA 490 - Research in Mathematics**

Variable (0.00 to 4.00) credit(s). An independent research project in mathematics under the close supervision of a faculty member. **Signature Learning Experience: Supervised Research.** Register by Instructor. This course is repeatable for credit.

## **Physics Courses**

**PHY 101 - General Physics I**

4.00 credits. A study of the principles of physics, specifically that are required to be successful on the MCAT, including Newtonian mechanics (motion, work, energy, and static equilibrium), vibrational motion, mechanical waves, gases, fluids, and thermodynamics. \*Prerequisite(s): Level II math placement or completion of Math Core requirement. Students who have credit for PHY 201 may not enroll in this course for credit. \*Corequisite(s): PHY 101L. Hours: lecture 3, laboratory 2. Fall semester.

**PHY 102 - General Physics II**

4.00 credits. Continuation of PHY 101. Topics include electricity (charge, force, energy, E-fields, and circuits) magnetism, geometric optics (reflection, refraction, mirrors, and lenses), wave optics, electromagnetic waves, quantum optics, atomic physics, and nuclear physics. \*Prerequisite(s): PHY 101. Students who have credit for PHY 202 may not enroll in this course for credit. \*Corequisite(s): PHY 102L. Hours: lecture 3, laboratory 2. Spring semester.

**PHY 105 - NPS How Things Work**

4.00 credit. **(Natural and Physical Science Core Course)** Based on activities experienced in daily life, students will learn several physical concepts. By experiencing science at work students will become more comfortable with it and will understand the predictable nature of the universe and dispel the "magic" of science and technology. Students learn how various technologies work and will develop their physical intuition of the world. Topics may include: amusement park rides, bicycles, baseball, human movement, automobiles, clocks, musical instruments, audio amplifiers, radio, lasers, cameras, computers, copiers, power generation and distribution, and nuclear reactors. Course will include a laboratory component each week. \*Corequisite(s): PHY 105L. Hours: lecture 3, laboratory 1.5.

**PHY 120 - Introductory Mathematics for Physics**

4.00 credits. This course covers the applied mathematics needed to complete the calculus-based introductory physics sequence. Topics include functions, graphs, coordinate systems, series representations, trigonometry, vectors, matrices, systems of equations, differentiation, integration, and differential equations. Fall semester.

**PHY 201 - College Physics I**

4.00 credits. Calculus-based introduction to the basic concepts of classical mechanics, to include kinematics and dynamics (linear and rotational motion, work and energy, impulse and momentum), friction, statics, universal gravitation, and relativity. Students will write several MATLAB programs. \*Prerequisite(s): A grade of C- or above in MA 121 or PHY 120. \*Corequisite(s): PHY 201L. Students who have credit for PHY 101 may not enroll in this course for credit. Hours: combined lecture/discussion 4, laboratory 2. Spring semester.

**PHY 202 - College Physics II**

4.00 credits. A continuation of PHY 201. Calculus-based introduction to the basic concepts of electricity and magnetism to include electrostatics, magnetostatics, electrostatic, potential, current, resistance, capacitance, inductance, direct current circuits, alternating current circuits, Maxwell's equations, electromagnetic radiation, and quantum mechanics. Students will write several MATLAB programs. \*Prerequisite(s): A grade of C- or above in MA 121. Students who have credit for PHY 102 may not enroll in this course for credit. \*Corequisite(s): PHY 202L. Hours: combined lecture/discussion 4, laboratory 2. Fall semester.

**PHY 203 - College Physics III**

4.00 credits. Calculus-based introduction to oscillations, fluids, thermodynamics, atomic and nuclear physics, solid state physics, and optics. Students will write several MATLAB programs. \*Prerequisite(s): A grade of C- or above in MA 121. \*Corequisite(s): PHY 203L. Hours: combined lecture/discussion 4, laboratory 2. Offered as needed.

**PHY 361 - Applied Quantum Mechanics/Advanced Topics in Applied Physics**

4.00 credits. Students will reproduce theoretical and experimental analyses published in journals such as American Journal of Physics, Physical Review Letters, and Nature Communications. Topics include the measurement problem, entanglement, quantum nonlocality, Bell inequalities, principles of quantum mechanics, Hilbert spaces, interaction-free measurement, quantum liar paradox, quantum eraser, weak values, Wigner's Friend, Popescu-Rohrlich corrections, Tsirelson bound, no-signaling condition, and interpretations of quantum mechanics. Students will write several MATLAB and Mathematica programs. \*Prerequisite(s): PHY 202. Offered as needed.

**PHY 370-378 - Special Topics in Physics**

3.00 credits. Topics in physics not covered in other courses. Register by Instructor. This course is repeatable for credit.

**PHY 480-489 - Independent Study in Physics**

3.00 credits. Study and experimentation in an area of interest to the student and faculty member. \*Prerequisite(s): Approval of the Dean and Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**PHY 491 - Research I in Computational Physics**

2.00 credits. An original experiment or theoretical investigation performed under the close supervision of a faculty member. A written thesis and a public seminar are required. Hours: laboratory 6. **Signature Learning Experience: Supervised Research.** Register by Instructor.

**PHY 492 - Research II in Computational Physics**

2.00 credits. An original experiment or theoretical investigation performed under the close supervision of a faculty member. A written thesis and a public seminar are required. Hours: laboratory 6. **Signature Learning Experience: Supervised Research.** Register by Instructor.

## **School of Human and Health Professions**

### **Dean of the School of Human and Health Professions**

*Dr. Tamera Keiter Humbert*

Esbenshade Hall, Room 369

717-361-4750

**Faculty:** Bellew, Caprino, Carlson, Dennehy, Eckrote, Ericksen, Frick, Fox, Haffejee, Haley-Mize, Hample, Kimmel, Licona, Mapp, D. Martin, W. Martin, Panchik, Rookey, Tyminski, Waltermire-Burton, Wentzel, Whitney

For more information, please visit the School's website or check your course syllabi, which are available through the course instructor or at the High Library.

### **Mission**

To provide a transformative educational experience that develops highly competent professionals who use their strengths and knowledge to help create change in the lives with whom they work, both locally and globally.

#### *Goals*

Our faculty and graduates:

- Uphold ethical and responsible professional standards
- Practice based on the best available knowledge and can contribute to that knowledge
- Work for equity and inclusion for all peoples

The School of Human and Health Professions includes programs in Education, Occupational Therapy, Physician's Assistant, and Social Work.

### **Honors in the Discipline**

The School of Human and Health Professions participates in the College Honors in the Discipline Program. For guidelines, students should consult their advisor.

### **Bachelor of Arts**

#### **English Secondary Education (B.A.)**

##### **Student Learning Outcomes for English Secondary Education:**

*Students will be able to:*

- Appropriately apply a variety of rhetorical strategies in the creation of texts.
- Appropriately apply a variety of interpretive strategies in the analysis of texts.
- Find appropriate primary and secondary research materials, adequately apply them in writing to support their own arguments, correctly and consistently cite their sources.
- Analyze the relationships among literature, language, and culture from the perspective of a critic.

- Empathize with those that they perceive in some way as different from themselves.
- Work independently to plan and complete advanced projects with little or no intervention from a professor.
- Develop a broad range of pedagogical skills in planning lessons for the middle and/or high school English language arts classroom.
- Apply appropriate methods in delivering lessons in a middle and/or high school English language arts classroom.
- Demonstrate, through extensive professional practice in early and late field experiences, the ability to utilize advanced content knowledge of English literature, composition, and language systems while planning and delivering lessons in middle and/or high school classroom.

English majors in all concentrations must complete the second semester at the introductory level of a modern language course at the 112 level or higher, or one course if the modern language placement is 200-level or higher. For ancient languages, the second course in a two-semester introductory sequence must be completed.

**PLEASE NOTE:** A complete list of the foundational requirements (including a list of approved English Literature courses) can be found in the EDUCATION MANUAL.

To ensure that all students are prepared to apply for formal acceptance, it is recommended that students take a minimum of 16 credit hours per semester.

#### **FOUNDATIONAL REQUIREMENTS:**

Each teacher candidate is expected to meet the following criteria and to use the guidelines to ensure a successful application for formal acceptance:

- Provide updated clearances prior to starting Education courses including a record of Act 34 (PA Criminal Record), PA Child Abuse, FBI Criminal History Report, and TB test. These clearances must be less than one year old. Clearances are required to be updated every year.
- Declare their Education major by the end of their First Year.
- Submit a student life clearance by March of their First Year. (Complete the top portion only and bring to Nicarry 143)
- Complete ED 105 and ED 150/ED 151 with earned grades of C or better- this should be done within the first year (ED 105 Fall and ED 150/151 Spring). ED 161 should be taken within the first 4 semesters (FY and Second year- but recommend during FY). \*Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.
- Meet all requirements for Formal Acceptance as outlined in the manual.
- Submit a Student Life Clearance by March of first year (submit to Education office)

#### **PROGRESSION TO FORMAL ACCEPTANCE:**

Participate in a planning meeting with advisor if issues or concerns arise during three GPA checkpoints conducted by the School of Human and Health Professions.

- Checkpoint #1: GPA verification will be completed at the end of the first semester of First year (December of FY). A minimum cumulative 2.80 is recommended. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA.
- Checkpoint #2: GPA verification will be completed at the end of the second semester of First year (May of FY). A minimum cumulative 2.80 should be achieved. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA. Students will begin work on a professional electronic portfolio, to be submitted at the time of application for formal acceptance.

- Prior to Checkpoint #3- Students should have completed or be in the process of completing 27 credit hours. This will ensure that requirements for Formal Acceptance can be achieved.
- Checkpoint #3: GPA verification will be completed at the end of the first semester of Second year (December of Second year). A minimum 2.80 needs to be maintained with the goal of a minimum 3.0 being achieved by end spring of Second year.

**FORMAL ACCEPTANCE needed for 300-Level ED courses:**

- Complete two Mathematics (MA) courses and two English (EN) courses (one writing composition and one literature).
- Complete 54 credit hours with a cumulative grade point average of 3.00 or higher.
- Successfully complete at least three courses with ED prefixes.
- Receive a satisfactory on student life clearance (re-check of previous clearance)
- Provide a record of ACT 34 (PA Criminal Record), PA Child Abuse, ACT 24, FBI Criminal History Report, and a TB medical clearance. These clearances must be less than one year old.
- Receive passing scores on the Basic Skills Assessment (PAPA or Praxis Core) or the SAT/ACT equivalent score as mandated by PDE and submit a copy of your official score report (Basic Skills exam) to the Education office.
- Provide a completed electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting the required competencies as defined by Danielson's Domains.

Students will begin creating an electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting required competencies. Final portfolio will be submitted as part of the Formal Acceptance application. Students typically apply for Formal Acceptance in the spring of the second year.

Approval of the Education Program and any other appropriate major program is necessary for the application to be successful. Students are evaluated at the conclusion of each semester in accordance with the Education Program Teacher Dispositions/Foundational Competencies Policy. Students may be advised or required to withdraw from a program at any time the Education advisors determines such action to be appropriate.

**Basic Skills Assessment Policy**

*General Requirements*

- 22 Pa. Code § 49.18 (Assessment) requires an assessment of basic skills, professional knowledge and practice and subject matter knowledge. The basic skills assessment is comprised of three individual tests covering reading, writing and mathematics.
- Candidates may combine individual tests from different vendors to meet the basic skills requirement.
- Basic Skills Assessments in Reading, Writing and Mathematics may be met using SAT, ACT, PAPA and/or Praxis Core scores or a combination thereof. (Students must pass the basic skills in order to receive formal acceptance into the program)
- Candidates electing to use tests from different vendors cannot use a composite score. They must meet the qualifying score for each individual test.

### **Approved Basic Skills Assessments**

*The Pre-service Academic Performance Assessment (PAPA) modules in Reading, Writing and Mathematics.*

- Visit [www.pa.nesinc.com](http://www.pa.nesinc.com) to register for PAPA tests.
- Reading test 8001, Mathematics test 8002, Writing test 8003
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 220 is required on the Reading module, 193 on the Mathematics module and 220 on the writing module. A composite scoring option is available.

*The Core Academic Skills for Educators (CORE) modules in Reading, Writing and Mathematics.*

- Visit [www.ets.org/praxis/pa](http://www.ets.org/praxis/pa) to register for CORE tests
- Reading test 5713, Mathematics test 5733, Writing test 5723
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 156 (Reading), 162 (Writing), and 142 (Mathematics) is required. A composite scoring option is available.

*The Scholastic Achievement Test (SAT)*

- The Scholastic Achievement Test (SAT) must achieve a minimum score of 27 (Reading), 26 (Mathematics), and 28 (Writing and Language). It is recommended that intended Education majors submit their SAT scores to Elizabethtown College. There is no composite scoring option. SAT scores may be combined with other tests.
- Submit official test scores in the vendor-sealed envelope and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

*The American College Test (ACT) Plus Writing. There is no composite scoring option.*

- The American College Test (ACT) Plus Writing must achieve a minimum score of 22 (Reading), 8 (Writing), 21 (Mathematics). \*Candidates that opt out of the Writing portion of the ACT will be required to take the writing portion of the Basic Skills Assessment.
- Submit official test scores and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality, in an envelope sealed by the test vendor. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

Older basic skills tests, such as the PPST Reading, Writing, and Mathematics, are accepted if taken at the time they were required in Pennsylvania. Refer to the testing CSPG 21 for more information about replaced tests.

### **Basic Skills Assessment Exceptions**

- The basic skills assessment requirement is waived for all certificates as of November 1, 2014 if the applicant completed an approved post-baccalaureate certification program.

- Experienced Out-of-State Instructional Certificate Exception: As of July 1, 2011, applicants submitting a copy of a current and valid out-of-state instructional certificate that is comparable in grade and content area, plus verification of two years of full-time teaching experience, are not required to take the basic skills assessments.
- Vocational Certificate Exception: Effective July 1, 2014, candidates in post-baccalaureate vocational instructional programs are not required to take the basic skills assessment in reading and writing. The basic skills mathematics assessment is still required for vocational level II certification.
- PDE implemented an alternative means to achieve exemption from the Basic Skills assessment testing requirements. At this time, the alternative is for the mathematics portion of the assessment only. The Program will accept a grade of B (3.0) or higher in a specific college level math course. Program providers must identify the course(s) that best align with the competencies and best meet the PA Academic Standards.
  - The program provider can use the courses within their programs that satisfy the required six credits of mathematics for program entry as the coursework for meeting the basic skills assessment if the competencies are included in the coursework.
  - If a student has not met the exemption for the math portion of the basic skills assessment based on their ACT/SAT scores, they should consider the below courses on their schedule as these will meet the criteria put into place by PDE to be exempt from the mathematics portion of the Basic Skills Assessment. These are the only two approved courses that may be taken to meet the exemption. Students must achieve a grade of B or above in each course.
    - MA 205: Mathematics for the Elementary Teacher
    - MA 251: Probability and Statistics

#### **Exit from the Programs**

Students seeking **award of the degree in the major only (without certification)** must:

- Receive approval of the Education Program and any other appropriate Program(s) for completion of their degree plan.
- Satisfy all requirements of the major, except the professional internship and Pennsylvania certification test results, with a cumulative/major grade point average of 2.00 or higher.
- Complete an alternative internship experience of at least six credits, as approved by the Education Program.

Students seeking **award of the degree in their major and certification** must:

- Satisfy all requirements of the major with the cumulative grade point average of 3.00 or higher.
- Earn a grade of Pass in the professional internship and senior seminar.
- Earn passing scores on the Pennsylvania Educator Certification Tests (PECT) and/or Praxis II series as it applies to your certification program. Students completing Early Childhood (PK-4) must take the PECT exam series, Elementary Middle Level (4-8) certifications take the Praxis series in core assessment and subject concentration, Secondary certification (7-12) take Praxis II in a content area and PK-12 (Music Education, Modern Languages – Spanish Education) must successfully complete the appropriate Fundamental Subjects: Content Knowledge Test and Praxis II in a content area. Graduate candidates in Special Education (PK-12) must take the PECT exam series in special education.

For a comprehensive listing of testing requirements in Pennsylvania, please see

<http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx#tab-1>.

Arrange for Basic Skills, PECT, and/or Praxis test scores to be sent to the Education Program showing passing scores on all required tests.

Complete two Mathematics (MA) courses and two English (EN) courses, one English Literature and one English Writing.

Formally and publicly present an electronic portfolio summarizing activities and experiences in professional education and demonstrating satisfaction of all required competencies.

Receive approval of the Education Program and appropriate major Program(s).

Submit the application for Pennsylvania certification to the Education Program.

**The English Secondary Education concentration (English Education) requires:**

- EN 200 - Major British Writers
- EN 220 - WCH British Literature: Medieval, Renaissance, or 18th Century (Pre-1800) or
- EN 230 - WCH British Literature: Romantic, Victorian, or Modern (Post-1800)
- Two courses from the EN 240 series
- EN 251 - HUM Multicultural Literature
- EN 301 - English Grammar and Linguistics
- EN 302 - The English Language
- EN 306 - Methods Seminar in Teaching Language and Composition
- EN 420 - British Authors (Pre-1800)

One 300-level genre or themes course:

- EN 311 - Genre Studies
- EN 313 - Drama
- EN 315 - Poetry
- EN 317 - Narrative
- EN 319 - Themes
- OR
- Additional 400-level authors seminar

One middle-digit 8 writing course:

- EN 180 - CE Introduction to Creative Writing
- EN 185 - Introduction to Professional Writing
- EN 280 - Creative Writing - Poetry, Prose
- EN 281 - CE Writing and Analyzing the Short Story
- EN 282 - Technical Writing
- EN 283 - Legal Writing
- EN 285 - Business and Public Relations Writing
- EN 286 - Creative Non-Fiction
- EN 287 - Writing Children's Literature

- EN 288 - CE Young Adult Literature
- EN 381 - Advanced Fiction Writing
- EN 385 - Writing and Editing for Publication
- CW 386 - Word, Web, and Design

**Education Courses:**

- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- SED 222 - Foundations of Inclusive Education (MSE 522)
- SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)
- ED 305 - Methods of Secondary Education
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 470 - Professional Internship
- ED 497 - Senior Seminar for Secondary Education

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language **Or**
- EN 150 - PLE Advanced Writing and Language
- EN 200 - Major British Writers
- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- Power of Language: Other Core course (4 credits)
- Mathematics PDE requirement (MA 205 or equivalent) or Mathematics Core requirement (MA 251 or equivalent)

**Note:**

It is strongly recommended that courses be chosen to fulfill both core and major requirements. Please see the Education Program Handbook for the formal acceptance guidelines of the program.

ED 105, ED150, and ED 151 are approved to satisfy Social Science Core.

**Accreditation**

Elizabethtown College is in compliance with Title II of the Higher Education Act and disclosure reporting. Requests for disclosure information – i.e., teacher preparation programs, successes on passing state licensing and certification examinations, and job placement – may be obtained by contacting the Dean.

## **Bachelor of Science**

### **Biology Secondary Education (B.S.)**

#### **Student Learning Outcomes for Biology Secondary Education major:**

*Students will be able to:*

- Recall, synthesize, and apply material from multiple disciplines including biology, mathematics, chemistry, and/or physics.
- Effectively research, synthesize, and communicate scientific information.
- Design and carry out experiments to address biological questions.
- Critically analyze and formulate logical conclusions from data.
- Effectively demonstrate common laboratory techniques, doing so in accordance with accepted safety standards.
- Plan and design appropriate instructional and assessment activities.
- Create, organize, and maintain an effective classroom environment conducive to learning and development
- Develop and apply instructional methodologies appropriate to the grade and developmental level of students.
- Design and implement successful interventions responsive to the needs of children with special needs.

The **Secondary Education major** (Biology Education) prepares the student for receipt of Pennsylvania Secondary Education Certification within the framework of the Biology major. This program provides a strong background in the biological sciences, while simultaneously fulfilling the requirements for secondary teaching certification. The required math courses will satisfy the requirement of two math courses for Education certification.

Students interested in this concentration should consult Dr. Thomas Murray.

The Biology Program has a prerequisite for entry into BIO 211 and upper-level classes contingent upon an average grade of C- or better in BIO 111 and BIO 112.

**PLEASE NOTE:** A complete list of the foundational requirements (including a list of approved English Literature courses) can be found in the EDUCATION MANUAL.

To ensure that all students are prepared to apply for formal acceptance, it is recommended that students take a minimum of 16 credit hours per semester.

#### **FOUNDATIONAL REQUIREMENTS:**

Each teacher candidate is expected to meet the following criteria and to use the guidelines to ensure a successful application for formal acceptance:

- Provide updated clearances prior to starting Education courses including a record of Act 34 (PA Criminal Record), PA Child Abuse, FBI Criminal History Report, and TB test. These clearances must be less than one year old. Clearances are required to be updated every year.
- Declare their Education major by the end of their First Year.
- Submit a student life clearance by March of their First Year. (Complete the top portion only and bring to Nicarry 143)
- Complete ED 105 and ED 150/ED 151 with earned grades of C or better- this should be done within the first year (ED 105 Fall and ED 150/151 Spring). ED 161 should be taken within the first 4 semesters (FY

and Second year- but recommend during FY). \*Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.

- Meet all requirements for Formal Acceptance as outlined in the manual.
- Submit a Student Life Clearance by March of first year (submit to Education office)

#### **PROGRESSION TO FORMAL ACCEPTANCE:**

Participate in a planning meeting with advisor if issues or concerns arise during three GPA checkpoints conducted by the School of Human and Health Professions.

- Checkpoint #1: GPA verification will be completed at the end of the first semester of First year (December of FY). A minimum cumulative 2.80 is recommended. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA.
- Checkpoint #2: GPA verification will be completed at the end of the second semester of First year (May of FY). A minimum cumulative 2.80 should be achieved. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA. Students will begin work on a professional electronic portfolio, to be submitted at the time of application for formal acceptance.
- Prior to Checkpoint #3- Students should have completed or be in the process of completing 27 credit hours. This will ensure that requirements for Formal Acceptance can be achieved.
- Checkpoint #3: GPA verification will be completed at the end of the first semester of Second year (December of Second year). A minimum 2.80 needs to be maintained with the goal of a minimum 3.0 being achieved by end spring of Second year.

#### **FORMAL ACCEPTANCE needed for 300-Level ED courses:**

- Complete two Mathematics (MA) courses and two English (EN) courses (one writing composition and one literature).
- Complete 54 credit hours with a cumulative grade point average of 3.00 or higher.
- Successfully complete at least three courses with ED prefixes.
- Receive a satisfactory on student life clearance (re-check of previous clearance)
- Provide a record of ACT 34 (PA Criminal Record), PA Child Abuse, ACT 24, FBI Criminal History Report, and a TB medical clearance. These clearances must be less than one year old.
- Receive passing scores on the Basic Skills Assessment (PAPA or Praxis Core) or the SAT/ACT equivalent score as mandated by PDE and submit a copy of your official score report (Basic Skills exam) to the Education office.
- Provide a completed electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting the required competencies as defined by Danielson's Domains.

Students will begin creating an electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting required competencies. Final portfolio will be submitted as part of the Formal Acceptance application. Students typically apply for Formal Acceptance in the spring of the second year.

Approval of the Education Program and any other appropriate major program is necessary for the application to be successful. Students are evaluated at the conclusion of each semester in accordance with the Education Program Teacher Dispositions/Foundational Competencies Policy. Students may be advised or required to withdraw from a program at any time the Education advisors determines such action to be appropriate.

## **Basic Skills Assessment Policy**

### *General Requirements*

- 22 Pa. Code § 49.18 (Assessment) requires an assessment of basic skills, professional knowledge and practice and subject matter knowledge. The basic skills assessment is comprised of three individual tests covering reading, writing and mathematics.
- Candidates may combine individual tests from different vendors to meet the basic skills requirement.
- Basic Skills Assessments in Reading, Writing and Mathematics may be met using SAT, ACT, PAPA and/or Praxis Core scores or a combination thereof. (Students must pass the basic skills in order to receive formal acceptance into the program)
- Candidates electing to use tests from different vendors cannot use a composite score. They must meet the qualifying score for each individual test.

### **Approved Basic Skills Assessments**

*The Pre-service Academic Performance Assessment (PAPA) modules in Reading, Writing and Mathematics.*

- Visit [www.pa.nesinc.com](http://www.pa.nesinc.com) to register for PAPA tests.
- Reading test 8001, Mathematics test 8002, Writing test 8003
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 220 is required on the Reading module, 193 on the Mathematics module and 220 on the writing module. A composite scoring option is available.

*The Core Academic Skills for Educators (CORE) modules in Reading, Writing and Mathematics.*

- Visit [www.ets.org/praxis/pa](http://www.ets.org/praxis/pa) to register for CORE tests
- Reading test 5713, Mathematics test 5733, Writing test 5723
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 156 (Reading), 162 (Writing), and 142 (Mathematics) is required. A composite scoring option is available.

*The Scholastic Achievement Test (SAT)*

- The Scholastic Achievement Test (SAT) must achieve a minimum score of 27 (Reading), 26 (Mathematics), and 28 (Writing and Language). It is recommended that intended Education majors submit their SAT scores to Elizabethtown College. There is no composite scoring option. SAT scores may be combined with other tests.
- Submit official test scores in the vendor-sealed envelope and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

*The American College Test (ACT) Plus Writing. There is no composite scoring option.*

- The American College Test (ACT) Plus Writing must achieve a minimum score of 22 (Reading), 8 (Writing), 21 (Mathematics). \*Candidates that opt out of the Writing portion of the ACT will be required to take the writing portion of the Basic Skills Assessment.
- Submit official test scores and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality, in an envelope sealed by the test vendor. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

Older basic skills tests, such as the PPST Reading, Writing, and Mathematics, are accepted if taken at the time they were required in Pennsylvania. Refer to the testing CSPG 21 for more information about replaced tests.

### **Basic Skills Assessment Exceptions**

- The basic skills assessment requirement is waived for all certificates as of November 1, 2014 if the applicant completed an approved post-baccalaureate certification program.
- Experienced Out-of-State Instructional Certificate Exception: As of July 1, 2011, applicants submitting a copy of a current and valid out-of-state instructional certificate that is comparable in grade and content area, plus verification of two years of full-time teaching experience, are not required to take the basic skills assessments.
- Vocational Certificate Exception: Effective July 1, 2014, candidates in post-baccalaureate vocational instructional programs are not required to take the basic skills assessment in reading and writing. The basic skills mathematics assessment is still required for vocational level II certification.
- PDE implemented an alternative means to achieve exemption from the Basic Skills assessment testing requirements. At this time, the alternative is for the mathematics portion of the assessment only. The Program will accept a grade of B (3.0) or higher in a specific college level math course. Program providers must identify the course(s) that best align with the competencies and best meet the PA Academic Standards.
  - The program provider can use the courses within their programs that satisfy the required six credits of mathematics for program entry as the coursework for meeting the basic skills assessment if the competencies are included in the coursework.
  - If a student has not met the exemption for the math portion of the basic skills assessment based on their ACT/SAT scores, they should consider the below courses on their schedule as these will meet the criteria put into place by PDE to be exempt from the mathematics portion of the Basic Skills Assessment. These are the only two approved courses that may be taken to meet the exemption. Students must achieve a grade of B or above in each course.
    - MA 205: Mathematics for the Elementary Teacher
    - MA 251: Probability and Statistics

### **Exit from the Programs**

Students seeking **award of the degree in the major only (without certification)** must:

- Receive approval of the Education Program and any other appropriate Program(s) for completion of their degree plan.
- Satisfy all requirements of the major, except the professional internship and Pennsylvania certification test results, with a cumulative/major grade point average of 2.00 or higher.
- Complete an alternative internship experience of at least six credits, as approved by the Education Program.

Students seeking **award of the degree in their major and certification must:**

- Satisfy all requirements of the major with the cumulative grade point average of 3.00 or higher.
- Earn a grade of Pass in the professional internship and senior seminar.
- Earn passing scores on the Pennsylvania Educator Certification Tests (PECT) and/or Praxis II series as it applies to your certification program. Students completing Early Childhood (PK-4) must take the PECT exam series, Elementary Middle Level (4-8) certifications take the Praxis series in core assessment and subject concentration, Secondary certification (7-12) take Praxis II in a content area and PK-12 (Music Education, Modern Languages – Spanish Education) must successfully complete the appropriate Fundamental Subjects: Content Knowledge Test and Praxis II in a content area. Graduate candidates in Special Education (PK-12) must take the PECT exam series in special education.

For a comprehensive listing of testing requirements in Pennsylvania, please see

<http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx#tab-1>.

Arrange for Basic Skills, PECT, and/or Praxis test scores to be sent to the Education Program showing passing scores on all required tests.

Complete two Mathematics (MA) courses and two English (EN) courses, one English Literature and one English Writing.

Formally and publicly present an electronic portfolio summarizing activities and experiences in professional education and demonstrating satisfaction of all required competencies.

Receive approval of the Education Program and appropriate major Program(s).

Submit the application for Pennsylvania certification to the Education Program.

**The specific requirements are:**

- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- BIO 211 - Genetics
- BIO 313 - General Ecology and
- BIO 313L - General Ecology Laboratory  
or
- BIO 317 - Aquatic Ecology
- BIO 324 - General Physiology
- BIO 324L - General Physiology Laboratory
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- One Earth Science course
- At least 11 credits of upper-level Biology classes with at least two laboratories

*School of Human and Health Professions*

- MA 121 - MA Calculus I or
- MA 251 - MA Probability and Statistics and
- One additional Mathematics course
  
- PHY 101 - General Physics I or
- PHY 201 - College Physics I

**Education Courses:**

- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)
- SED 222 - Foundations of Inclusive Education (MSE 522)
- ED 305 - Methods of Secondary Education
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 470 - Professional Internship
- ED 497 - Senior Seminar for Secondary Education
- Two English courses for Education certification, one literature and one writing (EN 100 or EN 150)
- Two Math courses for Education certification

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
  
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
  
- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I

**Notes:**

ED150 and ED 151 are approved to satisfy Social Science Core.

**Accreditation**

Elizabethtown College is in compliance with Title II of the Higher Education Act and disclosure reporting. Requests for disclosure information – i.e., teacher preparation programs, successes on passing state licensing and certification examinations, and job placement – may be obtained by contacting the Dean.

## Chemistry Secondary Education (B.S.)

### Student Learning Outcomes for Secondary Education:

*Students will be able to:*

- Explain fundamental chemistry concepts.
- Communicate chemical knowledge.
- Research a chemical problem or concept.
- Design, execute, and interpret experiments to solve chemical problems.
- Draw connections to other fields of study.
- Work as a member of a team.
- Envision and pursue multiple paths for purposeful life work.

The **Secondary Education curriculum** (Chemistry Education) prepares students for high school teaching. The required math courses will satisfy the requirement of two math courses for Education certification.

PLEASE NOTE: A complete list of the foundational requirements (including a list of approved English Literature courses) can be found in the EDUCATION MANUAL.

To ensure that all students are prepared to apply for formal acceptance, it is recommended that students take a minimum of 16 credit hours per semester.

### FOUNDATIONAL REQUIREMENTS:

Each teacher candidate is expected to meet the following criteria and to use the guidelines to ensure a successful application for formal acceptance:

- Provide updated clearances prior to starting Education courses including a record of Act 34 (PA Criminal Record), PA Child Abuse, FBI Criminal History Report, and TB test. These clearances must be less than one year old. Clearances are required to be updated every year.
- Declare their Education major by the end of their First Year.
- Submit a student life clearance by March of their First Year. (Complete the top portion only and bring to Nicarry 143)
- Complete ED 105 and ED 150/ED 151 with earned grades of C or better- this should be done within the first year (ED 105 Fall and ED 150/151 Spring). ED 161 should be taken within the first 4 semesters (FY and Second year- but recommend during FY). \*Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.
- Meet all requirements for Formal Acceptance as outlined in the manual.
- Submit a Student Life Clearance by March of first year (submit to Education office)

### PROGRESSION TO FORMAL ACCEPTANCE:

Participate in a planning meeting with advisor if issues or concerns arise during three GPA checkpoints conducted by the School of Human and Health Professions.

- Checkpoint #1: GPA verification will be completed at the end of the first semester of First year (December of FY). A minimum cumulative 2.80 is recommended. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA.

- Checkpoint #2: GPA verification will be completed at the end of the second semester of First year (May of FY). A minimum cumulative 2.80 should be achieved. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA. Students will begin work on a professional electronic portfolio, to be submitted at the time of application for formal acceptance.
- Prior to Checkpoint #3- Students should have completed or be in the process of completing 27 credit hours. This will ensure that requirements for Formal Acceptance can be achieved.
- Checkpoint #3: GPA verification will be completed at the end of the first semester of Second year (December of Second year). A minimum 2.80 needs to be maintained with the goal of a minimum 3.0 being achieved by end spring of Second year.

**FORMAL ACCEPTANCE needed for 300-Level ED courses:**

- Complete two Mathematics (MA) courses and two English (EN) courses (one writing composition and one literature).
- Complete 54 credit hours with a cumulative grade point average of 3.00 or higher.
- Successfully complete at least three courses with ED prefixes.
- Receive a satisfactory on student life clearance (re-check of previous clearance)
- Provide a record of ACT 34 (PA Criminal Record), PA Child Abuse, ACT 24, FBI Criminal History Report, and a TB medical clearance. These clearances must be less than one year old.
- Receive passing scores on the Basic Skills Assessment (PAPA or Praxis Core) or the SAT/ACT equivalent score as mandated by PDE and submit a copy of your official score report (Basic Skills exam) to the Education office.
- Provide a completed electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting the required competencies as defined by Danielson's Domains.

Students will begin creating an electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting required competencies. Final portfolio will be submitted as part of the Formal Acceptance application. Students typically apply for Formal Acceptance in the spring of the second year.

Approval of the Education Program and any other appropriate major program is necessary for the application to be successful. Students are evaluated at the conclusion of each semester in accordance with the Education Program Teacher Dispositions/Foundational Competencies Policy. Students may be advised or required to withdraw from a program at any time the Education advisors determines such action to be appropriate.

**Basic Skills Assessment Policy**

*General Requirements*

- 22 Pa. Code § 49.18 (Assessment) requires an assessment of basic skills, professional knowledge and practice and subject matter knowledge. The basic skills assessment is comprised of three individual tests covering reading, writing and mathematics.
- Candidates may combine individual tests from different vendors to meet the basic skills requirement.
- Basic Skills Assessments in Reading, Writing and Mathematics may be met using SAT, ACT, PAPA and/or Praxis Core scores or a combination thereof. (Students must pass the basic skills in order to receive formal acceptance into the program)
- Candidates electing to use tests from different vendors cannot use a composite score. They must meet the qualifying score for each individual test.

### **Approved Basic Skills Assessments**

*The Pre-service Academic Performance Assessment (PAPA) modules in Reading, Writing and Mathematics.*

- Visit [www.pa.nesinc.com](http://www.pa.nesinc.com) to register for PAPA tests.
- Reading test 8001, Mathematics test 8002, Writing test 8003
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 220 is required on the Reading module, 193 on the Mathematics module and 220 on the writing module. A composite scoring option is available.

*The Core Academic Skills for Educators (CORE) modules in Reading, Writing and Mathematics.*

- Visit [www.ets.org/praxis/pa](http://www.ets.org/praxis/pa) to register for CORE tests
- Reading test 5713, Mathematics test 5733, Writing test 5723
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 156 (Reading), 162 (Writing), and 142 (Mathematics) is required. A composite scoring option is available.

*The Scholastic Achievement Test (SAT)*

- The Scholastic Achievement Test (SAT) must achieve a minimum score of 27 (Reading), 26 (Mathematics), and 28 (Writing and Language). It is recommended that intended Education majors submit their SAT scores to Elizabethtown College. There is no composite scoring option. SAT scores may be combined with other tests.
- Submit official test scores in the vendor-sealed envelope and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

*The American College Test (ACT) Plus Writing. There is no composite scoring option.*

- The American College Test (ACT) Plus Writing must achieve a minimum score of 22 (Reading), 8 (Writing), 21 (Mathematics). \*Candidates that opt out of the Writing portion of the ACT will be required to take the writing portion of the Basic Skills Assessment.
- Submit official test scores and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality, in an envelope sealed by the test vendor. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

Older basic skills tests, such as the PPST Reading, Writing, and Mathematics, are accepted if taken at the time they were required in Pennsylvania. Refer to the testing CSPG 21 for more information about replaced tests.

### **Basic Skills Assessment Exceptions**

- The basic skills assessment requirement is waived for all certificates as of November 1, 2014 if the applicant completed an approved post-baccalaureate certification program.

- Experienced Out-of-State Instructional Certificate Exception: As of July 1, 2011, applicants submitting a copy of a current and valid out-of-state instructional certificate that is comparable in grade and content area, plus verification of two years of full-time teaching experience, are not required to take the basic skills assessments.
- Vocational Certificate Exception: Effective July 1, 2014, candidates in post-baccalaureate vocational instructional programs are not required to take the basic skills assessment in reading and writing. The basic skills mathematics assessment is still required for vocational level II certification.
- PDE implemented an alternative means to achieve exemption from the Basic Skills assessment testing requirements. At this time, the alternative is for the mathematics portion of the assessment only. The Program will accept a grade of B (3.0) or higher in a specific college level math course. Program providers must identify the course(s) that best align with the competencies and best meet the PA Academic Standards.
  - The program provider can use the courses within their programs that satisfy the required six credits of mathematics for program entry as the coursework for meeting the basic skills assessment if the competencies are included in the coursework.
  - If a student has not met the exemption for the math portion of the basic skills assessment based on their ACT/SAT scores, they should consider the below courses on their schedule as these will meet the criteria put into place by PDE to be exempt from the mathematics portion of the Basic Skills Assessment. These are the only two approved courses that may be taken to meet the exemption. Students must achieve a grade of B or above in each course.
    - MA 205: Mathematics for the Elementary Teacher
    - MA 251: Probability and Statistics

#### **Exit from the Programs**

Students seeking **award of the degree in the major only (without certification)** must:

- Receive approval of the Education Program and any other appropriate Program(s) for completion of their degree plan.
- Satisfy all requirements of the major, except the professional internship and Pennsylvania certification test results, with a cumulative/major grade point average of 2.00 or higher.
- Complete an alternative internship experience of at least six credits, as approved by the Education Program.

Students seeking **award of the degree in their major and certification** must:

- Satisfy all requirements of the major with the cumulative grade point average of 3.00 or higher.
- Earn a grade of Pass in the professional internship and senior seminar.
- Earn passing scores on the Pennsylvania Educator Certification Tests (PECT) and/or Praxis II series as it applies to your certification program. Students completing Early Childhood (PK-4) must take the PECT exam series, Elementary Middle Level (4-8) certifications take the Praxis series in core assessment and subject concentration, Secondary certification (7-12) take Praxis II in a content area and PK-12 (Music Education, Modern Languages – Spanish Education) must successfully complete the appropriate Fundamental Subjects: Content Knowledge Test and Praxis II in a content area. Graduate candidates in Special Education (PK-12) must take the PECT exam series in special education.

For a comprehensive listing of testing requirements in Pennsylvania, please see

<http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx#tab-1>.

Arrange for Basic Skills, PECT, and/or Praxis test scores to be sent to the Education Program showing passing scores on all required tests.

Complete two Mathematics (MA) courses and two English (EN) courses, one English Literature and one English Writing.

Formally and publicly present an electronic portfolio summarizing activities and experiences in professional education and demonstrating satisfaction of all required competencies.

Receive approval of the Education Program and appropriate major Program(s).

Submit the application for Pennsylvania certification to the Education Program.

**The Secondary Education curriculum requires:**

- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- CH 201 - Laboratory Methods in Chemistry
- CH 213 - Organic Chemistry II
- CH 214 - Chemical Instrumentation
- CH 242 - Physical Inorganic Chemistry
- CH 323 - Biochemistry I
- CH 326 - Techniques of Biochemistry or
- CH 455 - Integrated Chemistry Laboratory I
- CH 343 - Physical Chemistry I
- CH 395 - Chemistry Seminar I
- CH 396 - Chemistry Seminar II
- One additional Chemistry course, excluding internship or research
- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- PHY 201 - College Physics I
- PHY 202 - College Physics II

**Education Courses:**

- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- SED 222 - Foundations of Inclusive Education (MSE 522)
- ED 305 - Methods of Secondary Education
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 470 - Professional Internship
- ED 497 - Senior Seminar for Secondary Education
- Two English courses for Education certification, one literature and one writing (EN 100 or EN 150)

- Two Math courses for Education certification

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- BIO 111 - Molecules, Cells, & Animal Systems
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- ED 105 - Foundations of Teaching and Learning

**Notes:**

These courses begin a highly structured program coordinated among several programs, and if not completed in the first year, lead to delayed graduation or extraordinary difficulties for subsequent advisors.

There is a strong correlation between students' performance on the math portion of the SAT/ACT and CH 105, likely a result of quantitative thinking and analytical reasoning skills. To promote student success, when a student has very poor entrance exam scores, it may be advisable to delay BIO 111 rather than enrolling the student in both CH 105 and BIO 111 during the first semester. These students are encouraged to meet with the Dean to discuss a modified four-year plan.

Math placement will be determined by the Mathematical Sciences Program. Competency must be through the MA 122 level. MA 121 is a necessary prerequisite for PHY 201 which is normally taken in the spring semester of the sophomore year.

If not completed in the fall, EN 100 must be completed during the spring semester.

A grade of C- or better must be earned in CH 105 in order to advance to CH 113

Students should plan on taking ED 105 and ED 151 early in their college careers. All other Education courses require these two as prerequisites.

ED150 and ED 151 are approved to satisfy Social Science Core.

**Accreditation**

Elizabethtown College is in compliance with Title II of the Higher Education Act and disclosure reporting. Requests for disclosure information – i.e., teacher preparation programs, successes on passing state licensing and certification examinations, and job placement – may be obtained by contacting the Dean.

## **Early Childhood Education (B.S.)**

### **Student Learning Outcomes for Early Childhood Education:**

*Students will be able to:*

- Plan, design, and implement research-based instructional and assessment practices appropriate for children between preschool and fourth grade.
- Develop and apply instructional methodologies, including the use of technology, appropriate for children between preschool and fourth grade.
- Critically apply content knowledge and skills to facilitate student learning appropriate for children between 0 and 9 years.
- Create, organize, and maintain an effective and safe classroom environment conducive to learning and development.
- Design and implement successful interventions responsive to the needs of learners in pre-kindergarten through grade four.
- Exhibit the qualities that characterize a professional individual, including professional, ethical, and legal responsibilities of a certified teacher.
- Demonstrate an ongoing commitment to continued professional development and service.

Candidates for certification in **Early Childhood Education** must complete a major that consists of two key elements. The first element emphasizes critical concepts and ideas important to one's general education and academic preparation for teaching. The second emphasis stresses a professional core organized in five areas: 1) Early Childhood Development, Cognition and Learning, 2) Subject Matter Pedagogy Content (Pre-kindergarten through Fourth), 3) Assessment, 4) Family and Community Partnerships, and 5) Professionalism. Content requirements are based on national standards for early childhood education as well as Pennsylvania's curriculum standards.

PLEASE NOTE: A complete list of the foundational requirements (including a list of approved English Literature courses) can be found in the EDUCATION MANUAL.

To ensure that all students are prepared to apply for formal acceptance, it is recommended that students take a minimum of 16 credit hours per semester.

Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.

### **FOUNDATIONAL REQUIREMENTS:**

Each teacher candidate is expected to meet the following criteria and to use the guidelines to ensure a successful application for formal acceptance:

- Provide updated clearances prior to starting Education courses including a record of Act 34 (PA Criminal Record), PA Child Abuse, FBI Criminal History Report, and TB test. These clearances must be less than one year old. Clearances are required to be updated every year.
- Declare their Education major by the end of their First Year.
- Submit a student life clearance by March of their First Year. (Complete the top portion only and bring to Nicarry 143)
- Complete ED 105 and ED 150/ED 151 with earned grades of C or better- this should be done within the first year (ED 105 Fall and ED 150/151 Spring). ED 161 should be taken within the first 4 semesters (FY

and Second year- but recommend during FY). \*Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.

- Meet all requirements for Formal Acceptance as outlined in the manual.
- Submit a Student Life Clearance by March of first year (submit to Education office)

#### **PROGRESSION TO FORMAL ACCEPTANCE:**

Participate in a planning meeting with advisor if issues or concerns arise during three GPA checkpoints conducted by the School of Human and Health Professions.

- Checkpoint #1: GPA verification will be completed at the end of the first semester of First year (December of FY). A minimum cumulative 2.80 is recommended. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA.
- Checkpoint #2: GPA verification will be completed at the end of the second semester of First year (May of FY). A minimum cumulative 2.80 should be achieved. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA. Students will begin work on a professional electronic portfolio, to be submitted at the time of application for formal acceptance.
- Prior to Checkpoint #3- Students should have completed or be in the process of completing 27 credit hours. This will ensure that requirements for Formal Acceptance can be achieved.
- Checkpoint #3: GPA verification will be completed at the end of the first semester of Second year (December of Second year). A minimum 2.80 needs to be maintained with the goal of a minimum 3.0 being achieved by end spring of Second year.

#### **FORMAL ACCEPTANCE needed for 300-Level ED courses:**

- Complete two Mathematics (MA) courses and two English (EN) courses (one writing composition and one literature).
- Complete 54 credit hours with a cumulative grade point average of 3.00 or higher.
- Successfully complete at least three courses with ED prefixes.
- Receive a satisfactory on student life clearance (re-check of previous clearance)
- Provide a record of ACT 34 (PA Criminal Record), PA Child Abuse, ACT 24, FBI Criminal History Report, and a TB medical clearance. These clearances must be less than one year old.
- Receive passing scores on the Basic Skills Assessment (PAPA or Praxis Core) or the SAT/ACT equivalent score as mandated by PDE and submit a copy of your official score report (Basic Skills exam) to the Education office.
- Provide a completed electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting the required competencies as defined by Danielson's Domains.

Students will begin creating an electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting required competencies. Final portfolio will be submitted as part of the Formal Acceptance application. Students typically apply for Formal Acceptance in the spring of the second year.

Approval of the Education Program and any other appropriate major program is necessary for the application to be successful. Students are evaluated at the conclusion of each semester in accordance with the Education Program Teacher Dispositions/Foundational Competencies Policy. Students may be advised or required to withdraw from a program at any time the Education advisors determines such action to be appropriate.

## **Basic Skills Assessment Policy**

### *General Requirements*

- 22 Pa. Code § 49.18 (Assessment) requires an assessment of basic skills, professional knowledge and practice and subject matter knowledge. The basic skills assessment is comprised of three individual tests covering reading, writing and mathematics.
- Candidates may combine individual tests from different vendors to meet the basic skills requirement.
- Basic Skills Assessments in Reading, Writing and Mathematics may be met using SAT, ACT, PAPA and/or Praxis Core scores or a combination thereof. (Students must pass the basic skills in order to receive formal acceptance into the program)
- Candidates electing to use tests from different vendors cannot use a composite score. They must meet the qualifying score for each individual test.

### **Approved Basic Skills Assessments**

*The Pre-service Academic Performance Assessment (PAPA) modules in Reading, Writing and Mathematics.*

- Visit [www.pa.nesinc.com](http://www.pa.nesinc.com) to register for PAPA tests.
- Reading test 8001, Mathematics test 8002, Writing test 8003
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 220 is required on the Reading module, 193 on the Mathematics module and 220 on the writing module. A composite scoring option is available.

*The Core Academic Skills for Educators (CORE) modules in Reading, Writing and Mathematics.*

- Visit [www.ets.org/praxis/pa](http://www.ets.org/praxis/pa) to register for CORE tests
- Reading test 5713, Mathematics test 5733, Writing test 5723
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 156 (Reading), 162 (Writing), and 142 (Mathematics) is required. A composite scoring option is available.

*The Scholastic Achievement Test (SAT)*

- The Scholastic Achievement Test (SAT) must achieve a minimum score of 27 (Reading), 26 (Mathematics), and 28 (Writing and Language). It is recommended that intended Education majors submit their SAT scores to Elizabethtown College. There is no composite scoring option. SAT scores may be combined with other tests.
- Submit official test scores in the vendor-sealed envelope and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

*The American College Test (ACT) Plus Writing. There is no composite scoring option.*

- The American College Test (ACT) Plus Writing must achieve a minimum score of 22 (Reading), 8 (Writing), 21 (Mathematics). \*Candidates that opt out of the Writing portion of the ACT will be required to take the writing portion of the Basic Skills Assessment.
- Submit official test scores and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality, in an envelope sealed by the test vendor. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

Older basic skills tests, such as the PPST Reading, Writing, and Mathematics, are accepted if taken at the time they were required in Pennsylvania. Refer to the testing CSPG 21 for more information about replaced tests.

### **Basic Skills Assessment Exceptions**

- The basic skills assessment requirement is waived for all certificates as of November 1, 2014 if the applicant completed an approved post-baccalaureate certification program.
- Experienced Out-of-State Instructional Certificate Exception: As of July 1, 2011, applicants submitting a copy of a current and valid out-of-state instructional certificate that is comparable in grade and content area, plus verification of two years of full-time teaching experience, are not required to take the basic skills assessments.
- Vocational Certificate Exception: Effective July 1, 2014, candidates in post-baccalaureate vocational instructional programs are not required to take the basic skills assessment in reading and writing. The basic skills mathematics assessment is still required for vocational level II certification.
- PDE implemented an alternative means to achieve exemption from the Basic Skills assessment testing requirements. At this time, the alternative is for the mathematics portion of the assessment only. The Program will accept a grade of B (3.0) or higher in a specific college level math course. Program providers must identify the course(s) that best align with the competencies and best meet the PA Academic Standards.
  - The program provider can use the courses within their programs that satisfy the required six credits of mathematics for program entry as the coursework for meeting the basic skills assessment if the competencies are included in the coursework.
  - If a student has not met the exemption for the math portion of the basic skills assessment based on their ACT/SAT scores, they should consider the below courses on their schedule as these will meet the criteria put into place by PDE to be exempt from the mathematics portion of the Basic Skills Assessment. These are the only two approved courses that may be taken to meet the exemption. Students must achieve a grade of B or above in each course.
    - MA 205: Mathematics for the Elementary Teacher
    - MA 251: Probability and Statistics

### **Exit from the Programs**

Students seeking **award of the degree in the major only (without certification)** must:

- Receive approval of the Education Program and any other appropriate Program(s) for completion of their degree plan.
- Satisfy all requirements of the major, except the professional internship and Pennsylvania certification test results, with a cumulative/major grade point average of 2.00 or higher.
- Complete an alternative internship experience of at least six credits, as approved by the Education Program.

Students seeking **award of the degree in their major and certification must:**

- Satisfy all requirements of the major with the cumulative grade point average of 3.00 or higher.
- Earn a grade of Pass in the professional internship and senior seminar.
- Earn passing scores on the Pennsylvania Educator Certification Tests (PECT) and/or Praxis II series as it applies to your certification program. Students completing Early Childhood (PK-4) must take the PECT exam series, Elementary Middle Level (4-8) certifications take the Praxis series in core assessment and subject concentration, Secondary certification (7-12) take Praxis II in a content area and PK-12 (Music Education, Modern Languages – Spanish Education) must successfully complete the appropriate Fundamental Subjects: Content Knowledge Test and Praxis II in a content area. Graduate candidates in Special Education (PK-12) must take the PECT exam series in special education.

For a comprehensive listing of testing requirements in Pennsylvania, please see

<http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx#tab-1>.

Arrange for Basic Skills, PECT, and/or Praxis test scores to be sent to the Education Program showing passing scores on all required tests.

Complete two Mathematics (MA) courses and two English (EN) courses, one English Literature and one English Writing.

Formally and publicly present an electronic portfolio summarizing activities and experiences in professional education and demonstrating satisfaction of all required competencies.

Receive approval of the Education Program and appropriate major Program(s).

Submit the application for Pennsylvania certification to the Education Program.

**Early Childhood:**

- ED 105 - Foundations of Teaching and Learning
- ED 150 - Early Childhood Development
- ED 161 - Integrated Technology I
- ED 212 - Children/Adolescent Literature
- ED 250 - Language and Literacy Development in Early Childhood
- ED 258 - Educational Assessment and Evaluation
- ED 317 - Assessing Student Literacies in Grades PK-8
- ED 325 - Methods for Teaching Science and Health in Early Childhood
- ED 335 - Methods for Teaching Mathematics in Early Childhood
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 345 - Methods for Teaching Reading and Writing in Early Childhood
- ED 360 - Integrated Strategies for Creative Expression in Early Childhood
- ED 365 - Methods for Teaching Social Studies in Early Childhood
- ED 470 - Professional Internship
- ED 495 - Senior Seminar for Early Childhood
- SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)
- SED 222 - Foundations of Inclusive Education (MSE 522)

Additional Required Courses for Education Certification

- Math Core course
- MA 205 - Mathematics for the Elementary Teacher or other eligible Math course
- Two English courses for Education certification, one literature and one writing (EN 100 or EN 150)

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- ED 105 - Foundations of Teaching and Learning
- ED 150 - Early Childhood Development
- ED 161 - Integrated Technology I
- MA 205 - Mathematics for the Elementary Teacher
- One Non-Cultural Heritage Core course (4 credits)
- One Power of Language: Other Core course (4 credits)

**Notes:**

Students who enter the program in their first year **must be scheduled** for ED 105 in the fall and ED 150 in the spring of that first year. Completing both before the sophomore year is critical. Students that transfer into the program will work with their academic advisor to ensure these courses are completed on an alternative schedule.

Education majors may substitute ED 224 for their Western-Cultural Heritage Core and ED 150/151 for the Social Sciences core requirement.

**All Education majors must complete two English courses (one writing and one literature) and two Math courses (MA prefix) prior to formal acceptance, typically by the end of their sophomore year.**

**Accreditation**

Elizabethtown College is in compliance with Title II of the Higher Education Act and disclosure reporting. Requests for disclosure information – i.e., teacher preparation programs, successes on passing state licensing and certification examinations, and job placement – may be obtained by contacting the Dean.

**Early Childhood Education with Special Education Certification (B.S.)**

**Student Learning Outcomes for Early Childhood Education with Special Education Certification:**

*Students will be able to:*

- A thorough knowledge of the content and pedagogical skills in planning, preparation, and assessment in the fields of early childhood elementary and special education.
- An ability to establish and maintain a purposeful and equitable environment for learning.

- An ability to deliver instruction that engages students in learning by using a variety of instructional strategies, including technology.
- Qualities and dispositions that characterize a professional person in aspects that occur in and beyond the classroom/building.
- An awareness of, and adherence to, the professional, ethical, and legal responsibilities of being a PK-8 certified teacher.
- An ongoing commitment to lifelong learning and professional development through field-related clubs, conferences, and organizations.
- Teaching and advocacy for principles of social justice and civic competence.

Candidates for certification in Early Childhood Education with Special Education Certification must complete a major that consists of two key elements. The first element emphasizes critical concepts and ideas important to one's general education and academic preparation for teaching. The second emphasis stresses a professional core organized in five areas: 1) Early Childhood Development, Cognition and Learning, 2) Subject Matter Pedagogy Content (Pre-kindergarten through Fourth), 3) Assessment, 4) Family and Community Partnerships, and 5) Professionalism. Content requirements are based on national standards for early childhood education as well as Pennsylvania's curriculum standards.

PLEASE NOTE: A complete list of the foundational requirements (including a list of approved English Literature courses) can be found in the EDUCATION MANUAL.

Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.

To ensure that all students are prepared to apply for formal acceptance, it is recommended that students take a minimum of 16 credit hours per semester.

#### **FOUNDATIONAL REQUIREMENTS:**

Each teacher candidate is expected to meet the following criteria and to use the guidelines to ensure a successful application for formal acceptance:

- Provide updated clearances prior to starting Education courses including a record of Act 34 (PA Criminal Record), PA Child Abuse, FBI Criminal History Report, and TB test. These clearances must be less than one year old. Clearances are required to be updated every year.
- Declare their Education major by the end of their First Year.
- Submit a student life clearance by March of their First Year. (Complete the top portion only and bring to Nicarry 143)
- Complete ED 105 and ED 150/ED 151 with earned grades of C or better- this should be done within the first year (ED 105 Fall and ED 150/151 Spring). ED 161 should be taken within the first 4 semesters (FY and Second year- but recommend during FY). \*Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.
- Meet all requirements for Formal Acceptance as outlined in the manual.
- Submit a Student Life Clearance by March of first year (submit to Education office)

#### **PROGRESSION TO FORMAL ACCEPTANCE:**

Participate in a planning meeting with advisor if issues or concerns arise during three GPA checkpoints conducted by the School of Human and Health Professions.

- Checkpoint #1: GPA verification will be completed at the end of the first semester of First year (December of FY). A minimum cumulative 2.80 is recommended. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA.
- Checkpoint #2: GPA verification will be completed at the end of the second semester of First year (May of FY). A minimum cumulative 2.80 should be achieved. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA. Students will begin work on a professional electronic portfolio, to be submitted at the time of application for formal acceptance.
- Prior to Checkpoint #3- Students should have completed or be in the process of completing 27 credit hours. This will ensure that requirements for Formal Acceptance can be achieved.
- Checkpoint #3: GPA verification will be completed at the end of the first semester of Second year (December of Second year). A minimum 2.80 needs to be maintained with the goal of a minimum 3.0 being achieved by end spring of Second year.

**FORMAL ACCEPTANCE needed for 300-Level ED courses:**

- Complete two Mathematics (MA) courses and two English (EN) courses (one writing composition and one literature).
- Complete 54 credit hours with a cumulative grade point average of 3.00 or higher.
- Successfully complete at least three courses with ED prefixes.
- Receive a satisfactory on student life clearance (re-check of previous clearance)
- Provide a record of ACT 34 (PA Criminal Record), PA Child Abuse, ACT 24, FBI Criminal History Report, and a TB medical clearance. These clearances must be less than one year old.
- Receive passing scores on the Basic Skills Assessment (PAPA or Praxis Core) or the SAT/ACT equivalent score as mandated by PDE and submit a copy of your official score report (Basic Skills exam) to the Education office.
- Provide a completed electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting the required competencies as defined by Danielson's Domains.

Students will begin creating an electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting required competencies. Final portfolio will be submitted as part of the Formal Acceptance application. Students typically apply for Formal Acceptance in the spring of the second year.

Approval of the Education Program and any other appropriate major program is necessary for the application to be successful. Students are evaluated at the conclusion of each semester in accordance with the Education Program Teacher Dispositions/Foundational Competencies Policy. Students may be advised or required to withdraw from a program at any time the Education advisors determines such action to be appropriate.

**Basic Skills Assessment Policy**

*General Requirements*

- 22 Pa. Code § 49.18 (Assessment) requires an assessment of basic skills, professional knowledge and practice and subject matter knowledge. The basic skills assessment is comprised of three individual tests covering reading, writing and mathematics.
- Candidates may combine individual tests from different vendors to meet the basic skills requirement.

- Basic Skills Assessments in Reading, Writing and Mathematics may be met using SAT, ACT, PAPA and/or Praxis Core scores or a combination thereof. (Students must pass the basic skills in order to receive formal acceptance into the program)
- Candidates electing to use tests from different vendors cannot use a composite score. They must meet the qualifying score for each individual test.

### **Approved Basic Skills Assessments**

*The Pre-service Academic Performance Assessment (PAPA) modules in Reading, Writing and Mathematics.*

- Visit [www.pa.nesinc.com](http://www.pa.nesinc.com) to register for PAPA tests.
- Reading test 8001, Mathematics test 8002, Writing test 8003
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 220 is required on the Reading module, 193 on the Mathematics module and 220 on the writing module. A composite scoring option is available.

*The Core Academic Skills for Educators (CORE) modules in Reading, Writing and Mathematics.*

- Visit [www.ets.org/praxis/pa](http://www.ets.org/praxis/pa) to register for CORE tests
- Reading test 5713, Mathematics test 5733, Writing test 5723
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 156 (Reading), 162 (Writing), and 142 (Mathematics) is required. A composite scoring option is available.

*The Scholastic Achievement Test (SAT)*

- The Scholastic Achievement Test (SAT) must achieve a minimum score of 27 (Reading), 26 (Mathematics), and 28 (Writing and Language). It is recommended that intended Education majors submit their SAT scores to Elizabethtown College. There is no composite scoring option. SAT scores may be combined with other tests.
- Submit official test scores in the vendor-sealed envelope and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

*The American College Test (ACT) Plus Writing. There is no composite scoring option.*

- The American College Test (ACT) Plus Writing must achieve a minimum score of 22 (Reading), 8 (Writing), 21 (Mathematics). \*Candidates that opt out of the Writing portion of the ACT will be required to take the writing portion of the Basic Skills Assessment.
- Submit official test scores and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality, in an envelope sealed by the test vendor. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

Older basic skills tests, such as the PPST Reading, Writing, and Mathematics, are accepted if taken at the time they were required in Pennsylvania. Refer to the testing CSPG 21 for more information about replaced tests.

### **Basic Skills Assessment Exceptions**

- The basic skills assessment requirement is waived for all certificates as of November 1, 2014 if the applicant completed an approved post-baccalaureate certification program.
- Experienced Out-of-State Instructional Certificate Exception: As of July 1, 2011, applicants submitting a copy of a current and valid out-of-state instructional certificate that is comparable in grade and content area, plus verification of two years of full-time teaching experience, are not required to take the basic skills assessments.
- Vocational Certificate Exception: Effective July 1, 2014, candidates in post-baccalaureate vocational instructional programs are not required to take the basic skills assessment in reading and writing. The basic skills mathematics assessment is still required for vocational level II certification.
- PDE implemented an alternative means to achieve exemption from the Basic Skills assessment testing requirements. At this time, the alternative is for the mathematics portion of the assessment only. The Program will accept a grade of B (3.0) or higher in a specific college level math course. Program providers must identify the course(s) that best align with the competencies and best meet the PA Academic Standards.
  - The program provider can use the courses within their programs that satisfy the required six credits of mathematics for program entry as the coursework for meeting the basic skills assessment if the competencies are included in the coursework.
  - If a student has not met the exemption for the math portion of the basic skills assessment based on their ACT/SAT scores, they should consider the below courses on their schedule as these will meet the criteria put into place by PDE to be exempt from the mathematics portion of the Basic Skills Assessment. These are the only two approved courses that may be taken to meet the exemption. Students must achieve a grade of B or above in each course.
    - MA 205: Mathematics for the Elementary Teacher
    - MA 251: Probability and Statistics

### **Exit from the Programs**

Students seeking **award of the degree in the major only (without certification) must:**

- Receive approval of the Education Program and any other appropriate Program(s) for completion of their degree plan.
- Satisfy all requirements of the major, except the professional internship and Pennsylvania certification test results, with a cumulative/major grade point average of 2.00 or higher.
- Complete an alternative internship experience of at least six credits, as approved by the Education Program.

Students seeking **award of the degree in their major and certification must:**

- Satisfy all requirements of the major with the cumulative grade point average of 3.00 or higher.
- Earn a grade of Pass in the professional internship and senior seminar.
- Earn passing scores on the Pennsylvania Educator Certification Tests (PECT) and/or Praxis II series as it applies to your certification program. Students completing Early Childhood (PK-4) must take the PECT exam series, Elementary Middle Level (4-8) certifications take the Praxis series in core assessment and subject concentration, Secondary certification (7-12) take Praxis II in a content area and PK-12 (Music Education, Modern Languages – Spanish Education) must successfully complete the appropriate

Fundamental Subjects: Content Knowledge Test and Praxis II in a content area. Graduate candidates in Special Education (PK-12) must take the PECT exam series in special education.

For a comprehensive listing of testing requirements in Pennsylvania, please see  
<http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx#tab-1>.

Arrange for Basic Skills, PECT, and/or Praxis test scores to be sent to the Education Program showing passing scores on all required tests.

Complete two Mathematics (MA) courses and two English (EN) courses, one English Literature and one English Writing.

Formally and publicly present an electronic portfolio summarizing activities and experiences in professional education and demonstrating satisfaction of all required competencies.

Receive approval of the Education Program and appropriate major Program(s).

Submit the application for Pennsylvania certification to the Education Program.

**Early Childhood Education major with Special Education Certification requires:**

- ED 105 - Foundations of Teaching and Learning
- ED 150 - Early Childhood Development
- ED 161 - Integrated Technology I
- ED 212 - Children/Adolescent Literature
- ED 250 - Language and Literacy Development in Early Childhood
- ED 258 - Educational Assessment and Evaluation
- ED 325 - Methods for Teaching Science and Health in Early Childhood
- ED 335 - Methods for Teaching Mathematics in Early Childhood
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 345 - Methods for Teaching Reading and Writing in Early Childhood
- ED 360 - Integrated Strategies for Creative Expression in Early Childhood
- ED 365 - Methods for Teaching Social Studies in Early Childhood
- ED 470 - Professional Internship
- ED 495 - Senior Seminar for Early Childhood
- SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)
- SED 222 - Foundations of Inclusive Education (MSE 522)
- SED 224 - Methods of Teaching Students with High Incidence Disabilities (MSE 524)
- SED 230 - Methods of Teaching Students with Low Incidence Disabilities (MSE 530)
- SED 333 - Assessment in Special and Inclusive Education (MSE 533)
- SED 342 - Effective Instruction for Students with ASD and/or EBD (MSE 542)
- SED 344 - Intensive Reading, Writing, and Mathematics Intervention (MSE 544)

Additional Required Courses for Education Certification

- Math Core course
- MA 205 - Mathematics for the Elementary Teacher or other eligible Math course

- English literature course
- English writing course (EN 100 or EN 150)

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- ED 105 - Foundations of Teaching and Learning
- ED 150 - Early Childhood Development
- ED 161 - Integrated Technology I
- MA 205 - Mathematics for the Elementary Teacher
- Non-Cultural Heritage Core course (4 credits)
- Power of Language: Other Core course (4 credits)
- Humanities Core course (4 credits)

**Note:**

ED 105, ED 150, and ED 151 are approved to satisfy Social Science Core.

**Accreditation**

Elizabethtown College is in compliance with Title II of the Higher Education Act and disclosure reporting. Requests for disclosure information – i.e., teacher preparation programs, successes on passing state licensing and certification examinations, and job placement – may be obtained by contacting the Dean.

**Elementary/Middle Level Education (B.S.)**

**Student Learning Outcomes for Elementary/Middle Level Education:**

*Students will be able to:*

- Plan, design, and implement research-based instructional and assessment practices appropriate for children between fourth and eighth grade.
- Develop and apply instructional methodologies, including the use of technology, appropriate for children between fourth and eighth grade.
- Critically apply content knowledge and skills to facilitate student learning appropriate for students between fourth and eighth grade.
- Create, organize, and maintain an effective and safe classroom environment conducive to the learning and development of children between fourth and eighth grade.
- Design and implement successful interventions responsive to the needs of students between fourth and eighth grade.
- Exhibit the qualities that characterize a professional individual, including professional, ethical, and legal responsibilities of a certified teacher.
- Demonstrate an ongoing commitment to continued professional development and service.

Candidates for certification in **Elementary/Middle Level Education** must select an emphasis in one of four academic content areas and be a generalist in each of the other three academic content areas. The academic emphasis requires completion of a minimum of 30 credit hours in one of the following four content areas: 1) Mathematics, 2) Science, 3) English/Language Arts and Reading, or 4) Social Studies.

In addition to the one academic emphasis, candidates also are expected to generalize in the remaining three content areas by completing 12 credit hours in each. Students also complete a professional core organized into five areas: 1) Early Adolescent and Adolescent Development, Cognition and Learning; 2) Subject Matter Pedagogy Content (Grades Four through Eight); 3) Assessment; 4) Family and Community Partnerships; and 5) Professionalism. Content requirements are based on national standards for Elementary/Middle Level Education as well as Pennsylvania's curriculum standards. Candidates will have 190 hours of field experiences prior to student teaching.

**PLEASE NOTE:** A complete list of the foundational requirements (including a list of approved English Literature courses) can be found in the EDUCATION MANUAL.

Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.

To ensure that all students are prepared to apply for formal acceptance, it is recommended that students take a minimum of 16 credit hours per semester.

#### **FOUNDATIONAL REQUIREMENTS:**

Each teacher candidate is expected to meet the following criteria and to use the guidelines to ensure a successful application for formal acceptance:

- Provide updated clearances prior to starting Education courses including a record of Act 34 (PA Criminal Record), PA Child Abuse, FBI Criminal History Report, and TB test. These clearances must be less than one year old. Clearances are required to be updated every year.
- Declare their Education major by the end of their First Year.
- Submit a student life clearance by March of their First Year. (Complete the top portion only and bring to Nicarry 143)
- Complete ED 105 and ED 150/ED 151 with earned grades of C or better- this should be done within the first year (ED 105 Fall and ED 150/151 Spring). ED 161 should be taken within the first 4 semesters (FY and Second year- but recommend during FY). \*Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.
- Meet all requirements for Formal Acceptance as outlined in the manual.
- Submit a Student Life Clearance by March of first year (submit to Education office)

#### **PROGRESSION TO FORMAL ACCEPTANCE:**

Participate in a planning meeting with advisor if issues or concerns arise during three GPA checkpoints conducted by the School of Human and Health Professions.

- Checkpoint #1: GPA verification will be completed at the end of the first semester of First year (December of FY). A minimum cumulative 2.80 is recommended. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA.
- Checkpoint #2: GPA verification will be completed at the end of the second semester of First year (May of FY). A minimum cumulative 2.80 should be achieved. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA. Students will begin work on a professional electronic portfolio, to be submitted at the time of application for formal acceptance.

- Prior to Checkpoint #3- Students should have completed or be in the process of completing 27 credit hours. This will ensure that requirements for Formal Acceptance can be achieved.
- Checkpoint #3: GPA verification will be completed at the end of the first semester of Second year (December of Second year). A minimum 2.80 needs to be maintained with the goal of a minimum 3.0 being achieved by end spring of Second year.

**FORMAL ACCEPTANCE needed for 300-Level ED courses:**

- Complete two Mathematics (MA) courses and two English (EN) courses (one writing composition and one literature).
- Complete 54 credit hours with a cumulative grade point average of 3.00 or higher.
- Successfully complete at least three courses with ED prefixes.
- Receive a satisfactory on student life clearance (re-check of previous clearance)
- Provide a record of ACT 34 (PA Criminal Record), PA Child Abuse, ACT 24, FBI Criminal History Report, and a TB medical clearance. These clearances must be less than one year old.
- Receive passing scores on the Basic Skills Assessment (PAPA or Praxis Core) or the SAT/ACT equivalent score as mandated by PDE and submit a copy of your official score report (Basic Skills exam) to the Education office.
- Provide a completed electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting the required competencies as defined by Danielson's Domains.

Students will begin creating an electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting required competencies. Final portfolio will be submitted as part of the Formal Acceptance application. Students typically apply for Formal Acceptance in the spring of the second year.

Approval of the Education Program and any other appropriate major program is necessary for the application to be successful. Students are evaluated at the conclusion of each semester in accordance with the Education Program Teacher Dispositions/Foundational Competencies Policy. Students may be advised or required to withdraw from a program at any time the Education advisors determines such action to be appropriate.

**Basic Skills Assessment Policy**

*General Requirements*

- 22 Pa. Code § 49.18 (Assessment) requires an assessment of basic skills, professional knowledge and practice and subject matter knowledge. The basic skills assessment is comprised of three individual tests covering reading, writing and mathematics.
- Candidates may combine individual tests from different vendors to meet the basic skills requirement.
- Basic Skills Assessments in Reading, Writing and Mathematics may be met using SAT, ACT, PAPA and/or Praxis Core scores or a combination thereof. (Students must pass the basic skills in order to receive formal acceptance into the program)
- Candidates electing to use tests from different vendors cannot use a composite score. They must meet the qualifying score for each individual test.

### **Approved Basic Skills Assessments**

*The Pre-service Academic Performance Assessment (PAPA) modules in Reading, Writing and Mathematics.*

- Visit [www.pa.nesinc.com](http://www.pa.nesinc.com) to register for PAPA tests.
- Reading test 8001, Mathematics test 8002, Writing test 8003
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 220 is required on the Reading module, 193 on the Mathematics module and 220 on the writing module. A composite scoring option is available.

*The Core Academic Skills for Educators (CORE) modules in Reading, Writing and Mathematics.*

- Visit [www.ets.org/praxis/pa](http://www.ets.org/praxis/pa) to register for CORE tests
- Reading test 5713, Mathematics test 5733, Writing test 5723
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 156 (Reading), 162 (Writing), and 142 (Mathematics) is required. A composite scoring option is available.

*The Scholastic Achievement Test (SAT)*

- The Scholastic Achievement Test (SAT) must achieve a minimum score of 27 (Reading), 26 (Mathematics), and 28 (Writing and Language). It is recommended that intended Education majors submit their SAT scores to Elizabethtown College. There is no composite scoring option. SAT scores may be combined with other tests.
- Submit official test scores in the vendor-sealed envelope and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

*The American College Test (ACT) Plus Writing. There is no composite scoring option.*

- The American College Test (ACT) Plus Writing must achieve a minimum score of 22 (Reading), 8 (Writing), 21 (Mathematics). \*Candidates that opt out of the Writing portion of the ACT will be required to take the writing portion of the Basic Skills Assessment.
- Submit official test scores and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality, in an envelope sealed by the test vendor. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

Older basic skills tests, such as the PPST Reading, Writing, and Mathematics, are accepted if taken at the time they were required in Pennsylvania. Refer to the testing CSPG 21 for more information about replaced tests.

### **Basic Skills Assessment Exceptions**

- The basic skills assessment requirement is waived for all certificates as of November 1, 2014 if the applicant completed an approved post-baccalaureate certification program.

- Experienced Out-of-State Instructional Certificate Exception: As of July 1, 2011, applicants submitting a copy of a current and valid out-of-state instructional certificate that is comparable in grade and content area, plus verification of two years of full-time teaching experience, are not required to take the basic skills assessments.
- Vocational Certificate Exception: Effective July 1, 2014, candidates in post-baccalaureate vocational instructional programs are not required to take the basic skills assessment in reading and writing. The basic skills mathematics assessment is still required for vocational level II certification.
- PDE implemented an alternative means to achieve exemption from the Basic Skills assessment testing requirements. At this time, the alternative is for the mathematics portion of the assessment only. The Program will accept a grade of B (3.0) or higher in a specific college level math course. Program providers must identify the course(s) that best align with the competencies and best meet the PA Academic Standards.
  - The program provider can use the courses within their programs that satisfy the required six credits of mathematics for program entry as the coursework for meeting the basic skills assessment if the competencies are included in the coursework.
  - If a student has not met the exemption for the math portion of the basic skills assessment based on their ACT/SAT scores, they should consider the below courses on their schedule as these will meet the criteria put into place by PDE to be exempt from the mathematics portion of the Basic Skills Assessment. These are the only two approved courses that may be taken to meet the exemption. Students must achieve a grade of B or above in each course.
    - MA 205: Mathematics for the Elementary Teacher
    - MA 251: Probability and Statistics

#### **Exit from the Programs**

Students seeking **award of the degree in the major only (without certification)** must:

- Receive approval of the Education Program and any other appropriate Program(s) for completion of their degree plan.
- Satisfy all requirements of the major, except the professional internship and Pennsylvania certification test results, with a cumulative/major grade point average of 2.00 or higher.
- Complete an alternative internship experience of at least six credits, as approved by the Education Program.

Students seeking **award of the degree in their major and certification** must:

- Satisfy all requirements of the major with the cumulative grade point average of 3.00 or higher.
- Earn a grade of Pass in the professional internship and senior seminar.
- Earn passing scores on the Pennsylvania Educator Certification Tests (PECT) and/or Praxis II series as it applies to your certification program. Students completing Early Childhood (PK-4) must take the PECT exam series, Elementary Middle Level (4-8) certifications take the Praxis series in core assessment and subject concentration, Secondary certification (7-12) take Praxis II in a content area and PK-12 (Music Education, Modern Languages – Spanish Education) must successfully complete the appropriate Fundamental Subjects: Content Knowledge Test and Praxis II in a content area. Graduate candidates in Special Education (PK-12) must take the PECT exam series in special education.

For a comprehensive listing of testing requirements in Pennsylvania, please see

<http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx#tab-1>.

Arrange for Basic Skills, PECT, and/or Praxis test scores to be sent to the Education Program showing passing scores on all required tests.

Complete two Mathematics (MA) courses and two English (EN) courses, one English Literature and one English Writing.

Formally and publicly present an electronic portfolio summarizing activities and experiences in professional education and demonstrating satisfaction of all required competencies.

Receive approval of the Education Program and appropriate major Program(s).

Submit the application for Pennsylvania certification to the Education Program.

**Elementary/Middle Level Education – Language Arts/Reading/English emphasis consists of:**

Professional Education Courses (42 credits):

- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- ED 258 - Educational Assessment and Evaluation
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 470 - Professional Internship
- ED 496 - Senior Seminar for Elementary/ Middle Level
- SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)
- SED 222 - Foundations of Inclusive Education (MSE 522)

Reading/English Content Courses (32 credits):

- ED 317 - Assessing Student Literacies in Grades PK-8
- ED 346 - Methods for Teaching Reading and Writing in Elementary/Middle Level
- Five Program-approved English electives
  
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language

Required Mathematics Sequence (12 credits):

- MA 205 - Mathematics for the Elementary Teacher or
- MA 251 - MA Probability and Statistics
  
- ED 336 - Methods for Teaching Mathematics in Elementary/Middle Level
- One Program-approved Mathematics elective

Required Science Sequence (12 credits):

- ED 326 - Methods for Teaching Science and Health in Elementary/Middle Level
- Two Program-approved Science electives

Required Social Studies Sequence (12 credits):

- SO 204 - SSC Population and Global Issues or
- PS 342 - Pennsylvania Politics and Policy (PP 542)
  
- ED 366 - Methods for Teaching Social Studies in Elementary/Middle Level
- One Program-approved Social Studies elective

First Year Suggested Courses:

- FYS 100 - First-Year Seminar
  
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
  
- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- MA 205 - Mathematics for the Elementary Teacher
- Natural and Physical Science Core course (4 credits)
- Power of Language: Other Core course (4 credits)

**Elementary/Middle Level Education – Mathematics emphasis consists of:**

Professional Education Courses (46 credits):

- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- ED 258 - Educational Assessment and Evaluation
- ED 317 - Assessing Student Literacies in Grades PK-8
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 470 - Professional Internship
- ED 496 - Senior Seminar for Elementary/ Middle Level
- SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)
- SED 222 - Foundations of Inclusive Education (MSE 522)

Required Mathematics Sequence (32 credits):

- ED 336 - Methods for Teaching Mathematics in Elementary/Middle Level
- One Program-approved introductory Mathematics elective
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- MA 251 - MA Probability and Statistics
- Three Program-approved advanced Mathematics electives

Required Reading/English Sequence (12 credits):

- ED 346 - Methods for Teaching Reading and Writing in Elementary/Middle Level
- One English writing course (EN 100 or EN 150)
- One Program-approved English literature course

Required Science Content Courses (12 credits):

- ED 326 - Methods for Teaching Science and Health in Elementary/Middle Level
- Two Program-approved Science electives

Required Social Studies Sequence (12 credits):

- ED 366 - Methods for Teaching Social Studies in Elementary/Middle Level
- Two Program-approved Social Studies electives

First Year Suggested Courses:

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- MA 121 - MA Calculus I
- Non-Cultural Heritage Core course (4 credits)
- Humanities Core course (4 credits)

**Elementary/Middle Level Education – Science emphasis consists of:**

Professional Education Courses (46 credits):

- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- ED 258 - Educational Assessment and Evaluation
- ED 317 - Assessing Student Literacies in Grades PK-8
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 470 - Professional Internship
- ED 496 - Senior Seminar for Elementary/ Middle Level
- SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)
- SED 222 - Foundations of Inclusive Education (MSE 522)

Required Science Content Courses (32 credits):

- ED 326 - Methods for Teaching Science and Health in Elementary/Middle Level
- ES 113 - NPS Earth in Space: Evolution of a Planet or
- ES 114 - NPS Geosystems: Landscapes, Oceans and Atmosphere
- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- CH 101 - NPS General Chemistry: Practical Principles or
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science or
- CH 109 - NPS Introduction to Forensic Science
- PHY 101 - General Physics I or
- PHY 105 - NPS How Things Work
- Eight credits of 200- or 300- level Biology electives

Required Mathematics Sequence (12 credits):

- MA 205 - Mathematics for the Elementary Teacher or
- MA 251 - MA Probability and Statistics
- ED 336 - Methods for Teaching Mathematics in Elementary/Middle Level
- One Program-approved Mathematics elective

Required Reading/English Sequence (12 credits):

- ED 346 - Methods for Teaching Reading and Writing in Elementary/Middle Level
- One English writing course (EN 100 or EN 150)
- One Program-approved English literature course

Required Social Studies Sequence (12 credits):

- SO 204 - SSC Population and Global Issues
- ED 366 - Methods for Teaching Social Studies in Elementary/Middle Level
- One Program-approved Social Studies elective

First Year Suggested Courses:

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language

- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- MA 205 - Mathematics for the Elementary Teacher
- Non-Western Cultural Heritage Core course (4 credits)

**Elementary/Middle Level Education – Social Studies emphasis consists of:**

Professional Education Courses (46 credits):

- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 258 - Educational Assessment and Evaluation
- ED 317 - Assessing Student Literacies in Grades PK-8
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 470 - Professional Internship
- ED 496 - Senior Seminar for Elementary/ Middle Level
- SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)
- SED 222 - Foundations of Inclusive Education (MSE 522)

Required Social Studies Sequence (32 credits):

- SO 204 - SSC Population and Global Issues
- PS 342 - Pennsylvania Politics and Policy (PP 542)
- ED 366 - Methods for Teaching Social Studies in Elementary/Middle Level
- EC 101 - SSC Principles of Macroeconomics
- HI 101 - HUM United States History to 1877
- HI 102 - HUM United States History Since 1877
- HI 114 - WCH Western Civilization I or
- HI 115 - WCH Western Civilization II
- One Program-approved Social Studies elective

Required Mathematics Sequence (12 credits):

- ED 336 - Methods for Teaching Mathematics in Elementary/Middle Level
- MA 205 - Mathematics for the Elementary Teacher or
- MA 251 - MA Probability and Statistics
- One Program-approved Mathematics elective

Required Reading/English Sequence (12 credits):

- ED 346 - Methods for Teaching Reading and Writing in Elementary/Middle Level
- One English writing course (EN 100 or EN 150)
- One Program-approved English literature course

Required Science Content Courses (12 credits):

- ED 326 - Methods for Teaching Science and Health in Elementary/Middle Level
- Two Program-approved Science electives

First Year Suggested Courses:

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- HI 101 - HUM United States History to 1877
- HI 102 - HUM United States History Since 1877
- MA 205 - Mathematics for the Elementary Teacher

**Notes:**

Students must be scheduled for ED 105 in the fall and ED 151 in the spring, before the end of their first year. Completing both before the sophomore year is critical.

All Education majors must complete two English courses (one writing and one literature) and two Math courses (MA prefix) by the end of their sophomore year.

ED 150 and ED 151 are approved to satisfy Social Science Core.

**Accreditation**

Elizabethtown College is in compliance with Title II of the Higher Education Act and disclosure reporting. Requests for disclosure information – i.e., teacher preparation programs, successes on passing state licensing and certification examinations, and job placement – may be obtained by contacting the Dean.

**Exercise Science (B.S.)**

**The Exercise Science major requires:**

- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 201 - Human Anatomy and Physiology I

- BIO 202 - Human Anatomy and Physiology II
- BIO 220 - Nutrition
- EGR 323 - Biomechanics of Human Movement
- PBH 111 - Principles of Public Health
- PSY 105 - SSC Introduction to Psychology
- PSY 220 - Health Psychology
- PSY 247 - Lifespan Development
- BA 215 - Principles of Marketing
- BA 265 - Management and Organizational Behavior
- ESC 100 - Introduction to Exercise Science
- ESC 150 - First Aid, CPR, and Medical Terminology
- ESC 200 - Exercise Physiology I
- ESC 220 - Exercise Physiology II
- ESC 230 - Fitness Testing and Exercise Prescription
- ESC 240 - Strength Training and Conditioning
- ESC 250 - Prevention and Wellness Promotion
- ESC 300 - Nutrition in Sports and Exercise
- ESC 320 - Exercise and Special Populations
- ESC 330 - Professional Communication
- ESC 470-474 - Exercise Science Internship
- ESC 495 - Exercise Science Senior Seminar

## **Health Sciences (B.S.)**

### **Student Learning Outcomes for Health Sciences:**

*Students will be able to:*

- Analyze the factors that enable and/or hinder participation in meaningful occupations across the lifespan in multiple contexts.
- Articulate the importance of occupation and its influence on health and wellness.
- Analyze the body of evidence that relates to the understanding of health and human occupation.
- Apply knowledge of culture and global health care patterns and systems to analyze complex cases.
- Demonstrate professionalism through effective oral and written communication.
- Demonstrate professionalism through interpersonal relationships.
- Demonstrate critical self-reflection, promoting independent learning.

This degree serves as a prerequisite to the Master of Science in Occupational Therapy. Students completing only this course of study are not eligible to become registered occupational therapists, but have academic credentials that qualify them to be employed in health care and community settings. Students are required to complete 128 credits to obtain their degree.

### **The Health Sciences major requires:**

Off-campus experiential learning includes service-learning and clinical placements.

- OT 105 - Introduction to Health and Wellness
- OT 110 - Occupations across the Lifespan
- OT 205 - Evidence-Based Practice Foundation
- OT 210 - Global Health Care Systems
- OT 305 - Conditions and the Implications for Occupational Performance
- OT 310 - Occupations and Activity Analysis
- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 201 - Human Anatomy and Physiology I
- BIO 202 - Human Anatomy and Physiology II
- MA 251 - MA Probability and Statistics
- PSY 105 - SSC Introduction to Psychology
- NEU 125 - NPS Introduction to Neuroscience

**Fourth Year Suggested Courses (if accepted into the OT graduate degree program by meeting the entrance requirements):**

- OT 505 - Occupational Therapy Evaluation: Adult Populations
- OT 515 - Occupational Therapy Evaluation: Pediatric Populations
- OT 525 - Occupational Therapy History and Theory
- OT 532 - Occupational Therapy Intervention: Adult Populations
- OT 533 - Occupational Therapy Intervention: Pediatric Populations
- OT 534 - Scholarship I: Analysis of the Literature
- Two Elective courses (8 credits total)

If students do not meet the entrance requirements to move onto the Occupational Therapy graduate degree program by the end of the junior year, they may complete the B.S. in Health Sciences Degree in the senior year with the following requirements: 20 credits of elective courses at the 300-400 level as approved by the Occupational Therapy Program.

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- BIO 111 - Molecules, Cells, & Animal Systems
- OT 105 - Introduction to Health and Wellness
- OT 110 - Occupations across the Lifespan
- PSY 105 - SSC Introduction to Psychology
- MA 251 - MA Probability and Statistics
- Power of Language: Other Core course (4 credits)

**Notes:**

All OT courses must be taken in the semester indicated. BIO 111 needs to be completed in the fall semester of the first year. MA 251 needs to be completed in the first year.

Student should take 16 credits each semester of the first year.

If possible, avoid taking Social Sciences core other than PSY 105 or Natural and Physical Sciences core other than BIO 111 and PSY 125, as these courses are required in the major. If students complete other courses (that will ultimately count as electives) in these areas of understanding, it creates challenges related to completing requirements for minors and studying abroad.

First year students have already been notified of their acceptance into the occupational therapy program. Each first year student is assigned a faculty contact person from the program. A student with further questions should be referred to his/her contact person or to the School chair.

Any student who receives a C- or below in OT 105, OT 110, OT 205, OT 210, PSY 105, NEU 125, or BIO 111 should consult with both their advisor and the OT faculty contact person.

**Additional requirements for the Bachelor of Science in Health Sciences:**

All OT students (including transfers) must take Anatomy and Physiology (BIO 201 and BIO 202) at Elizabethtown College.

OT students must achieve a grade of C- or higher in all required courses, including all courses with an OT prefix; MA 251; PSY 105 and NEU 125; and BIO 111, BIO 201 and BIO 202. Students may repeat courses in accordance with College policies. Students choosing to repeat a course required for the major are strongly encouraged to discuss repeat options with their academic advisors.

Students must achieve an overall cumulative grade point average of 2.00 to earn a Bachelor of Science in Health Sciences.

**Requirements for admission into the Graduate Program:**

OT students must achieve a minimum cumulative grade point average of 2.9 by the end of the junior year to be admitted into the OT graduate degree program.

Students, in conjunction with their academic advisor, must also complete an essay to capture their professional development over their academic career. The purpose of this essay is to identify professional growth goals for entry-level practice. No student will be excluded from the graduate program based on the essay. If the composition does not meet the required expectations, repeated drafts guided by the academic advisor may be necessary. Essays are due at the end of the junior year to the Program Director by May 1.

**Accreditation**

The Occupational Therapy program has maintained a fully-accredited status since 1976 by the Accreditation Council for Occupational Therapy Education (ACOTE). The BS/MS Occupational Therapy degree program is fully accredited. The Doctorate in Occupational Therapy (OTD) has received Candidacy accreditation status. The organization can be contacted at ACOTE, c/o Accreditation Department, American Occupational Therapy Association (AOTA), Box 31220, 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449; (phone) 301-652-2682; (fax) 301-652-1417; [www.acoteonline.org](http://www.acoteonline.org).

## **Physics Secondary Education (B.S.)**

### **Student Learning Outcomes for Secondary Education:**

*Students will be able to:*

- identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- communicate effectively with a range of audiences
- recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- acquire and apply new knowledge as needed, using appropriate learning strategies.

A **Secondary Education major in Physics** is offered in conjunction with the Education Program and leads to Pennsylvania teacher certification at the secondary level.

Physics Education majors may substitute PHY 201 for one of their Natural and Physical Science Core courses. Engineering and Physics students must earn a C- or better in ALL prerequisite Engineering and Physics courses to continue in the major. The required math courses will satisfy the requirement of two math courses for Education certification.

**PLEASE NOTE:** A complete list of the foundational requirements (including a list of approved English Literature courses) can be found in the EDUCATION MANUAL.

To ensure that all students are prepared to apply for formal acceptance, it is recommended that students take a minimum of 16 credit hours per semester.

### **FOUNDATIONAL REQUIREMENTS:**

Each teacher candidate is expected to meet the following criteria and to use the guidelines to ensure a successful application for formal acceptance:

- Provide updated clearances prior to starting Education courses including a record of Act 34 (PA Criminal Record), PA Child Abuse, FBI Criminal History Report, and TB test. These clearances must be less than one year old. Clearances are required to be updated every year.
- Declare their Education major by the end of their First Year.
- Submit a student life clearance by March of their First Year. (Complete the top portion only and bring to Nicarry 143)
- Complete ED 105 and ED 150/ED 151 with earned grades of C or better- this should be done within the first year (ED 105 Fall and ED 150/151 Spring). ED 161 should be taken within the first 4 semesters (FY

and Second year- but recommend during FY). \*Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.

- Meet all requirements for Formal Acceptance as outlined in the manual.
- Submit a Student Life Clearance by March of first year (submit to Education office)

#### **PROGRESSION TO FORMAL ACCEPTANCE:**

Participate in a planning meeting with advisor if issues or concerns arise during three GPA checkpoints conducted by the School of Human and Health Professions.

- Checkpoint #1: GPA verification will be completed at the end of the first semester of First year (December of FY). A minimum cumulative 2.80 is recommended. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA.
- Checkpoint #2: GPA verification will be completed at the end of the second semester of First year (May of FY). A minimum cumulative 2.80 should be achieved. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA. Students will begin work on a professional electronic portfolio, to be submitted at the time of application for formal acceptance.
- Prior to Checkpoint #3- Students should have completed or be in the process of completing 27 credit hours. This will ensure that requirements for Formal Acceptance can be achieved.
- Checkpoint #3: GPA verification will be completed at the end of the first semester of Second year (December of Second year). A minimum 2.80 needs to be maintained with the goal of a minimum 3.0 being achieved by end spring of Second year.

#### **FORMAL ACCEPTANCE needed for 300-Level ED courses:**

- Complete two Mathematics (MA) courses and two English (EN) courses (one writing composition and one literature).
- Complete 54 credit hours with a cumulative grade point average of 3.00 or higher.
- Successfully complete at least three courses with ED prefixes.
- Receive a satisfactory on student life clearance (re-check of previous clearance)
- Provide a record of ACT 34 (PA Criminal Record), PA Child Abuse, ACT 24, FBI Criminal History Report, and a TB medical clearance. These clearances must be less than one year old.
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Approval of the Education Program and any other appropriate major program is necessary for the application to be successful. Students are evaluated at the conclusion of each semester in accordance with the Education Program Teacher Dispositions/Foundational Competencies Policy. Students may be advised or required to withdraw from a program at any time the Education advisors determines such action to be appropriate.

## **Basic Skills Assessment Policy**

### *General Requirements*

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- Candidates electing to use tests from different vendors cannot use a composite score. They must meet the qualifying score for each individual test.

### **Approved Basic Skills Assessments**

#### *The Pre-service Academic Performance Assessment (PAPA) modules in Reading, Writing and Mathematics.*

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- Reading test 8001, Mathematics test 8002, Writing test 8003
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- A minimum score of 220 is required on the Reading module, 193 on the Mathematics module and 220 on the writing module. A composite scoring option is available.

#### *The Core Academic Skills for Educators (CORE) modules in Reading, Writing and Mathematics.*

- Visit [www.ets.org/praxis/pa](http://www.ets.org/praxis/pa) to register for CORE tests
- Reading test 5713, Mathematics test 5733, Writing test 5723
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 156 (Reading), 162 (Writing), and 142 (Mathematics) is required. A composite scoring option is available.

#### *The Scholastic Achievement Test (SAT)*

- The Scholastic Achievement Test (SAT) must achieve a minimum score of 27 (Reading), 26 (Mathematics), and 28 (Writing and Language). It is recommended that intended Education majors submit their SAT scores to Elizabethtown College. There is no composite scoring option. SAT scores may be combined with other tests.
- Submit official test scores in the vendor-sealed envelope and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality. Scores may also

be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

*The American College Test (ACT) Plus Writing. There is no composite scoring option.*

- The American College Test (ACT) Plus Writing must achieve a minimum score of 22 (Reading), 8 (Writing), 21 (Mathematics). \*Candidates that opt out of the Writing portion of the ACT will be required to take the writing portion of the Basic Skills Assessment.
- Submit official test scores and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality, in an envelope sealed by the test vendor. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

Older basic skills tests, such as the PPST Reading, Writing, and Mathematics, are accepted if taken at the time they were required in Pennsylvania. Refer to the testing CSPG 21 for more information about replaced tests.

### **Basic Skills Assessment Exceptions**

- The basic skills assessment requirement is waived for all certificates as of November 1, 2014 if the applicant completed an approved post-baccalaureate certification program.
- Experienced Out-of-State Instructional Certificate Exception: As of July 1, 2011, applicants submitting a copy of a current and valid out-of-state instructional certificate that is comparable in grade and content area, plus verification of two years of full-time teaching experience, are not required to take the basic skills assessments.
- Vocational Certificate Exception: Effective July 1, 2014, candidates in post-baccalaureate vocational instructional programs are not required to take the basic skills assessment in reading and writing. The basic skills mathematics assessment is still required for vocational level II certification.
- PDE implemented an alternative means to achieve exemption from the Basic Skills assessment testing requirements. At this time, the alternative is for the mathematics portion of the assessment only. The Program will accept a grade of B (3.0) or higher in a specific college level math course. Program providers must identify the course(s) that best align with the competencies and best meet the PA Academic Standards.
  - The program provider can use the courses within their programs that satisfy the required six credits of mathematics for program entry as the coursework for meeting the basic skills assessment if the competencies are included in the coursework.
  - If a student has not met the exemption for the math portion of the basic skills assessment based on their ACT/SAT scores, they should consider the below courses on their schedule as these will meet the criteria put into place by PDE to be exempt from the mathematics portion of the Basic Skills Assessment. These are the only two approved courses that may be taken to meet the exemption. Students must achieve a grade of B or above in each course.
    - MA 205: Mathematics for the Elementary Teacher
    - MA 251: Probability and Statistics

### **Exit from the Programs**

Students seeking **award of the degree in the major only (without certification) must:**

- Receive approval of the Education Program and any other appropriate Program(s) for completion of their degree plan.

- Satisfy all requirements of the major, except the professional internship and Pennsylvania certification test results, with a cumulative/major grade point average of 2.00 or higher.
- Complete an alternative internship experience of at least six credits, as approved by the Education Program.

**Students seeking award of the degree in their major and certification must:**

- Satisfy all requirements of the major with the cumulative grade point average of 3.00 or higher.
- Earn a grade of Pass in the professional internship and senior seminar.
- Earn passing scores on the Pennsylvania Educator Certification Tests (PECT) and/or Praxis II series as it applies to your certification program. Students completing Early Childhood (PK-4) must take the PECT exam series, Elementary Middle Level (4-8) certifications take the Praxis series in core assessment and subject concentration, Secondary certification (7-12) take Praxis II in a content area and PK-12 (Music Education, Modern Languages – Spanish Education) must successfully complete the appropriate Fundamental Subjects: Content Knowledge Test and Praxis II in a content area. Graduate candidates in Special Education (PK-12) must take the PECT exam series in special education.

For a comprehensive listing of testing requirements in Pennsylvania, please see  
<http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx#tab-1>.

Arrange for Basic Skills, PECT, and/or Praxis test scores to be sent to the Education Program showing passing scores on all required tests.

Complete two Mathematics (MA) courses and two English (EN) courses, one English Literature and one English Writing.

Formally and publicly present an electronic portfolio summarizing activities and experiences in professional education and demonstrating satisfaction of all required competencies.

Receive approval of the Education Program and appropriate major Program(s).

Submit the application for Pennsylvania certification to the Education Program.

**Required courses for this major are:**

- PHY 120 - Introductory Mathematics for Physics
- PHY 201 - College Physics I
- PHY 202 - College Physics II
- PHY 203 - College Physics III
- ES 113 - NPS Earth in Space: Evolution of a Planet or
- ES 114 - NPS Geosystems: Landscapes, Oceans and Atmosphere
- EGR 210 - Circuit Analysis
- EGR 467 - Thermodynamics
- BIO 101 - NPS Biological Concepts
- BIO 113 - NPS Introduction to Environmental Science
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CS 121 - Computer Science I
- MA 121 - MA Calculus I

- MA 122 - Calculus II
- MA 222 - Calculus III

**Education Courses:**

- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)
- SED 222 - Foundations of Inclusive Education (MSE 522)
- ED 305 - Methods of Secondary Education
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 470 - Professional Internship
- ED 497 - Senior Seminar for Secondary Education
- Two English courses for Education certification, one literature and one writing (EN 100 or EN 150)
- Two Math courses for Education certification

**Suggested first year courses:**

Fall semester:

- ED 105 - Foundations of Teaching and Learning
- PHY 120 - Introductory Mathematics for Physics or
- MA 121 - MA Calculus I
- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language

Spring semester:

- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- PHY 201 - College Physics I
- MA 121 - MA Calculus I or
- MA 122 - Calculus II

**Notes:**

Education majors may substitute ED 224 for their Western-Cultural Heritage Core.

ED 150 and ED 151 are approved to satisfy Social Science Core.

## Accreditation

Elizabethtown College is in compliance with Title II of the Higher Education Act and disclosure reporting. Requests for disclosure information – i.e., teacher preparation programs, successes on passing state licensing and certification examinations, and job placement – may be obtained by contacting the Dean.

## Social Studies (B.S.)

### Student Learning Outcomes for Social Studies certification:

*Students will be able to:*

- Plan, design, and implement research-based instructional and assessment practices appropriate for students between seventh and twelve grades.
- Develop and apply instructional methodologies, including the use of technology, appropriate for students between seventh and twelve grades.
- Demonstrate content knowledge in the disciplines of social studies - history, economics, geography, civics and government, sociology, anthropology, and psychology.
- Critically apply content knowledge and skills germane to the disciplines of social studies to facilitate student learning appropriate for students between seventh and twelve grades.
- Create, organize, and maintain an effective and safe classroom environment conducive to the learning and development of students between seventh and twelve grades.
- Design and implement successful interventions responsive to the needs of students between seventh and twelve grades.
- Exhibit the qualities that characterize a professional individual, including professional, ethical, and legal responsibilities of a certified teacher.
- Demonstrate an ongoing commitment to continued professional development and service.

Students pursuing a **Social Studies certification** acquire a mastery of the various subject fields that are part of a secondary social studies curriculum. In addition, the program provides training in the techniques of teaching, along with actual teaching experience in a social studies classroom. Upon successful completion of the program, students are certified to teach social studies in secondary schools in Pennsylvania and, by reciprocal agreement, in several other states.

PLEASE NOTE: A complete list of the foundational requirements (including a list of approved English Literature courses) can be found in the EDUCATION MANUAL.

To ensure that all students are prepared to apply for formal acceptance, it is recommended that students take a minimum of 16 credit hours per semester.

## FOUNDATIONAL REQUIREMENTS:

Each teacher candidate is expected to meet the following criteria and to use the guidelines to ensure a successful application for formal acceptance:

- Provide updated clearances prior to starting Education courses including a record of Act 34 (PA Criminal Record), PA Child Abuse, FBI Criminal History Report, and TB test. These clearances must be less than one year old. Clearances are required to be updated every year.
- Declare their Education major by the end of their First Year.

- Submit a student life clearance by March of their First Year. (Complete the top portion only and bring to Nicarry 143)
- Complete ED 105 and ED 150/ED 151 with earned grades of C or better- this should be done within the first year (ED 105 Fall and ED 150/151 Spring). ED 161 should be taken within the first 4 semesters (FY and Second year- but recommend during FY). \*Education majors may substitute ED 150 or ED 151 to satisfy their Social Science Core course.
- Meet all requirements for Formal Acceptance as outlined in the manual.
- Submit a Student Life Clearance by March of first year (submit to Education office)

#### **PROGRESSION TO FORMAL ACCEPTANCE:**

Participate in a planning meeting with advisor if issues or concerns arise during three GPA checkpoints conducted by the School of Human and Health Professions.

- Checkpoint #1: GPA verification will be completed at the end of the first semester of First year (December of FY). A minimum cumulative 2.80 is recommended. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA.
- Checkpoint #2: GPA verification will be completed at the end of the second semester of First year (May of FY). A minimum cumulative 2.80 should be achieved. If GPA is below a 2.8, the teacher candidate will work with their education advisor to design a plan to raise the GPA. Students will begin work on a professional electronic portfolio, to be submitted at the time of application for formal acceptance.
- Prior to Checkpoint #3- Students should have completed or be in the process of completing 27 credit hours. This will ensure that requirements for Formal Acceptance can be achieved.
- Checkpoint #3: GPA verification will be completed at the end of the first semester of Second year (December of Second year). A minimum 2.80 needs to be maintained with the goal of a minimum 3.0 being achieved by end spring of Second year.

#### **FORMAL ACCEPTANCE needed for 300-Level ED courses:**

- Complete two Mathematics (MA) courses and two English (EN) courses (one writing composition and one literature).
- Complete 54 credit hours with a cumulative grade point average of 3.00 or higher.
- Successfully complete at least three courses with ED prefixes.
- Receive a satisfactory on student life clearance (re-check of previous clearance)
- Provide a record of ACT 34 (PA Criminal Record), PA Child Abuse, ACT 24, FBI Criminal History Report, and a TB medical clearance. These clearances must be less than one year old.
- Receive passing scores on the Basic Skills Assessment (PAPA or Praxis Core) or the SAT/ACT equivalent score as mandated by PDE and submit a copy of your official score report (Basic Skills exam) to the Education office.
- Provide a completed electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting the required competencies as defined by Danielson's Domains.

Students will begin creating an electronic portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting required competencies. Final portfolio will be submitted as part of the Formal Acceptance application. Students typically apply for Formal Acceptance in the spring of the second year.

Approval of the Education Program and any other appropriate major program is necessary for the application to be successful. Students are evaluated at the conclusion of each semester in accordance with the Education Program Teacher Dispositions/Foundational Competencies Policy. Students may be advised or required to withdraw from a program at any time the Education advisors determines such action to be appropriate.

### **Basic Skills Assessment Policy**

#### *General Requirements*

- 22 Pa. Code § 49.18 (Assessment) requires an assessment of basic skills, professional knowledge and practice and subject matter knowledge. The basic skills assessment is comprised of three individual tests covering reading, writing and mathematics.
- Candidates may combine individual tests from different vendors to meet the basic skills requirement.
- Basic Skills Assessments in Reading, Writing and Mathematics may be met using SAT, ACT, PAPA and/or Praxis Core scores or a combination thereof. (Students must pass the basic skills in order to receive formal acceptance into the program)
- Candidates electing to use tests from different vendors cannot use a composite score. They must meet the qualifying score for each individual test.

### **Approved Basic Skills Assessments**

*The Pre-service Academic Performance Assessment (PAPA) modules in Reading, Writing and Mathematics.*

- Visit [www.pa.nesinc.com](http://www.pa.nesinc.com) to register for PAPA tests.
- Reading test 8001, Mathematics test 8002, Writing test 8003
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 220 is required on the Reading module, 193 on the Mathematics module and 220 on the writing module. A composite scoring option is available.

*The Core Academic Skills for Educators (CORE) modules in Reading, Writing and Mathematics.*

- Visit [www.ets.org/praxis/pa](http://www.ets.org/praxis/pa) to register for CORE tests
- Reading test 5713, Mathematics test 5733, Writing test 5723
- Scores must be electronically submitted directly to PDE (Pennsylvania Dept. of Education) and Elizabethtown College, from the test vendor. In addition, candidates must submit an official copy of the score report to the Education Program office.
- A minimum score of 156 (Reading), 162 (Writing), and 142 (Mathematics) is required. A composite scoring option is available.

*The Scholastic Achievement Test (SAT)*

- The Scholastic Achievement Test (SAT) must achieve a minimum score of 27 (Reading), 26 (Mathematics), and 28 (Writing and Language). It is recommended that intended Education majors submit their SAT scores to Elizabethtown College. There is no composite scoring option. SAT scores may be combined with other tests.
- Submit official test scores in the vendor-sealed envelope and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality. Scores may also

be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

*The American College Test (ACT) Plus Writing. There is no composite scoring option.*

- The American College Test (ACT) Plus Writing must achieve a minimum score of 22 (Reading), 8 (Writing), 21 (Mathematics). \*Candidates that opt out of the Writing portion of the ACT will be required to take the writing portion of the Basic Skills Assessment.
- Submit official test scores and a TIMS application cover sheet to the Pennsylvania Program of Education, Bureau of School Leadership and Teacher Quality, in an envelope sealed by the test vendor. Scores may also be verified from an official score report by (1) the Pennsylvania Approved Preparation Programs through TIMS; or (2) sent directly from the high school to the Bureau.

Older basic skills tests, such as the PPST Reading, Writing, and Mathematics, are accepted if taken at the time they were required in Pennsylvania. Refer to the testing CSPG 21 for more information about replaced tests.

### **Basic Skills Assessment Exceptions**

- The basic skills assessment requirement is waived for all certificates as of November 1, 2014 if the applicant completed an approved post-baccalaureate certification program.
- Experienced Out-of-State Instructional Certificate Exception: As of July 1, 2011, applicants submitting a copy of a current and valid out-of-state instructional certificate that is comparable in grade and content area, plus verification of two years of full-time teaching experience, are not required to take the basic skills assessments.
- Vocational Certificate Exception: Effective July 1, 2014, candidates in post-baccalaureate vocational instructional programs are not required to take the basic skills assessment in reading and writing. The basic skills mathematics assessment is still required for vocational level II certification.
- PDE implemented an alternative means to achieve exemption from the Basic Skills assessment testing requirements. At this time, the alternative is for the mathematics portion of the assessment only. The Program will accept a grade of B (3.0) or higher in a specific college level math course. Program providers must identify the course(s) that best align with the competencies and best meet the PA Academic Standards.
  - The program provider can use the courses within their programs that satisfy the required six credits of mathematics for program entry as the coursework for meeting the basic skills assessment if the competencies are included in the coursework.
  - If a student has not met the exemption for the math portion of the basic skills assessment based on their ACT/SAT scores, they should consider the below courses on their schedule as these will meet the criteria put into place by PDE to be exempt from the mathematics portion of the Basic Skills Assessment. These are the only two approved courses that may be taken to meet the exemption. Students must achieve a grade of B or above in each course.
    - MA 205: Mathematics for the Elementary Teacher
    - MA 251: Probability and Statistics

### **Exit from the Programs**

Students seeking **award of the degree in the major only (without certification) must:**

- Receive approval of the Education Program and any other appropriate Program(s) for completion of their degree plan.

- Satisfy all requirements of the major, except the professional internship and Pennsylvania certification test results, with a cumulative/major grade point average of 2.00 or higher.
- Complete an alternative internship experience of at least six credits, as approved by the Education Program.

**Students seeking award of the degree in their major and certification must:**

- Satisfy all requirements of the major with the cumulative grade point average of 3.00 or higher.
- Earn a grade of Pass in the professional internship and senior seminar.
- Earn passing scores on the Pennsylvania Educator Certification Tests (PECT) and/or Praxis II series as it applies to your certification program. Students completing Early Childhood (PK-4) must take the PECT exam series, Elementary Middle Level (4-8) certifications take the Praxis series in core assessment and subject concentration, Secondary certification (7-12) take Praxis II in a content area and PK-12 (Music Education, Modern Languages – Spanish Education) must successfully complete the appropriate Fundamental Subjects: Content Knowledge Test and Praxis II in a content area. Graduate candidates in Special Education (PK-12) must take the PECT exam series in special education.

For a comprehensive listing of testing requirements in Pennsylvania, please see  
<http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx#tab-1>.

Arrange for Basic Skills, PECT, and/or Praxis test scores to be sent to the Education Program showing passing scores on all required tests.

Complete two Mathematics (MA) courses and two English (EN) courses, one English Literature and one English Writing.

Formally and publicly present an electronic portfolio summarizing activities and experiences in professional education and demonstrating satisfaction of all required competencies.

Receive approval of the Education Program and appropriate major Program(s).

Submit the application for Pennsylvania certification to the Education Program.

**Requirements for Social Studies certification include:**

- HI 101 - HUM United States History to 1877
- HI 102 - HUM United States History Since 1877
- HI 114 - WCH Western Civilization I or
- HI 115 - WCH Western Civilization II
- PS 111 - SSC American National Government
- PS 150 - NCH Introduction to Comparative Politics
- PS 245 - NCH International Relations
- EC 101 - SSC Principles of Macroeconomics
- AN 111 - NCH Understanding Human Cultures
- SO 101 - SSC Discovering Society
- PS 342 - Pennsylvania Politics and Policy (PP 542)
- PSY 105 - SSC Introduction to Psychology

- SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)
- SO 204 - SSC Population and Global Issues

One of the following elective options:

- One European History course
- One Non-European/Non-U.S. History course
- One Sociology course
- One Anthropology course

**Education Courses:**

- ED 105 - Foundations of Teaching and Learning
- ED 151 - Early Adolescent/Adolescent Development
- ED 161 - Integrated Technology I
- SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)
- SED 222 - Foundations of Inclusive Education (MSE 522)
- ED 305 - Methods of Secondary Education
- ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom
- ED 470 - Professional Internship
- ED 497 - Senior Seminar for Secondary Education
- Two English courses for Education certification, one literature and one writing (EN 100 or EN 150)
- Two Math courses for Education certification

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language **Or**
- EN 150 - PLE Advanced Writing and Language
- ED 105 - Foundations of Teaching and Learning
- ED 150 - Early Childhood Development
- ED 151 - Early Adolescent/Adolescent Development
- MA 205 - Mathematics for the Elementary Teacher
- HI 101 - HUM United States History to 1877
- HI 102 - HUM United States History Since 1877

**Notes:**

Students must be scheduled for ED 105 in the fall and ED 151 in the spring, before the end of their first year. Completing both before the sophomore year is critical.

All Education majors must complete two English courses (one writing and one literature) and two Math courses (MA prefix) by the end of their sophomore year.

Students pursuing a major in Social Studies Education may double major in History. Students electing to double-major may take up to 20 credits in up to two semesters (fall or spring) at Elizabethtown College without paying a credit overload fee.

### **Accreditation**

Elizabethtown College is in compliance with Title II of the Higher Education Act and disclosure reporting. Requests for disclosure information – i.e., teacher preparation programs, successes on passing state licensing and certification examinations, and job placement – may be obtained by contacting the Dean.

## **Bachelor of Social Work**

### **Social Work (B.S.W.)**

#### **Student Learning Outcomes for Social Work:**

*Students will be able to:*

- Demonstrate ethical and professional behavior.
- Engage diversity and difference in practice.
- Advance human rights and social, economic, and environmental justice.
- Engage in practice-informed research and research-informed practice.
- Engage in policy practice.
- Engage with individuals, families, groups, organizations, and communities.
- Assess individuals, families, groups, organizations, and communities.
- Intervene with individuals, families, groups, organizations, and communities.
- Evaluate practice with individuals, families, groups, organizations, and communities.

#### **Prospective social work majors must apply for admission to the program in the spring semester of their second year. This application requires the following:**

- A formal interview with a social work faculty member during which professional interests and abilities are explored.
- Two reference rating forms.
- A short essay describing the applicant's interest in the field of social work.
- A 2.00 cumulative grade point average.

Admittance into the program does not guarantee that the student will graduate with a degree in Social Work. The advisor – in conjunction with the Social Work faculty – reserves the right to dismiss a student from the major on the basis of unprofessional behavior and/or academic performance. The standards for professional conduct as expressed in the National Association of Social Workers Code of Ethics serve as the Program's standards for determining dismissal from the program. The student has the right to appeal the decision in the same manner as dismissal for academically related reasons. These policies are articulated in both the Program handbook and on the website.

In order to remain in the Program, the student must obtain a minimum grade point average of 2.00 in all social work courses required by the major. Social Work students must achieve a grade of C or higher in all courses required within the Social Work Program. If a student receives a C- or below in any of these classes, they will be required to

repeat the class. Academic credit for life experience and previous work experience is not given in whole or in part toward the social work degree.

**The Social Work major requires the following courses:**

- SW 160 - SSC Social Problems and Response of Social Welfare Institutions
- SW 233 - Human Behavior in the Social Environment
- SW 280 - Multicultural Counseling Skills
- SW 330 - Methods of Social Work Research
- SW 367 - Generalist SW Practice I: Individuals
- SW 368 - Generalist SW Practice II: Families and Small Groups
- SW 369 - Generalist SW Practice III: Communities and Organizations
- SW 380 - Social Policy
- SW 470 - Introductory Field Seminar
- SW 471 - Introductory Field Instruction
- SW 472 - Advanced Field Seminar
- SW 473 - Advanced Field Instruction
- SW 495 - Senior Seminar in Social Work
- Any 100-level Biology course
- MA 251 - MA Probability and Statistics
- PSY 105 - SSC Introduction to Psychology
- SO 101 - SSC Discovering Society

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- SW 160 - SSC Social Problems and Response of Social Welfare Institutions
- PSY 105 - SSC Introduction to Psychology
- SO 101 - SSC Discovering Society

**Notes:**

Spanish is highly recommended for the core Power of Language - Other (Ancient or Modern Language).

**Minors**

**Coaching Minor**

**The Coaching Minor requires:**

- HW 110 - Being a Mental Health Ally
- HW 112 - Wellness and the College Student

- HW 130 - Introduction to Coaching: A Servant Leadership Approach
- HW 135 - Sports Medicine
- HW 470 - Internship in Health and Wellness
- Ten credit hours of electives

**Elective Courses:**

Ten credit hours from the following.

- HW 200 - Nutrition for Life
- PSY 240 - Child and Adolescent Development
- BIO 200 - NPS Human Anatomy and Physiology: The Basics
- COM 210 - Presentation Skills
- PCS 160 - HUM Conflict Dynamics and Transformation
- ED 105 - Foundations of Teaching and Learning
- DAT 200 - Data Analytics
- CP 150 - Career and Purposeful Pathways

**Human Services Minor**

A minor in **Human Services**, consisting of a minimum 20 credit hours, is available. The minor provides students the knowledge, values, and skills to explore society's social problems and the intricate social welfare system designed to assist people in need. It also provides the student with an overview of human behavior, social problems, and the development of American social welfare institutions. **All students, except social work majors, may pursue this minor.**

For further information, contact Dr. Susan Mapp.

The requirements for the Human Services minor are (unless otherwise noted, all courses receive four credits):

**Required courses:**

Three required courses (12 credits) must be taken:

- SW 160 - SSC Social Problems and Response of Social Welfare Institutions
- SW 233 - Human Behavior in the Social Environment
- SW 280 - Multicultural Counseling Skills

**Elective courses:**

A minimum of eight elective credits from the following courses (four credit hours of which must be outside of the Program of Social Work) also must be taken:

Social Work:

- SW 360 - International Social Development
- SW 339 - Human Sexuality
- SW 344 - Aging: Social Response and Implications

- SW 346 - Exploring the Culture and Services of Vietnam (2.00 credits)
- SW 347 - May Term in Vietnam (2.00 credits)
- SW 355 - Women in Society
- SW 357 - Child Welfare
- SW 366 - Addiction and Society

Sociology and Anthropology:

- SO 204 - SSC Population and Global Issues
- SO 215 - Criminology
- SO 217 - U.S. Criminal Justice System
- SO 220 - Race and Ethnic Relations
- SO 270 - Law and Social Change
- SO 301 - Social Issues
- SO 305 - Marriage and Family (WGS 305)
- SO 342 - Modern Corrections
- SO 352 - Juvenile Law and Justice

Education:

- SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)
- SED 222 - Foundations of Inclusive Education (MSE 522)

Communications:

- COM 252 - HUM Multi-Cultural Communications

Occupational Therapy:

- OT 110 - Occupations across the Lifespan
- OT 210 - Global Health Care Systems

Political Science:

- PS 361 - Public Administration (PP 561)
- PS 363 - American Domestic Policy (PP 563)
- PS 365 - Women and Politics

Psychology:

- PSY 220 - Health Psychology
- PSY 247 - Lifespan Development
- PSY 230 - Psychology of Women and Gender
- PSY 240 - Child and Adolescent Development
- PSY 245 - Adult Development and Aging
- PSY 250 - Psychopathology

- PSY 335 - Applied Social Psychology
- PSY 355 - Counseling Psychology
- PSY 360 - Psychology of Stress

Women and Gender Studies:

- WGS 105 - SSC Sex and Gender in Society

## **Master of Education**

### **Master of Education in Curriculum and Instruction (M.Ed.)**

The Education Program and the School of Continuing and Professional Studies offers a graduate program leading to a master's degree in curriculum and instruction. This program is designed for certified educators (PK-12) who seek advanced study in curriculum and instruction.

This degree affords students the advantage of customizing their degree by selecting a certificate of study in Year 1 of the program – Integrative STEM, ESL, Interdisciplinary Autistic Support, or Trauma-Informed Practice. Year 2 continues with a scope and sequence that emphasizes a constructivist approach, promoting project-based assessments, social-emotional learning, applied practice, and action research.

The program is delivered through accelerated online modules that combine synchronous and asynchronous learning opportunities.

#### **Student Learning Outcomes**

*Students will be able to:*

- Demonstrate knowledge of curriculum mapping, theory, models, and pedagogical approaches.
- Apply these models, theories, and pedagogical approaches in their own practice, across sociocultural contexts, and in diverse learning environments.
- Display commitment and leadership for building learning communities through collaborative strategies and among key stakeholders, including students, parents, educators, and staff.
- Use and apply formal and informal assessment strategies to promote and evaluate the continual intellectual, social-emotional, and personal development of all learners.
- Use and apply instructional technologies to promote and evaluate the continual intellectual, social-emotional, and personal development of all learners.
- Design and conduct action research that explores learning strategies related to classroom, community, or cross-disciplinary issues.

#### **Degree Requirements:**

- Baccalaureate Degree from accredited institution.
- Current Teaching Certification (PA or other).
- 3.0 cumulative GPA or above.
- Statistics or equivalent course.
- Provide three letters of recommendation in support of your academic and professional abilities for success in program.
- Submit a writing sample that demonstrates higher-order thinking, writing, and communication skills.

**Year 1 Requirements:**

Enroll in one of these certificate programs and successfully meet the certificate program SLO's.

- Graduate Certificate in Interdisciplinary Autism Support
- Graduate Certificate in Trauma Informed Practice
- Graduate Certificate in ESL Program Specialist K-12
- Graduate Certificate in Integrative Science, Technology, Engineering, and Mathematics (STEM) Education Endorsement

**Year 2 Requirements:**

Advance into the MCI courses and successfully complete the master degree requirements.

- MCI 520 - Curriculum and Pedagogy
- MCI 525 - Curriculum and Methods
- MCI 530 - Building Social and Community Capacity
- MCI 535 - Current Issues and Trends in Assessment in Special and Applied Statistics
- MCI 550 - Social Emotional Learning

**Capstone Course:**

- MCI 590 - The Graduate Research Seminar

**Master of Education in Special Education (M.Ed.)**

Designed for working, in-service teachers, the online Master of Education in Special Education affords candidates a complex understanding of educational theory, an awareness and adherence to professional ethics, a commitment to professional development, and the ability to establish and maintain an equitable and purposeful learning environment for all students. Candidates may select from either K-8 or 7-12 certification for the state of Pennsylvania. The program capstone is a six-week internship in special education. Offered in collaboration with the School of Continuing and Professional Studies.

**Student Learning Outcomes for Special Education:**

*Students will be able to:*

- Plan, design, and implement research-based instructional and assessment practices in special education.
- Develop and apply instructional methodologies, including the use of technology, appropriate for a special education classroom.
- Critically apply, adapt, and differentiate content knowledge and skills to facilitate inclusive student learning.
- Create, organize, and maintain an effective and safe classroom environment for all learners.
- Design and implement successful interventions responsive to the needs of all students.
- Exhibit the qualities that characterize a professional individual, including professional, ethical, and legal responsibilities of a certified teacher in special education.
- Demonstrate an ongoing commitment to continued professional development and service to the discipline.

**Requirements of Acceptance:**

- Complete requirements in general education certification (see applicable undergraduate degree planners).
- Receive a B or above in SED 212/MSE 512 (Learning Environment and Social Interaction in Inclusive Settings) and SED 222/MSE 522 (Foundations of Inclusive Education).
- Maintain a 3.3 cumulative GPA or above.
- Receive satisfactory ratings on the Teacher Dispositions document.
- Provide two letters of recommendation in support of your academic and professional abilities for success in the program.

**Application Deadlines:**

- Applications into the MSE 4+1 program are accepted during the fall and spring semesters. Applicants who apply in the spring of junior year are required to student teach in the fall of their senior year.
- Submit application form
- Submit two recommendation forms or two letters of recommendation in support of your academic and professional abilities for success in the program.

**Course Requirements:**

- MSE 512 - Learning Environment and Social Interaction in Inclusive Settings (SED 212)
- MSE 522 - Foundations of Inclusive Education (SED 222)
- MSE 524 - Methods of Teaching Students with High Incidence Disabilities (SED 224)
- MSE 530 - Methods of Teaching Students with Low Incidence Disabilities (SED 230)
- MSE 533 - Assessment in Special and Inclusive Education (SED 333)
- MSE 540 - Etiology, Equity, and Law
- MSE 542 - Effective Instruction for Students with ASD and/or EBD (SED 342)
- MSE 544 - Intensive Reading, Writing, and Mathematics Intervention (SED 344)
- MSE 565 - Issues in Special Education
- MSE 570 - Graduate Student Teaching
- MSE 590 - Graduate Research Seminar

**Master of Physician Assistant Studies**

**Master of Physician Assistant Studies (M.P.A.S.)**

**Requirements for Admission**

**Pre-Physician Assistant Program Provisional Acceptance:**

- A minimum combined SAT score of 1100 or a minimum ACT score of 22
- Academic GPA of 3.5 or greater
- Complete mandatory interview

*Applications for acceptance are due by December 15 for consideration.*

**Formal acceptance will be offered during the 7th semester (Fall prior to starting the program). Criteria to maintain provisional acceptance and be offered formal acceptance is:**

- 3.0 Overall GPA in Year 1
- 3.0 Math/Science GPA in Year 1
- 3.2 Overall GPA in Years 2 and 3
- 3.2 Math/Science GPA in Years 2 and 3
- Completion of 200 Healthcare Exposure Hours (including 20 hours shadowing a PA-C)

**Master of Physician Studies Graduate Program:**

- Coursework prerequisites:
  - General Biology - a minimum of 6 credits with laboratory
  - Anatomy and Physiology - a minimum of 6 credits with laboratory
  - General Chemistry - a minimum of 3 credits with laboratory
  - Organic Chemistry - a minimum of 3 credits with laboratory
  - Microbiology - a minimum of 3 credits with laboratory
  - Probability and Statistics - 3 credits
  - Psychology - 3 credits
- Academic GPA of 3.0 or greater
- Official GRE scores (ideal composite score of 300) or MCAT scores (ideal score of 500)
- Minimum 200 healthcare exposure hours (including 20 hours of shadowing a PA-C)
- Complete a non-cognitive skills test through CASPer (<https://takecasper.com/>)
- Complete mandatory interview

**Student Learning Outcomes for Physician Assistant:**

*Students will be able to:*

- Medical Knowledge: Graduates will demonstrate a deep understanding and application of core medical knowledge that is essential for patient care upon entry into clinical practice.
- Patient Centered Care: Graduates will apply core medical knowledge learned to patient centered care and utilize evidence based medicine to refine clinical reasoning and judgment while demonstrating the ability to recognize healthy versus ill patients in various stages of illness.
- Society and Population Health: Graduates will understand how patient health may be affected by psychosocial influences as well as community, environmental, and genetic disparities. Graduates will be able to identify their own implicit biases and understand how these ideas can impact patient care.
- Health Literacy: Graduates will utilize emotional intelligence to adjust the style and content of their verbal communication with patients to establish rapport and engage in shared decision making.
- Professional Practice: Graduates will demonstrate an understanding of Physician Assistant roles and responsibilities while maintaining a level of team awareness, keeping the patient at the center of all health care decisions.
- Legal, Fiscal, and System Based Healthcare: Graduates will demonstrate an understanding of ethically and legally appropriate ways to deliver safe, quality, and efficacious healthcare to patients in a variety of clinical settings.

- Self-Reflection and Assessment: Graduates will work closely with program faculty and their advisors in an ongoing and continual process to develop strategies necessary for reflection, self-evaluation, and self-control while developing confidence in addressing the health needs of their patients.

### **Didactic Course Requirements**

- MPA 500 - Medical Terminology
- MPA 501 - Foundations of Health Sciences I
- MPA 502 - Foundations of Health Sciences II
- MPA 503 - Clinical Health Sciences
- MPA 511 - Clinical Medicine I
- MPA 512 - Clinical Medicine II
- MPA 513 - Clinical Medicine III
- MPA 521 - Pharmacology I
- MPA 522 - Pharmacology II
- MPA 523 - Pharmacology III
- MPA 531 - Physical Assessment and Procedures I
- MPA 532 - Physical Assessment and Procedures II
- MPA 533 - Physical Assessment and Procedures III
- MPA 541 - Clinical Reasoning I
- MPA 542 - Clinical Reasoning II
- MPA 543 - Clinical Reasoning III
- MPA 551 - Patient Communication and Education I
- MPA 552 - Patient Communication and Education II

### **Clinical Course Requirements**

- MPA 600 - Transition to Clinical Practice
- MPA 601 - Education and Research I
- MPA 602 - Education and Research II
- MPA 603 - PANCE Preparation I
- MPA 604 - PANCE Preparation II
- MPA 605 - PANCE Preparation III
- MPA 611 - Primary Care Preceptorship I
- MPA 612 - Primary Care Preceptorship II
- MPA 613 - Primary Care Preceptorship III
- MPA 614 - Ambulatory Care Preceptorship
- MPA 615 - Acute Care Preceptorship
- MPA 616 - Surgery Preceptorship
- MPA 617 - Behavioral Medicine Preceptorship
- MPA 618 - Advanced Clinical Specialty Preceptorship
- MPA 699 - Culminating Experience

## Accreditation

Elizabethtown College has applied for Accreditation-Provisional from the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA). Elizabethtown College anticipates matriculating its first class in July 2022, pending achieving Accreditation-Provisional status at the March 2022 ARC-PA meeting. Accreditation-Provisional is an accreditation status granted when the plans and resources allocation, if fully implemented as planned, of a proposed program that has not yet enrolled students appear to demonstrate the program's ability to meet the ARC-PA Standards or when a program holding accreditation-provisional status appears to demonstrate continued progress in with the Standards as it prepares for the graduation of the first class (cohort) of students.

## Master of Science

### Master of Science in Occupational Therapy (M.S.)

#### Student Learning Outcomes for Occupational Therapy:

*Students will be able to:*

- Demonstrate the ability to effectively collaborate with others (colleagues, professional contacts, clients, faculty, etc.).
- Engage with clients in a manner that demonstrates skillful application of concepts related to client-centered care, culturally responsive care, and therapeutic use of self.
- Recognize opportunities and construct plans to influence change and enhance occupational performance for individuals, populations, and organizations.
- Engage in occupational therapy practice that integrates critical thinking, reflective practice, creativity, and ethical reasoning in the occupational therapy process.
- Design and implement evaluations and interventions that are occupation-centered and theory-based, with entry-level competence.
- Contribute to the body of evidence that supports traditional and emerging occupational therapy practice and/or the understanding of human occupation.

The **Master of Science in Occupational Therapy** requires two years or four semesters (this includes one summer semester/session) of graduate academic study and six months of clinical Level II Fieldwork with the requirements listed below. **To begin the master's program in occupational therapy, students must have successfully completed prerequisites including a 2.9 by the end of their junior year and earning a minimum of a C- in all required courses.** Successful completion of the Master of Science in Occupational Therapy affords the student the opportunity to take the National Board of Certification in Occupational Therapy (NBCOT) Exam and to become licensed to practice occupational therapy as an individual jurisdiction requires. **Please note: a felony conviction may affect an individual's qualification to take the NBCOT certification exam and/or obtain professional credentials.**

#### The Master of Science in Occupational Therapy requires:

- OT 505 - Occupational Therapy Evaluation: Adult Populations
- OT 515 - Occupational Therapy Evaluation: Pediatric Populations
- OT 525 - Occupational Therapy History and Theory
- OT 532 - Occupational Therapy Intervention: Adult Populations
- OT 533 - Occupational Therapy Intervention: Pediatric Populations

- OT 534 - Scholarship I: Analysis of the Literature
- OT 550 - Advanced Occupational Therapy Theory and Application
- OT 554 - Scholarship II: Methods and Analysis
- OT 556 - Analysis and Application: Therapeutic Relationships
- OT 558 - Occupational Therapy Practice in Context
- OT 560 - Analysis and Application: Functional Movement
- OT 562 - Management of Occupational Therapy Services
- OT 564 - Scholarship III: Analysis, Application, and Discussion
- OT 590 - Graduate Project Practicum

**Additional requirements to attain the Master of Science in Occupational Therapy degree:**

Maintain a minimum OT grade point average of 3.00.

Achieve a minimum grade of C- in all graduate courses. College policies on repeating courses apply to graduate study.

Students must pass both Level II Fieldwork experiences. Only one Level II failure may be repeated. Students are required to complete 24 weeks of full-time fieldwork or its equivalent of Level II fieldwork within 18 months of completing graduate coursework.

**Accreditation**

The Occupational Therapy program has maintained a fully-accredited status since 1976 by the Accreditation Council for Occupational Therapy Education (ACOTE). The BS/MS Occupational Therapy degree program is fully accredited. The Doctorate in Occupational Therapy (OTD) has received Candidacy accreditation status. The organization can be contacted at ACOTE, c/o Accreditation Department, American Occupational Therapy Association (AOTA), Box 31220, 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449; (phone) 301-652-2682; (fax) 301-652-1417; [www.acoteonline.org](http://www.acoteonline.org).

**Doctorate**

**Occupational Therapy (OTD)**

**Student Learning Outcomes for Occupational Therapy:**

*Students will be able to:*

- Demonstrate the ability to effectively collaborate with others (colleagues, professional contacts, clients, faculty, etc.).
- Identify/ diagnose occupational performance and participation and construct plans to influence change and enhance occupational performance for individuals, populations, and organizations.
- Engage in occupational therapy practice that integrates critical thinking, reflective practice, creativity, and ethical reasoning in the occupational therapy process.
- Design and implement evaluations and interventions that are occupation-centered and theory-based, with entry-level competence.
- Demonstrate ability to plan community programs, educate others, provide consolation, and provide care coordination/ case -management.

- Contribute to the body of evidence that supports traditional and emerging occupational therapy practice and/or the understanding of human occupation.
- Demonstrate leadership in the management and delivery of occupational therapy services, evaluation of program effectiveness, conflict management, and professional development.
- Recognize opportunities for and demonstrate principles and skills related to advocacy.

The Doctorate in Occupational Therapy requires three years or 8 semesters (this includes two summer semesters/sessions) of graduate academic study, six months of clinical Level II Fieldwork, one Capstone Experience with the requirements listed below. **To begin coursework toward the doctorate program in occupational therapy, students must have successfully completed prerequisites including earning a GPA of 2.9 by the end of their junior year and earning a minimum of a C- in all required courses. Students will start to take graduate level courses in the senior year and will officially be registered into the doctorate degree only after completing the fourth year of the occupational therapy program and earning an undergraduate degree in Health Sciences.**

Successful completion of the Doctorate in Occupational Therapy affords the student the opportunity to take the National Board of Certification in Occupational Therapy (NBCOT) Examination and to become licensed to practice occupational therapy as individual jurisdiction requires. **Please note: a felony conviction may affect an individual's qualification to take the NBCOT certification exam and/or obtain professional credentials.**

**The Doctorate in Occupational Therapy requires:**

- OT 505 - Occupational Therapy Evaluation: Adult Populations
- OT 515 - Occupational Therapy Evaluation: Pediatric Populations
- OT 525 - Occupational Therapy History and Theory
- OT 532 - Occupational Therapy Intervention: Adult Populations
- OT 533 - Occupational Therapy Intervention: Pediatric Populations
- OT 534 - Scholarship I: Analysis of the Literature
- OT 550 - Advanced Occupational Therapy Theory and Application
- OT 554 - Scholarship II: Methods and Analysis
- OT 556 - Analysis and Application: Therapeutic Relationships
- OT 558 - Occupational Therapy Practice in Context
- OT 560 - Analysis and Application: Functional Movement
- OT 562 - Management of Occupational Therapy Services
- OT 564 - Scholarship III: Analysis, Application, and Discussion
- OT 590 - Graduate Project Practicum
- OT 650 - Leadership in Professional Practice
- OT 655 - Populations - Based Occupational Therapy Practice
- OT 660 - Evidence Based Application
- OT 795 - Capstone Experience
- OT 705 - Preparation for Practice
- OT 710 - Graduate Portfolio
- 600 - Level Graduate Electives (3 courses)

**Additional requirements to attain the Doctorate in Occupational Therapy degree:**

Maintain a minimum grade point average of 3.00 throughout the graduate program. Achieve a minimum grade of C- in all graduate courses.

A student must earn a minimum cumulative GPA of 3.00 to remain in good academic standing in Elizabethtown College graduate programs. Students who fail to maintain the minimum cumulative GPA at the end of any semester will be placed on academic probation. Students on academic probation will have one semester in which they are registered to return to good academic standing. Students who fail to meet the conditions of their academic probation can expect dismissal from the program.

Students who have withdrawn from the College must petition the graduate program for readmission. To be eligible for readmission, applicants must be in good standing and the academic program must have the capacity to accept additional students. Additional conditions of readmission may be imposed by the specific graduate program for which the applicant seeks readmission.

It is up to the discretion of the student's major Program to determine if undergraduate and graduate courses may be taken concurrently. Graduate courses may count toward undergraduate programs; however, undergraduate courses may not count toward graduate programs. Undergraduate program courses taken by graduate students to complete credit deficiencies are free elective credits only and do not fulfill any major requirements. Graduate courses may not be met via Challenge Tests.

Students must pass both Level II Fieldwork experiences. Only one Level II failure may be repeated; student withdrawals from Level II fieldwork will be reviewed by the program on a case-by-case basis and may be considered a failure based on the student's fieldwork performance prior to the withdrawal. Students are required to complete 24 weeks of full-time fieldwork or its equivalent of Level II fieldwork within 18 months of completing graduate didactic coursework.

### **Accreditation**

The Occupational Therapy program has maintained a fully-accredited status since 1976 by the Accreditation Council for Occupational Therapy Education (ACOTE). The BS/MS Occupational Therapy degree program is fully accredited. The Doctorate in Occupational Therapy (OTD) has received Candidacy accreditation status. The organization can be contacted at ACOTE, c/o Accreditation Department, American Occupational Therapy Association (AOTA), Box 31220, 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449; (phone) 301-652-2682; (fax) 301-652-1417; [www.acoteonline.org](http://www.acoteonline.org).

### **Certificates**

#### **ESL Program Specialist K-12 Certificate**

The School of Human and Health Professions offers a certificate program leading to an ESL Program Specialist K-12 Certificate.

This program is designed for pre-service candidates seeking further understanding of pedagogy, resources, methods, and curriculum designed to allow English Learners access to equitable educational opportunities. The program is a combination of coursework and field experiences that will reveal the importance of language and culture in the education of English Learners.

It affords students the advantages of a unique and practical curricular focus in curriculum and instruction supported by a constructivist course sequence that promotes individualized assessments, real application to current classroom practice, and applied research relevant to grade bands across the PK-12 continuum.

**Student Learning Outcomes for the ESL Program Specialist K-12 Certificate Program:**

*Students will be able to:*

1. Construct, implement, and evaluate educational programming for English Learners that considers the importance of language in curriculum, instruction, and assessment.
2. Construct, implement, and evaluate educational programming for English Learners that considers the importance of culture in curriculum, instruction, and assessment.
3. Consider how observing, planning, implementing, and managing instruction are essential practices for constructing appropriate learning opportunities for English Learners.
4. Develop a wide range of assessment practices appropriate for English Learners.
5. Demonstrate professionalism in planning, implementing, and evaluating educational programming for English Learners and their families.

**Course Scope and Sequence (16 credits)**

Courses Taken after Provisional Acceptance

- ED 243 - English Grammar and Linguistics for ESL Learners
- ED 255 - Literacy and Language Acquisition
- ED 268 - Educational Assessment and Evaluation of English Learners

Courses Taken after Formal Acceptance:

- ED 352 - Cultural Diversity: Awareness, Relevance, and Responsiveness
- ED 362 - Methods for Teaching English Learners: Culturally and Linguistically Responsive Teaching
- ED 398 - Teaching English Learners Practicum

**Program Design and Admission Requirements:**

To maximize credit, course, and scheduling efficiency, the program design utilizes a mix of 4 and 2 credit classes. Six new courses were created for this certification per the ESL program guidelines. All of these courses are offered through the Education Program. Students may only declare their intent for this program after receiving provisional acceptance into the education major. The program consists of six courses, in total, for 16 credit hours and 60 hours of field placement. Students may only enroll in the 300-level classes, including the methods course and practicum, once they achieve formal acceptance into the major. ED 341 is a pre-requisite for the 300-level methods and field placement practicum courses. Candidates will also be encouraged to work with their academic advisor and the Director of Clinical Experiences to seek a student teaching placement (ED 470) which continues to enhance their professional development in ESL and their general certification area.

**Graduate Certificate in Curriculum and Instruction**

**Student Learning Outcomes**

*Students will be able to:*

- Demonstrate knowledge of curriculum mapping, theory, models, and pedagogical approaches.
- Apply these models, theories, and pedagogical approaches in their own practice, across sociocultural contexts, and in diverse learning environments.
- Display commitment and leadership for building learning communities through collaborative strategies and among key stakeholders, including students, parents, educators, and staff.
- Use and apply formal and informal assessment strategies to promote and evaluate the continual intellectual, social-emotional, and personal development of all learners.
- Use and apply instructional technologies to promote and evaluate the continual intellectual, social-emotional, and personal development of all learners.

**The certificate includes the following five courses in the C&I sequence for 15 credits.**

- MCI 520 - Curriculum and Pedagogy
- MCI 525 - Curriculum and Methods
- MCI 530 - Building Social and Community Capacity
- MCI 535 - Current Issues and Trends in Assessment in Special and Applied Statistics
- MCI 550 - Social Emotional Learning

**Note:**

Candidates in the Curriculum and Instruction Certificate may matriculate into the Master of Education program.

They would need to complete MCI 590 and one of the four other certificate options (Graduate Certificate in Integrative Science, Technology, Engineering, and Mathematics (STEM) Education Endorsement, Graduate Certificate in Trauma Informed Practice, Graduate Certificate in Interdisciplinary Autism Support, or Graduate Certificate in ESL Program Specialist K-12).

## **Graduate Certificate in ESL Program Specialist K-12**

The Education Program offers a post-baccalaureate certificate program leading to an ESL Program Specialist K-12 Certificate.

This program is designed for in-service teachers seeking further understanding of pedagogy, resources, methods, and curriculum designed to allow English Learners access to equitable educational opportunities. The program is a combination of coursework and field experiences that will reveal the importance of language and culture in the education of English Learners.

It affords students the advantages of a unique and practical curricular focus in curriculum and instruction supported by a constructivist course sequence that promotes individualized assessments, real application to current classroom practice, and applied research relevant to grade bands across the PK-12 continuum.

### **Student Learning Outcomes for the ESL Program Specialist K-12 Certificate Program (as required by PDE; please note that these are outcomes to be met across the entire program duration):**

*Students will be able to, as it relates to language:*

- Recognize language as an integrative system made up of component parts (phonology, morphology, syntax, pragmatics and semantics) and apply this knowledge to identify aspects of English that are difficult for ELs.

- Support ELs in communicating effectively for social and academic purposes by enhancing oral/aural skills, i.e., recognizing and using syntactic structures, the English sound system, and other communication skills.
- Support ELs in understanding and using appropriate register variation and language use within different contexts and for different audiences, including formal, informal, social, and academic.
- Develop a variety of instructional techniques to assist ELs in developing and using vocabulary (idioms, cognates, and collocations) and L2 literacy appropriately in written and spoken language, including contextualized practice with focused feedback.
- Apply knowledge of the principles of first and second language acquisition, and of the differences between first and second language acquisition, to the design of instruction for ELs.
- Apply strategies that recognize the role of students' L1s as a resource for language and literacy development and for communicating with invested participants (students, families, volunteer support, and bilingual aides).

*Students will be able to, as it relates to culture:*

- Demonstrate knowledge of the processes of negotiating one's cultural identity.
- Differentiate among the varied processes of cultural transitions, including acculturation, assimilation, biculturalism and resistance.
- Identify negative effects of prejudice, stereotyping and ethnocentrism on language learners' successful learning in schools and promote pro-social classroom learning environment.
- Recognize cultural bias in curriculum and materials and use a range of resources to deliver instruction.
- Demonstrate effective intercultural communication skills to appreciate diverse cultures.
- Develop effective techniques for communication between home and school by recognizing and supporting the preferred mode of communication of the parent/guardian (written, oral, L1, L2, etc.) and utilizing interpretation and translation resources appropriately.
- Demonstrate understanding of the interdependence of language and culture to facilitate students' transition between the home culture/language and U.S. school culture/language.
- Integrate diverse ways of learning and multiple cultural perspectives, including building on ELs' strengths, into the planning/adapting of curriculum and instructional methods.

*Students will be able to, as it relates to Observing, Planning, Implementing, and Managing Instruction:*

- Design standards-aligned instruction in English utilizing the Pennsylvania Academic Standards, the English Language Proficiency Standards, and Can-Do descriptors in relation to the continuum of proficiency levels.
- Plan effective lessons in all domains (Reading, Writing, Speaking, and Listening) using a variety of materials, texts, activities, strategies and assessments appropriately based on consideration of learners' differing English language proficiency, L1 literacy and prior knowledge, age and developmental stages, grade levels, learning styles and socio-cultural needs.
- Plan ESL instruction and assessment specific to the reading and writing needs of students with limited formal schooling (LFS) or interrupted formal education (SIFE).
- Recognize, plan and implement key elements of ESL lesson design, which include: a) Content and language objectives; b) Scaffolding, supports; c) Activating and building on prior knowledge; d) Formative and authentic assessments; and e) Academic and social interaction at the English Language Proficiency Level of the student, specifically in the domains of listening, speaking, reading and writing.
- Differentiate instruction based on formative assessment of student progress, re-teaching as necessary for students who need additional time and alternative approaches to meet learning outcomes.

- Develop and implement communicative activities in K-12 classrooms that promote authentic interactions for social and academic purposes and that integrate all language skills, i.e., reading, writing, speaking, and listening.
- Plan and provide evidence-based reading and writing instruction that includes various cueing systems (i.e. graphic, syntactic, and semantic cues) appropriate for ELs.
- Select, analyze and adapt a variety of authentic sources and tools to enhance oracy and literacy development for ELs, including but not limited to: a) Various popular texts, including fiction, non-fiction, comic-book style, etc.; b) Visual and/or original source materials; c) L1 materials; d) Music; and e) Media and multi-media, including technological resources and electronic communication.
- Explain and model explicit comprehension and learning strategies that assist students with learning tasks in all subject areas.
- Collaborate with and provide guidance to content teachers of ELs related to using English language proficiency standards (ELPS), appropriate supports, and adaptations which provide students access to content instruction, tasks and assessments at their English language proficiency level.

*Students will be able to, as it relates to Assessment:*

- Use multiple and appropriate formative and summative assessment measures for a variety of purposes, including classroom and student self-assessment and technology-based assessment (e.g., audio, video, computer) at various grade levels.
- Apply appropriate testing practices for English Learners including: a) Determination of the validity and reliability of tests to make assessment related decisions for ELs; b) Knowledge and application of alternate and multiple assessment measures to ascertain what ELs' know and can do; c) Appropriate interpretation and use of data to support ELs; and d) Assessment of ELs' test-taking challenges and creation of strategies and scaffolding techniques to address these challenges.
- Recognize, apply and share state-allowed testing accommodations for ELs at varying proficiency levels.
- Identify and use multiple assessment resources and measures (including research, native language evaluation, Pennsylvania English Language Proficiency Standards, PA Academic Achievement Standards, and WIDA ACCESS for ELs' performance rubrics, among others) to make informed decisions concerning an EL's progression through a language instruction program (identification, placement, progress, achievement, exit, and monitoring) observing all applicable national and state requirements.
- Implement a variety of assessment tools as part of classroom instruction (observation checklists, reading logs, video spreadsheet software, self- and peer-assessment, among others), planning for classroom practice of each technique, to record progress towards ELs' English language proficiency and academic achievement.
- Inform parents/families, using their preferred mode(s) of communication, of federal and state-mandated testing, and the implications of such testing, for ELs in a language instructional program.
- Identify accountability measures and assessment targets in order to analyze real-time EL data in order to make programmatic and instructional adjustments.
- As part of an instructional planning team, analyze data from various EL groups (disaggregated, where appropriate, by language proficiency level, grade level, instructional site, etc.) to evaluate the effectiveness of an ESL program or language teaching methodology.
- Identify and use a variety of resources and research, including native-language assessment and accommodated assessments, to inform decisions about language differences, giftedness, learning disabilities, or other qualities of ELs which would entitle them to participation in school programs.
- Understand and share multiple measures of assessment data, collected over time, to document EL growth and progress before considering a referral to a special education or other remedial program.

- Evaluate and share data, including strengths and weaknesses of each model, with parents/family and other members of a team making informed decisions on referral of an EL for special education or gifted services.

*Students will be able to, as it relates to professionalism:*

- Use research in the field of ESL to articulate a personal educational philosophy for instructing ELs.
- Conduct focused action research in the classroom following applicable procedures for protection of human research participants.
- Create a personal professional development plan based on interests and reflection, taking advantage of opportunities to support those goals in professional associations and other academic organizations.
- Collaborate with general and specialist school staff (e.g., multidisciplinary faculty teams) for the purpose of establishing instructional programs appropriate for ELs at a variety of English proficiency levels.
- Recognize the need to advocate for ELs and their families including full access to school resources; inform colleagues in instructional teams.
- Develop classroom activities that could involve families and provide ELs and their families with information, support, and assistance (e.g., advocate for the students and their families, help families participate in their school/community through the use of bilingual paraprofessionals or interpreters, or engage with community members and policymakers with respect to issues affecting ELs).
- Model the use of culturally and linguistically responsive techniques and dispositions, so as to support the learning of other school professionals working with ELs.

#### **Course Scope and Sequence**

- MED 543 - English Grammar and Linguistics for ESL Teachers
- MED 552 - Cultural Diversity: Awareness, Relevance, and Responsiveness
- MED 555 - Literacy and Language Acquisition
- MED 562 - Methods for Teaching English Learners: Culturally and Linguistically Responsive Teaching
- MED 568 - Educational Assessment and Evaluation of English Learners
- MED 570 - Teaching English language Learners Practicum

#### **Graduate Certificate in Integrative Science, Technology, Engineering, and Mathematics (STEM) Education Endorsement**

The Education Program offers a post-baccalaureate certificate program leading to the Integrative Science, Technology, Engineering, & Mathematics (STEM) Education Endorsement.

This program is designed for in-service teachers seeking further understanding of pedagogy, resources, methods, and curriculum designed to promote integrative STEM learning. The program is a combination of coursework and field experiences that will prepare teachers to construct, implement, and evaluate integrative STEM educational programming.

It affords students the advantages of a unique and practical curricular focus in curriculum and instruction supported by a constructivist course sequence that promotes individualized assessments, real application to current classroom practice, and applied research relevant to grade bands across the PK-12 continuum.

#### **Student Learning Outcomes for the Integrative Science, Technology, Engineering, & Mathematics (STEM) Education Endorsement:**

*School of Human and Health Professions*

STEM Competencies (as specified by the Pennsylvania Department of Education; please note that these competencies will be developed across the entire program duration)

*Content*

- Demonstrate knowledge of the following standards: Next Generation Science Standards, PA Mathematics Standards, PA Science and Technology Standards.
- Understand STEM Education as an integrated approach across disciplines, connected to other disciplines beyond science, technology, engineering and mathematics.
- Recognize that STEM Education is general education with the intent to prepare a citizenry who can function in a science and technology rich society.
- Utilize problem solving approaches and the design process to answer complex questions, engage in critical thinking, investigate societal issues, and develop solutions for challenges and real world problems.
- Demonstrate knowledge of inquiry-based teaching and learning methodologies as applied to STEM education.

*Skills and Abilities*

- Apply practices that integrate STEM disciplines through the design and implementation of multiple, integrated, developmentally appropriate learning experiences for all students.
- Represent real world phenomena through a variety of scientific, mathematical, technological, or engineering models.
- Explore basic fundamental concepts and major principles of science, technology, engineering and math through connections with other areas, especially history, language, arts, and culture, etc.
- Utilize the design process and a variety of resources (educational technology, information, materials, tools, machines) to safely and efficiently develop solutions to problems that require integration of concepts and skills from multiple disciplines, including science, technology, engineering, math, language arts, social studies, arts, and/or physical education.
- Use mathematical and scientific formulas, principles, reasoning, and precise language to predict outcomes and solve technological and engineering problems.

*Instructional Practices*

- Design, implement, and reflect on lessons and units that incorporate an integrative STEM learning cycle approach and developmentally appropriate methodology.
- Select, modify, and develop learning activities that support higher order thinking and creative problem solving which foster an understanding of the interconnectedness of Science, Technology, Engineering, and Mathematics.
- Establish and maintain a physically and emotionally safe learning environment that encourages and supports innovation, design thinking, and intellectual risk taking.
- Incorporate reading, writing, and questioning strategies through integrative and active strategies that supports the development of STEM literacy for all students.
- Engage students in the purposeful use of instructional technologies to increase access and extend their abilities to understand, transfer, and adapt STEM knowledge, skills, and dispositions.

*Assessment*

- Create differentiated learning experiences in integrative STEM education to meet the needs of all students.

- Elicit students' conceptions, reasoning and understanding through multiple forms of meaningful assessments including formative/summative and individual/group.
- Enable students to utilize strategies for self- assessment to build their capacity to monitor their own learning.
- Utilize diverse and authentic assessment strategies to monitor and adjust instruction across STEM disciplines and grade levels.

### **Course Scope and Sequence**

- MED 510 - Introduction to STEM and STEM Education
- MED 520 - STEM Curriculum, Pedagogy, and Assessment
- MED 530 - Constructing Integrative STEM Curricula
- MED 571 - STEM Education Practicum

### **Graduate Certificate in Interdisciplinary Autism Support**

#### **Student Learning Outcomes for the Graduate Certificate in Interdisciplinary Autism Support**

*Students will be able to:*

- Appreciate, understand the complexity, and compare autism strengths and challenges across the lifespan, from diagnosis through adulthood.
- Implement evidence based interoception assessments and interventions to improve sleep, eating, toileting, education, emotional regulation and social participation individually and in group settings.
- Use evidence-based lifestyle (focus on food choice) assessment and interventions to improve sleep, eating, toileting, emotional regulation and social participation individually and in group settings.
- Design and create programs and environments that support individuals with autism in their homes, schools, at work and communities.

#### **Certificate Requirements include:**

- ASC 500 - Autism Across the Lifespan
- ASC 510 - Interoception Assessment and Intervention
- ASC 520 - Lifestyle Modification with Autism
- ASC 530 - Designing Responsive Programs with the Autism Community

### **Graduate Certificate in Trauma Informed Practice**

#### **Student Learning Outcomes for the Graduate Certificate in Trauma Informed Practice**

*Students will be able to:*

- Assess the short- and long-term impact of trauma on the developing child.
- Implement trauma-informed approaches within their field of practice.
- Establish cross-system collaborations with other practitioners serving children and families experiencing trauma.
- Advocate for trauma-sensitive school and organization change.

**The Course Requirements include:**

- TIC 500 - Foundations of Trauma
- TIC 520 - The Impact of Trauma on Brain Architecture and Child Development
- TIC 530 - Sustaining Trauma-Sensitive Systems
- TIC 540 - Trauma Informed Practice

**American Sign Language Courses**

**ASL 105 - PLO American Sign Language**

4.00 credits. (**Power of Language Core Course**) An introduction to American Sign Language (ASL). The course will examine the fundamentals of the sign lexicon emphasizing grammatical features of comprehension and expression. Students will build conversational skills through dialogues about the everyday life experiences that make up meaningful participation in human occupations. Through the Community-Based Learning experience, students will engage in contextual learning through interactive social participation with individuals in the Deaf Community.

**Signature Learning Experience: Community-Based Learning.**

**Autism Support Courses**

**ASC 500 - Autism Across the Lifespan**

3.00 credits. This course focuses on understanding autism across the lifespan including the physical, cognitive and social skill limitations and strengths in each phase of life. Case studies will be the primary learning tools, with students developing a long-term intervention plan for an individual on their current or future caseload based upon the concepts discussed. \*Prerequisite(s): Completed undergraduate degree.

**ASC 510 - Interoception Assessment and Intervention**

3.00 credits. This course provides an overview of the construct of interoception and discusses evidenced based interoception awareness tools used by professionals in the field of Autism Support. In particular, a critique of the literature and current practices to assess and intervene with interoception as a tool to improve sleep, emotional regulation, toileting, eating, education and social participation will be reviewed. Emphasis is given to the various types of assessment and intervention techniques that yield outcomes in individual and group settings.

\*Prerequisite(s): Completed undergraduate degree.

**ASC 520 - Lifestyle Modification with Autism**

3.00 credits. The course discusses evidenced based lifestyle tools used by professionals in the field to assess and intervene to improve sleep, emotional regulation, toileting, eating, education and social participation. Respecting sensory differences with regard to lifestyle modification especially eating, will be discussed. Emphasis is given to the various types of assessment and intervention techniques that yield outcomes in individual and group settings.

\*Prerequisite(s): Completed undergraduate degree.

**ASC 530 - Designing Responsive Programs with the Autism Community**

3.00 credits. The course is the capstone experience of the certificate where students integrate previous coursework, knowledge, and skills. The course is designed around each candidate working with a case study (ideally current client) to create a final summative project where a program or environment is designed to maximize strengths in a community setting. This course is the final course taken in the certificate. \*Prerequisite(s): Completed undergraduate degree.

## Education Courses

### **ED 105 - Foundations of Teaching and Learning**

4.00 credits. This course is designed to introduce students to the philosophical, sociological, political and historical foundations of education and learning. The course emphasizes on the concepts, theories, and research on learning and the factors, including teaching, that influence learning. Fieldwork experience is required which will include a rotation of placements in early childhood, middle, and secondary levels, and will require an FBI Clearance, Criminal Record Clearance, Pennsylvania Child Abuse Clearance, and TB Test (fees). \*Corequisite(s): ED 105L. A grade of C or better must be earned to continue in the program.

### **ED 150 - Early Childhood Development**

4.00 credits. This course is designed to introduce students to the foundations of early childhood development. The course examines the concepts, theories, and research on child development. The course focuses on the typical and atypical physical, cognitive, social, emotional, and moral development of children between 0 and 9 years. Students will be introduced to different models and approaches in early childhood and developmentally appropriate practices. Field experience is required which will require FBI Clearance, Criminal Record Clearance, Pennsylvania Child Abuse Clearance, and TB Test (fees). \*Prerequisite(s): ED 105. \*Corequisite(s): ED 150L. A grade of C or better must be earned to continue in the program.

### **ED 151 - Early Adolescent/Adolescent Development**

4.00 credits. This course examines the concepts, theories, and research on early adolescent and adolescent development. It focuses on typical and atypical physical, cognitive, social, emotional, and moral development of children ages 8-18. Students will be introduced to different models, approaches, and developmentally appropriate practices for students in grades 4-12. Field experience is required, which will require FBI Clearance, Criminal Record Clearance, Pennsylvania child Abuse Clearance, and TB Test (fees). \*Prerequisite(s): ED 105.

\*Corequisite(s): ED 151L. A grade of C or better must be earned to continue in the program.

### **ED 161 - Integrated Technology I**

2.00 credits. An introductory study of current and emerging instructional media and technologies used across the grades and curricula. Organizing time and records through technology and computer-mediated communications, including basic multimedia presentation tools, are presented. Classroom-related features of Word and PowerPoint are practiced at an introductory level.

### **ED 210 - Peace Education and Integrated Schools in Northern Ireland and U.S.**

2.00 credits. This course explores the history, process and practices of peace education and integrated schools in Northern Ireland and the United States. Comparative methods of peace education, integrative practices, inclusion, mediation, and conflict resolution will be examined. Students will conduct independent research with a faculty mentor that links course content to each student's program of study. Upon completion of the spring semester course, students will travel to Belfast to work with key stakeholders in the region's integrated schools, including Queens University faculty in the Centre for Shared Education and leaders in the Northern Ireland Council for Integrated Education. Spring only. Bi-Annually.

### **ED 212 - Children/Adolescent Literature**

2.00 credits. The course focuses on literacy genres and the work of well-known authors and illustrators and includes study of multicultural literature that represents diverse ethnic, linguistic, and cultural perspectives. Response to literature and selection of books for the classroom are emphasized. Course content is applicable for Early Childhood and Middle Level classrooms. \*Pre/Corequisite(s): ED 105 and ED 150 or ED 151 formal acceptance into the Education Program is required.

**ED 243 - English Grammar and Linguistics for ESL Learners**

2.00 credits. This course provides for the study of the grammar, mechanics, and linguistics of the English language related to teaching English as a second language. The course includes a history of the English language and how the language has changed over time. Special attention will be placed on the use of the four domains of the English language in social and academic settings. \*Prerequisite(s): Provisional Acceptance.

**ED 250 - Language and Literacy Development in Early Childhood**

4.00 credits. This course focuses on the research-based principles and practices for language and literacy development of children ages birth to 9. Topics include language acquisition, reading and writing development, and strategies for teaching comprehension, fluency, word study and vocabulary in the early grades (PK through fourth). Requires field experience. \*Prerequisite(s): ED 105, and ED 150 or ED 151 or formal acceptance into the Education Program required. \*Corequisite(s): ED 250L.

**ED 255 - Literacy and Language Acquisition**

2.00 credits. This course will focus on theories of first and second language acquisition, along with factors that influence language acquisition and the impact of language acquisition on learning. Emphasis will be placed on the 5 pillars of literacy (phonemic awareness, phonics, vocabulary, fluency, and comprehension), verbal and non-verbal language development, and specific styles and strategies for language learning. Components of language (morphology, phonology, syntax, semantics, and pragmatics) will be addressed. \*Prerequisite(s): Provisional Acceptance.

**ED 258 - Educational Assessment and Evaluation**

4.00 credits. Examines current issues, trends and practices in educational assessment. Emphasizes the study of different assessment and evaluation procedures in the early childhood, elementary and secondary classroom. Explores a variety of traditional and innovative approaches to assessment of student learning and development. \*Prerequisite(s): ED 105 and ED 150 or ED 151 or Formal acceptance into Education Program required.

**ED 268 - Educational Assessment and Evaluation of English Learners**

2.00 credits. Examines current issues, trends and practices in educational assessment of English Learners. Emphasizes the study of different assessment and evaluation procedures for English Learners in the early childhood, elementary and secondary classroom. Emphasis placed on the development, implementation, and analysis of assessment methods designed specifically for English Learners, as well as designing accommodations for existing assessment tools to meet the needs of English Learners. Identification and education of English Learners with specific learning disabilities will be explored. \*Prerequisite(s): ED 258.

**ED 305 - Methods of Secondary Education**

4.00 credits. A study of the instructional methodology of an academic discipline with emphasis upon literacy strategies, reading in the content, and assessment. Students complete a field experience component which explores these practices under the guidance of a clinical professor in the academic major (e.g., science, English, mathematics, social studies) for grades 7-12. \*Prerequisite(s): ED 150 or ED 151. Formal acceptance into Education Program required. Register by Instructor.

**ED 306 - Methods of Modern Language Education PK-12**

4.00 credits. A study of the instructional methodology of an academic discipline with emphasis upon literacy strategies, reading in the content, and assessment. Students complete a field experience component which explores these practices under the guidance of a clinical professor in the academic major (e.g. Spanish) in the PK-12 continuum. \*Prerequisite(s): ED 150 or ED 151. Formal acceptance into Education Program required. Fall semester. Register by Instructor.

**ED 317 - Assessing Student Literacies in Grades PK-8**

4.00 credits. This course provides preservice teachers theories and methods for assessing student literacies in grades PK-8. Through exploring and reflecting on their own literacy practices, students will learn strategies and interventions that will help them assess and monitor student progress in tradition and digital literacies. The course, which will emphasize writing assessment, will include topics such as reading and writing workshop, special topics in the teaching of reading (e.g. vocabulary, comprehension, and fluency), designing mini-lessons after informally assessing (e.g., meeting with students during conferences) and formally assessing (e.g., administering state assessments) students, writing genres for authentic purposes and audiences, mentor texts, technology in the literacy classroom, writing in the content areas, rubrics, and grammar. \*Prerequisite(s): ED 258 and Formal acceptance into the Education Program.

**ED 325 - Methods for Teaching Science and Health in Early Childhood**

4.00 credits. A study of science processes in an early childhood school program and the utilization of multiple resources, organization, management, evaluation, instructional strategies, and integration of science and health in the early childhood program. Field experience is required. \*Prerequisite(s): ED 250 and ED 258. \*Corequisite(s): ED 335, ED 345 and ED 365. Formal acceptance into Education Program required. Register by Instructor.

**ED 326 - Methods for Teaching Science and Health in Elementary/Middle Level**

4.00 credits. This course provides for the study of science processes at the middle school level (fourth through eighth grades), with emphasis upon the utilization of multiple resources, organization, classroom management, instructional strategies and assessment. Field experience is required. \*Corequisite(s): ED 336, ED 346, and ED 366. Formal acceptance into Education Program required.

**ED 335 - Methods for Teaching Mathematics in Early Childhood**

4.00 credits. A study of how children develop a background of understanding and skill in mathematics in Pre-K to fourth grade, concentrating on the development of problem-solving, reasoning, and communication skills in mathematics, and connecting mathematics and the real world. Additional focus will be on organization for instruction, alternative means of evaluation, and teaching special needs and at-risk students. Field experience is required. \*Prerequisite(s): ED 250 and ED 258. \*Corequisite(s): ED 325, ED 345 and ED 365. Formal acceptance into Education Program required. Register by Instructor.

**ED 336 - Methods for Teaching Mathematics in Elementary/Middle Level**

4.00 credits. A study of how children develop a background of understanding and skill in mathematics in fourth through eighth grades with emphasis on problem-solving, reasoning and communication skills. Additional focus will be on organization for instruction, teaching methods, accommodations and alternative strategies. \*Corequisite(s): ED 326, ED 346 and ED 366. Formal acceptance into Education Program required. Register by Instructor.

**ED 341 - ELL: Linguistic and Cultural Diversity in the Classroom**

4.00 credits. This course introduces future teachers to the special linguistic and cultural educational needs of English language learners (ELL). Aspects of cross-linguistic and cross-cultural knowledge will be studied as well as methods of instruction that focus on the language needs and background knowledge of the ELL. Theory and practices of current ELL programs will also be examined. Twenty hours of field experience required (i.e., 2 hours per week for 10 weeks). \*Prerequisite(s): ED 105, and ED 150 or ED 151. \*Corequisite(s): ED 341L. Formal acceptance into Education Program required.

**ED 345 - Methods for Teaching Reading and Writing in Early Childhood**

4.00 credits. This course furthers the study of literacy theories and research-based practices presented in ED 250. This course explores approaches to teaching reading and writing in the primary grades and examines the construction of rich literacy environment in culturally, linguistically, and socio-economically diverse classrooms.

Course content focuses on instructional strategies, curriculum design and implementation, and assessment and evaluation. Field experience is required for Methods Block. Field experience is required. \*Prerequisite(s): ED 250 and ED 258. \*Corequisite(s): ED 325, ED 335 and ED 365. Formal acceptance into Education Program required. Register by Instructor.

**ED 346 - Methods for Teaching Reading and Writing in Elementary/Middle Level**

4.00 credits. This course furthers the study of literacy theories and research-based practices presented in ED 352 Literacy Assessment, Instruction and Intervention in Elem/Middle Level. This course explores approaches to teaching reading and writing in the elementary/middle grades and examines the construction of a rich literacy environment in culturally, linguistically, and socio-economically diverse classrooms. Course content focuses on instructional strategies, curriculum design and implementation, and assessment and evaluation. Field experience is required. \*Prerequisite(s): ED 258. \*Corequisite(s): ED 326, ED 336 and ED 366. Formal acceptance into Education Program required. Register by Instructor.

**ED 352 - Cultural Diversity: Awareness, Relevance, and Responsiveness**

4.00 credits. This course provides for the exploration and understanding of cultural diversity, particularly as related to historical, current, and future cultural diversification of the American school system. Aspects of different cultures, including beliefs, behaviors, values, and attitudes, will be compared and contrasted in relation to planning culturally relevant and responsive curriculum and instruction. Theories and programs of multicultural education will be explored. \*Prerequisite(s): ED 341.

**ED 360 - Integrated Strategies for Creative Expression in Early Childhood**

4.00 credits. This course is designed to familiarize students with the creative, self-expression and problem-solving skills among children in early childhood settings. Students will explore creative learning theories and research and focus on developmentally appropriate curriculum strategies in all developmental domains. This course emphasizes strategies to develop, implement and evaluate activities in the environment that encourages and supports creative self-expression and problem solving in children. \*Prerequisite(s): ED 250. Formal acceptance into Education Program required.

**ED 362 - Methods for Teaching English Learners: Culturally and Linguistically Responsive Teaching**

4.00 credits. This course provides for the planning, implementation, and evaluation of developmentally appropriate educational programs for English Learners (ELs). English Learners represent an extremely diverse group of students, linguistically and culturally, and are at diverse levels of English proficiency, therefore it is important that teachers have the knowledge and skills needed to create programs that are developmentally appropriate for the diversity of English Learners in our schools. This course will focus on theoretical and practical considerations of planning, implementing, and evaluating educational programs for English Learners. \*Prerequisite(s): ED 341.

**ED 365 - Methods for Teaching Social Studies in Early Childhood**

4.00 credits. A study of content, teaching strategies, materials, organizing approaches and curricula for teaching social studies at the early elementary level (PK through fourth grade). Students will be required to complete a field experience component, documented by a journal. \*Prerequisite(s): ED 250 and ED 258. \*Corequisite(s): ED 325, ED 335 and ED 345. Formal acceptance into Education Program required.

**ED 366 - Methods for Teaching Social Studies in Elementary/Middle Level**

4.00 credits. This course will examine the content, teaching strategies, materials, organizing approaches and curricula for teaching social studies at the middle school level (fourth through eighth grades). Students will be required to complete a field experience component, documented by a journal. \*Corequisite(s): ED 326, ED 336 and ED 346. Formal acceptance into Education Program required. Register by Instructor.

**ED 370-378 - Special Topics in Education**

Variable credit. Topics chosen in response to student and faculty interests. Formal acceptance into Education Program required. This course is repeatable for credit.

**ED 398 - Teaching English Learners Practicum**

2.00 credits. This practicum-based course provides for a structured field placement in conjunction with an online seminar in which students will: 1) conduct in-depth observations of English Learners (ELs) and 2) plan, implement, and evaluate educational programming for English Learners. Special attention will be placed on the relationship of curriculum, pedagogy, and assessment in planning educational programming. Instructional materials and strategies will be based on multicultural education and language learning theory to develop appropriate methodology to use with culturally and linguistically diverse students at varying levels of English proficiency. Sixty hours of field experience are required. \*Prerequisite(s): Formal Acceptance and ED 341. \*Corequisite(s): ED 398 L.

**ED 399 - Thesis Preparation**

2.00 credits. This course focuses on the various stages of the research process and writing Chapters 1, 2 and 3 of the thesis. Students identify a research question for investigation, establish the validity of pursuing the topic of research, complete a literature review associated with their research topic, and evaluate quantitative and qualitative methods utilized when conducting studies. This course provides foundational knowledge and competencies for students who wish to complete Honors in Education during the senior year. Formal acceptance into the Education Program is required. **Signature Learning Experience: Supervised Research.** Register by Instructor.

**ED 400 - Senior Project in Education**

2.00 credits. Students participating in the School's Honors in the Discipline Program may register for this course during semesters in which research or writing for their project is being completed. Recognition for Honors in the Discipline is not assured by completion of this course. See the Dean of Human and Health Professions for additional information. \*Prerequisite(s): Invitation to Honors in the Discipline Program. **Signature Learning Experience: Supervised Research.** Register by Instructor. This course is repeatable for credit.

**ED 470 - Professional Internship**

12.00 credits. Supervised student teaching for a full semester at the level of certification (Early Childhood, Elementary/Middle, dual certification in Special Education, or Secondary Education). A maximum of twelve credit hours from Education 470 may count toward the education major. Additional credits count as free electives.

\*Prerequisite(s): Completion of all program requirements with Education prefixes and cumulative grade point average required at the time of full admission to the program \*Corequisite(s): ED 495, ED 496 or ED 497.

**Signature Learning Experience: Field Placement.** Register by Instructor. Graded Pass/No Pass. Course fees.

**ED 480-489 - Independent Study in Education**

Variable credit. Upon the initiative of the student, a program of study may be organized with a faculty member on a topic of mutual interest. \*Prerequisite(s): Approval of the Dean and the Independent Study Committee. Register by Instructor.

**ED 495 - Senior Seminar for Early Childhood**

4.00 credits. A study of professional and ethical practices, family and community relationships, and special education issues in early childhood. (PK-4th grade). Particular emphasis will be given to the laws, procedures, and codes of conduct that guide practice, collaboration with diverse families, advocacy for the rights of children and their families, and support for the transition of children to new educational settings. \*Corequisite(s): ED 470.

**Signature Learning Experience: Capstone Experience.** Register by Instructor.

**ED 496 - Senior Seminar for Elementary/ Middle Level**

4.00 credits. This course serves as an issues seminar for pre-service teachers, engaging them in active discussion of professional and ethical practices, family and community relationships, and special education issues in middle school settings (fourth through eighth grades). Particular emphasis will be given to the laws, procedures, and codes of conduct that guide practice, collaboration with diverse families, advocacy for the rights of early adolescent and adolescent students and their families, and support for the transition of adolescents to new educational settings.

\*Corequisite(s): ED 470. **Signature Learning Experience: Capstone Experience.** Register by Instructor.

**ED 497 - Senior Seminar for Secondary Education**

4.00 credits. This course serves as an issues seminar for pre-service teachers, engaging them in active discussion of professional and ethical practices, family and community relationships, (urban, rural and suburban environments), advocacy for student rights, the transition of adolescents to new educational settings and special education issues in secondary school settings. \*Corequisite(s): ED 470. **Signature Learning Experience: Capstone Experience.**

Register by Instructor.

## Exercise Science Courses

**ESC 100 - Introduction to Exercise Science**

3.00 credits. This course will provide students with an introduction to the field of exercise science and the inter-related disciplines of exercise physiology, motor development, nutrition, biomechanics and sports and exercise psychology. The course will provide an overview of the field as a profession, including career opportunities and planning, professional organizations and certification, the relationship of the field to the healthcare system, and current trends in healthcare, wellness and fitness. Students will also learn the structure and curricular options within the BS in Exercise Science program, as well as the opportunities to build a strong educational and professional portfolio to support their career trajectory.

**ESC 150 - First Aid, CPR, and Medical Terminology**

3.00 credits. This course will provide students with an opportunity to obtain American Red Cross certifications for First Aid, Automatic External Defibrillation, and Cardiopulmonary Resuscitation. Students will also learn the principles of prevention of injuries and adverse medical events in fitness and wellness settings, and how to manage emergency situations when they occur. In addition, students will independently learn the roots, prefixes and suffixes of medical terms in order to develop a conversant vocabulary in the healthcare field.

**ESC 200 - Exercise Physiology I**

3.00 credits. This course studies the physiological responses and adaptations of the human body to increased physical activity and exercise, including the cardiopulmonary, circulatory and neuromuscular systems, under both short-term and long-term activity and exercise conditions. The course will cover a variety of types of activity and exercise, and students will learn how to interpret data arising from measurements of physiological responses to exercise.

**ESC 220 - Exercise Physiology II**

3.00 credits. This course will extend the knowledge and principles learned in Exercise Physiology I to study the physiological responses of the human body to increased activity and exercise in the presence of common diseases and chronic conditions, particularly those affecting the cardiovascular and respiratory systems. The course will also cover how exercise prescription and progression is impacted by disease and dysfunction, and also how physiological responses to activity and exercise can be impacted by age, gender, culture, ethnicity, and lifestyle.

**ESC 230 - Fitness Testing and Exercise Prescription**

3.00 credits. This course will provide students with the knowledge and skills to choose, implement and interpret various tests of physical fitness tests, and to use the findings of those tests to create safe, effective and personalized exercise and activity programs for clients from varied populations.

**ESC 240 - Strength Training and Conditioning**

3.00 credits. This course will provide students with the scientific knowledge and skills to devise safe and effective resistance exercise programs to improve muscular strength, power and endurance, utilizing a variety of methods and equipment. The course will also cover the various trends in muscle function improvement that are seen in both the research literature and in the fitness industry.

**ESC 250 - Prevention and Wellness Promotion**

3.00 credits. This course will provide students with the scientific knowledge and counseling skills to guide clients in averting physical and lifestyle behaviors that can cause injuries and diseases, and to educate clients in how to make healthy, positive physical and lifestyle behavior choices that will enhance their health and well-being. The course will cover a wide range of topics that are critical to prevention and wellness, including but not limited to mental health, drugs and alcohol, personal safety, nutrition, sexuality, motivation and resilience. Students will also develop knowledge about behavior change theories and skills in interpersonal communication to implement successful prevention and wellness strategies for clients.

**ESC 300 - Nutrition in Sports and Exercise**

3.00 credits. This course provides students with a working knowledge of the role of nutrition in improving physical performance, particularly in exercise training and athletic endeavors. The course will cover the metabolic interactions associated with exercise and athletic activities, the effect of eating choices and disorders, how nutritional needs vary across athletic populations, and the efficacy of nutritional supplements and dietary regimens.

**ESC 320 - Exercise and Special Populations**

3.00 credits. This course will provide students with the knowledge and skills to apply the principles of fitness testing, exercise prescription, and strength training and conditioning to populations that have specific needs and conditions that require special attention and guidance. These populations will include those with common chronic medical conditions, such as diabetes, arthritis and cardiovascular disease, and those with physical disabilities. Students will develop an in-depth knowledge of the diseases and conditions that they are likely to encounter in their professional practice, and develop problem-solving skills to adapt physical training programs to these populations so that they are safe and effective.

**ESC 330 - Professional Communication**

3.00 credits. This course will enable students to develop competencies in oral and written communication in professional settings. These skills will include the development of effective interpersonal communication and rapport with clients and professionals, and the ability to communicate the value of exercise and physical activity broadly to a variety of stakeholders using an array of communication platforms. The course will emphasize the importance of both listening and responding in addition to speaking and writing, and the critical importance of communication as an expression of professional competence.

**ESC 470-474 - Exercise Science Internship**

Variable (0.00-3.00) credits. This course will provide students the opportunity to apply the skills, knowledge and professional values they have learned in the curriculum to a real-life training experience, under the direction of an on-site preceptor and the monitoring of the Exercise Science program. The internship will allow the students to gain experience in client interactions, design, implement and assess exercise programs, and develop their behavioral attributes as professionals.

**ESC 495 - Exercise Science Senior Seminar**

3.00 credits. This course will consist of two parts: in the first part, students will prepare and present projects, based on their internship or academic experiences that represent a cogent synthesis of their learning throughout the exercise science curriculum. These projects can involve faculty-guided research, community projects or entrepreneurial activities, as well as other projects as approved by the faculty. Students will effectively communicate the purposes, outcomes and reflections on their work in written and verbal form. In the second part of the course, students will engage in review and refresher study of critical topics needed for successful post-graduation certification by the American College of Sports Medicine or the National Strength and Conditioning Association.

## **Health and Wellness Courses**

**HW 110 - Being a Mental Health Ally**

1.00 credit. Students will receive information about types of mental health concerns and mental health crisis situations. Discussion and activities in class will facilitate students' abilities to assist someone who is experiencing mental health concerns and help the person connect with resources. Information and discussions will facilitate increased awareness and decreased stigma about mental health topics.

**HW 112 - Wellness and the College Student**

2.00 credits. Students will gain an understanding of the eight dimensions of wellness with specific focus on health concerns for college students. Students will utilize health information to develop health promotion programming for the Elizabethtown College campus. Students will explore wellness topics including nutrition, physical activity, sexual health, healthy relationships, alcohol and drug use, sleep, stress, and mental health. Additionally, the class will examine leadership development, program planning, and evaluation for students interested in becoming a Student Wellness Advocate or Student Athlete Mentor.

**HW 115 - Physical Fitness and Wellness**

1.00 credit. Instruction in cardiovascular-type activities, strength, flexibility, weight control, nutrition, myths, physical activity, injury prevention and rehabilitation, safety, fitness equipment, stress, relaxation, games, exercises and the consumer-personalizing fitness, aerobic exercises.

**HW 130 - Introduction to Coaching: A Servant Leadership Approach**

2.00 credits. Students will be able to demonstrate the skills and knowledge needed to lead and coach an athletic team at the high school or college level. Each student will develop a coaching philosophy that will address the key components needed to be successful, not only in terms of wins and losses, but also in the area of character development of athletes.

**HW 135 - Sports Medicine**

2.00 credits. This course is designed to introduce the essentials and basics of sports medicine to the students of Elizabethtown College. Basic concepts involve overview of human anatomy and movement systems, first aid and wound care, injury prevention, evaluation, management, and rehabilitation, as well as emergency response, sports psychology, and sports nutrition.

**HW 200 - Nutrition for Life**

2.00 credits. The goal of this course is for students to develop a better understanding of nutrition and how to create healthy choices based on their specific dietary needs. Students will learn about food energy sources (carbs, proteins and fats), macronutrients, micronutrients, and developing a meal plan/grocery list. Specific diets will be introduced (gluten free, lactose free, vegetarian, vegan, etc.), as well as pro and con discussions of popular and fad diets. Students will learn how nutrition can affect their health by learning about several comorbidities and how

proper nutrition has been proven to prevent and/or decrease complications. Students who have taken the BIO 200 Nutrition course are prohibited from taking HW 200. In addition, this course does not fulfill requirements in the natural or physical sciences.

**HW 470 - Internship in Health and Wellness**

1.00 credit. Placement at an internship site provides students with practical experience in the coaching field while working under a site supervisor. Written assignments and discussions with the site supervisor and the course faculty member will enable students to integrate what they have learned through other courses in the coaching minor and further develop their identity, skills and knowledge-base as a coach. **Signature Learning Experience: Internship.**

**PE 100 - Pilates and Yoga**

1.00 credit. This course introduces a fitness program that incorporates both pilates and yoga. Both pilates and yoga emphasize the balanced development of the body through core strength, flexibility, and awareness. Graded Pass/No Pass.

**PE 105 - Swimming**

1.00 credit. Instruction in the four basic strokes, survival swimming and water safety.

**PE 106 - Water Aerobics**

1.00 credit. Introduces the student to different means to obtain a cardiovascular workout in the water. Graded Pass/No Pass.

**PE 118 - Lifeguarding**

1.00 credit. Provides lifeguard candidates and current lifeguards with the knowledge and skills necessary to keep the patrons of aquatic facilities safe in and around the water. Includes instruction in lifeguarding skills, CPR for the professional rescuer and first aid. Graded Pass/No Pass. Additional fee.

**PE 119 - Scuba**

1.00 credit. A total introduction to the use of scuba equipment and safety; includes work in the pool and classroom. Provides deep water dive certification by the Professional Association of Diving Instructors (PADI). Graded Pass/No Pass. Additional fee.

**PE 120 - Aerobics**

1.00 credit. Inspiration - perspiration: a diversified fitness program that will give a complete workout. Graded Pass/No Pass.

**PE 125 - Tennis**

1.00 credit. Rules, playing techniques and skill development.

**PE 137 - Outdoor Recreation**

1.00 credit. Introduction to hiking, camping, orienteering and wilderness survival skills. Additional fee. Graded Pass/No Pass.

**PE 140 - Bowling**

1.00 credit. Rules, playing techniques and skill development. Additional fee. Graded Pass/No Pass.

**PE 146 - Racquetball**

1.00 credit. Rules, playing techniques and skill development.

**PE 150 - Volleyball**

1.00 credit. Rules, playing techniques and skill development.

**PE 161 - Adapted Physical Education 1**

1.00 credit. Individual activity or collective exercise adapted to needs and abilities of the student. Graded Pass/No Pass. Register by Instructor.

**PE 165 - Golf/Badminton**

1.00 credit. Rules, playing techniques and skill development.

**PE 175 - Archery/Badminton**

1.00 credit. Rules, playing techniques and skill development.

**PE 185 - Basketball**

1.00 credit. Rules, playing techniques and skill development.

**PE 190 - Horsemanship**

1.00 credit. Basic riding positions, balance and equine safety. Discuss equine behavior, care, tack, styles and management. Graded Pass/No Pass. Additional fee.

**PE 194 - Skiing**

1.00 credit. Graded Pass/No Pass. Additional fee.

**PE 195 - Soccer**

1.00 credit. Rules, playing techniques and skill development.

**PE 218 - Water Safety Instruction**

1.00 credit. This course follows American Red Cross certification procedures. Graded Pass/No Pass. Additional fee.

**Master of Curriculum and Instruction Courses**

**MCI 520 - Curriculum and Pedagogy**

3.00 credits. This course examines curriculum theory, models and current trends in curriculum development. It emphasizes pedagogical approaches that focus on issues of multiculturalism, equity and social emotional learning across the K-12 continuum. Register by Instructor.

**MCI 525 - Curriculum and Methods**

3.00 credits. This course will focus on applying curriculum theory, methods, and current trends in curriculum development towards constructing curricula relevant to a diversity of educational settings. Special attention will be placed on the infusion of technology and online learning in planning and implementing curricula.

**MCI 530 - Building Social and Community Capacity**

3.00 credits. This course explores how teachers across the PK-12 continuum can create partnerships with parents and students that facilitate participation in the schools while also validating home culture and family concerns and aspirations. It reflects current research and theory in family literacy development, bilingual and multicultural education, critical pedagogy, participatory research, cooperative learning, and feminist perspectives. It examines the roles the community and family play in sustaining a cooperative and peaceful culture of learning. Register by Instructor.

**MCI 535 - Current Issues and Trends in Assessment in Special and Applied Statistics**

3.00 credits. This course emphasizes the latest research in the current trends of assessment and evaluation. The course discusses methods for planning assessments that are integrated with instruction, crafting assessment tools, crafting scoring rubrics, grading and evaluating students, assessing higher order thinking, and applied statistics for assessment and evaluation. Strategies are discussed that promote and evaluate the continual intellectual, social-emotional, and personal development of all learners. Register by Instructor.

**MCI 550 - Social Emotional Learning**

3.00 credits. Students will develop and demonstrate an understanding of social-emotional learning and explore how it can impact both academic achievement and classroom behavior. Students will engage in activities through which they will learn, plan to use, and implement strategies designed to foster social-emotional and self-management skills using the peace education paradigm. \*Prerequisite(s): Completion of all foundational courses. Register by Instructor.

**MCI 590 - The Graduate Research Seminar**

6.00 credits. This course serves as the research seminar capstone for graduate teachers to construct an action research proposal related to their area of practice. Focus will be on action research and the application of research to classroom settings. Register by Instructor.

**Master of Education Courses**

**MED 510 - Introduction to STEM and STEM Education**

3.00 credits. This course will focus on the historical development of STEM as an integrated educational paradigm and its impact on our current educational system. Trends and issues in the current STEM movement, STEM schools, STEM educational policy, and past, integrated curricular movements, such as STS and STSE, will all be discussed in the course.

**MED 520 - STEM Curriculum, Pedagogy, and Assessment**

3.00 credits. This course will focus on the interrelationship between STEM curriculum, pedagogy, and assessment. STEM curriculum documents such as state and national standards, alternative STEM pedagogies, and a range of appropriate assessment strategies will be examined in the course.

**MED 530 - Constructing Integrative STEM Curricula**

3.00 credits. This course will focus on the construction of an integrated STEM curriculum unit. Methods of curriculum construction, drawing on various standards and paradigms, will be explored with the goal of constructing an integrated STEM curriculum unit for implementation in a formal learning environment.

**MED 543 - English Grammar and Linguistics for ESL Teachers**

2.00 credits. This course provides for the study of the grammar, mechanics, and linguistics of the English language related to teaching English as a second language. The course includes a history of the English language and how the language has changed over time. Special attention will be placed on the use of the four domains of the English language in social and academic settings. \*Prerequisite(s): Provisional Acceptance.

**MED 552 - Cultural Diversity: Awareness, Relevance, and Responsiveness**

4.00 credits. This course provides for the exploration and understanding of cultural diversity, particularly as related to historical, current, and future cultural diversification of the American school system. Aspects of different cultures, including beliefs, behaviors, values, and attitudes, will be compared and contrasted in relation to planning culturally relevant and responsive curriculum and instruction. Theories and programs of multicultural education will be explored. \*Prerequisite(s): Formal acceptance.

**MED 555 - Literacy and Language Acquisition**

2.00 credits. This course will focus on theories of first and second language acquisition, along with factors that influence language acquisition and the impact of language acquisition on learning. Emphasis will be placed on the 5 pillars of literacy (phonemic awareness, phonics, vocabulary, fluency, and comprehension), verbal and non-verbal language development, and specific styles and strategies for language learning. Components of language (morphology, phonology, syntax, semantics, and pragmatics) will be addressed. \**Prerequisite(s)*: Provisional acceptance.

**MED 562 - Methods for Teaching English Learners: Culturally and Linguistically Responsive Teaching**

4.00 credits. This course provides for the planning, implementation, and evaluation of developmentally appropriate educational programs for English Learners (ELs). English Learners represent an extremely diverse group of students, linguistically and culturally, and are at diverse levels of English proficiency, therefore it is important that teachers have the knowledge and skills needed to create programs that are developmentally appropriate for the diversity of English Learners in our schools. This course will focus on theoretical and practical considerations of planning, implementing, and evaluating educational programs for English Learners. \**Prerequisite(s)*: Formal acceptance.

**MED 568 - Educational Assessment and Evaluation of English Learners**

2.00 credits. Examines current issues, trends and practices in educational assessment of English Learners. Emphasizes the study of different assessment and evaluation procedures for English Learners in the early childhood, elementary and secondary classroom. Emphasis placed on the development, implementation, and analysis of assessment methods designed specifically for English Learners, as well as designing accommodations for existing assessment tools to meet the needs of English Learners. Identification and education of English Learners with specific learning disabilities will be explored. \**Prerequisite(s)*: Provisional acceptance.

**MED 570 - Teaching English language Learners Practicum**

2.00 credits. This practicum-based course provides for a structured field placement in conjunction with an online seminar in which students will: 1) conduct in-depth observations of English Learners (ELs) and 2) plan, implement, and evaluate educational programming for English Learners. Special attention will be placed on the relationship of curriculum, pedagogy, and assessment in planning educational programming. Instructional materials and strategies will be based on multicultural education and language learning theory to develop appropriate methodology to use with culturally and linguistically diverse students at varying levels of English proficiency. Sixty hours of field experience are required. \**Prerequisite(s)*: Formal acceptance.

**MED 571 - STEM Education Practicum**

3.00 credits. This course will have students implement and evaluate a STEM curriculum unit in a formal learning environment. In addition to curriculum construction and evaluation, this, the final course in the STEM endorsement program, will require students to develop a portfolio demonstrating their proficiency in the program competencies.

**Master of Special Education Courses**

**MSE 512 - Learning Environment and Social Interaction in Inclusive Settings (SED 212)**

4.00 credits. A study of the scientific principles and best practices for creating and sustaining an optimal learning environment and positive social interaction for diverse learners in an inclusive classroom setting. Emphasis is on analyzing factors that influence academic and social behavior, adapting the physical environment, implementing an equitable classroom management system, maintaining a respectful climate, teaching social skills, and implementing positive behavioral supports. \**Prerequisite(s)*: Formal acceptance into Education Program required. Register by Instructor.

**MSE 522 - Foundations of Inclusive Education (SED 222)**

4.00 credits. This course is an introduction to philosophical, historical, and legal foundations of Special Education and inclusive education principles and practices. The history, etiology, characteristics, and accommodations for students with special needs in the classroom setting will be examined. Field experience is required which will require FBI Clearance, Criminal Record Clearance, Pennsylvania Child Abuse Clearance, and TB Test (fees).

\**Prerequisite(s)*: Formal acceptance into Education Program required. \**Corequisite(s)*: MSE 522L. Register by Instructor.

**MSE 524 - Methods of Teaching Students with High Incidence Disabilities (SED 224)**

4.00 credits. A study of the specialized instructional strategies to adapt and accommodate classroom environments, testing methodologies, and curricula to meet the needs of exceptional children and youth. Emphasis is on high incidence disabilities, such as learning disabilities, ADD/ADHD, emotional and behavior disorders, communication disorders, and cultural or linguistic diversity. Field experience is required which will require FBI Clearance, Criminal Record Clearance, Pennsylvania Child Abuse Clearance, and TB Test (fees). \**Prerequisite(s)*: Formal acceptance into Education Program required. \**Corequisite(s)*: MSE 524L. Register by Instructor.

**MSE 530 - Methods of Teaching Students with Low Incidence Disabilities (SED 230)**

4.00 credits. This course is designed to prepare students to implement best practices, ensure access, and to serve as advocates in collaboration with a service team for students with low incidence disabilities and their families. These disabilities include the traditional categories of significant and/or multiple disabilities: mental disabilities with significant cognitive needs, low vision and blindness, hearing impairments and deafness, deaf-blindness, autism, physical or health disabilities, and traumatic brain injury. Students learn strategies for collaboration, specific instructional and classroom management procedures, considerations for younger and older students, and are challenged to identify and use innovative tools to support active participation. Students are also encouraged to wrestle with current trends and issues in special education and the larger field of education. Reading response, and collaborative learning are an integral part of the course experience. \**Prerequisite(s)*: SED 224 and acceptance into the Graduate Education Program is required. Register by Instructor.

**MSE 533 - Assessment in Special and Inclusive Education (SED 333)**

4.00 credits. This course provides an overview of assessment as a tool to guide various types of decisions in the educational setting. The primary focus is on use of informal and formal assessment to craft instruction that is responsive to individual learners. The course also includes information on how to use data to make eligibility and placement decisions while highlighting best practice to ensure that these decisions are well informed and in the best interest of the learner. Specific topics include legislation, trends, and issues in assessment practices; different types of tests and their appropriate administration, scoring, and interpretation; use of descriptive statistics to describe and interpret data sets; reliability and validity considerations in designing, administering, and reporting; and assessment of young children and behavior. \**Prerequisite(s)*: Acceptance into the Graduate Education Program is required. Register by Instructor.

**MSE 540 - Etiology, Equity, and Law**

4.00 credits. This course discusses federal and state special education law, including relevant court cases, and its interrelationship with equity and etiology of special needs students. Laws, regulations, policy, and stereotypes relating to the education of special needs populations are discussed. Methods of conflict resolution, mediation, and ethical standards are examined. Students will be required to apply what they learn as they analyze real-life case scenarios. \**Prerequisite(s)*: Acceptance into the Graduate Education Program is required. Register by Instructor.

**MSE 542 - Effective Instruction for Students with ASD and/or EBD (SED 342)**

4.00 credits. This course is designed to prepare teachers to support the participation and education of students with Autism Spectrum Disorder (ASD) or Emotional and Behavioral Disorders (EBD) in the PK-12 setting. Emphasis is

on the diagnostic criteria, methods of identification, and best practices in intervention and support according to current research. Field experience is required. \*Prerequisite(s): Acceptance into the Graduate Education Program is required. \*Corequisite(s): MSE 544, MSE 565, and MSE 542L. Register by Instructor.

**MSE 544 - Intensive Reading, Writing, and Mathematics Intervention (SED 344)**

4.00 credits. This course provides substantive, research-based instruction that effectively prepares future teachers to assess and provide interventions to students who are struggling in the reading, writing, and mathematics content areas. An emphasis will be placed on determining differences between typical and problematic performance in each of the areas and modifying instructional methods, providing strategy instruction, and monitoring progress in each area. A clinical field experience is required. \*Prerequisite(s): MSE 524 and acceptance into the Graduate Education Program is required. \*Corequisite(s): MSE 542, MSE 565, and MSE 544L. Register by Instructor.

**MSE 565 - Issues in Special Education**

4.00 credits. Working with a faculty mentor, this is a self-directed and self-constructed course for those specializing in PK-8 or 7-12 certifications. Graduate candidates select specific topics to explore that are particularly germane to their certificate levels and companion competencies. \*Prerequisite(s): Acceptance into the Graduate Education Program is required. \*Corequisite(s): MSE 542 and MSE 544. Register by Instructor.

**MSE 570 - Graduate Student Teaching**

12.00 credits. This experience is supervised student teaching for a full semester in Special Education. To be taken in conjunction with the Graduate Research Seminar. \*Prerequisite(s): Acceptance into the Graduate Education Program is required. \*Corequisite(s): MSE 590. Graded Pass/No Pass. Register by Instructor.

**MSE 590 - Graduate Research Seminar**

4.00 credits. This course serves as the research seminar capstone for graduate teachers to understand and apply research theories and design, culminating in a scholarly paper and corresponding oral defense. Experience is supervised student teaching for a full semester in Special Education. To be taken in conjunction with the Graduate Student Teaching. \*Prerequisite(s): MSE 565. \*Corequisite(s): MSE 570. Register by Instructor.

**Occupational Therapy Courses**

**OT 105 - Introduction to Health and Wellness**

4.00 credits. This course introduces students to foundational concepts of health and wellness from a broad variety of perspectives. Students will learn how factors such as culture, environments, and social relations influence health at personal and societal levels. The relationship between health and ability to participate in daily life will be explored. Health Science Majors.

**OT 110 - Occupations across the Lifespan**

4.00 credits. This course will examine occupational performance from birth through adult aging. An emphasis will be placed on the interaction of the person factors within different environments and context to support both meaningful occupation and role competence. Active learning labs and community based learning will support student learning outcomes. Health Science Majors. **Signature Learning Experience: Community-Based Learning.**

**OT 205 - Evidence-Based Practice Foundation**

4.00 credits. This is the first in a series of courses designed to promote the active use and application of scholarship in health care practice. Three modules include: evidence and the health care, tests & measurements, and evidence in health care practice. Skills, knowledge, and critical thinking introduced in this course will be integrated with later occupational therapy practice courses. \*Prerequisite(s): MA 251.

**OT 210 - Global Health Care Systems**

4.00 credits. In this course, students will describe, analyze, and critique health care systems globally. The impact of culture and policy on the delivery of health services will be explored. Students will also analyze the ethical and justice issues related to global health care delivery and utilization. \*Prerequisite(s): OT 105.

**OT 305 - Conditions and the Implications for Occupational Performance**

4.00 credits. Within this course, students will become familiar with common diagnoses and conditions that impact occupations. An emphasis will be placed on understanding the incidence, epidemiology, etiology, diagnosis, symptomatology, prognosis, and functional implications of conditions. \*Prerequisite(s): BIO 201, BIO 202, OT 110, and OT 205.

**OT 310 - Occupations and Activity Analysis**

4.00 credits. This course addresses the analysis of how individuals and groups engage in meaningful occupations and activities in various contexts to support their health and well-being. Students consider how client factors, performance skills, performance patterns, activity demands, and context(s) and environments interact to support successful engagement in occupation. Students develop skills in analysis, and in grading and adapting the environment, tools, materials, occupations, and interventions to address client needs, the sociocultural context, and technological advances. \*Prerequisite(s): OT 105, OT 110, BIO 201, and BIO 202.

**OT 370-378 - Special Topics in Health and Occupation**

2.00 credits. A series of courses with topics not otherwise covered in the curriculum. Offered when student interest and faculty availability justify. \*Prerequisite(s): Permission of the instructor. This course is repeatable for credit.

**OT 415 - Health, Wellness, and Healing: Application to Well-being**

4.00 credits. This course is designed to increase student knowledge of health, wellness, and healing as it applies to well-being. The course will broaden the range of student knowledge of traditional, non-traditional, complimentary, alternative, integrative, and functional medicine, and emerging trends in individual and community-based practice areas.

**OT 475 - Health Internship**

0.00 credit. Alternative internship experience in a health setting that is approved by the Program of Occupational Therapy. This experience allows students to apply skills and knowledge gained through academic work in a related service agency, health care facility, or community setting. \*Prerequisite(s): Senior Status. **Signature Learning Experience: Internship.** Graded Pass/No Pass. Register by Instructor. This course is repeatable for credit.

**OT 480-489 - Independent Study in Occupational Therapy**

Variable credit. The purpose of this course is to offer advanced students opportunity to study specialized areas not otherwise included in the curriculum. \*Prerequisite(s): Approval of the Dean and Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**OT 492 - Undergraduate Scholarship Practicum I**

Variable (2.00 or 4.00) credits. An original scholarship project planned, implemented and written by students with substantive supervision and consultation with faculty. Any occupational therapy student may petition to take this course. All students who qualify for the Honors in the Discipline will be extended an invitation to use this course for scholarship endeavors. Students must obtain permission of the professor who they wish to serve as their scholarship mentor prior to enrollment and must submit for IRB approval. Scholarship used as Honors in the Discipline must have a minimum of four credits across OT 492 and/or OT 494. This is not an occupational therapy curricular required course. **Signature Learning Experience: Supervised Research.** Graded Pass/No Pass. Register by Instructor. Fall semester.

**OT 494 - Undergraduate Scholarship Practicum II**

Variable (2.00 or 4.00) credits. An original scholarship project planned, implemented and written by students with substantive supervision and consultation with faculty. Any Occupational Therapy student may petition to take this course. All students who qualify for the Honors in the Discipline will be extended an invitation to use this course for scholarship endeavors. Students must obtain permission of the professor whom they wish to serve as their scholarship mentor prior to enrollment and must submit for IRB approval. Scholarship used as Honors in the discipline must have a minimum of four credits across OT 492 and/or 494. This is not an Occupational Therapy curricular required course. **Signature Learning Experience: Supervised Research.** Graded Pass/No Pass. Register by Instructor. Spring semester.

**OT 505 - Occupational Therapy Evaluation: Adult Populations**

4.00 credits. Through this course, students will gain knowledge, and develop clinical reasoning skills and professional attributes to complete occupational therapy assessment with adult populations. \**Prerequisite(s)*: OT 105, OT 205, OT 305, OT 310, and NEU 125. \**Corequisite(s)*: OT 525.

**OT 515 - Occupational Therapy Evaluation: Pediatric Populations**

4.00 credits. Through this course, students will gain knowledge, and develop clinical reasoning skills and professional attributes to complete occupational therapy assessment with pediatric populations. \**Prerequisite(s)*: OT 105, OT 205, OT 305, OT 310, and NEU 125. \**Corequisite(s)*: OT 505.

**OT 525 - Occupational Therapy History and Theory**

4.00 credits. Students learn about the historical, philosophical, and ethical development of occupational therapy. Students will perform a complex analysis of major occupation based theories and models. Application of models and theories across populations and settings will be explored. \**Prerequisite(s)*: Successful completion of the undergraduate degree in Health Sciences and matriculation into the graduate program in Occupational Therapy.

**OT 532 - Occupational Therapy Intervention: Adult Populations**

4.00 credits. Through this course, students will gain knowledge and develop clinical reasoning skills and professional attributes to complete occupational therapy intervention with adult populations. \**Prerequisite(s)*: OT 505 and OT 525. \**Corequisite(s)*: OT 532F and OT 532S. **Signature Learning Experience: Fieldwork Education.**

**OT 533 - Occupational Therapy Intervention: Pediatric Populations**

4.00 credits. Through this course, students will gain knowledge and develop clinical reasoning skills and professional attributes to complete occupational therapy intervention with pediatric populations. \**Prerequisite(s)*: OT 515 and OT 525. \**Corequisite(s)*: OT 533F and OT 533S. **Signature Learning Experience: Fieldwork Education.**

**OT 534 - Scholarship I: Analysis of the Literature**

4.00 credits. This is the second in a series of courses designed to promote the active use and application of scholarship in occupational therapy practice. The primary focus of this course is to analyze the literature related to a particular topic and formulate scholarship questions. \**Prerequisite(s)*: OT 205 and successful completion of Undergraduate degree in Health Sciences.

**OT 550 - Advanced Occupational Therapy Theory and Application**

4.00 credits. Students will learn how to apply theory to practice in this seminar course. A key element of this course will be combining theories to maximize therapeutic outcomes. Students will have the opportunity to explore and build upon existing theories, as well as create their own. \**Prerequisite(s)*: OT 525.

**OT 554 - Scholarship II: Methods and Analysis**

4.00 credits. This is the third in a series of courses designed to promote the active use and application of scholarship in occupational therapy practice. The course is designed to provide students with knowledge of research methods and program analysis. \*Prerequisite(s): OT 534.

**OT 556 - Analysis and Application: Therapeutic Relationships**

4.00 credits. The course provides opportunities for students to further investigate and practice skills related to the therapeutic relationship and process including providing training and education to clients and families, applying therapeutic use of self in individual and group intervention, directing and modifying intervention, and providing supervision to occupational therapy assistants. \*Prerequisite(s): OT 310, OT 505, OT 515, OT 532, and OT 533.

**OT 558 - Occupational Therapy Practice in Context**

4.00 credits. Through this course, students will develop and integrate clinical reasoning skills and professional attributes when engaging in and completing the occupational therapy process throughout diverse contexts (person, place, time) and within applicable theories and frames of reference. The emphasis of the course will be on completing the entire process, including assessment, goal planning, intervention, adaptation, and revision of goals, discharge planning, referral recommendations and terminating care while attending to multiple contexts of practice. \*Prerequisite(s): OT 505, OT 515, OT 525, OT 532, OT 533, and OT 556. \*Corequisite(s): OT 558F and OT 558S.

**OT 560 - Analysis and Application: Functional Movement**

4.00 credits. The course provides opportunities for students to further investigate and practice skills related to the understanding, analysis, and application of functional movement within the therapeutic process including safe patient handling and transfer training, fabrication of orthotics and assistive technologies, the use of physical agent modalities, and the application of environmental adaptations. \*Prerequisite(s): NEU 125, OT 310, OT 505, OT 515, and OT 532.

**OT 562 - Management of Occupational Therapy Services**

4.00 credits. This course provides an introduction to various principles of management for occupational therapists. The course presents opportunities to learn about strategic planning, management of therapeutic programs, budgeting, and program evaluation. Students will also learn and apply management theories and leadership principles to employee development and supervision within occupational therapy and/or interdisciplinary teams. Additional topics to be covered include performance improvement, consultation, entrepreneurship, marketing, and organizational change. \*Prerequisite(s): Successful completion of the B.S. in Health Sciences.

**OT 564 - Scholarship III: Analysis, Application, and Discussion**

4.00 credits. This is the fourth in a series of courses designed to promote the active use and application of scholarship in occupational therapy practice. The course is designed to provide students with the opportunity to analyze data and provide a synopsis and critique of the data. \*Prerequisite(s): OT 554.

**OT 575 - Graduate Internship**

Variable (0.00 to 4.00) credits. A supplemental fieldwork experience that is intended to provide opportunities for clinical development to cover the breadth of field experiences that the student should have for entry-level positions. This fieldwork is intended to be more intensive than a Level I fieldwork but not as comprehensive as Level II. A minimum time would be two weeks, but it is likely that the sites serving more involved clients will require a minimum of three weeks of full-time fieldwork to reach the target competency level. \*Prerequisite(s): B.S. in Health and Occupation. Register by Instructor. Offered as needed. This course is repeatable for credit provided it occurs in a different setting.

**OT 580 - Master's Level Independent Study**

Variable credit. Independent Study option for students in the Occupational Therapy Master's program. Register by Instructor. This course is repeatable for credit.

**OT 590 - Graduate Project Practicum**

0.00 credit. This is a non-credit bearing course designed to support the graduate student projects mentored by OT faculty and companion the graduate research sequence courses. The course provides a structure for a faculty-mentored graduate project that is inspired, planned, implemented, and then prepared for publication/ presentation. Specific projects will include: general overview of the problem, review of the literature, problem statement, methodological design that supports research questions, aggregation and summary of data, comparison of research with other studies, and a critical analysis of the research conducted. Students will have a variety of research topics from which to choose based on faculty area of clinical expertise and scholarly endeavors. \**Prerequisite(s)*: B.S. in Health and Occupation \**Corequisite(s)*: OT 534, and either OT 554 or OT 564. Graded Pass / No Pass. Register by Instructor. This course is repeatable for credit.

**OT 595 - Level II Fieldwork**

6.00 credits. Twelve weeks of Level II Fieldwork experience. 6.00 credits for full-time (i.e. 12 weeks) fieldwork (part-time fieldwork approved by the Program may be registered for 2.00 or 4.00 credits). Further information on Level II Fieldwork can be found in the Program Student Manual and the Level II Fieldwork Student Manual.

\**Prerequisite(s)*: B.S. in Heath Sciences and completed coursework in Occupational Therapy. Graded Pass/No Pass. Register by Instructor. Spring, Summer, or Fall semester. This course is repeatable for credit.

**OT 596 - Level II Fieldwork: Specialty**

Variable (0.00 to 6.00) credits. Variable length of Level II Fieldwork experience in area of student's interest. Arranged on an availability basis. \**Prerequisite(s)*: B.S. in Health and Occupation and completion of all graduate didactic coursework. Graded Pass/No Pass. Register by Instructor.

**OT 641 - Acute Care and Rehabilitation Graduate Elective**

4.00 credits. This course emphasizes the practice skills and knowledge essential to practicing in medical model acute and rehabilitation areas with applications to both adult and pediatric populations. Students will explore advanced study in technology, documentation and treatments of these traditional medical model practice venues. Advanced splint construction, hand therapy, physical agents/modalities, ergonomic issues and other acute issues models are examples of options that may be addressed. Case studies apply traditional occupational therapy practice to individuals with physical disabilities. \**Prerequisite(s)*: OT 505, OT 515, OT 532, and OT 533.

**OT 643 - Topics in Gerontology Graduate Elective**

4.00 credits. This course enables students to gain content knowledge and expertise in the practice area of gerontology. This elective emphasizes geriatric occupations, wellness and clinical practice. \**Prerequisite(s)*: OT 505 and OT 532.

**OT 644 - Health, Wellness, and Healing Graduate Elective**

4.00 credits. This graduate elective course is designed to increase student knowledge of occupational therapy services in the context of health and wellness and healing. The course will broaden the range of student knowledge of service in mental health and wellness and will seek to help students strengthen their understanding of the roles played by occupational therapists in these areas of practice, the theories that are applied and the contexts of occupational therapy in community-based practice areas. \**Prerequisite(s)*: OT 505, OT 515, OT 532, and OT 533.

**OT 645 - School System Practice Graduate Elective**

4.00 credits. This course is designed to enable students to gain content knowledge and expertise in a practice area of interest. This course is designed to allow students to explore in-depth the area of school-based practice. Students will learn and discuss current legislation governing therapy practice in general and special education in both public and private school arenas as well as best practice models for screening/evaluation, direct and consultative service delivery, and efficacy research. In addition to in-class lecture content, students will participate in seminars and service learning or continuing education activities. \*Prerequisite(s): OT 515 and OT 533.

**OT 647 - Topics of Pediatric Practice Graduate Elective**

4.00 credits. This course provides an in-depth study of a diversity of practice in areas related to pediatric populations. Pediatric practice covers a broad array of settings, ages, and ability levels. Through this course, students will advance their understanding of childhood occupations, family systems, and models of practice, in addition to interventions that will increase meaningful participation. Since pediatric practice involves a sophisticated balance of conditional, pragmatic, narrative, interactive, procedural, and ethical clinical reasoning; a case-based approach to learning will be a primary mode of teaching. Specific topics addressed in this course are guided by student interest and faculty expertise. Experiential learning in community settings may also be used to support the students' learning. \*Prerequisite(s): OT 515 and OT 533.

**OT 650 - Leadership in Professional Practice**

4.00 credits. This course provides the opportunity to learn leadership theory and styles for application to professional occupational therapy practice. Students will develop leadership skills for use in clinical, management and service contexts. The course will link theory and practice to issues such as staff training & professional development, conflict resolution, interdisciplinary teamwork and collaboration as well as intraprofessional collaboration of OT/OTA practitioners in multiple contexts.

**OT 655 - Populations - Based Occupational Therapy Practice**

4.00 credits. Through this course, students will gain knowledge and develop clinical reasoning skills and professional attributes to complete occupational therapy assessment and intervention with populations/groups.

\*Prerequisite(s): OT 505, OT 525, and OT 532.

**OT 660 - Evidence Based Application**

3.00 credits. This course highlights the value and importance of evidence-based practice and the diligence to uphold evidence in the decision-making process for occupational therapy intervention. Students need to compete EBP papers that are associated with a topic being addressed in occupational therapy practice.

**OT 688 - Pre-Capstone Experience Seminar**

1.00 credit. The Pre-Capstone Experience Seminar is completed within the last three semesters of the doctorate program prior to the Capstone Experience. Students must successfully complete all requirements of this course prior to scheduling the Capstone Experience. The goal of the doctoral Pre-Capstone Experience Seminar is to provide students with the opportunity to develop a comprehensive proposal outlining the extent of the Capstone experience.

**OT 705 - Preparation for Practice**

1.00 credit. This course provides an avenue for students to synthesize their understanding of professional practice issues and develop preliminary plans that promote lifelong learning. The focus of the course will be integration and synthesis of knowledge and skills necessary for professional development in practice related to completing requirements for national certification, licensure, continuing education, and developing career goals.

\*Prerequisite(s): Completion of all didactic course work and Fieldwork II requirements.

**OT 710 - Graduate Portfolio**

3.00 credits. This course provides an avenue for students to synthesize their understanding of their professional knowledge, skills, and dispositions as it related to entry-level occupational therapy practice. The primary purpose of the course is to complete a portfolio and present this work to the faculty for review and comments. \**Prerequisite(s)*: Completion of all didactic course work and Fieldwork II requirements.

**OT 795 - Capstone Experience**

12 credits. The Capstone Experience is completed in the last semester of the doctorate program. Students must successfully complete all didactic coursework and both Fieldwork II experiences before moving onto the Capstone Experience. The goal of the doctoral experiential component is to develop occupational therapists with advanced skills (those that are beyond a generalist level). The doctoral experiential component is an integral part of the program's curriculum design and shall include an in-depth experience in one or more of the following: clinical practice skills, research skills, administration, leadership, program and policy development, advocacy, education, or theory development. \**Prerequisite(s)*: Completion of all didactic course work and Fieldwork II requirements.

**Physician Assistant Courses**

**MPA 500 - Medical Terminology**

0.5 credits. In this course, students will learn the principles of medical word building and medical vocabulary used as a physician assistant through root words, prefixes and suffixes. Graded Pass/No Pass. Winter term.

**MPA 501 - Foundations of Health Sciences I**

4.00 credits. This course provides an in-depth study of topics in human anatomy, physiology and pathophysiology in a system-based approach. Instruction will emphasize genetic and molecular mechanisms of health and disease with material on cell biology and immunology, infectious disease, integumentary, musculoskeletal and rheumatological, neurological and hematology systems. Hours: lecture 3, laboratory 3.

**MPA 502 - Foundations of Health Sciences II**

4.00 credits. This course provides an in-depth study of topics in human anatomy, physiology and pathophysiology in a system-based approach. Instruction will emphasize genetic and molecular mechanisms of health and disease material on cardiology, pulmonology, eyes, ears, nose, throat and endocrine systems. Hours: lecture 3, laboratory 3.  
\**Prerequisite(s)*: MPA 501. Summer term.

**MPA 503 - Clinical Health Sciences**

3.00 credits. This course provides an in-depth study of topics in human anatomy, physiology and pathophysiology in a system-based approach. Instruction will emphasize material on gastrointestinal, renal and genitourinary systems as well as some introduction to pregnancy and pediatrics and surgical components. \**Prerequisite(s)*: MPA 501 and MPA 502. Fall semester.

**MPA 511 - Clinical Medicine I**

6.00 credits. This course will introduce students to the broad scope of clinical medicine and disease processes. Included will be pathology and prevalence, microbiology, signs and symptoms, evaluation and management in a system-based approach. This course will explore disorders of integumentary, musculoskeletal, rheumatological, behavioral health, neurological and hematology systems. Spring semester.

**MPA 512 - Clinical Medicine II**

6.00 credits. This course will continue building on the broad scope of clinical medicine and disease processes. Included will be pathology and prevalence, microbiology, signs and symptoms, evaluation and

management in a system-based approach. This course will explore disorders of cardiology, pulmonology, eyes, ears, nose, throat and endocrine systems. \*Prerequisite(s): MPA 511. Summer term.

**MPA 513 - Clinical Medicine III**

6.00 credits. This course will continue to build on the foundation of the broad scope of clinical medicine and disease processes. Included will be pathology and prevalence, microbiology, signs and symptoms, evaluation and management in a system-based approach. This course will explore disorders of gastrointestinal, renal, genitourinary and reproductive systems as well as including special populations of pregnancy, pediatrics, geriatrics and emergency medicine. \*Prerequisite(s): MPA 511 and MPA 512. Fall semester.

**MPA 521 - Pharmacology I**

3.00 credits. This course will give students a foundation in the mechanism by which drugs influence physiologic manifestations of disease. There is introduction to the principles of drug action, metabolism, elimination, toxicity and therapeutics. This course will cover anti-inflammatories, antibiotics, topical remedies, analgesics, mental health medications, neurological therapeutics and anticoagulation. Spring semester.

**MPA 522 - Pharmacology II**

3.00 credits. This course continues building on the mechanism by which drugs influence physiologic manifestations of disease and the principles of drug action, metabolism, elimination, toxicity and therapeutics. The second course introduces therapeutics for cardiology, pulmonology, eyes, ears, nose, throat and endocrinology. \*Prerequisite(s): MPA 521. Summer term.

**MPA 523 - Pharmacology III**

3.00 credits. This course continues building on the mechanism by which drugs influence physiologic manifestations of disease and the principles of drug action, metabolism, elimination, toxicity and therapeutics. The third course introduces therapeutics for gastrointestinal, renal, genitourinary and reproductive systems. There is also discussion on pregnancy, pediatrics, geriatrics and alternative medicines. \*Prerequisite(s): MPA 521 and MPA 522. Fall semester.

**MPA 531 - Physical Assessment and Procedures I**

3.00 credits. This course is a lecture and laboratory course designed to introduce students to the theory and application of physical examination and basic point of care skills. The students will cover a comprehensive physical examination and begin to discuss problem focused collection based on patient presentation. Hours: lecture 2, laboratory 3. Spring semester.

**MPA 532 - Physical Assessment and Procedures II**

3.00 credits. This course is a lecture and laboratory course designed to explore further the physical examination, procedural and basic point of care skills. The students will continue their comprehensive physical examination and problem focused collection based on patient presentation and add in more diverse populations across the life span. They will also be introduced to more complex assessment tools such as electrocardiograms, xray, pulmonary function testing, ultrasound, etc. Hours: lecture 1.5, laboratory 4.5). \*Prerequisite(s): MPA 531. Summer term.

**MPA 533 - Physical Assessment and Procedures III**

3.00 credits. This course is a lecture and laboratory course designed to further explore the physical examination, procedural and basic point of care skills across the life span. The students will continue their comprehensive physical examination, problem focused data collection based on patient presentation, point of care and procedural skills. They will also be introduced to more complex procedures (biopsy, incision and drainage, intubation, etc). Hours: lecture 1, laboratory 6. \*Prerequisite(s): MPA 531 and MPA 532. Fall semester.

**MPA 541 - Clinical Reasoning I**

2.00 credits. This course will introduce students to the process of collecting and documenting data and integrating this data into a patient assessment. Students will also learn problem solving/medical decision making for more effective patient evaluation, diagnosis, and management. There is discussion of each component of a SOAP note and interviewing skills. Students will learn oral and written presentation skills. Spring semester.

**MPA 542 - Clinical Reasoning II**

2.00 credits. This course is a small group case- based setting to practice the skill of collecting a history and critical thinking for problem solving and medical decision making, continuing on effective patient evaluation, diagnosis and management. Standardized patients, facilitators, self-directed learning and small group discussion will be used. Students will continue to practice oral presentation and written SOAP notes. Hours: lecture 1, small group 3.

\**Prerequisite(s)*: MPA 541. Summer term.

**MPA 543 - Clinical Reasoning III**

2.00 credits. This course is a small group case- based setting to practice the skill of collecting a history and critical thinking for problem solving and medical decision making to further master effective patient evaluation, diagnosis and management. Standardized patients, facilitators, self-directed learning and small group discussion will be used. This final installment of the course will utilize more complex cases, evidence based medicine and diverse populations across the life span. Students will continue to practice oral presentation and written SOAP notes.

\**Corequisite(s)*: MPA 541 and MPA 542. Fall semester.

**MPA 551 - Patient Communication and Education I**

2.00 credits. In this course, students will learn essential skills in the assessment of and communication with patients. There will be focus on patient-provider relationships, health literacy, diverse populations, patient education, social and behavioral sciences as well as normal and abnormal human development across the life span, motivational interviewing, substance use/abuse, end of life discussion and delivering bad news, HIPPA and the history of the physician assistant profession. This course will use interpersonal and communication skills that result in effective exchange of information and collaboration with patients, their families and other health professionals. Spring semester.

**MPA 552 - Patient Communication and Education II**

2.00 credits. In this course, students will continue to develop the essential skills in the assessment of and communication with patients across diverse populations. This course will use interprofessional patient centered teams to continue development of clinical and therapeutic understanding. This course will include discussion on intellectual honesty and appropriate academic and professional conduct, professional development and medical literature, reimbursement, billing and coding, concepts of public health as they relate to the role of the practicing PA, patient safety, quality improvement, prevention of medical errors and risk management, health care delivery systems and health policy, and prescription writing. \**Prerequisite(s)*: MPA 551. Fall semester.

**MPA 600 - Transition to Clinical Practice**

2.00 credits. This course is a review of all pertinent material related to clinical rotations and clinical practice. Students will review and receive updates on any policies and procedures, HIPPA, documentation, patient safety, professionalism, ethics, etc. \**Prerequisite(s)*: Successful completion of all didactic coursework. Spring semester.

**MPA 601 - Education and Research I**

2.00 credits. In the first section of a two part series, students will learn the basics of developing their culminating experience project and will identify a community service opportunity in an area of their choosing to promote community involvement, lifelong learning, and develop a deeper understanding of accessibility to care concerns

within a community. Students can complete their capstones in a diverse range of settings, including clinical or hospital environments, public policy organizations, and nonprofit organizations. Students will be encouraged to apply classroom learning concepts to the clinical setting. \*Prerequisite(s): Successful completion of all didactic coursework. Spring semester.

**MPA 602 - Education and Research II**

2.00 credits. In the second section of a two part series, students will expand on the development, implementation, and evaluation of their culminating experience project. Research and fieldwork time will be provided to students for project completion. These concepts will culminate into a fully developed capstone project. \*Prerequisite(s): MPA 601. Summer term.

**MPA 603 - PANCE Preparation I**

0.5 credits. Attaining board certification is a requirement for all Physician Assistants intending to apply for state licensure and practice medicine upon graduation throughout the United States. This course is a comprehensive review of material presented throughout the didactic and clinical years. Topics align directly with the blueprint provided by the National Commission for Certification of Physician Assistants (NCCPA). Students will complete practice examinations designed to prepare them for the Physician Assistant National Certification Examination (PANCE) administered by the NCCPA. \*Prerequisite(s): Successful completion of all didactic coursework. Graded Pass/No Pass. Spring semester.

**MPA 604 - PANCE Preparation II**

0.5 credits. Attaining board certification is a requirement for all Physician Assistants intending to apply for state licensure and practice medicine upon graduation throughout the United States. This course is a comprehensive review of material presented throughout the didactic and clinical years. Topics align directly with the blueprint provided by the National Commission for Certification of Physician Assistants (NCCPA). Students will be required to attend a board review course selected and approved by the Clinical Coordinator and Program Director. In addition to attending a board review course, students will complete practice examinations designed to prepare them for the Physician Assistant National Certification Examination (PANCE) administered by the NCCPA. \*Prerequisite(s): MPA 603. Graded Pass/No Pass. Summer term.

**MPA 605 - PANCE Preparation III**

0.5 credits. Attaining board certification is a requirement for all Physician Assistants intending to apply for state licensure and practice medicine upon graduation throughout the United States. This course is a comprehensive review of material presented throughout the didactic and clinical years. Topics align directly with the blueprint provided by the National Commission for Certification of Physician Assistants (NCCPA). Students will repeat the PACKRAT, designed to assess student readiness for the Physician Assistant National Certification Examination (PANCE) administered by the NCCPA. \*Prerequisite(s): MPA 603 and MPA 604. Graded Pass/No Pass. Fall semester.

**MPA 611 - Primary Care Preceptorship I**

4.00 credits. Students will complete a 4-week community based clinical preceptorship designed to enhance student competence in the delivery of periodic well care in one of four primary care settings. Students in this preceptorship will be placed in an internal medicine and/or family practice setting. Students will be placed in settings that focus on the management of acute and chronic disease across the lifespan in inpatient and/or outpatient settings. Students will participate in history-taking, physical examination, assessment, formulating a problem list, ordering and interpreting diagnostic tests, developing a treatment plan, and completing medical documentation appropriately. Students in this rotation will develop an increased understanding of environmental, social, and economic factors that impact patient care. Students will gain further experience functioning as a part of a healthcare team through preceptor presentation

and expanding on effective communication with patients, families, and healthcare providers. \**Prerequisite(s)*: Successful completion of all didactic coursework.

**MPA 612 - Primary Care Preceptorship II**

4.00 credits. Students will complete a 4-week community based clinical preceptorship designed to enhance student competence in the delivery of periodic well care in one of four primary care settings. In addition to family practice exposure, students will gain exposure to women's health. Students will be placed in settings that focus on the management of acute and chronic disease across the lifespan in inpatient and/or outpatient settings. Students will participate in history-taking, physical examination, assessment, formulating a problem list, ordering and interpreting diagnostic tests, developing a treatment plan, and completing medical documentation appropriately. Students in this rotation will develop an increased understanding of environmental, social, and economic factors that impact patient care. Students will gain further experience functioning as a part of a healthcare team through preceptor presentation and expanding on effective communication with patients, families, and healthcare providers. \**Prerequisite(s)*: Successful completion of all didactic coursework.

**MPA 613 - Primary Care Preceptorship III**

4.00 credits. Students will complete a 4-week community based clinical preceptorship designed to enhance student competence in the delivery of periodic well care in one of four primary care settings. In addition to family practice exposure, students will gain exposure to pediatric care. Students will be placed in settings that focus on the management of acute and chronic disease across the lifespan in inpatient and/or outpatient settings. Students will participate in history-taking, physical examination, assessment, formulating a problem list, ordering and interpreting diagnostic tests, developing a treatment plan, and completing medical documentation appropriately. Students in this rotation will develop an increased understanding of environmental, social, and economic factors that impact patient care. Students will gain further experience functioning as a part of a healthcare team through preceptor presentation and expanding on effective communication with patients, families, and healthcare providers. \**Prerequisite(s)*: Successful completion of all didactic coursework.

**MPA 614 - Ambulatory Care Preceptorship**

4.00 credits. Students will complete a 4-week community based clinical preceptorship designed to enhance student competence in the delivery of healthcare in an ambulatory care or outpatient setting. Students will utilize this rotation to enhance exposure in any of the four areas of primary care that lack sufficient breadth/depth of clinical exposure. Possible settings for preceptorship completion include family practice, pediatrics, women's health, internal medicine, urgent care, orthopedics, behavioral medicine, specialty care, and emergency medicine. Students will be placed in settings that focus on the management of acute and chronic disease across the lifespan in outpatient settings. Students will participate in history-taking, physical examination, assessment, formulating a problem list, ordering and interpreting diagnostic tests, developing a treatment plan, and completing medical documentation appropriately. Students in this rotation will develop an increased understanding of environmental, social, and economic factors that impact patient care. Students will gain further experience functioning as a part of a healthcare team through preceptor presentation and expanding on effective communication with patients, families, and healthcare providers. \**Prerequisite(s)*: Successful completion of all didactic coursework.

**MPA 615 - Acute Care Preceptorship**

4.00 credits. Students will complete a 4-week community based clinical preceptorship designed to enhance student competence in the delivery of healthcare across the lifespan for patients in an urgent, emergent, critical care, trauma, or acute surgical setting which includes exposure to the Emergency Department. Emphasis will be placed on developing an increased understanding of critical vs noncritical patient presentations and methods for evaluation and stabilization in acute, life-threatening events. Students will observe and assist in clinical procedures, giving them the experience necessary to evaluate, treat, and refer patients appropriately. Students will participate in history-taking, physical examination, assessment, formulating a problem list, ordering and interpreting diagnostic tests, developing

a treatment plan, and completing medical documentation appropriately. Students will gain further experience functioning as a part of a healthcare team through preceptor presentation and expanding on effective communication with patients, families, and healthcare providers. \*Prerequisite(s): Successful completion of all didactic coursework.

**MPA 616 - Surgery Preceptorship**

4.00 credits. Students will complete a 4-week community based clinical preceptorship designed to enhance student competence in the care of the surgical patient in pre-operative, intra-operative, and post-operative settings. Students will become familiar with a variety of common surgical conditions, providing adequate patient education about his/her surgical condition, and recognizing potential complications. Students will observe and assist in surgical procedures, giving them the experience necessary to evaluate and refer patients for surgical treatment. However, emphasis will not be placed on the meticulous details surrounding completion of any specific surgical procedures. \*Prerequisite(s): Successful completion of all didactic coursework.

**MPA 617 - Behavioral Medicine Preceptorship**

4.00 credits. Students will complete a 4-week clinical rotation that exposes them to the care of patients with behavioral and psychiatric conditions. Emphasis will be placed on the enhancing the student's development of skills and knowledge necessary to manage patients with behavioral and psychiatric conditions. Students will be able to observe and assist in the diagnosis and management of patients, as well as develop an awareness of psychosocial problems likely to be encountered in a primary care practice. \*Prerequisite(s): Successful completion of all didactic coursework.

**MPA 618 - Advanced Clinical Specialty Preceptorship**

4.00 credits. Students will complete a 4-week community based clinical preceptorship designed to enhance student competence in the delivery of healthcare to patients in a medical specialty or subspecialty of their interest. For this rotation, the program will design an individualized curriculum to ensure a safe and positive learning experience for each student. \*Prerequisite(s): Successful completion of all didactic coursework.

**MPA 619 - Advanced Clinical Specialty International Preceptorship**

4.00 credits. Students will complete a 4-week community based clinical preceptorship designed to enhance student competence in the delivery of healthcare to patients in a medical specialty or subspecialty of their interest. For this rotation, the program will design an individualized curriculum to ensure a safe and positive learning experience for each student \*Prerequisite(s): Successful completion of all didactic coursework.

**MPA 680 - Independent Study I**

0.00 credits. The independent study course is a non-credit course designed for students that desire or require additional in-depth study on a topic or set of topics in conjunction with the student's faculty advisor. This course is offered on an as needed basis during the Spring semester, with the permission of the Program Director.

**MPA 681 - Independent Study II**

0.00 credits. The independent study course is a non-credit course designed for students that desire or require additional in-depth study on a topic or set of topics in conjunction with the student's faculty advisor. This course is offered on an as needed basis during the Summer semester, with the permission of the Program Director.

**MPA 699 - Culminating Experience**

2.00 credits. This course is a culmination of the preparatory education and research courses completed in the Spring and Summer semesters. Upon completion of this course students will have utilized prior clinical experiences, the program curriculum, and specific student interests to gain greater insight into healthcare related issues while actively participating in community service. Students will present their final capstone project in the form of a written paper with an accompanying poster presentation. \*Prerequisite(s): MPA 601 and MPA 602. Fall semester.

## Social Work Courses

### **SW 160 - SSC Social Problems and Response of Social Welfare Institutions**

4.00 credits. (**Social Sciences Core Course**) An orientation to the sociological and social work approaches of examining social problems and the development of social welfare policies and programs to reduce their severity and extent. An understanding of both sociological and social work theories and the way in which these theories form the foundation for research, service and advocacy is emphasized. Fifteen (15) hours of service-learning are required.

**Signature Learning Experience: Community-Based Learning.**

### **SW 233 - Human Behavior in the Social Environment**

4.00 credits. This course provides a study of the interrelationships of social systems, with particular emphasis upon the impact of the environment on human development throughout the life span. Special consideration is given to the influence of ethnicity, racism, sexism and ageism upon human behavior. Fifteen (15) hours of service-learning are required. **Signature Learning Experience: Community-Based Learning.**

### **SW 236 - NCH Social Issues in South Africa I (PSY 236)**

2.00 credits. (**Non-Western Cultural Heritage Core Course**) The central goal of these two 2-credit courses is for students to understand the struggles that South Africa has gone through leading up to the institution of apartheid, during the apartheid years, and post apartheid. Students learn about the social issues related to the conflict and the different approaches used to try to resolve these conflicts within the framework provided by social work and psychology. Spring semester.

### **SW 237 - NCH Social Issues in South Africa II (PSY 237)**

2.00 credits. (**Non-Western Cultural Heritage Core Course**) The central goal of these two 2-credit courses is for students to understand the struggles that South Africa has gone through leading up to the institution of apartheid, during the apartheid years, and post apartheid. Students learn about the social issues related to the conflict and the different approaches used to try to resolve these conflicts within the framework provided by social work and psychology. \**Prerequisite(s): SW 236. Signature Learning Experience: Cross Cultural Experience. May term.*

### **SW 280 - Multicultural Counseling Skills**

4.00 credits. Theories explaining human behavior and social interaction, in the context of social systems and social welfare, are discussed, analyzed and critically reviewed. Students learn about the cultural heritage of diverse groups, and about the need for equality and social and economic justice for all oppressed people. Students learn and role-play interpersonal relationships skills in a laboratory situation. Fifteen (15) hours of service-learning in a diverse setting is required. **Signature Learning Experience: Community-Based Learning.**

### **SW 330 - Methods of Social Work Research**

4.00 credits. A focus upon the basic elements of the scientific method providing an overview of research designs commonly used in social sciences, including techniques for gathering, analyzing and presenting data.

\**Prerequisite(s): SW 160, SW 233, or permission of the instructor. Fall semester.*

### **SW 339 - Human Sexuality**

4.00 credits. This course focuses on the socio-historical aspects of sexuality, survey and experimental research, and attitudes towards sexuality.

### **SW 344 - Aging: Social Response and Implications**

4.00 credits. An examination of the aging process in our society. The emphasis is on the interface of the individual and the environment and the services, needs and institutions related to the elderly. Field trips to community agencies and 10 service-learning hours required. **Signature Learning Experience: Community-Based Learning.**

**SW 345 - International Social Work Field Preparation**

1.00 credit. This class will help students gain an understanding of the country and culture in which they will be studying, as well as to develop a better understanding of their own cultural development. This class is a prerequisite for SW470 abroad in the Fall of Senior year. \*Prerequisite(s): Social Work majors only. Graded Pass/No Pass.

**SW 346 - Exploring the Culture and Services of Vietnam**

2.00 credits. This course serves as an introduction to the history and culture of Vietnam as it relates to the social problems and social services in modern-day Vietnam. Lectures will provide background on social services and non-profit organizations, specifically Brittany's Hope Foundation. Class periods will focus on the Vietnam War and development of basic language and communication skills. Later class periods will focus on the development of appropriate age and ability level activities for the children. Finally, there will be a focus on successful fundraising strategies. The course is a prerequisite for students participating in the May-term Service Learning Trip to Vietnam. \*Prerequisite(s): Acceptance to the May term trip to Vietnam (SW 347). **Signature Learning Experience: Cross Cultural Experience.** Register by Instructor. Alternating spring semesters.

**SW 347 - May Term in Vietnam**

2.00 credits. This course is comprised of a seventeen-day international trip to Vietnam. Students will have the opportunity to examine issues of culture, poverty, social development, and the needs of orphaned children in Vietnam through direct service learning, lectures, and reflective sessions. \*Prerequisite(s): SW 346. **Signature Learning Experience: Cross Cultural Experience.** Graded Pass/No Pass. Register by Instructor. Alternating May terms.

**SW 355 - Women in Society**

4.00 credits. This course is designed to provide a systemic view of women in our society. The emphasis will include the socialization of women, women's roles historically and in our major social institutions, sexism and the feminist movement. Feminist social work practice and its connection to feminist ideology theory will be explored.

**SW 357 - Child Welfare**

4.00 credits. A study of ethnic, cultural and economic problems as they relate to children, the services available to combat those problems, and the legal and legislative aspects of child welfare. **Signature Learning Experience: Community-Based Learning.**

**SW 360 - International Social Development**

4.00 credits. The impact of the history, traditions and beliefs of different non-Western cultures on the development of social issues will be examined. The history of the problem, its context and development within the culture, and attempts at resolution will be explored. Students will be able to understand why common issues assume different forms in different cultures.

**SW 366 - Addiction and Society**

4.00 credits. An examination of individual, family and social implications of addiction in society and an exploration of social policies related to addiction.

**SW 367 - Generalist SW Practice I: Individuals**

4.00 credits. A focus on problem solving in generalist practice at the micro level (i.e., individuals) with diverse populations. A variety of interventions, assessment techniques and theories are studied in preparation for a required 40-hour supervised field experience. \*Prerequisite(s): SW 160, SW 233 , or permission of the instructor, and social work majors only. **Signature Learning Experience: Field Placement.** Fall semester.

**SW 368 - Generalist SW Practice II: Families and Small Groups**

4.00 credits. A study of the knowledge, values and skills that comprise the generalist base of social work practice. It is designed to assist students in developing basic entry-level social work competencies to work with groups and families from a systems perspective. A 40-hour supervised field experience is required. \**Prerequisite(s)*: SW 367, or permission of the instructor. \**Corequisite(s)*: SW 369; and social work majors only. **Signature Learning Experience: Field Placement.**

**SW 369 - Generalist SW Practice III: Communities and Organizations**

4.00 credits. Theory and skills development for macro generalist social work practice are presented. Promoting the social welfare of communities and organizations by enhancing social and economic justice is stressed.

\**Prerequisite(s)*: SW 330, or permission of the instructor. \**Corequisite(s)*: SW 368; and social work majors only. Spring semester.

**SW 370-378 - Special Topics in Social Work**

Variable credit. Topical areas in social work, chosen in accord with student and faculty interest. This course is repeatable for credit.

**SW 380 - Social Policy**

4.00 credits. Students build their knowledge of social welfare and social work's historical and philosophical foundation. They learn why and how social policy is formulated and implemented, how policy impacts direct practice, and frameworks for policy analysis. \**Prerequisite(s)*: SW 330, SW 367 or permission of the instructor, and social work majors only. Spring semester.

**SW 400 - Senior Project in Social Work**

Variable (2.00 or 4.00) credits. Students who are completing a senior research project may register for this course in the semester in which the project is completed. Completion of this course does not assure recognition for Honors in the Discipline. A maximum of four credit hours from SW 400 may count toward the degree. Additional credits count as free electives. Majors only. **Signature Learning Experience: Supervised Research.** Register by Instructor.

**SW 470 - Introductory Field Seminar**

1.00 credit. The course supports students during their fall internship hours through assignments that allow them to apply course knowledge to the field as well as discuss issues. \**Prerequisite(s)*: SW 380 or permission of the instructor, and social work majors only. \**Corequisite(s)*: SW 471. Fall semester.

**SW 471 - Introductory Field Instruction**

5.00 credits. Supervised field instruction for at least 200 hours in an agency. Student begins to assume responsibility with client systems in such ways as monitoring tasks, providing support, conducting group activities, and assisting the social worker with other professional responsibilities. \**Prerequisite(s)*: SW 380 or permission of the instructor, and social work majors only. \**Corequisite(s)*: SW 470. **Signature Learning Experience: Field Placement.** Graded Pass/No Pass. Fall semester.

**SW 472 - Advanced Field Seminar**

1.00 credit. The course supports students during their spring internship hours through assignments that allow them to apply course knowledge to the field as well as discuss issues. \**Prerequisite(s)*: SW 470 and SW 471 and social work majors only. \**Corequisite(s)*: SW 473 and SW 495.

**SW 473 - Advanced Field Instruction**

11.00 credits. Supervised field instruction for at least 400 hours plus a weekly on-campus seminar. Students proceed from an "assistant" position to one of complete client responsibility under direct supervision. Roles students assume may include advocate, enabler, social broker and program planner. \*Prerequisite(s): SW 470 and SW 471 and social work majors only. \*Corequisite(s): SW 472 and SW 495. **Signature Learning Experience: Field Placement.** Graded Pass/No Pass. Spring semester.

**SW 480-489 - Independent Study in Social Work**

Variable (1.00 to 4.00) credits. Opportunity for advanced students independently to pursue study otherwise not available in the curriculum. \*Prerequisite(s): Permission of the Dean and approval of the Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**SW 495 - Senior Seminar in Social Work**

4.00 credits. Final course integrating the theory from preceding courses with the professional experience of field instruction. A major project is required. \*Corequisite(s): SW 472 and SW 473, or permission of the instructor, and social work majors only. **Signature Learning Experience: Capstone Experience.** Spring semester.

## Special Education Courses

**SED 212 - Learning Environment and Social Interaction in Inclusive Settings (MSE 512)**

4.00 credits. A study of the scientific principles and best practices for creating and sustaining an optimal learning environment and positive social interaction for diverse learners in an inclusive classroom setting. Emphasis is on analyzing factors that influence academic and social behavior, adapting the physical environment, implementing an equitable classroom management system, maintaining a respectful climate, teaching social skills, and implementing positive behavioral supports. \*Prerequisite(s): ED 105, and ED 150 or ED 151. Formal acceptance into Education Program required.

**SED 222 - Foundations of Inclusive Education (MSE 522)**

4.00 credits. This course is an introduction to philosophical, historical and legal foundations of Special Education and inclusive education principles and practices. The history, etiology, characteristics and accommodations for students with special needs in the classroom setting will be examined. Field experience is required which will require FBI Clearance, Criminal Record Clearance, Pennsylvania Child Abuse Clearance, and TB Test (fees).

\*Prerequisite(s): ED 105, and ED 150 or ED 151 or Formal Acceptance into the Education Program required.

\*Corequisite(s): SED 222L. Provisional or formal acceptance into Education Program required.

**SED 224 - Methods of Teaching Students with High Incidence Disabilities (MSE 524)**

4.00 credits. A study of the specialized instructional strategies to adapt and accommodate classroom environments, testing methodologies, and curricula to meet the needs of exceptional children and youth. Emphasis is on high incidence disabilities, such as learning disabilities, ADD/ADHD, emotional and behavior disorders, communication disorders. This course also examines issues related to cultural or linguistic diversity. Field experience is required which will require FBI Clearance, Criminal Record Clearance, Pennsylvania Child Abuse Clearance, and TB Test (fees). \*Prerequisite(s): ED 250 and SED 222, or permission of the Program, or Formal Acceptance into the Education Program required. \*Corequisite(s): SED 224L.

**SED 230 - Methods of Teaching Students with Low Incidence Disabilities (MSE 530)**

4.00 credits. This course is designed to prepare students to implement best practices, ensure access, and to serve as advocates in collaboration with a service team for students with low incidence disabilities and their families. These disabilities include the traditional categories of significant and/or multiple disabilities: mental disabilities with significant cognitive needs, low vision and blindness, hearing impairments and deafness, deaf-blindness, autism,

physical or health disabilities, and traumatic brain injury. Students learn strategies for collaboration, specific instructional and classroom management procedures, considerations for younger and older students, and are challenged to identify and use innovative tools to support active participation. Students are also encouraged to wrestle with current trends and issues in special education and the larger field of education. Reading response, and collaborative learning are an integral part of the course experience. \*Prerequisite(s): Formal acceptance into the Education Program is required. Register by Instructor.

**SED 333 - Assessment in Special and Inclusive Education (MSE 533)**

4.00 credits. This course provides an overview of assessment as a tool to guide various types of decisions in the educational setting. The primary focus is on use of informal and formal assessment to craft instruction that is responsive to individual learners. The course also includes information on how to use data to make eligibility and placement decisions while highlighting best practice to ensure that these decisions are well informed and in the best interest of the learner. Specific topics include legislation, trends, and issues in assessment practices; different types of tests and their appropriate administration, scoring, and interpretation; use of descriptive statistics to describe and interpret data sets; reliability and validity considerations in designing, administering, and reporting; and assessment of young children and behavior. \*Prerequisite(s): Formal Acceptance into the Education Program is required. Register by Instructor.

**SED 342 - Effective Instruction for Students with ASD and/or EBD (MSE 542)**

4.00 credits. This course is designed to prepare teachers to support the participation and education of students with Autism Spectrum Disorders (ASD) or Emotional Behavioral Disorders (EBD) in the PK-12 setting. Emphasis is on the diagnostic criteria, methods of identification, and best practices in intervention and support according to current research. Field experience is required which will require FBI Clearance, Criminal Record Clearance, Pennsylvania Child Abuse Clearance, and TB Test (fees). \*Prerequisite(s): Formal Acceptance into the Education Program is required. \*Corequisite(s): SED 344 and SED 342L. Register by Instructor.

**SED 344 - Intensive Reading, Writing, and Mathematics Intervention (MSE 544)**

4.00 credits. This course provides substantive, research-based instruction that effectively prepares future teachers to assess and provide interventions to students who are struggling in the reading, writing, and mathematics content areas. An emphasis will be placed on determining differences between typical and problematic performance in each of the areas and modifying instructional methods, providing strategy instruction, and monitoring progress in each area. Field experience is required which will require FBI Clearance, Criminal Record Clearance, Pennsylvania Child Abuse Clearance, and TB Test (fees). \*Prerequisite(s): Formal acceptance into the Education Program is required. \*Corequisite(s): SED 342, and SED 344L. Register by Instructor.

## Trauma Informed Practice Courses

**TIC 500 - Foundations of Trauma**

3.00 credits. This course focuses on the definition of trauma, types of trauma, trauma prevalence rates within specific populations, and factors that contribute to and buffer against the development of traumatic stress reaction (TSR). Additionally, signs of secondary traumatic stress experienced by professionals working with children exposed to trauma and self-care strategies are provided.

**TIC 520 - The Impact of Trauma on Brain Architecture and Child Development**

3.00 credits. This course examines how toxic stress reaction to childhood trauma can alter brain structure and, in turn, affect attention, self-regulation, decision-making, learning, and physical and emotional health and well-being. The ameliorating effects of establishing safe and secure environments in which children live and learn and healthy connections to adults and peers are also explored.

**TIC 530 - Sustaining Trauma-Sensitive Systems**

3.00 credits. This course examines the rationale for developing trauma-sensitive systems that serve children and families, and the guiding principles, policies, practices and capacity to initiate, create and sustain school and organization systems that are responsive to the needs of children exposed to trauma. Students develop an action plan to advocate for increased cultural sensitivity in their work settings.

**TIC 540 - Trauma Informed Practice**

3.00 credits. This course focuses on trauma-informed practices that prevent, mitigate and remediate the neurodevelopmental impact of trauma, and examines the recommended resources and processes to implement an integrated care system. Students participate in asynchronous forums to apply trauma-informed practices and collaborative approaches through case study analysis.

## **School of Public Service**

### **Dean of the School of Public Service**

*Dr. April Kelly Woessner*

Nicarry Hall, Room 247

717-361-1285

**Faculty:** Gillis, Helb, Hughes, Johnson, Kanagy, Kozimor, McClellan, Ozkanca, Poniatowski, G. Ricci, Silberstein, Telleen

For more information, please visit the School's website or check your course syllabi, which are available through the course instructor or at the High Library.

### **Mission**

The School of Public Service is grounded in the mission of Elizabethtown College - educate for service. We believe that education is most noble when used to benefit others. Our programs empower students to use their knowledge, expertise, and communication skills to solve pressing problems in their communities and around the globe.

Graduates for our program are leaders who pursue meaningful careers within all levels of government, non-profit agencies, the legal community, non-governmental organizations (NGOs), media organizations, and other places where they can make a difference. They shape public policy, lead community organizations, inform public discourse, build positive community relations, and design programs and initiatives to serve the public interest.

The School of Public Service includes programs in Criminal Justice, Journalism, Legal Studies, Mass Communications, Media Analytics and Social Media, Political Science, Public Health, Public Relations, and Sociology.

### **Honors in the Discipline**

The School of Public Service participates in the College Honors in the Discipline Program. For guidelines, students should consult their advisor.

### **Bachelor of Arts**

#### **Criminal Justice (B.A.)**

##### **Student Learning Outcomes for Criminal Justice:**

*Students will be able to:*

- Design a professional-quality research proposal that incorporates one of several data measurement tools used to study crime and the criminal justice system.
- Compare social theories, theories of crime, deviance, and the criminal justice system in order to explain the world in which we live.
- Critically evaluate current and historical studies of crime and the criminal justice system.
- Explain the relationships between social forces, social control, and social justice.

- Defend the value of cultural diversity in heterogeneous societies.
- Analyze the various forms and distribution patterns of crime in the United States.
- Articulate a perspective appropriate to Criminal Justice in order to make a personally meaningful contribution to self and society.

With a focus on social justice, the **Criminal Justice major** emphasizes the prevention aspects of the criminal justice system. Students learn basic social science theories on the sources of conflict in America, such as race and ethnic relations and deviant behavior. Majors also acquire the analytical tools and knowledge necessary to collect and interpret crime data. As liberal arts majors, students broaden their learning outside of sociology in such fields as ethics, political science, psychology and statistics. In addition, criminal justice majors elect subjects relevant to modern criminology such as management, foreign language, human genetics, law, professional writing or social work.

The **Criminal Justice major** consists of 40 required credits and eight credits of approved electives.

**The Criminal Justice major requires:**

- MA 251 - MA Probability and Statistics
- SO 101 - SSC Discovering Society
- SO 105 - Introductory Seminar for Sociology and Anthropology
- SO 205 - Social Theory
- SO 215 - Criminology
- SO 217 - U.S. Criminal Justice System
- SO 220 - Race and Ethnic Relations
- SO 330 - Research Methods
- SO 331 - Statistical Analysis (PBH 331)
- SO 342 - Modern Corrections
- SO 352 - Juvenile Law and Justice
- SO 353 - Policing in America
- SO 470-474 - Internship in Sociology

One of the following:

- CP 130 - Professional Skills Development and Defining Career Goals
- CP 140 - Mapping Career Goals and Job Shadow
- CP 150 - Career and Purposeful Pathways

**Elective Courses:**

Choose two from different disciplines.

- AN 363 - Forensic Anthropology
- CH 109 - NPS Introduction to Forensic Science
- CH 110 - NPS Forensic Science Laboratory
- PCS 262 - Restorative Practices
- NEU 325 - The Neuroscience of Drug Abuse
- PH 115 - HUM Ethics
- PS 211 - SSC Political Psychology (PSY 211)

- PS 290 - Judicial Process and Politics
- PS 303 - Constitutional Law I: Institutions
- PS 304 - Constitutional Law II: Rights and Liberties
- PS 361 - Public Administration (PP 561)
- PSY 235 - Social Psychology
- PSY 250 - Psychopathology
- PSY 350 - Child Psychopathology and Treatment
- PSY 355 - Counseling Psychology
- REL 103 - HUM Religion and Nonviolence
- SW 366 - Addiction and Society
- WGS 105 - SSC Sex and Gender in Society

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- PH 115 - HUM Ethics
- SO 101 - SSC Discovering Society
- SO 217 - U.S. Criminal Justice System
- CH 109 - NPS Introduction to Forensic Science
- CH 110 - NPS Forensic Science Laboratory
- Power of Language: Other Core course (4 credits)

**Digital Media Production (B.A.)**

**Student Learning Outcomes for Digital Media Production:**

*Students will be able to:*

- Write effective communication materials for a variety of contexts.
- Effectively demonstrate competencies in oral communication.
- Demonstrate competencies in media production.
- Use critical thinking skills in the application of communication theories.
- Plan and implement communication productions that address organizational challenges.
- Demonstrate leadership abilities through effective program and production management including independent, experiential learning, and collaborative endeavors.
- Conduct all work in an ethical manner.

**The Digital Media Production major requires:**

- COM 120 - Intro to Communications
- COM 130 - Visual Communications
- COM 210 - Presentation Skills
- COM 211 - Intro to Journalism

- COM 220 - Audio Production
- COM 230 - Video Production
- COM 248 - Communication Law and Ethics
- COM 310 - New Media Production
- COM 316 - Broadcast News
- COM 333 - Organizational Communication
- COM 410 - Advanced Production
- COM 495 - Communications Capstone

**Eight credits from the following list of courses:**

- COM 145 - CE Digital Photography (ART 145)
- COM 180 - SSC Media, Sports, and Society
- COM 252 - HUM Multi-Cultural Communications
- COM 261 - HUM Film Studies
- COM 314 - Feature Writing
- COM 320 - Advanced Multimedia Journalism (EN 320)
- COM 351 - Intro to Public Relations
- COM 355 - PR Writing
- COM 358 - Marketing Communications
- COM 412 - Advanced Public Relations
- COM 424 - Script and Screenwriting
- COM 474 - Internship in Communications
- COM 480-484 - Independent Study in Communications

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- COM 120 - Intro to Communications
- COM 130 - Visual Communications
- COM 210 - Presentation Skills
- COM 211 - Intro to Journalism

**Notes:**

Students must declare a major of study by the beginning of their sophomore year (second year) and transfer students (internal or from other institutions) must declare a major of study. Declaring the major late could result in students taking additional semesters of study to complete course work in proper sequence. Prerequisite courses must be taken in advance of courses, NOT as co-requisites. Although not required, a minor course of study is recommended by the Communications Program.

COM 145 will fulfill Digital Media Production elective requirement and the Creative Expression requirement of the Core program.

COM 180 will fulfill the Digital Media Production elective requirement and the Social Sciences requirement of the Core program.

COM 252 will fulfill the Digital Media Production requirement and the Humanities requirement of the Core program.

### **Program Opportunities**

Program facilities and the Media Center are located in the Steinman Center for Communications and Fine Arts. This Center contains modern equipment in audio and video studios, and graphics and multi-image laboratories. The student-operated media stations, WWEC 88.3 FM and ECTV Channel 40, and the student-run newspaper, the Etownian, are housed in the Center. The Program also operates a citizen journalism news website, [www.wetown.org](http://www.wetown.org).

The curriculum is complemented by a number of programmatic organizations: WWEC-FM radio, Photography Club, Society for Collegiate Journalists (honorary society), the Jay Firm (student public relations agency), ECTV-40, and others. The Etownian provides excellent journalism experiences for majors. These organizations sponsor speakers, workshops, contests, and field trips to enhance campus life while making the student's classroom experience more meaningful.

### **Internships and Practica**

Out-of-classroom, on-the-job field experiences are encouraged of all majors and minors. An experience linking the academic world and the work world can enable an advanced student to apply – in a practical way – understandings and abilities in a career-related position. Practica may be elected by majors and minors at the sophomore level and above and are available for zero, one, two, or three semester credits with on- or off-campus sponsors. Board members of ECTV and WWEC may also receive a one-credit practicum experience. Practicum experiences are repeatable to a maximum of four credits and may count only as general elective credit. Internship credits also count only as general elective credits. They are available only to seniors and must be taken only for 12 semester credits (requiring the internship to be the equivalent of a full-time position for an entire semester). Additionally, the internship option requires an overall 2.70 grade point average and a 3.00 grade point average in the major. The Program's "Guide to the Preparation of Internships" serves as an outline of procedures and requirements for an internship. Students are permitted to seek their own positions for either option (practicum or internship) or to apply for one from the many opportunities already listed with regional communications organizations.

### **GPA Requirement**

All students must have a 2.00 grade point average to declare the major or minor and enroll in any courses above the 100 level.

### **Journalism (B.A.)**

#### **Student Learning Outcomes:**

*Students with a bachelor's degree in Journalism will be able to:*

1. Write effective communication materials for a variety of contexts.
2. Effectively demonstrate competencies in oral communication.
3. Demonstrate competencies in media production.
4. Use critical thinking skills in the application of communication theories.

5. Plan and implement communication productions that address organizational challenges.
6. Develop leadership abilities through effective program and production management including independent, experiential learning, and collaborative endeavors.
7. Conduct all work in an ethical manner.

**Major requirements include:**

- COM 120 - Intro to Communications or
- EN 185 - Introduction to Professional Writing
- COM 130 - Visual Communications
- COM 210 - Presentation Skills
- COM 211 - Intro to Journalism
- COM 220 - Audio Production
- COM 230 - Video Production
- COM 248 - Communication Law and Ethics
- COM 314 - Feature Writing
- COM 316 - Broadcast News
- COM 320 - Advanced Multimedia Journalism (EN 320)
- COM 333 - Organizational Communication
- COM 495 - Communications Capstone
- COM 470-473 - Practicum

**Eight elective credits from the following:**

- COM 145 - CE Digital Photography (ART 145)
- COM 180 - SSC Media, Sports, and Society
- COM 252 - HUM Multi-Cultural Communications
- COM 261 - HUM Film Studies
- COM 310 - New Media Production
- COM 351 - Intro to Public Relations
- COM 355 - PR Writing
- COM 358 - Marketing Communications
- COM 370-378 - Special Topics in Communications
- COM 410 - Advanced Production
- COM 412 - Advanced Public Relations
- COM 424 - Script and Screenwriting
- COM 474 - Internship in Communications
- COM 480-484 - Independent Study in Communications
- CW 386 - Word, Web, and Design
- EN 385 - Writing and Editing for Publication
- PS 215 - SSC Political Communication

### **First Year Suggested Courses**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- COM 120 - Intro to Communications or
- EN 185 - Introduction to Professional Writing
- COM 130 - Visual Communications
- COM 210 - Presentation Skills
- COM 211 - Intro to Journalism

### **Program Opportunities**

Program facilities and the Media Center are located in the Steinman Center for Communications and Fine Arts. This Center contains modern equipment in audio and video studios, and graphics and multi-image laboratories. The student-operated media stations, WWEC 88.3 FM and ECTV Channel 40, and the student-run newspaper, the *Etownian*, are housed in the Center. The Program also operates a citizen journalism news website, [www.wetown.org](http://www.wetown.org).

The curriculum is complemented by a number of programmatic organizations: WWEC-FM radio, Photography Club, Society for Collegiate Journalists (honorary society), the Jay Firm (student public relations agency), ECTV-40, and others. The *Etownian* provides excellent journalism experiences for majors. These organizations sponsor speakers, workshops, contests, and field trips to enhance campus life while making the student's classroom experience more meaningful.

### **Internships and Practica**

Out-of-classroom, on-the-job field experiences are encouraged of all majors and minors. An experience linking the academic world and the work world can enable an advanced student to apply – in a practical way – understandings and abilities in a career-related position. Practica may be elected by majors and minors at the sophomore level and above and are available for zero, one, two, or three semester credits with on- or off-campus sponsors. Board members of ECTV and WWEC may also receive a one-credit practicum experience. Practicum experiences are repeatable to a maximum of four credits and may count only as general elective credit. Internship credits also count only as general elective credits. They are available only to seniors and must be taken only for 12 semester credits (requiring the internship to be the equivalent of a full-time position for an entire semester). Additionally, the internship option requires an overall 2.70 grade point average and a 3.00 grade point average in the major. The Program's "Guide to the Preparation of Internships" serves as an outline of procedures and requirements for an internship. Students are permitted to seek their own positions for either option (practicum or internship) or to apply for one from the many opportunities already listed with regional communications organizations.

### **GPA Requirement**

All students must have a 2.00 grade point average to declare the major or minor and enroll in any courses above the 100 level.

## **Legal Studies (B.A.)**

### **Student Learning Outcomes for Legal Studies:**

*Students will be able to:*

- Formulate cogent arguments and skillfully critique the arguments of others.
- Communicate effectively and fluently in speech and in writing.
- Conduct independent, original research, demonstrating the ability to gather, organize, and present evidence, data, or information from a variety of primary and secondary sources.
- Critically analyze the relationship between law, government, and society.
- Discuss and understand major theories and criticisms of law from an interdisciplinary perspective.
- Evaluate the quality of legal research, whether it employs social scientific methods (quantitative or qualitative) or legal research methods.

For students who are interested in law school, a strong advisory component in terms of proper course work, relevant extracurricular activities and preparation for the Law School Admissions Test (LSAT) examination is offered.

The advisor for this major is Dr. Matthew Telleen.

### **The Legal Studies major requires the following courses (20 credits):**

- PH 115 - HUM Ethics or
- PH 255C - Advanced Ethics: Legal
- SO 270 - Law and Social Change
- PS 301 - Mock Trial I
- PS 302 - Mock Trial II
- PS 303 - Constitutional Law I: Institutions or
- PS 304 - Constitutional Law II: Rights and Liberties
- PS 495 - Senior Seminar in Political Science

The Legal Studies major may choose from the following elective courses (20 credits):

- BA 330 - Legal Environment of Business
- BA 331 - Business and Commercial Law for Accounting/Financial Professionals
- BA 337 - International Legal and Ethical Environment of Business
- COM 248 - Communication Law and Ethics
- EC 101 - SSC Principles of Macroeconomics
- EN 283 - Legal Writing
- HI 316 - The Enlightenment and French Revolution (1600-1800)
- PH 115 - HUM Ethics
- PH 255C - Advanced Ethics: Legal
- PH 234 - HUM Justice Through the Ages
- PS 111 - SSC American National Government

- PS 290 - Judicial Process and Politics
- HPS 300 - HNR Gender and the Law (HWG 300) or
- HWG 300 - HNR Gender and the Law (HPS 300)
- PS 303 - Constitutional Law I: Institutions
- PS 304 - Constitutional Law II: Rights and Liberties
- PS 305 - Philosophy of Law (PH 305) or
- PH 305 - Philosophy of Law (PS 305)
- PS 470-478 - Internship in Political Science

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- PH 115 - HUM Ethics or
- PH 255C - Advanced Ethics: Legal
- 4 credits of 100/200- level electives

**Political Science (B.A.)**

**Student Learning Outcomes for Political Science:**

*Students will be able to:*

- Explain the major theories, concepts, and methods of political analysis – empirical, normative, and policy-oriented.
- Apply theories, concepts, and methods used in the study of politics to political ideas, institutions, and practices.
- Exercise critical judgment, analyze, and synthesize relevant information and construct reasoned argument.
- Communicate effectively and fluently in speech and in writing.
- Conduct independent, original research, demonstrating the ability to gather, organize, and present evidence, data, and information from a variety of primary and secondary sources.
- Be involved in matters of public concern locally, nationally, and globally.

**The Political Science major requires the following courses:**

- PS 101 - WCH Foundations of American Government
- PS 150 - NCH Introduction to Comparative Politics
- PS 205 - WCH Western Political Heritage
- PS 211 - SSC Political Psychology (PSY 211)

- PS 230 - Research Methods
- PS 245 - NCH International Relations
- PS 361 - Public Administration (PP 561) or
- PS 363 - American Domestic Policy (PP 563)
- PS 495 - Senior Seminar in Political Science
- An additional 16 credits of political science courses or other approved electives
- Participation in a for-credit experiential-learning or off-campus study program approved by the School and the Office of Registration and Records. Examples of such programs include: the School's Capital Semester Internship Program (PS 479), the Queen's University International Study Centre at Herstmonceux Castle; the American University Washington Semester Program; BCA Study Abroad programs; the Summer Study Abroad Oxford, England, Programme; and May term international experiences sponsored by individual faculty and Programs. Approved political science courses in these off-campus programs will count toward the major.

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- PS 111 - SSC American National Government
- PS 150 - NCH Introduction to Comparative Politics

**Notes:**

The Political Science major has no modern or ancient language requirement beyond the Power of Language - Other requirement in the core program. However, students are encouraged to develop competency in a modern language, particularly if they are interested in study abroad.

MA 251 is suggested to satisfy the Mathematics core requirement.

If a student has received AP credit for PS 111 and is interested in taking sophomore-level courses in political science, she/he should consult with the Dean first. PS 205 or PS 245 are good choices.

For information about the Washington Center Internship Program, students should contact the Study Abroad Office. For internship opportunities in Harrisburg through the School's Capital Semester Internship Program (PS 417), students should contact Dr. April Kelly-Woessner.

**Public Relations (B.A.)**

**Student Learning Outcomes for Public Relations major:**

*Students will be able to:*

- Write effective communication materials for a variety of contexts.
- Effectively demonstrate competencies in oral communication.

- Demonstrate competencies in media production.
- Use critical thinking skills in the application of communication theories.
- Plan and implement communication productions that address organizational challenges.
- Demonstrate leadership abilities through effective program and production management including independent, experiential learning, and collaborative endeavors.
- Conduct all work in an ethical manner.

**The Public Relations major requires:**

- COM 120 - Intro to Communications
- COM 130 - Visual Communications
- COM 210 - Presentation Skills
- COM 211 - Intro to Journalism
- COM 235 - PR Media Production
- COM 248 - Communication Law and Ethics
- COM 333 - Organizational Communication
- COM 351 - Intro to Public Relations
- COM 355 - PR Writing
- COM 358 - Marketing Communications
- COM 495 - Communications Capstone

**Twelve Credits from the following list of courses:**

- COM 145 - CE Digital Photography (ART 145)
- COM 180 - SSC Media, Sports, and Society
- COM 252 - HUM Multi-Cultural Communications
- COM 261 - HUM Film Studies
- COM 310 - New Media Production
- COM 312 - Introduction to Media Analytics
- COM 314 - Feature Writing
- COM 316 - Broadcast News
- COM 320 - Advanced Multimedia Journalism (EN 320)
- COM 410 - Advanced Production
- COM 412 - Advanced Public Relations
- COM 424 - Script and Screenwriting
- COM 474 - Internship in Communications
- COM 480-484 - Independent Study in Communications

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- COM 120 - Intro to Communications

- COM 130 - Visual Communications
- COM 210 - Presentation Skills
- COM 211 - Intro to Journalism

**Notes:**

Students must declare a major of study by the beginning of their sophomore year (second year) and transfer students (internal or from other institutions) must declare a major of study. Declaring the major late could result in students taking additional semesters of study to complete course work in proper sequence. Prerequisite courses must be taken in advance of courses, NOT as co-requisites. Although not required, a minor course of study is recommended by the Program advisors.

COM 145 will fulfill the Public Relations elective requirement and the Creative Expression requirement of the Core program.

COM 180 will fulfill the Public Relations elective requirement and the Social Sciences requirement of the Core program.

COM 252 will fulfill the Public Relations elective requirement and the Humanities requirement of the Core program.

**Program Opportunities**

Program facilities and the Media Center are located in the Steinman Center for Communications and Fine Arts. This Center contains modern equipment in audio and video studios, and graphics and multi-image laboratories. The student-operated media stations, WWEC 88.3 FM and ECTV Channel 40, and the student-run newspaper, the *Etownian*, are housed in the Center. The Program also operates a citizen journalism news website, [www.wetown.org](http://www.wetown.org).

The curriculum is complemented by a number of programmatic organizations: WWEC-FM radio, Photography Club, Society for Collegiate Journalists (honorary society), the Jay Firm (student public relations agency), ECTV-40, and others. The *Etownian* provides excellent journalism experiences for majors. These organizations sponsor speakers, workshops, contests, and field trips to enhance campus life while making the student's classroom experience more meaningful.

**Internships and Practica**

Out-of-classroom, on-the-job field experiences are encouraged of all majors and minors. An experience linking the academic world and the work world can enable an advanced student to apply – in a practical way – understandings and abilities in a career-related position. Practica may be elected by majors and minors at the sophomore level and above and are available for zero, one, two, or three semester credits with on- or off-campus sponsors. Board members of ECTV and WWEC may also receive a one-credit practicum experience. Practicum experiences are repeatable to a maximum of four credits and may count only as general elective credit. Internship credits also count only as general elective credits. They are available only to seniors and must be taken only for 12 semester credits (requiring the internship to be the equivalent of a full-time position for an entire semester). Additionally, the internship option requires an overall 2.70 grade point average and a 3.00 grade point average in the major. The Program's "Guide to the Preparation of Internships" serves as an outline of procedures and requirements for an internship. Students are permitted to seek their own positions for either option (practicum or internship) or to apply for one from the many opportunities already listed with regional communications organizations.

### **GPA Requirement**

All students must have a 2.00 grade point average to declare the major or minor and enroll in any courses above the 100 level.

### **Sociology (B.A.)**

#### **Student Learning Outcomes for Sociology:**

*Students will be able to:*

- Design and conduct a professional-quality social research project utilizing quantitative and/or qualitative data with a variety of statistics techniques.
- Defend the value of cultural diversity in heterogeneous societies, examining aspects of their own culture to gain a clearer understanding of their own place in a global society.
- Explain the place of humankind in the continuum of nature and articulate the responsibility that this position entails.
- Articulate the relevance of their discipline by which they intend to make a meaningful contribution to self and society.

The **Sociology major** emphasizes conceptual and applied approaches in both disciplines so that the student is prepared for a variety of career opportunities. Students majoring in Sociology move directly into careers in business, government, criminal justice, survey and marketing research, religious settings, and in other fields in which knowledge of society and human behavior is important. Some go on to graduate school seeking higher degrees in sociology, anthropology, public health, hospital administration, social planning, social work, law, and business administration.

#### **The Sociology Major requires 50 credits:**

- SO 101 - SSC Discovering Society
- SO 105 - Introductory Seminar for Sociology and Anthropology
- SO 204 - SSC Population and Global Issues
- SO 205 - Social Theory
- SO 301 - Social Issues
- SO 330 - Research Methods
- SO 331 - Statistical Analysis (PBH 331)
- MA 251 - MA Probability and Statistics
- SO 470-474 - Internship in Sociology

One of the following:

- CP 130 - Professional Skills Development and Defining Career Goals
- CP 140 - Mapping Career Goals and Job Shadow
- CP 150 - Career and Purposeful Pathways

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- SO 101 - SSC Discovering Society

**Note:**

Sociology majors should take MA 251 in their sophomore year to fulfill the mathematics core requirement. MA 251 is also a prerequisite for SO 331, which is usually taken in the spring of the junior year.

**Bachelor of Science**

**Media Analytics and Social Media (B.S.)**

**Student Learning Outcomes for Media Analytics and Social Media:**

*Students with a bachelor's degree in Media Analytics and Social Media will be able to:*

- Write effective communication materials for a variety of contexts.
- Effectively demonstrate competencies in oral communication.
- Demonstrate competencies in media production
- Use critical thinking skills in the application of communication theories.
- Plan and implement communication productions that address organizational challenges
- Develop leadership abilities through effective program and production management including independent, experiential learning, and collaborative endeavors.
- Conduct all work in an ethical manner.

**The Media Analytics and Social Media major requires:**

- COM 120 - Intro to Communications
- COM 130 - Visual Communications
- COM 210 - Presentation Skills
- COM 211 - Intro to Journalism
- COM 248 - Communication Law and Ethics
- COM 310 - New Media Production
- COM 312 - Introduction to Media Analytics
- CS 113 - NPS The Power and Beauty of Computing
- DAT 300 - Big Data and Statistical Analysis
- DAT 315 - Machine Learning
- MA 251 - MA Probability and Statistics
- MA 252 - Statistical Methods in Research
- COM 495 - Communications Capstone

**Eight credits from the following:**

- COM 235 - PR Media Production
- COM 333 - Organizational Communication
- COM 351 - Intro to Public Relations or
- COM 355 - PR Writing
- COM 358 - Marketing Communications or
- BA 215 - Principles of Marketing
- COM 412 - Advanced Public Relations
- CS 122 - Computer Science II
- DS 200 - Introduction to Data Science
- BA 320 - Introduction to Data Analytics in Business

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- COM 120 - Intro to Communications
- COM 130 - Visual Communications
- COM 210 - Presentation Skills
- COM 211 - Intro to Journalism

**Program Opportunities**

Program facilities and the Media Center are located in the Steinman Center for Communications and Fine Arts. This Center contains modern equipment in audio and video studios, and graphics and multi-image laboratories. The student-operated media stations, WWEC 88.3 FM and ECTV Channel 40, and the student-run newspaper, the *Etownian*, are housed in the Center. The Program also operates a citizen journalism news website, [www.wetown.org](http://www.wetown.org).

The curriculum is complemented by a number of programmatic organizations: WWEC-FM radio, Photography Club, Society for Collegiate Journalists (honorary society), the Jay Firm (student public relations agency), ECTV-40, and others. The *Etownian* provides excellent journalism experiences for majors. These organizations sponsor speakers, workshops, contests, and field trips to enhance campus life while making the student's classroom experience more meaningful.

**Internships and Practica**

Out-of-classroom, on-the-job field experiences are encouraged of all majors and minors. An experience linking the academic world and the work world can enable an advanced student to apply – in a practical way – understandings and abilities in a career-related position. Practica may be elected by majors and minors at the sophomore level and above and are available for zero, one, two, or three semester credits with on- or off-campus sponsors. Board

members of ECTV and WWEC may also receive a one-credit practicum experience. Practicum experiences are repeatable to a maximum of four credits and may count only as general elective credit. Internship credits also count only as general elective credits. They are available only to seniors and must be taken only for 12 semester credits (requiring the internship to be the equivalent of a full-time position for an entire semester). Additionally, the internship option requires an overall 2.70 grade point average and a 3.00 grade point average in the major. The Program's "Guide to the Preparation of Internships" serves as an outline of procedures and requirements for an internship. Students are permitted to seek their own positions for either option (practicum or internship) or to apply for one from the many opportunities already listed with regional communications organizations.

### **GPA Requirement**

All students must have a 2.00 grade point average to declare the major or minor and enroll in any courses above the 100 level.

## **Bachelor of Arts + Bachelor of Science**

### **Public Health (B.A./B.S.)**

#### **Student Learning Outcomes for Public Health (B.A.):**

*Students will be able to:*

- Explain how social environments impact decisions and behaviors affecting public health
- Explain the legislative process and demonstrate the ability to conduct analysis of bills, policies and laws related to public health
- Complete an independent research project analyzing an issue related to public health
- Explain the processes by which public health issues are administered or managed within an organization

#### **Student Learning Outcomes for Public Health (B.S.)**

*Students will be able to:*

- Explain the biological basis of health and disease
- Using data analyses (i.e., statistical, spatial, etc.), explain how individual health and social care systems affect global health
- Complete an independent research project analyzing an issue related to public health
- Communicate the processes by which public health is an interdisciplinary field of health and illness in both individuals and populations

### **Required Common Courses for BA/BS**

- PBH 111 - Principles of Public Health
- MA 251 - MA Probability and Statistics
- SO 204 - SSC Population and Global Issues
- BIO 111 - Molecules, Cells, & Animal Systems
  
- PH 235 - HUM Bioethics or
- PH 255B - Advanced Ethics: Medicine

- COM 282 - Health Communication
- PBH 474 - Public Health Field Instruction
- PBH 495 - Public Health Senior Seminar

**Required Courses for BA in Public Health**

- PBH 364 - Health Policy and Law (PS 364)
- PBH 330 - Social Epidemiology
- PBH 331 - Statistical Analysis (SAN 331)

1 Course in Social Determinants of Health

- PSY 220 - Health Psychology
- SO 235 - Medical Sociology
- SW 366 - Addiction and Society

1 Course in Public Policy Analysis

- PS 363 - American Domestic Policy (PP 563)
- SW 380 - Social Policy

1 Course in Administration of Public Services

- PS 361 - Public Administration (PP 561)
- SO 355 - Emergency Operations in Disaster Response

2 Public Health Electives

- PS 111 - SSC American National Government
- SW 344 - Aging: Social Response and Implications
- Any additional electives from Public Policy Analysis, Social Determinants of Health, or Administration of Public Services

**Required Courses for BS in Public Health**

- PBH 335 - Epidemiology
- BIO 225 - Geographic Information Systems: Fundamentals and Applications
- BIO 305 - Applied Biostatistics or
- MA 252 - Statistical Methods in Research
- OT 210 - Global Health Care Systems

2 Courses in Human Behavior

- PSY 105 - SSC Introduction to Psychology
- PSY 220 - Health Psychology

- PSY 235 - Social Psychology
- PSY 250 - Psychopathology
- BIO 328 - Behavioral Endocrinology
- CSC 315 - Cognitive Neuroscience (PH 315)
- NEU 125 - NPS Introduction to Neuroscience

2 Courses in Science Electives

- BIO 113 - NPS Introduction to Environmental Science
- BIO 200 - NPS Human Anatomy and Physiology: The Basics
- BIO 211 - Genetics
- BIO 324 - General Physiology
- BIO 336 - Pathogenic Microbiology
- BIO 352 - Developmental Biology
- BIO 362 - Ecotoxicology
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science

## **Minors**

### **Cognitive Science Minor**

#### *Student Learning Outcomes*

This interdisciplinary minor integrates elements of Psychology, Biology, Neuroscience, Philosophy, and Computer Science into a unified field of study to better understand the human mind.

*Students will be able to:*

- Students, through both oral and written assignments, and laboratory work will demonstrate a basic understanding of the various methodologies used by neuroscientists, psychologists, computer scientists, and philosophers to address questions about cognition, consciousness and behavior, and how those methodologies work together.
- Students, as part of a senior capstone seminar - will be able to demonstrate an ability to synthesize research findings from an array of disciplines in the cognitive sciences in the evaluation of a question pertaining to cognition, consciousness and behavior.

For further information, contact the Cognitive Science Minor Advisor, Dr. Michael Silberstein.

#### **Required Classes (12 credits):**

- NEU 125 - NPS Introduction to Neuroscience
- CSC 290 - Introduction to Cognitive Science (PH 290)
- CSC 462 - Cognitive Science Capstone

Neurobiology Track

- CSC 315 - Cognitive Neuroscience (PH 315)
- PSY 210 - Sensation and Perception

Psychology Track

- CSC 350 - Animal Minds (PH 350)
- PSY 315 - Cognitive Psychology

Computational Track

- CS 121 - Computer Science I
- CS 434 - Green Robotics, Automation, and Machine Intelligence (EGR 434)

## Communications Minor

A **Communications minor** is offered to students majoring in other programs. The minor permits students to reach a level of competency in written, spoken, and visual communications to complement their primary area of preparation.

**The 24 credits required for a Communications minor include:**

- COM 120 - Intro to Communications
- COM 130 - Visual Communications
- COM 210 - Presentation Skills
- COM 211 - Intro to Journalism

Two Communications electives from:

- COM 145 - CE Digital Photography (ART 145)
- COM 220 - Audio Production
- COM 230 - Video Production
- COM 235 - PR Media Production
- COM 248 - Communication Law and Ethics
- COM 261 - HUM Film Studies
- COM 316 - Broadcast News
- COM 333 - Organizational Communication
- COM 351 - Intro to Public Relations
- COM 355 - PR Writing
- COM 358 - Marketing Communications

## Program Opportunities

Program facilities and the Media Center are located in the Steinman Center for Communications and Fine Arts. This Center contains modern equipment in audio and video studios, and graphics and multi-image laboratories. The student-operated media stations, WWEC 88.3 FM and ECTV Channel 40, and the student-run newspaper, the

Etownian, are housed in the Center. The Program also operates a citizen journalism news website, [www.wetown.org](http://www.wetown.org).

The curriculum is complemented by a number of programmatic organizations: WWEC-FM radio, Photography Club, Society for Collegiate Journalists (honorary society), the Jay Firm (student public relations agency), ECTV-40, and others. The Etownian provides excellent journalism experiences for majors. These organizations sponsor speakers, workshops, contests, and field trips to enhance campus life while making the student's classroom experience more meaningful.

### **Internships and Practica**

Out-of-classroom, on-the-job field experiences are encouraged of all majors and minors. An experience linking the academic world and the work world can enable an advanced student to apply – in a practical way – understandings and abilities in a career-related position. Practica may be elected by majors and minors at the sophomore level and above and are available for zero, one, two, or three semester credits with on- or off-campus sponsors. Board members of ECTV and WWEC may also receive a one-credit practicum experience. Practicum experiences are repeatable to a maximum of four credits and may count only as general elective credit. Internship credits also count only as general elective credits. They are available only to seniors and must be taken only for 12 semester credits (requiring the internship to be the equivalent of a full-time position for an entire semester). Additionally, the internship option requires an overall 2.70 grade point average and a 3.00 grade point average in the major. The Program's "Guide to the Preparation of Internships" serves as an outline of procedures and requirements for an internship. Students are permitted to seek their own positions for either option (practicum or internship) or to apply for one from the many opportunities already listed with regional communications organizations.

### **GPA Requirement**

All students must have a 2.00 grade point average to declare the major or minor and enroll in any courses above the 100 level.

### **International Studies Minor**

The **International Studies minor** is an interdisciplinary minor, comprised of a cluster of foreign culture, language, and international affairs courses with a largely contemporary focus. It provides the students with enhanced understanding of the conditions in the rest of the world that are making themselves felt in the daily lives of Americans. In addition to the general liberal arts goal of broadening students' horizons of awareness of other peoples and places, the minor offers a valuable complementary education for many career-oriented and pre-professional programs of study. The minor provides three principal categories of an international education: competency in a second language, knowledge of other cultures, and appreciation of global interdependence among nations.

For further information, contact the International Studies Minor Advisor, Dr. Oya Dursun-Ozkanca.

#### **Student Learning Outcomes:**

*Students will be able to:*

- Draw effectively on primary and/or secondary sources to analyze a multicultural and/or international topic from a political, historical, economic, legal, cultural, religious, or geographic perspective.
- Communicate in a language other than English at an intermediate level.
- Communicate effectively orally and in writing about a multicultural and/or international topic.

The requirements for an International Studies minor are 26 credits as follows:

**Foundational requirement (4 credits):**

- PS 245 - NCH International Relations

**Language requirement (8 credits):**

Two semesters of modern language at the 200-level or above. At least one of these two courses should be taken at the Elizabethtown College. Up to 4 credits can be taken at an affiliated or approved non-affiliated study abroad program. Exceptions to this language requirement can be made by petitioning the Director of the International Studies Minor (for example, students who are native or near-native speakers of a language other than English).

**Elective courses (12 credits):**

Select any three courses from the following list, with the caveat that two would come from the same discipline or language (defined in practical terms by course prefix), and one would come from a different discipline or language (defined in practical terms by course prefix).. At least one of these elective courses should be taken at the 300- or 400-level. Up to 8 credits can be taken at an affiliated or approved non-affiliated study abroad program. In addition to the elective courses listed below, students may also take a number of 170- and 370-series courses that are approved by the International Studies Minor Program Committee to satisfy the minor elective requirements.

**Business**

- BA 197 - Introduction to International Business
- FBE 280 - Global Family Business
- FIN 327 - International Financial Management
- BA 337 - International Legal and Ethical Environment of Business
- BA 350 - European Union Simulation I (PS 350)
- FBE 450 - Entrepreneurship in Emerging Economy

**Communications**

- COM 251 - International Communications

**Economics**

- EC 280 - International Organizations Seminar
- EC 307 - International Economics
- EC 311 - Economic Development

**English**

- EN 251 - HUM Multicultural Literature
- HEN 252 - HNR HUM Irony, Humor, and Despair in Modern Literature
- HEN 253 - HNR WCH Gaelic and Anglo-Irish Ireland

**Fine and Performing Arts**

- ART 240 - NCH History of Japanese Art and Aesthetics (JA 240)
- ART 280 - NCH World Architecture
- MU 205 - NCH World Music

**History**

- HI 226 - History of Modern China
- HI 225 - History of Modern Japan
- HI 316 - The Enlightenment and French Revolution (1600-1800)
- HI 320 - Middle East in Modern Times
- HI 321 - North Africa in Modern Times

**International Studies**

- INT 233 - NCH The Arab Spring (PS 233)
- INT 331 - Peace and War in a Global World (PCS 331, HI 331)
- INT 332 - Model United Nations (PS 332)
- INT 470-474 - Internship in International Studies

**Modern Languages**

- Any 300-level or above modern language course, and/or any 200-level or above modern languages course that does not have 11 or 12 as final two digits in the course number

**Political Science**

- PS 150 - NCH Introduction to Comparative Politics
- PS 233 - NCH The Arab Spring (INT 233)
- PS 332 - Model United Nations (INT 332)
- PS 340 - Political Violence and Terrorism
- PS 350 - European Union Simulation I (BA 350)

**Religious Studies**

- REL 290 - NCH Dharma Traditions: Hindu, Buddhist, Jain, and Sikh
- REL 293 - Islam
- REL 392 - Religion in China and Japan

**Social Work**

- SW 360 - International Social Development

**Sociology and Anthropology**

- AN 111 - NCH Understanding Human Cultures
- SO 204 - SSC Population and Global Issues

**Capstone requirement (2 or 4 credits):**

- INT 490 - Directed Research Project in International Studies

**Note:**

The International Studies minors can double-count up to 18 credits.

## **Philosophy Minor**

**Students pursuing a Philosophy minor normally complete 20 credits including:**

- PH 115 - HUM Ethics
- PH 205 - WCH Western Political Heritage (PS 205)
- PH 210 - Logic and Legal Reasoning
  
- PH 201 - WCH History of Western Philosophy I or
- PH 202 - WCH History of Western Philosophy II

**One of the following:**

- PH 235 - HUM Bioethics
- PH 255B - Advanced Ethics: Medicine
- PH 255D - Advanced Ethics: Environmental
- PH 275 - HUM Science and Values

**One 300/400-level PH-designated course:**

- PH 315 - Cognitive Neuroscience (CSC 315)
- PH 320 - Philosophy of Religion (REL 320)
- PH 350 - Animal Minds (CSC 350)
- PH 355 - Public Policy Ethics
- PH 370-378 - Special Topics in Philosophy
- PH 480-489 - Independent Study in Philosophy

## **Political Science Minor**

A **Political Science minor** requires 20 credits of course work.

**The following courses are required:**

- PS 111 - SSC American National Government
  
- PS 150 - NCH Introduction to Comparative Politics or
- PS 245 - NCH International Relations
  
- PS 205 - WCH Western Political Heritage
- Eight credits of Political Science electives, at least four of which must be at the 300- or 400-level

## **Sociology Minor**

The Sociology minor requires 20 credits of course work, including:

- SO 101 - SSC Discovering Society
- Four Sociology electives, one of which must be at the 300-level

## **Master of Public Policy**

### **Master of Public Policy (M.P.P.)**

Requirements for admission into the graduate program:

- Students should take Microeconomics and Macroeconomics prior to their fifth year.
- Students must maintain an undergraduate GPA minimum of a 3.0.

Applications for acceptance are due to Dr. April Kelly-Woessner, Director of the Public Policy Program in the fall semester of a student's junior year. Students will be notified of their acceptance in the spring semester of their junior year.

Additional requirements to attain the Master of Public Policy:

- Students must complete 16 combined undergraduate/graduate credits in their senior year.
- Students must maintain a minimum Public Policy GPA of 3.0 to continue in the program.
- Students must achieve a minimum grade of C- or better in all graduate courses.
- College policies on course repeats apply to graduate study.
- Successful defense of Master's Thesis.
- MPP students are expected to abide by the program's standards of academic and professional expectations. Students will receive a copy of expectations when admitted to the program.

### **Student Learning Outcomes for Master of Public Policy:**

*Students will be able to:*

- Explain the steps of the policymaking process, including problem setting, formulation, implementation, analysis, and evaluation.
- Apply theories and concepts associated with the development of U.S. public policy to evaluate a policy problem.
- Conduct original research and analysis of a policy problem, using advanced data analysis techniques.
- Demonstrate the ability to interpret, synthesize, and critique prior research on a complex policy problem.
- Clearly communicate informed policy recommendations in written and oral forms, to policymakers, interest groups, and the public.
- Identify major ethical dilemmas associated with the public policy process.

**Combined undergraduate/graduate course requirements typically taken in senior year:**

- PP 520 - Public Policy Research I: Research Design and Data Analysis
- PP 521 - Public Policy Research II: Advanced Statistics
- PP 542 - Pennsylvania Politics and Policy (PS 342)
- PP 563 - American Domestic Policy (PS 363)

**Graduate course requirements typically taken in the fifth year:**

- PP 555 - Public Policy Ethics (PH 355)
- PP 561 - Public Administration (PS 361)
- Two program-approved Public Policy electives
- PP 575 - Public Policy Internship (taken in the summer)
- PP 690 - Master's Thesis I
- PP 691 - Master's Thesis II

## **Anthropology Courses**

**AN 111 - NCH Understanding Human Cultures**

4.00 credits. (**Non-Western Cultural Heritage Core Course**) An exploratory survey of the peoples and cultures of the world with special emphasis upon four interrelated cultural systems: economy, technology, social organization and ideology.

**AN 201 - NPS Principles of Biological Anthropology**

4.00 credits. (**Natural and Physical Science Core Course**) Introductory examination of humans and their biological history within the scientific framework of evolution by natural selection. The study of genetics, modern primates, the human fossil record and early cultural attainments provides a context in which to understand our place in the continuum of nature.

**AN 342 - Primates (BIO 342)**

4.00 credits. This course is a survey of the Order Primates using current taxonomic relationships to organize the content and sequence of topics. Through an examination of the morphological characteristics, distribution, adaptation, and behaviors of non-human primates, this course will provide a context within which we can understand our unique place in the continuum of nature. Selected topics such as social organization, reproduction and development, communication, cognition, and conservation will be coupled with the taxonomic survey.

**AN 343 - Human Origins (BIO 343)**

4.00 credits. Examines the fossil, molecular, and archaeological record of human evolution, providing a comprehensive survey of our biological and behavioral changes from the earliest proposed hominins to modern Homo sapiens. Important topics include bipedalism, the changing ecology of the Plio-Pleistocene, tool use, hominin interactions with their changing environments, increased brain size and intelligence, social behaviors, symbolic behaviors such as language and art, and other significant bio-cultural adaptations.

**AN 363 - Forensic Anthropology**

4.00 credits. Analysis of human skeletal anatomy from the medico-legal perspective, emphasizing recovery, bone identification, and determination of sex, ethnicity, stature and age of an individual. Register by Instructor.

## Cognitive Science Courses

### **CSC 290 - Introduction to Cognitive Science (PH 290)**

4.00 credits. Cognitive science is an interdisciplinary science that integrates elements of philosophy, psychology, neuroscience, and computer science into a unified field of study. As a required course for the Cognitive Science Minor, Introduction to Cognitive Science provides exposure to a variety of disciplines, with particular focus on how they cooperate to study cognition and behavior. Fall semester.

### **CSC 315 - Cognitive Neuroscience (PH 315)**

4.00 credits. Philosophers of Mind have been exploring the human mind for centuries. Cognitive Psychologists have been exploring the human mind through behavioral studies for over fifty years. In parallel, neuroscientists have built-up our understanding of the human brain. Cognitive Neuroscience lies at the intersection of these fields. This course will provide a big picture, theoretical, up to date introduction to twenty-first century Cognitive Neuroscience. The student will also learn how this key discipline fits into the larger field known as Cognitive Science.

### **CSC 350 - Animal Minds (PH 350)**

4.00 credits. There is a growing consensus that many non-human animals are conscious and much more intelligent than previously believed. Throughout this interdisciplinary course, we will try to answer the question what, if anything, makes humans unique with regard to cognitive abilities and conscious experience? We will explore similarities and differences between humans and other animals for a variety of cognitive abilities such as perception, attention, learning, memory, reasoning, tool use, and language using primary scientific evidence and an evolutionary framework. We will explore particular debates in current animal cognition research.

### **CSC 462 - Cognitive Science Capstone**

4.00 credits. Students will read and discuss articles in the cognitive science literature dealing with major advances in cognitive science. A paper and oral presentation on subject related to the discussion is required. \*Prerequisite(s): PH 290, NEU 125, and at least 12 credits in the minor. **Signature Learning Experience: Capstone Experience.** Register by Instructor. Fall or spring semester.

## Communications Courses

### **COM 105 - Fundamentals of Speech**

4.00 credits. Basic instruction on developing poise and confidence in speaking. Emphasis is placed on verbal and nonverbal communications, research, outlining, speech preparation, use of visual aids, and the rudiments of group dynamics and discussion.

### **COM 120 - Intro to Communications**

4.00 credits. In this course students study communication as a field of study focusing both on human and mediated communication (news, persuasion, entertainment). As theories provide the means to understand, explain, predict and implement communication processes and events. This course will also expose students to significant media history to inform the current applications of media in society, business and mass communication environments. \*This course is required of all Communications majors and minors.

### **COM 130 - Visual Communications**

4.00 credits. In this course students study the design, theory and development of production in visual communication including digital photography, new media design and basic print design principles. Students will apply aesthetics and concepts learned to the production of visual media projects. \*Prerequisite(s): Declared or intended communications major or declared communications minor or permission of the instructor.

**COM 145 - CE Digital Photography (ART 145)**

4.00 credits. (**Creative Expression Core Course**) This is a course in beginning digital photography. Photography will be dealt with as a photojournalistic form and an art form. No prior knowledge or experience in the arts or photography is expected. Demonstrations and supervised lab periods will be used to instruct students in basic camera and Photoshop techniques of digital photography. Individual and group critiques/discussions of student photography will be held. Discussion of photographic history, criticism and aesthetics will be used to help the student understand class projects and to increase appreciation of photographic traditions and contemporary trends.

**COM 180 - SSC Media, Sports, and Society**

4.00 credits. (**Social Sciences Core Course**) This course is designed to help students more critically view the role of sport media in American culture. The influence/relationship between sport media and issues such as race, gender, sexuality (homophobia), nationalism, capitalism/consumerism, violence and civic life will be examined. Issues in relation to journalism ethics and the production of sport media also will be examined.

**COM 210 - Presentation Skills**

4.00 credits. Students become proficient at translating the written word into a professional oral performance. Exercises and projects develop competence in a variety of areas. This course is an advanced professional speaking course, which allows students to experience various presentation formats with the focus on one organization.

\**Prerequisite(s): COM 120.*

**COM 211 - Intro to Journalism**

4.00 credits. In this course students study the application and importance of clear, logical writing necessary for success in print, broadcast and online project management. Grammar, language skills and Associated Press style will be introduced and refined. \**Prerequisite(s): COM 120.*

**COM 220 - Audio Production**

4.00 credits. The technical and aesthetic fundamentals of the radio industry and audio production fields are explored in this course, including an advanced examination of writing and production materials for radio/audio programming. An in-depth analysis of the audio medium - including commercials, news, documentaries, digital editing and special programs - will be undertaken. Through the development of analytical, technical and critical skills, the student will become knowledgeable in writing and producing a complete range of audio projects. A general overview of the history of audio broadcasting is included. Students are required to purchase production materials for the course.

\**Prerequisite(s): COM 120 and COM 130.*

**COM 230 - Video Production**

4.00 credits. The technical and aesthetic fundamentals of the television industry and video production fields are explored in this course, including an advanced examination of writing and production materials for television/video programming. Through the development of analytical, technical and critical skills, the student will become knowledgeable in writing and producing a complete range of video projects. Students are required to purchase production materials for the course. \**Prerequisite(s): COM 120 and COM 130.*

**COM 235 - PR Media Production**

4.00 credits. This course addresses theory and principles of multimedia (audio and video) as applied in business and organizational settings. This course emphasizes achieving an organization's goals through informing, persuading, and entertaining while applying the foundations of theory, planning, scripting, storyboarding, and production.

\**Prerequisite(s): COM 120 and COM 130.*

**COM 248 - Communication Law and Ethics**

4.00 credits. An examination of the law related to the field of communications as well as its history and effects. Current ethical issues are explored through case studies. Analysis of legal and ethical issues affecting the media - including the First Amendment, defamation, privacy, news gathering, obscenity, copyright and broadcasting/telecommunications - and the views of philosophers from Socrates to the present. \*Prerequisite(s): COM 120.

**COM 251 - International Communications**

4.00 credits. The course is an examination of the systems of communications around the world. It is designed to examine the human experience as an American by exploring the sociocultural, economic, political and scientific/technical impact of communications.

**COM 252 - HUM Multi-Cultural Communications**

4.00 credits. (**Humanities Core Course**) The course is designed to study issues of diversity and the media by investigating the audience, content and institutions of communications. Cultural perceptions will be explored as they relate to an individual's beliefs on diversity such as race, ethnicity, gender, sexual orientation, religion, age, class and disability. A research and field experience will challenge students to analyze and formulate their own views.

**COM 261 - HUM Film Studies**

4.00 credits. (**Humanities Core Course**) This course is an introduction to cinema studies including the history of cinema, methodologies of filmmaking and criticism, and critical analysis of film. Throughout the semester, students will learn to actively watch and analyze a variety of films, as well as the general application of critical film analysis, the history of film from the early experimental films produced at the turn of the century through the rise of the "Studio System," alternative cinema and "New Hollywood," and contemporary filmmaking. Major film theories and theorists will be explored contemporaneously and critically analyzed.

**COM 282 - Health Communication**

4.00 credits. The course provides an introduction to health communication theory and practice including physician-patient interpersonal communication, mass communication and health journalism, health industry communication, health advocacy, and public health education campaigns by nonprofit organizations and government health agencies, as well as the impact of entertainment media on the dissemination of health information. Students will explore and evaluate the health communication challenge of reaching diverse target audiences through a variety of channels.

\*Prerequisite(s): COM 120 or major declaration in Public Health.

**COM 310 - New Media Production**

4.00 credits. This course is an examination of convergence in mass media and how that convergence impacts website design. Through theory, application and practice, students will learn about media convergence and its place in the new media landscape. Emphasis will be placed on proper design and evaluation of websites. \*Prerequisite(s): COM 120 and COM 130, or ART 207 and COM 130.

**COM 312 - Introduction to Media Analytics**

4.00 credits. This course will give students an in-depth look at using and understanding Google Analytics. Students will apply techniques to measure media impact for real-world clients and develop effective strategies. In the course, students will develop business models reflecting the strategic positioning of clients, and engage audiences using social, mobile and other media platforms.

**COM 314 - Feature Writing**

4.00 credits. This course focuses on the writing, editing, production and management skills in the magazine publishing industry. Skills needed to write as a freelance writer and staff writer in the magazine industry are

developed. Story titles, openings, closings, structures, research and query letters are examined. The impact of new media on the traditional print magazine also is explored. The course culminates with the production of a mass circulation publication - The Jay Crew magazine. \*Prerequisite(s): COM 211.

**COM 316 - Broadcast News**

4.00 credits. This course serves as an introduction to the styles and techniques of writing for the broadcast media. Emphasis is given to conceptualizing, writing and editing news copy for television and radio. \*Prerequisite(s): COM 211, COM 220 and COM 230.

**COM 320 - Advanced Multimedia Journalism (EN 320)**

4.00 credits. This is an advanced-level journalism class aimed at honing newsgathering, writing, and editing skills learned in previous courses. Students will apply multimedia skills to covering a variety of stories and publishing those stories across different media platforms. \*Prerequisite(s): COM 211 and COM 230.

**COM 333 - Organizational Communication**

4.00 credits. Through theory, application and practice, this course explores aspects of organizational communication in order to prepare students for the challenges of organized activity at work, in the community, and in the family. \*Prerequisite(s): COM 120.

**COM 351 - Intro to Public Relations**

4.00 credits. A study of the theory and practice of public relations, its role in administration, its role in society, and its potential as a career. Course content addresses strategies and tactics of public relations in commercial, nonprofit and government organizations. \*Prerequisite(s): COM 211.

**COM 355 - PR Writing**

4.00 credits. In this course students study a survey of strategic writing activities that address the most common and best practices in corporate communication, included but not limited to project management documents, media relations documents, and corporate media production documents. \*Prerequisite(s): COM 211.

**COM 358 - Marketing Communications**

4.00 credits. Skills are provided in blending concepts and applications of marketing communications that integrate advertising, public relations, sales promotion and other organizational efforts into a strategic viewpoint in a global/international environment. Students are taught from an integrated marketing communications perspective with respect to planning, implementation and control of marketing communications campaigns. \*Prerequisite(s): COM 351.

**COM 370-378 - Special Topics in Communications**

4.00 credits. Periodic offerings of the School or directed study in topics of special interest to advanced majors. These courses count as concentration elective credit. This course is repeatable for credit.

**COM 400 - Honors in the Discipline I**

2.00 credits. Communications majors of superior ability are invited to explore a topic of their choosing and produce a major work in consultation with the student's honors committee. A public oral presentation of the work is also expected. \*Prerequisite(s): Communications majors with a GPA of at least 3.6 in the major and 3.5 overall by the end of the fall semester of their junior year. By invitation only. **Signature Learning Experience: Supervised Research.** Register by Instructor.

**COM 401 - Honors in the Discipline II**

2.00 credits. Communications majors of superior ability are invited to explore a topic of their choosing and produce a major work in consultation with the student's honors committee. A public oral presentation of the work is also expected. This is to be taken following the successful completion of COM 400. \**Prerequisite(s)*: Communications majors with a GPA of at least 3.6 in the major and 3.5 overall by the end of the fall semester of their junior year. Successful completion of COM 400. By invitation only. **Signature Learning Experience: Supervised Research.** Register by Instructor.

**COM 410 - Advanced Production**

4.00 credits. This team-based production course will challenge students to produce professional projects for local clients that exhibit advanced writing, audio, video and online skills. Project management, teamwork, negotiation, and best practices are at the core of this mass communications course. \**Prerequisite(s)*: COM 230 and Communications major or minor with a minimum of junior standing in the Program.

**COM 412 - Advanced Public Relations**

4.00 credits. The course provides an opportunity for students to build upon knowledge, skills and expertise in public relations by applying them to the study of actual public relations cases. The analysis and evaluation of actual public relations practice lead the student to a better knowledge of public relations principles, application and management in the profession. Agency projects enhance the application of advanced public relations practices. \**Prerequisite(s)*: COM 351.

**COM 424 - Script and Screenwriting**

4.00 credits. Emphasis is placed on identifying the tools used in successful creative writing and then putting them into practice. Through study and practical application, students become familiar with the various visual/audio formats used in dramatic and documentary television and film writing. \**Prerequisite(s)*: COM 211 or declared Creative Writing minor or permission of the instructor.

**COM 470-473 - Practicum**

Variable (0.00 to 3.00) credit(s). Supervised application of previously studied theory by professionals in the field of the student's concentration. Practicum with an on- or off-campus sponsor may be used for free elective credit only, repeatable to a maximum of four credits within a major or minor declaration. A maximum of four credit hours from Communications 470-473 may count as communications electives. Additional credits count as free electives.

\**Prerequisite(s)*: At least sophomore standing, and majors/minors only. **Signature Learning Experience: Practicum.** Graded Pass/No Pass. Register by Instructor. This course is repeatable for credit.

**COM 474 - Internship in Communications**

12.00 credits. Supervised application of previously studied theory by professionals in the field of the student's concentration. A maximum of twelve credit hours from Communications 474 may count as communications electives. Additional credits count as free electives. \**Prerequisite(s)*: Senior standing, majors only, 2.70 cumulative grade point average with a 3.00 grade point average in the major. Must be taken for a full semester off campus for free elective credit only. **Signature Learning Experience: Internship.** Register by Instructor.

**COM 480-484 - Independent Study in Communications**

Variable credit. A specially-designed course, unique to each student, allowing the individual the opportunity to pursue scholarly and practical work in the area of major interest under the guidance of members of the Communications faculty. Specific goals and objectives permit the student to complete special projects, literature reviews and research papers. \**Prerequisite(s)*: At least junior standing, scholarship requirement, and approval of Independent Study Committee. Register by Instructor. This course is repeatable for credit.

### **COM 495 - Communications Capstone**

4.00 credits. A capstone course providing an integration of course work, knowledge, skills and experiential learning to enable the student to demonstrate a broad mastery of professional expectations for a promise of initial employability, further learning and career advancement. Critical thinking, creative thinking, problem-solving strategies, effective written and oral communication, quantitative and qualitative analysis, computer literacy, library competency and mediated communication related to a student's concentration and specific career plans is employed. \*Prerequisite(s): Senior standing and majors only. **Signature Learning Experience: Capstone Experience.** Register by Instructor.

## **Honors Political Science Courses**

### **HPS 300 - HNR Gender and the Law (HWG 300)**

4.00 credits. This interdisciplinary Honors course will examine issues of gender in the context of American statutory and constitutional law. Due to its interdisciplinary nature, course material will draw from the disciplines of history, law, political science, psychology, and sociology to better understand how law affects gendered groups in the United States. We will address such topics as sexual discrimination, sexual harassment, reproductive rights, same-sex marriage, and other issues. Honors students only.

## **Honors Sociology Courses**

### **HSO 224 - HNR SSC The Amish in Modern Society**

4.00 credits. (**Social Sciences Core Course - Honors**) \*A Guided Writing and Research course. Sociological theories and concepts will be used to analyze and compare Amish society with contemporary American society. Using concepts such as power, class, culture, gender, inequality, deviance, social control and technology, the course will explore fundamental differences between Amish society and modern life. The course will examine the Amish in the context of modern culture to explore questions about how societies construct values and organize social behavior, and how their members view the idea of progress, the impact of technology on human experience, and the roots of social well-being. \*Students who have taken SO 364 may not take this course. Honors students only. Fall semester.

## **International Studies Courses**

### **INT 233 - NCH The Arab Spring (PS 233)**

4.00 credits. (**Non-Western Cultural Heritage Core Course**) \*A Guided Writing and Research course. This course provides an in-depth analysis of the Arab Spring, series of revolutions, protests, rebellions that have been ongoing in the Arab world since 2011. It analyzes the causes behind the uprisings and the path that each continues to take. Situating the Arab Spring in diplomatic history, it explores the political and socio-economic characteristics of the countries to illustrate why the success of democratic transition in the Middle Eastern and North African region vary. May term only.

### **INT 331 - Peace and War in a Global World (PCS 331, HI 331)**

4.00 credits. Students will learn essentials about the history of war and peacemaking since 1500, as well as key concepts such as the military revolution, just war, non-violence, the liberal or democratic peace, the Kantian triad, and the Confucian and Westphalia international relations systems.

### **INT 332 - Model United Nations (PS 332)**

4.00 credits. This course introduces the history, structure, functions, and activities of the United Nations. It is designed to provide students with theoretical and historical foundations to study the UN and understand the

modalities of international diplomacy at this defining moment in history. This course goes beyond a traditional approach to the study of the UN, as students taking this course are required to participate at an intercollegiate Model United Nations simulation conference. **Signature Learning Experience: Internship.**

**INT 370-378 - Special Topics in International Studies**

Variable credits. Topical areas and problems of international studies, subjects chosen in accord with student demand. Credit variable based upon topics.

**INT 470-474 - Internship in International Studies**

Variable (0.00, 2.00, or 4.00) credits. This course is an internship seminar designed to integrate previous coursework in the interdisciplinary field of international studies into the internship experience of International Studies minor students. Internship experience can clearly enhance the students' learning and is a valuable supplement to classroom instruction. The main purpose of this course is to assist students in the learning process of reflection, analysis, and integration of experiences and insights gained through their internships with the academic theory, principles, concepts, and social and ethical dimensions of international studies. This course is designed specifically for junior and senior students pursuing the International Studies minor, with a GPA of 2.0 or higher. Each student produces a research paper and a log of daily entries into their internship diary. **Signature Learning Experience: Internship.** Register by Instructor.

**INT 490 - Directed Research Project in International Studies**

Variable (2.00 or 4.00) credits. This course is a capstone seminar designed to integrate previous coursework in the interdisciplinary field of international studies and produce a major research project on a topic related to international studies. It is designed specifically for senior students pursuing the International Studies minor. Each student produces a major research paper and is required to present the results in front of Capstone Directed Research Project Committee, consisting of the Director of the International Studies Minor and a supervising faculty member (if both positions are filled by the same faculty member, then the student is required to invite another faculty member to serve as the reader). \*Prerequisite(s): Successful completion of all other requirements of the international studies minor) in their senior year on either fall or spring semester. Therefore, students need to successfully complete PS 245 NCH International Relations, two semesters of modern language at the 200 level or above, and three elective courses approved by the International Studies Minor Program Committee, before they become eligible for enrolling in this course. **Signature Learning Experience: Supervised Research.** Register by Instructor.

## Master of Public Policy Courses

**PP 520 - Public Policy Research I: Research Design and Data Analysis**

4.00 credits. This course provides students with an understanding of the various methodological approaches used to analyze public policy. Students learn to collect, analyze, and organize data in order to inform public policy debates. Register by Instructor. Fall semester.

**PP 521 - Public Policy Research II: Advanced Statistics**

4.00 credits. This course provides students with the skills to analyze public policy issues using advanced statistical techniques. \*Prerequisite(s): PP 520. Register by Instructor. Spring semester.

**PP 542 - Pennsylvania Politics and Policy (PS 342)**

4.00 credits. This course will examine Pennsylvania government, its structure and the politics that impact policy. Throughout the course we will monitor major policy issues at the state level and have the opportunity to discuss those policy issues with state officials, lobbyists, and members of the media. Register by Instructor.

**PP 555 - Public Policy Ethics (PH 355)**

4.00 credits. This course explores how ethics, morality, religion, and culture influence the policy making process. Students learn to apply principles of moral reasoning to contemporary policy debates. Register by Instructor.

**PP 561 - Public Administration (PS 361)**

4.00 credits. A study of the role and influence of executive branch departments and agencies in American politics, government, and policymaking. Differences between public- and private-sector leadership, decision making, communications, organization, budgeting, and human resource management will be emphasized. Register by Instructor.

**PP 563 - American Domestic Policy (PS 363)**

4.00 credits. An examination of the development and impact of selected public policies in health care, welfare, education, energy, and the environment. Students will conduct policy analyses, making use of information resources in the Harrisburg area. Register by Instructor.

**PP 565 - Health Policy and Law (PS 365)**

4.00 credits. This course introduces students to the various aspects of health policy, related legal analysis, and the development of legislation for application in real-world settings. Course objectives are to: (1) understand the scope of health policy issues; (2) learn how to prepare useful analytic information on those topics; and (3) apply those substantive facts to the drafting of laws in a political environment.

**PP 575 - Public Policy Internship**

Variable (0.00 to 8.00) credit(s). Students complete a policy internship, working for a state government agency, lobbying firm, non-profit agency, or other approved client. Eight credits of internship experience are required for the MPP degree. \*Prerequisite(s): PP 521. Register by Instructor. Course is repeatable for credit.

**PP 690 - Master's Thesis I**

4.00 credits. Students work closely with a faculty advisor and two committee members to develop a plan for a comprehensive policy analysis project. Students present and defend a 12-15 page prospectus, which lays the groundwork for the Master's Thesis. \*Prerequisite(s): PP 521. Register by Instructor.

**PP 691 - Master's Thesis II**

Variable (1.00-4.00) credit(s). As the capstone to the MPP curriculum, students complete a major policy analysis project, usually 35-40 pages in length. The Master's Thesis defines an issue, designs research strategies, gathers data, evaluates alternative solutions, and makes an informed policy recommendation. Students must take PP 691 for 4.00 credits the first time, but may repeat 691 up to three times, for 1-4 credits, if additional time is needed to prepare the Master's Thesis for defense. \*Prerequisite(s): PP 690. Register by Instructor.

## **Philosophy Courses**

**PH 115 - HUM Ethics**

4.00 credits. **(Humanities Core Course)** A study of the nature, origin and development of ethical theories from both a historical and contemporary perspective and their relevance to significant current moral dilemmas such as abortion, euthanasia, capital punishment and environmental issues. Special attention is given to the exploration of enduring moral concerns, such as moral realism versus relativism, egoism, altruism, the role of reason in ethics, and the nature of responsible moral decision making.

**PH 201 - WCH History of Western Philosophy I**

4.00 credits. (**Western Cultural Heritage Core Course**) Engagement in an in-depth survey of the central issues and thinkers in Western Philosophy in ancient, medieval and early modern periods. Special emphasis is placed on the works of major figures such as Plato, Aristotle, Augustine, Aquinas, Ockham and Descartes with a view toward exploring their respective positions on critical questions in epistemology, metaphysics, ethics, politics and aesthetics.

**PH 202 - WCH History of Western Philosophy II**

4.00 credits. (**Western Cultural Heritage Core Course**) This course engages in an in-depth survey of the central issues and thinkers in the modern and contemporary periods. Special emphasis is placed on major figures such as Kant, Locke, Hume, Hegel, Nietzsche, Wittgenstein and Heidegger with a view toward exploring their respective positions in regard to epistemology, metaphysics, ethics, politics and aesthetics.

**PH 205 - WCH Western Political Heritage (PS 205)**

4.00 credits. (**Western Cultural Heritage Core Course**) A critical assessment of the ideas and selected original works of leading Western social and political thinkers since Plato. Justice, equality, war and peace, rights, freedom, order and community are among some of the ideas to be examined from a variety of critical and historical perspectives.

**PH 210 - Logic and Legal Reasoning**

Variable (0.00 or 4.00) credits. This course is an exploration of the concepts of formal logic, argument creation and evaluation and persuasion. Using the concepts evaluated on the LSAT, this course will examine concepts like sufficient and necessary conditions, the transitive property, diagramming arguments and logical flaws. Students will analyze how these concepts deployed in both the practice of law and in political and social discourse. This course is open to students with advanced English placement as well as those who have already completed their PLE requirement. \*This course may only be taken once for credit. A student may elect to repeat this class for the experience; however, no additional credit will be earned. Any student initially completing PH 210 for zero credit will be prohibited from taking the course in a future semester for academic credit.

**PH 234 - HUM Justice Through the Ages**

4.00 credits. (**Humanities Core Course**) This seminar addresses the subject of justice as it has appeared in classical literature. Many of the readings involve the contest between positive law, enacted by the state, and what has been labeled natural or eternal law. The course begins with readings from the ancient world and concludes with modern-day readings on the subject. It also includes films that eloquently address the perennial problems associated with defining justice.

**PH 235 - HUM Bioethics**

4.00 credits. (**Humanities Core Course**) \*A Guided Writing and Research course. Rapid development of technology during the 20th century has allowed biologists to gather, process, and manipulate animal and plant tissue at a rate faster than any other time in human history. In this course we will investigate the ethical issues surrounding the use of this technology in the medical, research, and agricultural fields by drawing upon a variety of disciplinary perspectives including biology, ethics, history, law, literature, political science, psychology, and religion.

**PH 255A - Advanced Ethics: Business (BA 255A)**

4.00 credits. Business Ethics is part of a four-course sequence in Applied Ethics. In each course, a theoretical foundation for ethical discourse within the respective field is established. This course then proceeds to a detailed treatment of central ethical dilemmas in the actual practice of business.

**PH 255B - Advanced Ethics: Medicine**

4.00 credits. Medical Ethics is part of a four-course sequence in Applied Ethics. In each course, a theoretical foundation for ethical discourse within the respective field is established. This course then proceeds to a detailed treatment of central ethical dilemmas in the actual practice of medicine.

**PH 255C - Advanced Ethics: Legal**

4.00 credits. Legal Ethics is part of a four-course sequence in Applied Ethics. In each course, a theoretical foundation for ethical discourse within the respective field is established. This course then proceeds to a detailed treatment of central ethical dilemmas in the actual practice of law.

**PH 255D - Advanced Ethics: Environmental**

4.00 credits. Environmental Ethics is part of a four-course sequence in Applied Ethics. In each course, a theoretical foundation for ethical discourse within the respective field is established. This course then proceeds to a detailed treatment of central ethical dilemmas in the practice of public policy with regard to environmental use and protection.

**PH 275 - HUM Science and Values**

4.00 credits. (**Humanities Core Course**) Many people now recognize that for both good and ill, science is value-laden, e.g., scientists are influenced by ethical and political values when they do science. Scientists are people, just like the rest of us. The truth is that values shape research methods, agendas, and applications of scientific knowledge. More controversially, it maybe that even theory choice and theory testing are value-laden. So all this raises questions, how can we inform our consciences and pursue implementations of scientific and technological developments that are just and respectful of human dignity? What is the responsibility of the scientist or engineer for the uses their work is put to? By what means, in which respects, and to what extent does science change our world and does the world change science? Which of these changes are morally positive and which are not? To answer these questions we need an approach to science that integrates the history, philosophy, anthropology, psychology, sociology, and economics of science and scientists into a comprehensive analysis. This course will introduce the student to foundational ethical theories and principles, and then apply them to various case studies in the area of science and values.

**PH 290 - Introduction to Cognitive Science (CSC 290)**

4.00 credits. Cognitive science is an interdisciplinary science that integrates elements of philosophy, psychology, neuroscience, and computer science into a unified field of study. As a required course for the Cognitive Science Minor, Introduction to Cognitive Science provides exposure to a variety of disciplines, with particular focus on how they cooperate to study cognition, consciousness, and behavior. Fall semester.

**PH 305 - Philosophy of Law (PS 305)**

4.00 credits. An analysis of the major underlying philosophical issues of both criminal and civil law. Special attention is given to natural law theory, legal positivism, epistemological foundations of legal reasoning and interpretation, and the moral foundations of retributive and distributive justice.

**PH 315 - Cognitive Neuroscience (CSC 315)**

4.00 credits. Philosophers of Mind have been exploring the human mind for centuries. Cognitive Psychologists have been exploring the human mind through behavioral studies for over fifty years. In parallel, neuroscientists have built-up our understanding of the human brain. Cognitive Neuroscience lies at the intersection of these fields. This course will provide a big picture, theoretical, up to date introduction to twenty-first century Cognitive Neuroscience. The student will also learn how this key discipline fits into the larger field known as Cognitive Science.

**PH 320 - Philosophy of Religion (REL 320)**

4.00 credits. A study of the various rational efforts to establish the validity of the religious perspective. Topics will include: the nature of religious experience, the relationship between faith and reason, the arguments for the existence of God, the problem of evil, the possibility of miracles and immortality, and the relationship between religion and ethics, and religion and science.

**PH 350 - Animal Minds (CSC 350)**

4.00 credits. There is a growing consensus that many non-human animals are conscious and much more intelligent than previously believed. Throughout this interdisciplinary course, we will try to answer the question what, if anything, makes humans unique with regard to cognitive abilities and conscious experience? We will explore similarities and differences between humans and other animals for a variety of cognitive abilities such as perception, attention, learning, memory, reasoning, tool use, and language using primary scientific evidence and an evolutionary framework. We will explore particular debates in current animal cognition research.

**PH 355 - Public Policy Ethics**

4.00 credits. This course explores how ethics, morality, religion, and culture influence the policy making process. Students learn to apply principles of moral reasoning to contemporary policy debates. Fall semester.

**PH 370-378 - Special Topics in Philosophy**

4.00 credits. A series of courses with topics not otherwise covered in the curriculum. Offered when student interest and faculty availability justify. \*Prerequisite(s): Permission of the instructor. This course is repeatable for credit.

**PH 480-489 - Independent Study in Philosophy**

4.00 credits. Advanced students have the opportunity to study specialized areas not otherwise included in the curriculum. \*Prerequisite(s): Approval of the Dean and Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**PH 495 - Film Studies Capstone**

4.00 credits. An analysis of selected perennial issues in philosophy through the media of film and literature. Areas of investigation will include: the nature of Self and Reality, the nature of Knowledge, as well as issues in moral and political philosophy. \*Prerequisite(s): COM 261 and a minimum of 16 earned credits in the minor or permission of instructor. **Signature Learning Experience: Capstone Experience.** Register by Instructor.

**Political Science Courses**

**PS 101 - WCH Foundations of American Government**

4.00 credits. **(Western Cultural Heritage Core Course)** Analysis of key features of American government and politics, with special emphasis on the establishment, interpretation, and relevance of the U.S. Constitution.

**PS 111 - SSC American National Government**

4.00 credits. **(Social Sciences Core Course)** Students are introduced to the social sciences through analysis of how the American political system works and the factors that shape American political behavior. In particular, students will examine American political ideals, the U.S. Constitution, federalism, and civil rights and liberties; the media, public opinion, political organizations and elections; and the presidency, bureaucracy, Congress and the Courts. Throughout, students will think critically about the origins and structure of Americans' beliefs about politics, and about how American law and public policy are made.

**PS 150 - NCH Introduction to Comparative Politics**

4.00 credits. (**Non-Western Cultural Heritage Core Course**) A comparison and contrast of the political systems of selected foreign nations, emphasizing the historical development of party systems, political cultures and executive-legislative relations.

**PS 205 - WCH Western Political Heritage**

4.00 credits. (**Western Cultural Heritage Core Course**) A critical assessment of the ideas and selected original works of leading Western social and political thinkers since Plato. Justice, equality, war and peace, rights, freedom, order and community are among some of the ideas to be examined from a variety of critical and historical perspectives.

**PS 211 - SSC Political Psychology (PSY 211)**

4.00 credits. (**Social Science Core Course**) \*A Guided Writing and Research course. This interdisciplinary course explores the intersection between political science and psychology. It introduces students to psychological theories and research findings in order to explain what people think, feel and do about contemporary political issues. Specifically, the course draws on psychological concepts regarding motivation, personality, cognition, attribution, emotion and identity to examine mass political behavior and public opinion.

**PS 215 - SSC Political Communication**

4.00 credits. (**Social Science Core Course**) \*A Guided Writing and Research course. This interdisciplinary course explores the intersection between political science and communication. It introduces students to communication theories and research findings in order to explain how political information is created, disseminated, and evaluated by political elites and citizens. The first part of the course introduces students to communication theory and various methodological approaches to the study of political communication. The second part of the courses examines the role of the mass media in a democracy. The third part of the course examines social communication networks and the sharing of political information within the family, workplace, and community.

**PS 225 - HUM American Democracy in Film and Fiction**

4.00 credits. (**Humanities Core Course**) \*A Guided Writing and Research course. An examination of democratic theory through major films and novels depicting the American political experience from the 1930s to the present. Questions to be explored include whether political elites are accountable to the general public, whether mass control of government is desirable, and how democracies should deal with evil.

**PS 230 - Research Methods**

4.00 credits. Techniques of empirical political research and the development of modern methods of analysis and data presentation in political science with reference to contributions from other social sciences. A major research project on methodology is required. Register by Instructor. Spring semester.

**PS 233 - NCH The Arab Spring (INT 233)**

4.00 credits. (**Non-Western Cultural Heritage Core Course**) \*A Guided Writing and Research course. This course provides an in-depth analysis of the Arab Spring, series of revolutions, protests, rebellions that have been ongoing in the Arab world since 2011. It analyzes the causes behind the uprisings and the path that each continues to take. Situating the Arab Spring in diplomatic history, it explores the political and socio-economic characteristics of the countries to illustrate why the success of democratic transition in the Middle Eastern and North African region vary. May term only.

**PS 240 - WCH Foundations of American Democracy**

4.00 credits (**Western Cultural Heritage Core Course**) This course traces the roots of the early American republic. Students will explore how Greek, Roman, and English traditions influenced American democracy and the Founding

Fathers. Students will also discuss topics including the Declaration of Independence, Articles of Confederation, U.S. Constitutional Convention, and the Federalist and Anti-Federalist Papers.

**PS 245 - NCH International Relations**

4.00 credits. (**Non-Western Cultural Heritage Core Course**) Survey of the basic units of analysis, concepts and principles of global international relations with emphasis on the formulation and implementation of foreign policy in the context of political, economic, military and cultural factors.

**PS 290 - Judicial Process and Politics**

4.00 credits. This course is designed to give students a broad understanding of the function and structure of the American courts and the various actors who comprise the judiciary. The course will examine such topics as the hierarchy of courts, judicial selection methods, models of judicial decision-making, the judiciary's interaction with the other branches of government, and contemporary problems in the American justice system.

**PS 301 - Mock Trial I**

2.00 credits. To prepare and conduct a criminal jury trial in the American Mock Trial Association regional and national competition. \*May only be taken once for credit. A student may elect to repeat this class for the experience; however, no additional credit is earned. Fall semester.

**PS 302 - Mock Trial II**

2.00 credits. To prepare and conduct a criminal jury trial in the American Mock Trial Association regional and national competition. \*Prerequisite(s): PS 301 in the same academic year. \*May only be taken once for credit. A student may elect to repeat this class for the experience; however, no additional credit is earned. **Signature Learning Experience: Practicum.** Spring semester.

**PS 303 - Constitutional Law I: Institutions**

4.00 credits. This course examines the Supreme Court's interpretation of the powers granted by the U.S. Constitution to the institutions of the federal government. Topics include the power of judicial review, constraints on judicial power, the sources and scope of Congressional power, the domestic powers of the President, the President and foreign affairs, and the separation of powers.

**PS 304 - Constitutional Law II: Rights and Liberties**

4.00 credits. This course examines the Supreme Court's interpretation of the protections provided by the U.S. Constitution against governmental intrusion on our civil liberties. Topics include First Amendment issues, such as freedom of speech, freedom of religion, and the establishment clause; 14th Amendment issues, such as right to privacy; discrimination based on race, gender and sexual orientation; and remedies for discrimination such as affirmative action.

**PS 305 - Philosophy of Law (PH 305)**

4.00 credits. An analysis of the major underlying philosophical issues of both criminal and civil law. Special attention is given to natural law theory, legal positivism, epistemological foundations of legal reasoning and interpretation, and the moral foundations of retributive and distributive justice.

**PS 313 - The American Presidency**

4.00 credits. An examination of the development of the modern presidency as institution, symbol and policymaker. Topics to be covered include the nature of presidential power, the institutional presidency, relations with the public and governmental institutions in the United States, and policy leadership in foreign and domestic affairs.

\*Prerequisite(s): PS 111.

**PS 314 - Legislative Process and Behavior**

4.00 credits. An exploration of the American legislative process, operating procedures of the United States Congress, and factors that influence congressional decision making, including constitutional constraints, congressional rules and members' own drives and ambitions. A substantial portion of the course will emphasize the techniques and methods researchers employ in the study of Congress. \*Prerequisite(s): PS 230, or permission of instructor.

**PS 315 - Public Opinion and Political Behavior**

4.00 credits. An examination of opinion formation and predictors of political behavior. Topics include measurement of public opinion, stability and strength of opinions, the impact of public opinion on the political process, mass political behavior, voting behavior and collective action dilemmas. \*Prerequisite(s): PS 230, or permission of the instructor.

**PS 316 - The American Electoral Process**

4.00 credits. Analysis of the process of recruiting, nominating and electing candidates for national office in the United States., the major participants in national elections, and the impact of elections on public policymaking.

**Signature Learning Experience: Community-Based Learning.**

**PS 323 - Politics Through Film and Literature**

4.00 credits. A study of political novels and films and how these art forms have significantly shaped our understanding of politics. Democracy, totalitarianism, social inequality, terrorism, justice and the rule of law are among some of the topics examined.

**PS 326 - American Political Thought**

4.00 credits. Historical analysis of major American political thinkers from the Puritans to the present with special consideration given to the founding principles of the American republic.

**PS 328 - Politics and Religion**

4.00 credits. Analysis of the relationships between forms of government and religious attitudes and practices with emphasis on the influence of religion on political life and of religious interpretations of politics.

**PS 332 - Model United Nations (INT 332)**

4.00 credits. This course introduces the history, structure, functions, and activities of the United Nations. It is designed to provide students with theoretical and historical foundations to study the UN and understand the modalities of international diplomacy at this defining moment in history. This course goes beyond a traditional approach to the study of the UN, as students taking this course are required to participate at an intercollegiate Model United Nations simulation conference. **Signature Learning Experience: Internship.**

**PS 340 - Political Violence and Terrorism**

4.00 credits. This course systematically analyzes political violence and terrorism in comparative and international perspective. It introduces students to the historical, analytical and comparative study of terrorism, civil wars, and other forms of political violence. It surveys competing theories about the causes, conduct, and conclusion of the political conflicts and political violence in the world and examines how the international community deals with different forms of political violence. Alternating spring semesters.

**PS 342 - Pennsylvania Politics and Policy (PP 542)**

4.00 credits. This course will examine Pennsylvania government, its structure and the politics that impact policy. Throughout the course we will monitor major policy issues at the state level and have the opportunity to discuss those policy issues with state officials, lobbyists, and members of the media.

**PS 345 - American Foreign Policy**

4.00 credits. Emphasis on the 1990s and beyond, with consideration of major international challenges and opportunities facing the United States, social and governmental processes in foreign policy decision making, and the large role of American society and the private sector in the United States' presence in the world.

**PS 350 - European Union Simulation I (BA 350)**

4.00 credits. Study of the principles and theories of European integration, the history of the current European Union (E.U.) from the Treaty of Rome to the present, and the structure and functioning of the European Union, including class participation representing an E.U. Member State in the annual Mid-Atlantic European Union Consortium E.U. Simulation in Washington, D.C. **Signature Learning Experience: Field Experience.**

**PS 360 - Washington Institute (BA 360)**

4.00 credits. The course highlights relationships between the legislative, executive, independent agencies and third-party institutions that directly affect how policy is made in the United States. The course exposes students to the mechanism that is used to formulate policy for the United States. The Institute will focus heavily on International policy and the inner workings of the various institutional agents that participate in the process of making policy. Students will observe and develop a critical sense of how to weigh the various interests before policy is ultimately made. Students will learn to examine the purpose of policy and evaluate how it will impact various industries.

\**Prerequisite(s): BA 101. Signature Learning Experience: Community-Based Learning.* Register by Instructor.

**PS 361 - Public Administration (PP 561)**

4.00 credits. A study of the role and influence of executive branch departments and agencies in American politics, government, and policymaking. Differences between public- and private-sector leadership, decision making, communications, organization, budgeting, and human resource management will be emphasized.

**PS 363 - American Domestic Policy (PP 563)**

4.00 credits. An examination of the development and impact of selected public policies in health care, welfare, education, energy, and the environment. Students will conduct policy analyses, making use of information resources in the Harrisburg area.

**PS 364 - Health Policy and Law (PBH 364)**

4.00 credits. This course introduces students to the various aspects of health policy, related legal analysis, and the development of legislation for application in real-world settings. Course objectives are to: (1) understand the scope of health policy issues; (2) learn how to prepare useful analytic information on those topics; and (3) apply those substantive facts to the drafting of laws in a political environment.

**PS 365 - Women and Politics**

4.00 credits. Examination of the role of women in the political process. Topics include feminist theory, the development of the women's movement, participation of women in the political process as voters and elected officials, and public policy issues affecting women, including the feminization of poverty, reproductive rights and equality in the workforce.

**PS 370-378 - Special Topics in Political Science**

Variable credit. Topical areas and problems of political science, subjects chosen in accord with student demand. Credit variable based upon topics. This course is repeatable for credit.

**PS 470-478 - Internship in Political Science**

Variable (0.00 to 8.00) credits. This course provides students with applied field instruction in political science. A maximum of eight credit hours from Political Science 470-478 may count as political science or legal studies

electives. Additional credits count as free electives. **Signature Learning Experience: Internship.** Register by Instructor. This course is repeatable for credit.

**PS 479 - Capital Semester Internship**

Variable credit. Applied field experience in politics and public administration for state or local government agencies, the state legislature, and private political organizations. Normally, four credits are given to internships contracted for two regular office-hour days a week. Full-time internships receive eight hours of credit. \**Prerequisite(s):* PS 361, junior or senior status. **Signature Learning Experience: Internship.** Register by Instructor.

**PS 480-489 - Independent Study in Political Science**

Variable credit. Designed to offer independent study to advanced students, making use of techniques of political science in specific problem areas not included in the School's regular offerings. \**Prerequisite(s):* Approval of the Dean and the Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**PS 490 - Senior Thesis**

4.00 credits. An individualized study project involving research of a topic and the preparation and defense of a major paper or project in consultation with the student's honors advisor and the Program faculty. Completion of this course does not assure recognition for Honors in the Discipline. \**Prerequisite(s):* Invitation to Honors in the Discipline Program and PS 495. **Signature Learning Experience: Supervised Research.** Register by Instructor. Spring semester.

**PS 491 - Research in Political Science**

Variable (1.00 to 4.00) credit(s). An original research investigation planned and performed by students in consultation with faculty. A paper is written and major findings are presented orally to faculty and peers. Students must obtain permission of the professor who they wish to serve as their research mentor before enrolling in the course. A maximum of four credit hours from PS 491 and PS 492 combined can count as Political Science electives. Additional credits count as free electives. \**Prerequisite(s):* At least sophomore standing. **Signature Learning Experience: Supervised Research.** Graded Pass/No Pass or Letter Graded. Register by Instructor. Fall semester. This course is repeatable for credit.

**PS 492 - Research in Political Science**

Variable (1.00 to 4.00) credit(s). An original research investigation planned and performed by students in consultation with faculty. A paper is written and major findings are presented orally to faculty and peers. Students must obtain permission of the professor who they wish to serve as their research mentor before enrolling in the course. A maximum of four credit hours from PS 491 and PS 492 combined can count as Political Science electives. Additional credits count as free electives. \**Prerequisite(s):* At least sophomore standing. **Signature Learning Experience: Supervised Research.** Graded Pass/No Pass or Letter Graded. Register by Instructor. This course is repeatable for credit.

**PS 495 - Senior Seminar in Political Science**

4.00 credits. An integrative, capstone course in political science, in which significant controversies in political theory and practice will be discussed and analyzed. Course requirements include a major research project and the ETS Major Field Test in Political Science. \**Prerequisite(s):* Senior status, or permission of the instructor. **Signature Learning Experience: Capstone Experience.** Register by Instructor. Fall semester.

## Public Health Courses

### **PBH 111 - Principles of Public Health**

4.00 credits. This course will introduce students to the study of public health. The course will provide an overview of the history of public health in the United States, global health issues, and the various factors that influence health, such as social and behavioral factors, economics, the environment, policy, culture, and more. Discussion of current issues in public health and awareness of health disparities will include strategies to improve health of underserved populations. Fall semester.

### **PBH 330 - Social Epidemiology**

4.00 credits. Social epidemiology is the study of the impact of social structures and social behavior on determinants of health in populations. This course introduces students to social epidemiologic methodology, including issues of research design, data collection, research ethics, and measurement. \*Pre/Corequisite(s): MA 252. Signature Learning Experience:

### **PBH 331 - Statistical Analysis (SAN 331)**

4.00 credits. Basic introduction to the study of statistical techniques of social research and analysis with emphasis on reasoning with data. \*Prerequisite(s): PBH 330 and MA 251. Signature Learning Experience: Community-Based Learning. Spring semester.

### **PBH 335 - Epidemiology**

4.00 credits. An introduction to the concepts and methods of epidemiology and their use in public health. Students will be able to identify the factors associated with the distribution and development of disease and different ways to quantify the expression of disease in populations. Quantitative approaches to epidemiology will be emphasized including types of data available, measures of morbidity and mortality, evaluation of association and causality and screening for diseases. \*Prerequisite(s): MA 251. Fall semester.

### **PBH 364 - Health Policy and Law (PS 364)**

4.00 credits. This course introduces students to the various aspects of health policy, related legal analysis, and the development of legislation for application in real-world settings. Course objectives are to: (1) understand the scope of health policy issues; (2) learn how to prepare useful analytic information on those topics; and (3) apply those substantive facts to the drafting of laws in a political environment.

### **PBH 474 - Public Health Field Instruction**

4.00 credits. Supervised field instruction for at least 160 hours in a public health agency. Students apply knowledge and skills from public health coursework to a community organization or agency engaged in public health practice. Open to public health majors only. \*Prerequisite(s): PBH 111 and senior year. \*Corequisite(s): PBH 495. Graded Pass/No Pass.

### **PBH 495 - Public Health Senior Seminar**

4.00 credits. This course occurs at the culmination of a student's undergraduate studies in public health. This course is designed to provide opportunities for students to integrate and apply principles of public health across various topics and current public health issues. Students will also complete a capstone project related to a contemporary public health topic. \*Pre/Corequisite(s): PBH 111, and 200- and 300- level PBH courses required for the major. Signature Learning Experience: Capstone.

## Sociology Courses

### **SO 101 - SSC Discovering Society**

4.00 credits. (**Social Sciences Core Course**) An introduction to the sociological perspective to achieve an understanding of society and its impact on the individual through exploring social reality, processes and explanation.

### **SO 105 - Introductory Seminar for Sociology and Anthropology**

1.00 credit. This course will introduce new majors to the disciplines of and the Program of Sociology. Students will be introduced to the expectations and opportunities in the program, receive cohort curricular advising, and learn about career options in the fields. Students will be introduced to the practices of social science research and writing.

\**Prerequisite(s)*: Sophomore status and officially declared major in Sociology or Criminal Justice. Graded Pass/No Pass.

### **SO 204 - SSC Population and Global Issues**

4.00 credits. (**Social Sciences Core Course**) This course is designed to introduce students to the issues, both national and global, that relate to population trends, policies and the environment. Students should leave this course with a basic understanding of demographic methods and techniques; familiarization with the three components of population studies: fertility, mortality and migration; a general knowledge of population policy issues, and a heightened awareness of the interactions between the environment and human society. Emphasis shall be placed on the sociological perspective of population and environmental issues as well as the role of the individual student in population and environmental solutions.

### **SO 205 - Social Theory**

4.00 credits. Examination and analysis of the development of the major classical and contemporary social theories with an emphasis on examining key concepts and how these have been applied in sociology and anthropology.

\**Prerequisite(s)*: \*Prerequisites: SO 101 and AN 111.

### **SO 215 - Criminology**

4.00 credits. Criminological approaches to explaining criminal behavior with an emphasis on criminological theories and methods.

### **SO 217 - U.S. Criminal Justice System**

4.00 credits. An overview of the criminal justice system in the United States that examines theories of justice, policing, courts, corrections, and alternatives to addressing crime.

### **SO 220 - Race and Ethnic Relations**

4.00 credits. Study of racial and cultural minorities in the United States and their relationships to dominant groups, including discrimination, prejudice, racial myths, and methods of reducing intergroup tensions.

### **SO 230 - Introduction to Urban Sociology**

4.00 credits. Students will learn what sociologists have to say about urban social structure including the examination of the development of cities both historically and globally. Special focus will include suburbanization within the U.S. comparing different uses of space within local neighborhoods. Students should leave this course with a basic understanding of the core concepts of urbanization, the environmental problems associated with the urban lifestyle, and the impact of urbanization on the natural environment.

### **SO 235 - Medical Sociology**

4.00 credits. Health and illness can only be adequately understood within a consideration of sociological, political, economic, and cultural forces. This course will provide an overview of sociological perspectives and methods for

understand the social meanings of illness, the social construction of health and disease, the distribution of health and medical resources across populations, the ways that cultural, organizational and economic interact with healthcare institutions, and reasons that some deviant behaviors are medicalized and others are not. We will utilize the sociological imagination to assess the effects of macro level factors upon access to healthcare, wellness, and disease.

**SO 270 - Law and Social Change**

4.00 credits. An analysis of the ways in which law is both a means of achieving social change and a product of social change. \*Prerequisite(s): Sophomore status or permission of the instructor.

**SO 301 - Social Issues**

4.00 credits. A survey of major social problems including alienation, addiction, crime and poverty. Implications for public policy are stressed.

**SO 305 - Marriage and Family (WGS 305)**

4.00 credits. A study of cross-cultural marriage and family patterns and the comparison of these frameworks to premarital, marital, postmarital and nonmarital aspects of family life in our society.

**SO 317 - Sociology of Religion**

4.00 credits. An analysis of the role and function of religion and religious institutions in society. A study of religion as a social and cultural system.

**SO 330 - Research Methods**

4.00 credits. Basic procedures of sociological research design, sampling, measurement and data analysis.

\*Prerequisite(s): SO 101. Fall semester.

**SO 331 - Statistical Analysis (PBH 331)**

4.00 credits. Basic introduction to the study of statistical techniques of social research and analysis with emphasis on reasoning with data. \*Prerequisite(s): SO 330 and MA 251. **Signature Learning Experience: Community-Based Learning.** Spring semester.

**SO 342 - Modern Corrections**

4.00 credits. Overview of the origins, processes, organization and contemporary trends of corrections for juveniles and adults, including problems and alternatives to current correctional policies.

**SO 352 - Juvenile Law and Justice**

4.00 credits. An analysis of young offenders focusing on delinquency theory, juvenile law, and components and processes of the juvenile justice system.

**SO 353 - Policing in America**

4.00 credits. Examines the structure of policing and police behavior in America, including the roles of police officers, decision-making strategies, community relations and problems with policing.

**SO 355 - Emergency Operations in Disaster Response**

4.00 credits. Emergency Operations will focus on governmental (local, state and federal) and non-government organizational (e.g. Red Cross) responses to natural (e.g. hurricanes and tornadoes) and man-made (e.g. terrorism, industrial accidents) disasters. Students learn about how various disasters effect different societies or ethnic groups within those societies. Course requirements include completion of independent study courses through FEMA's Emergency Management Institute. In addition, students take several field trips to sites like the Pennsylvania

Emergency Management Agency (PEMA) Emergency Operations Center and Lancaster County Emergency Training Center. Several hands-on activities facilitate student understanding of the emergency management aspects of disaster planning and response. The course culminates in a real world emergency management exercise at the college or other location, designed to allow students to apply material learned in the course. Register by Instructor.

**SO 364 - Amish Society (REL 364)**

4.00 credits. An introduction to the history, culture and social organization of the Old Order Amish. Sociological theories and models utilized by social scientists to describe and analyze the Amish will be presented. Special attention will be paid to recent social changes. \*Students who have taken HSO 224 may not take this course.

**SO 370-378 - Special Topics in Sociology**

4.00 credits. Occasional course offerings used to enhance the Program curriculum. This course is repeatable for credit.

**SO 400 - Senior Project in Sociology**

Variable (1.00 to 4.00) credit(s). Students who have been invited and accepted to participate in the Honors in the Discipline Program may be registered for this course. Completion of this course does not assure recognition for Honors in the Discipline. \*Prerequisite(s): Invitation to Honors in the Discipline program. See the Dean for additional information **Signature Learning Experience: Supervised Research**. Register by Instructor. This course is repeatable for credit.

**SO 470-474 - Internship in Sociology**

Variable (0.00 to 8.00) credits. Applied field instruction in a subfield of sociology chosen to meet the needs of the student. A maximum of eight credit hours from Sociology 470-474 may count as sociology electives. Additional credits count as free electives. \*Prerequisite(s): Permission of Internship Supervisor. **Signature Learning Experience: Internship**. Graded Pass/No Pass. Register by Instructor. This course is repeatable for credit.

**SO 480-489 - Independent Study in Sociology**

Variable credit. Offers advanced students the opportunity for independent study in areas not included in the regular offerings within the School. \*Prerequisite(s): Approval of the Dean and Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**SO 490 - Research in Sociology**

Variable (1.00 to 4.00) credit(s). Students will engage in an original research investigation developed and implemented in collaboration with faculty overseeing the course. Students will write a paper that summarizes and reflects upon the findings and present their research to the program faculty. Students must obtain permission of the professor who they wish to serve as their research mentor before enrolling in the course. **Signature Learning Experience: Supervised Research**. Register by Instructor. Fall semester. This course is repeatable for credit.

## **School of Sciences**

### **Dean of the School of Sciences**

*Dr. Jodi L. Lancaster*

Lyet Hall, Room 143  
717-361-1325

**Faculty:** Bowne, Bridge, Cavender, Dalton, Goldina, Hagan, Hoffman, MacKay, Murray, Newell, Pretz, Rood, Roy, Simmons, Smith, Toote, Wickham, Wohl

For more information, please visit the School's website or check your course syllabi, which are available through the course instructor or at the High Library.

### **Mission**

Engages students in the scientific study of biology, chemistry, psychology and their intersections, fostering a desire for life-long learning and application of skills and knowledge to improve the health and well-being of people, animals and our environment through research, health and helping professions, advocacy and science. Faculty in the School of Sciences provide a rigorous academic experience coupled with strong mentoring and advising to help students craft a personalized path to meet their unique academic and career goals.

The School of Sciences includes programs in Biology, Biology Laboratory Science, Biochemistry and Molecular Biology, Chemistry, Environmental Science, Neuroscience, and Psychology. The School of Sciences collaborates with the School of Human and Health Professions on Biology Secondary Education and Chemistry Secondary Education.

### **Honors in the Discipline**

The School of Sciences participates in the College Honors in the Discipline Program. For guidelines, students should consult their advisor.

### **Cooperative Programs with Other Institutions**

The School of Sciences participates in several Joint Degree Programs.

### **Bachelor of Arts**

#### **Psychology (B.A.)**

##### **Student Learning Outcomes for Psychology major:**

*Students will be able to:*

### **Scientific and Critical Thinking**

- Critically analyze, synthesize, and evaluate ideas.
- Conduct independent psychological research and apply psychological and methodological concepts to novel research ideas.

### **Knowledge Base**

- Describe current and historical concepts and theories within the domains of the field: Mind and Body, Self and Society, Clinical and Counseling.

### **Ethical Reasoning in the Field**

- Apply ethical standards to evaluation of psychological science and practice with sensitivity to context, diversity, and human differences.

### **Communication**

- Effectively convey an evidence-based analysis of psychological research and theories through oral and written formats.
- Interact effectively with others in academic and applied settings.

### **Professional Development**

- Apply psychological content and skills to career goals and cultivate a sense of purposeful life work.

### **The Psychology major requires:**

- PSY 105 - SSC Introduction to Psychology
- NEU 125 - NPS Introduction to Neuroscience
- PSY 205 - Career Seminar
- PSY 280 - Psychological Statistics
- PSY 285 - Psychological Research Methods
- PSY 485 - Advanced Psychological Research
- Three credits of electives in Psychology (PSY or NEU)

All students are required to complete one Community- Based Learning course (not restricted to course offerings in Psychology). This course can count towards other requirements within the Psychology major.

### **Domains of Psychology**

Among courses taken in Mind and Body, Self and Society, or Clinical and Counseling, two must be at the 300-level.

#### **Mind and Body**

Choose two of the following:

- PSY 210 - Sensation and Perception
- PSY 220 - Health Psychology
- PSY 310 - Intelligence and Creativity

- PSY 315 - Cognitive Psychology
- NEU 320 - Behavioral Neuroscience (with lab)
- NEU 325 - The Neuroscience of Drug Abuse

#### Self and Society

Choose two of the following:

- PSY 211 - SSC Political Psychology (PS 211)
- PSY 230 - Psychology of Women and Gender
- PSY 235 - Social Psychology
- PSY 240 - Child and Adolescent Development
- PSY 245 - Adult Development and Aging
- PSY 330 - Psychology of Prejudice (WGS 330)
- PSY 335 - Applied Social Psychology

#### Clinical and Counseling

Choose one of the following:

- PSY 250 - Psychopathology
- PSY 255 - Psychotherapy and Assessment
- PSY 350 - Child Psychopathology and Treatment
- PSY 355 - Counseling Psychology
- PSY 360 - Psychology of Stress

#### One of the following:

- PSY 415 - Seminar in Cognition
- PSY 435 - Seminar in Social Psychology
- PSY 440 - Seminar in Developmental Psychology

#### First Year Suggested Courses:

- PSY 105 - SSC Introduction to Psychology (Preferably to be taken in the first semester)
- NEU 125 - NPS Introduction to Neuroscience (Preferably to be taken in the second, third, or fourth semester.)
- One 200-level course in the Domains of Psychology (Mind and Body, Self and Society, Clinical and Counseling)
- Five Core/Elective courses (20 credits total)

#### Notes:

PSY 105 is a prerequisite to all psychology courses, except NEU 125, NEU 320 and NEU 325.

Students must achieve an average of a C- or better for PSY 280 and PSY 285 to continue in the major

## Bachelor of Science

### Biochemistry and Molecular Biology (B.S.)

The **Biochemistry and Molecular Biology (BMB)** major prepares students for successful careers as research scientists at the chemistry-biology interface, or as health clinicians in translational medicine. Beginning with a highly structured foundational curriculum involving substantial hands-on laboratory experience, students gain the knowledge, confidence and ability to tackle more complex problems. At the junior and senior levels, students are able to tailor their curriculum from a rich diversity of upper level courses to suit their needs and interests. BMB students complete their required senior research project by electing to work with faculty from either Biology or Chemistry. Through this interdisciplinary experience, which stresses the importance of ethical behavior, lifelong learning and professionalism, graduates of the BMB program are prepared for successful post graduate study, or entry into the biomedical/pharmaceutical workforce.

#### Student Learning Outcomes for the Biochemistry and Molecular Science major:

*Students will be able to:*

- Recall, synthesize and apply fundamental concepts from multiple disciplines including biology, chemistry and mathematics.
- Effectively research, synthesize and communicate scientific information with an understanding of the importance of ethical scientific practice.
- Design, execute and critically interpret experiments to investigate questions at the cellular-molecular interface.
- Effectively demonstrate essential biology and chemistry laboratory techniques, doing so in accordance with accepted safety standards.
- Work effectively as members of a team to achieve common goals which contribute to purposeful life work.

#### The Biochemistry and Molecular Biology major curriculum requires:

- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- BIO 211 - Genetics
- BIO 212 - Cell Biology
- BIO 212L - Cell Biology Laboratory
- BIO 310 - Molecular Biology
- BIO 310L - Molecular Biology Laboratory
- BIO 495 - Seminar in Biology
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- CH 201 - Laboratory Methods in Chemistry
- CH 213 - Organic Chemistry II
- CH 214 - Chemical Instrumentation
- CH 216 - Synthesis Lab
- CH 323 - Biochemistry I
- CH 324 - Biochemistry II
- CH 326 - Techniques of Biochemistry

- CH 395 - Chemistry Seminar I
- CH 396 - Chemistry Seminar II
- MA 121 - MA Calculus I
- PHY 101 - General Physics I or
- PHY 201 - College Physics I

Twelve credits with at least two labs from a combination of the following:

- BIO 235 - General Microbiology
- BIO 311 - Experimental Design in Cell Biology
- BIO 322 - Immunology
- BIO 324 - General Physiology
- CH 242 - Physical Inorganic Chemistry
- CH 343 - Physical Chemistry I
- CH 402 - Advanced Inorganic Chemistry
- CH 414 - Advanced Instrumental Analysis
- CH 421 - Advanced Organic Chemistry
- CH 455 - Integrated Chemistry Laboratory I

Four credits among:

- BIO 491 - Research in Biology
- BIO 492 - Research in Biology
- CH 491 - Research in Chemistry
- CH 492 - Research in Chemistry I

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- MA 121 - MA Calculus I

**Notes:**

The Biochemistry and Molecular Biology Program has a prerequisite for entry into BIO 211 and upper-level classes contingent upon an average grade of C- or better in BIO 111 and BIO 112 or permission by the Dean and instructor. The Biochemistry and Molecular Biology Program has a prerequisite for a grade of C- or higher for entry to CH113 and a prerequisite of a grade of C- or higher for entry into CH213.

## Accreditation

Students wishing to have the BMB degree certified by the American Chemical Society Committee on Professional Training may do so by electing to take PHY 201 and PHY 202, MA 122, and CH 343.

## Biology (B.S.)

This curriculum prepares students for the rigors of graduate school, professional schools of medicine and allied health, and biologically oriented employment opportunities. Two concentrations are available to students pursuing a Bachelor of Science in Biology: **Biological Sciences** and **Health Professions**.

### Student Learning Outcomes for Biology:

*Students will be able to:*

- Recall, synthesize, and apply material from multiple disciplines including biology, mathematics, chemistry, and physics.
- Effectively research, synthesize, and communicate scientific information with an understanding of the importance of ethical scientific practice.
- Design and carry out experiments to address biological questions.
- Critically analyze and formulate logical conclusions from data.
- Effectively demonstrate common laboratory techniques, doing so in accordance with accepted safety standards.

The Biology Program has a prerequisite for entry into BIO 211 and upper-level classes contingent upon an average grade of C- or better in BIO 111 and BIO 112 or permission by the Dean and instructor.

### Biological Sciences Concentration

The Biological Sciences concentration prepares students for direct entry into the workforce or for graduate programs in fields as diverse as ecology, neuroscience, and cell biology. The specific requirements are:

- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- BIO 211 - Genetics
- BIO 324 - General Physiology
- BIO 324L - General Physiology Laboratory
- BIO 495 - Seminar in Biology
- At least 15 credits of upper-level Biology classes with at least three laboratories.
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- CH 213 - Organic Chemistry II
- (If a fourth chemistry course is required, CH 242 is recommended.)
- CH 201 - Laboratory Methods in Chemistry or
- CH 216 - Synthesis Lab

- BIO 313 - General Ecology and
- BIO 313L - General Ecology Laboratory  
or
- BIO 317 - Aquatic Ecology or
- BIO 335 - Microbial Ecology and Diversity
  
- MA 121 - MA Calculus I or
- MA 251 - MA Probability and Statistics
  
- PHY 101 - General Physics I or
- PHY 201 - College Physics I  
(If a second physics course is required, PHY 102 or PHY 201 is recommended.)

First Year Suggested Courses:

- FYS 100 - First-Year Seminar
  
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
  
- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- Two Core courses (8 credits total)

### **Health Professions concentration**

The **Health Professions concentration** prepares students interested in pursuing a graduate degree in medicine (MD and DO), specialized fields of medicine (Optometry, Podiatry, Dentistry, etc.), veterinary medicine, or other careers in healthcare such as Physician Assistant, Physical Therapy and Nurse Practitioner. The concentration also prepares students for entry into the professional 3+3 physical therapy program with Widener University, the \*3+2 Physician Assistant program at Elizabethtown, and, after three or four years, other accredited pre-approved programs. Students interested in these cooperative programs should consult the School of Science homepage and refer to the Affiliate Programs.

Major courses:

- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- BIO 201 - Human Anatomy and Physiology I
- BIO 202 - Human Anatomy and Physiology II
- BIO 211 - Genetics
  
- BIO 313 - General Ecology and
- BIO 313L - General Ecology Laboratory

or

- BIO 317 - Aquatic Ecology or
- BIO 335 - Microbial Ecology and Diversity
- BIO 495 - Seminar in Biology
- Three additional BIO Elective courses (11 credits; at least two laboratory courses.)
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- MA 251 - MA Probability and Statistics
- PHY 101 - General Physics I
- PSY 105 - SSC Introduction to Psychology
- PSY 240 - Child and Adolescent Development or
- PSY 245 - Adult Development and Aging or
- PSY 247 - Lifespan Development or
- PSY 250 - Psychopathology

If only three years on campus (Biology - Health Professions with an accelerated 3+3 or 3+4 program) please note the following differences:

BIO 313, BIO 317, or BIO 335 are not required (Ecology requirement).

BIO 495 - Seminar in Biology not required.

Only 1 Biology elective with lab is required (4 credits).

Please consult with your academic advisor and the Health Professions Advising Committee (HPAC).

For those pursuing a career in medicine (pre-med) the following courses are highly recommended for preparation for the Medical College Admissions Test (MCAT):

- SO 101 - SSC Discovering Society
- CH 213 - Organic Chemistry II
- CH 214 - Chemical Instrumentation or
- CH 242 - Physical Inorganic Chemistry
- CH 216 - Synthesis Lab
- CH 323 - Biochemistry I
- PHY 102 - General Physics II or
- PHY 202 - College Physics II

Note:

Additional considerations include whether or not to take MA 121 - MA Calculus I, whether or not to take the 200-level Physics courses (PHY 201/PHY 202), and whether or not a second semester of Physics is needed (e.g., Physical Therapy requires 8 credits of Physics). Specific schools may require additional courses. Please consult your academic advisor and the Health Professions Advising Committee (HPAC).

For those students pursuing the \*3+2 Physician Assistant Program at Elizabethtown (Biology - Health Professions with pre-Physician Assistant program) please note the following differences:

BIO 235 - General Microbiology is required

BIO 495 - Seminar in Biology is required

BIO 313, BIO 317, or BIO 335 are not required (Ecology requirement)

Only 1 Biology elective with lab is required (4 credits), though several others may be recommended.

Please consult with your academic advisor and the Physician Assistant program.

\*Anticipated start date of Master of Physician Assistant Studies (M.P.A.S.) program is July 2022.

First Year Suggested Courses:

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- BIO 111 - Molecules, Cells, & Animal Systems
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- CH 113 - Organic Chemistry I
- PSY 105 - SSC Introduction to Psychology

## **Biology Laboratory Science (B.S.)**

### **Student Learning Outcomes for Biology Laboratory Science major:**

*Students will be able to:*

- Recall, synthesize, and apply material from multiple disciplines including biology, mathematics, chemistry, and physics.
- Effectively research, synthesize, and communicate scientific information with an understanding of the importance of ethical scientific practice.
- Design and carry out experiments to address biological questions.
- Critically analyze and formulate logical conclusions from data.
- Effectively demonstrate common laboratory techniques, doing so in accordance with accepted safety standards.

The Biology Laboratory Science (BLS) curriculum prepares students for biological research careers utilizing new methodologies of microbiology and cellular and molecular biology. Emphasizing "research-based learning," student internships and integration with the Core Curriculum, the major also provides unique learning experiences, and stresses ethical use of technology, lifelong learning, and development of leadership skills.

The Biology Program has a prerequisite for entry into BIO 211 and upper-level classes contingent upon an average grade of C- or better in BIO 111 and BIO 112 or permission by the Dean and instructor.

Students interested in the Biology Laboratory Science major should consult Dr. Jodi L. Lancaster.

**The specific requirements are:**

- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- BIO 211 - Genetics
- BIO 212 - Cell Biology
- BIO 212L - Cell Biology Laboratory
- BIO 235 - General Microbiology
- BIO 310 - Molecular Biology
- BIO 310L - Molecular Biology Laboratory
- BIO 311 - Experimental Design in Cell Biology
- BIO 324 - General Physiology
- BIO 324L - General Physiology Laboratory
- BIO 495 - Seminar in Biology
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- CH 213 - Organic Chemistry II
  
- CH 201 - Laboratory Methods in Chemistry or
- CH 216 - Synthesis Lab
  
- MA 121 - MA Calculus I or
- MA 251 - MA Probability and Statistics
  
- PHY 101 - General Physics I or
- PHY 201 - College Physics I  
(If a second physics course is required, PHY 102 or PHY 201 is recommended.)

At least seven credits from:

- Upper-level Biology electives with or without
- CH 323 - Biochemistry I with or without the laboratory

A maximum of four credits combined from research and/or internships can be applied to major; all additional credits will be considered free elective credits.

- BIO 474 - Internship in Biological Sciences or
- BIO 491 - Research in Biology or
- BIO 492 - Research in Biology

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- Two Core courses (8 credits)

**Chemistry (B.S.)**

**Student Learning Outcomes for Chemistry major:**

*Students will be able to:*

- Explain fundamental chemistry concepts.
- Communicate chemical knowledge.
- Research a chemical problem or concept.
- Design, execute, and interpret experiments to solve chemical problems.
- Draw connections to other fields of study.
- Work as a member of a team.
- Envision and pursue multiple paths for purposeful life work.

The **Chemistry major** offers three concentrations: the American Chemical Society Approved Professional Chemistry curriculum, the Chemistry Management curriculum, and the Chemical Physics curriculum.

**All Chemistry majors must take:**

- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- CH 201 - Laboratory Methods in Chemistry
- CH 213 - Organic Chemistry II
- CH 214 - Chemical Instrumentation
- CH 242 - Physical Inorganic Chemistry
- CH 343 - Physical Chemistry I
- CH 395 - Chemistry Seminar I
- CH 396 - Chemistry Seminar II
- MA 121 - MA Calculus I
- MA 122 - Calculus II

- PHY 201 - College Physics I
- PHY 202 - College Physics II

**American Chemical Society (ACS) concentration**

The **American Chemical Society (ACS) concentration** prepares the student for graduate school or for a career in industrial or government laboratories. The ACS-approved curriculum requires:

- CH 323 - Biochemistry I
- CH 326 - Techniques of Biochemistry
- CH 343 - Physical Chemistry I
- CH 455 - Integrated Chemistry Laboratory I
- CH 495 - Chemistry Seminar III
- CH 496 - Chemistry Seminar IV
- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life  
(recommended for Pre-Med students only)

Four courses from among:

- CH 324 - Biochemistry II
- CH 402 - Advanced Inorganic Chemistry
- CH 414 - Advanced Instrumental Analysis
- CH 421 - Advanced Organic Chemistry
- CH 344 - Physical Chemistry II

Four credits from among:

- CH 491 - Research in Chemistry
- CH 492 - Research in Chemistry
- CH 490 - Independent Problems in Chemistry

First Year Suggested Courses:

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or  
EN 150 - PLE Advanced Writing and Language
- BIO 111 - Molecules, Cells, & Animal Systems
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- One Power of Language: Other Core course (4 credits)

**Chemical Physics option:**

The **Chemical Physics curriculum** is a foundation for work at the interface between chemistry and physics. This curriculum requires:

- CH 455 - Integrated Chemistry Laboratory I
- CH 495 - Chemistry Seminar III
- CH 496 - Chemistry Seminar IV
- MA 222 - Calculus III
- PHY 203 - College Physics III

At least three courses (8 credits) from among:

- CH 402 - Advanced Inorganic Chemistry
- CH 414 - Advanced Instrumental Analysis
- CH 421 - Advanced Organic Chemistry
- MA 201 - Linear Algebra
- MA 321 - Differential Equations
- MA 351 - Theory of Probability
- MA 425 - Complex Variables
- Approved 300- or 400- level Physics courses

At least four credits from among:

- CH 491 - Research in Chemistry
- CH 492 - Research in Chemistry
- CH 490 - Independent Problems in Chemistry

First Year Suggested Courses:

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or  
• EN 150 - PLE Advanced Writing and Language
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- Two Core courses (8 credits total)

**Chemistry Management option:**

The **Chemistry Management** option is preparation for sales or management positions in chemical and related industries. The chemistry management curriculum requires:

- CH 323 - Biochemistry I
- CH 326 - Techniques of Biochemistry or
- CH 455 - Integrated Chemistry Laboratory I
- CH 495 - Chemistry Seminar III
- CH 496 - Chemistry Seminar IV
- One additional Chemistry course, excluding internship or research
- BIO 111 - Molecules, Cells, & Animal Systems
- AC 101 - Introduction to Accounting
- BA 215 - Principles of Marketing
- BA 265 - Management and Organizational Behavior
- BA 330 - Legal Environment of Business
- FIN 325 - Corporate Finance
- BA 416 - Marketing Management
- EC 101 - SSC Principles of Macroeconomics

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- BIO 111 - Molecules, Cells, & Animal Systems
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- One Core course (4 credits total)

**Notes for all Chemistry curriculum:**

These courses begin a highly structured and coordinated program of study, and if not successfully completed in the first year, may lead to delayed graduation or rigorous academic schedules.

There is a strong correlation between students' performance on the math portion of the SAT/ACT and CH 105, likely a result of quantitative thinking and analytical reasoning skills. To promote student success, when a student has low entrance exam scores, it may be advisable to delay BIO 111 rather than enrolling the student in both CH 105 and BIO 111 during the first semester. These students are encouraged to meet with the program advisor to discuss a modified four-year plan.

Math placement will be determined by the Mathematical Science program. For the Chemical Physics track, competency must be through the MA 222 level. For the other tracks, competency must be through the MA 122 level. MA 121 is a necessary prerequisite for PHY 201 which is normally taken in the spring semester of the sophomore year.

EC 101 is a requirement for students pursuing the chemistry management option.

If not completed in the fall, EN 100 must be completed during the spring semester.

A grade of C- or better must be earned in CH 105 in order to advance to CH 113 and a C- or better in CH 113 is necessary to advance to CH 213.

Students planning to apply to medical school or other health related professional schools should plan on taking BIO 112. The recommendation is to take it during the second semester of the first year.

#### **Accreditation**

The BS in Chemistry Program with the ACS concentration is on the approved list of the American Chemical Society Committee on Professional Training.

### **Chemistry Laboratory Science (B.S.)**

#### **Student Learning Outcomes for Chemistry Laboratory Science major:**

*Students will be able to:*

- Explain fundamental chemistry concepts
- Communicate chemical knowledge
- Research an analytical method or topic
- Design and execute a procedure for analyzing a chemical sample and interpret the results
- Work as a member of a team
- Envision and pursue multiple paths for purposeful life work

#### **The Chemistry Laboratory Sciences major requires:**

- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
  - CH 113 - Organic Chemistry I
  - CH 201 - Laboratory Methods in Chemistry
  - CH 213 - Organic Chemistry II
  - CH 214 - Chemical Instrumentation
  - CH 242 - Physical Inorganic Chemistry
  - CH 343 - Physical Chemistry I
  - CH 395 - Chemistry Seminar I
  - CH 396 - Chemistry Seminar II
  - CH 414 - Advanced Instrumental Analysis
  - CH 455 - Integrated Chemistry Laboratory I
  - CH 472 - Internship in Chemistry
  - One additional Chemistry elective
- 
- BIO 111 - Molecules, Cells, & Animal Systems
  - MA 121 - MA Calculus I
  - PHY 201 - College Physics I

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- BIO 111 - Molecules, Cells, & Animal Systems
- MA 121 - MA Calculus I
- Two Core courses (8 credits total)

**Notes:**

CH 414 is offered every other year, so it may end up in either the junior or senior year.

**Environmental Science (B.S.)**

**Student Learning Outcomes for Environmental Science major:**

*Students will be able to:*

- Recall, synthesize, and apply material from multiple disciplines including biology, mathematics, chemistry, and physics.
- Effectively research, synthesize, and communicate scientific information with an understanding of the importance of ethical scientific practice.
- Design and carry out experiments to address biological questions.
- Critically analyze and formulate logical conclusions from data.
- Effectively demonstrate common laboratory techniques, doing so in accordance with accepted safety standards.

The **Environmental Science** curriculum prepares students for entry-level positions with environmental firms, industry, or government agencies that require knowledge of environmental principles and methodology, as well as for entry into graduate environmental programs. In addition to providing students with a solid grounding in basic principles, the curriculum also exposes them to the application of those principles through research and/or internships.

The Environmental Science Program has a prerequisite for entry into BIO 211 and upper-level classes contingent upon an average grade of C- or better in BIO 111 and BIO 112 or permission by the Dean and instructor.

For further information: Students interested in Environmental Science should consult Dr. Thomas Murray.

**The Environmental Science major requires:**

- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- BIO 113 - NPS Introduction to Environmental Science

- BIO 225 - Geographic Information Systems: Fundamentals and Applications
- BIO 313 - General Ecology and
- BIO 313L - General Ecology Laboratory
- BIO 320 - Conservation Biology
- BIO 495 - Seminar in Biology
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- CH 201 - Laboratory Methods in Chemistry
- MA 121 - MA Calculus I or
- MA 251 - MA Probability and Statistics
- PHY 101 - General Physics I or
- PHY 201 - College Physics I

**A minimum of two biology electives from the following:**

- BIO 211 - Genetics
- BIO 235 - General Microbiology
- BIO 317 - Aquatic Ecology
- BIO 318 - Marine Biology
- BIO 335 - Microbial Ecology and Diversity
- BIO 347 - Invertebrate Zoology
- BIO 362 - Ecotoxicology

**A minimum of two additional electives from:**

- PH 255D - Advanced Ethics: Environmental
- ES 114 - NPS Geosystems: Landscapes, Oceans and Atmosphere
- SO 204 - SSC Population and Global Issues
- PS 363 - American Domestic Policy (PP 563)
- CH 214 - Chemical Instrumentation
- EGR 251 - Introduction to Environmental Engineering

**Take one of:**

A maximum of four credits can be applied to major; all additional research credits will be considered free elective credits.

- BIO 474 - Internship in Biological Sciences
- BIO 491 - Research in Biology
- BIO 492 - Research in Biology
- PS 479 - Capital Semester Internship

**First Year Suggested Courses:**

- FYS 100 - First-Year Seminar
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- Two Core courses (8 credits)

**Neuroscience (B.S.)**

Neuroscience is an interdisciplinary program that prepares students to develop an understanding of the brain at a cellular and behavioral level using knowledge and skills gleaned primarily from the fields of Biology, Psychology, and Chemistry. Students develop statistical and laboratory skills which are applied in a capstone experience in the field. The Neuroscience program prepares students for work in biological and clinical laboratory settings and for graduate work in Neuroscience and related fields including Neurology, Neuropsychology, Psychology, Cognitive Science, and Medicine.

**Student Learning Outcomes for Neuroscience major:**

*Students will be able to:*

- Describe brain function at a cellular and behavioral level from an interdisciplinary perspective.
- Effectively convey an evidence-based analysis of neuroscientific research and theories through oral and written formats.
- Effectively demonstrate laboratory techniques used in neuroscience research, doing so in accordance with accepted safety standards.
- Apply neuroscientific concepts in clinical or research settings.

**Requirements for the Neuroscience Major:**

**Foundational Courses**

- NEU 125 - NPS Introduction to Neuroscience
- PSY 105 - SSC Introduction to Psychology
- BIO 111 - Molecules, Cells, & Animal Systems
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science

**Methodological Courses**

- PSY 280 - Psychological Statistics
- PSY 285 - Psychological Research Methods

### Breadth Courses

- BIO 211 - Genetics (lab required)
- BIO 212 - Cell Biology (lab optional)
- PSY 210 - Sensation and Perception
- PSY 315 - Cognitive Psychology or
- CSC 315 - Cognitive Neuroscience (PH 315)

### Advanced Courses in Neuroscience

- NEU 320 - Behavioral Neuroscience (lab required)
- NEU 325 - The Neuroscience of Drug Abuse

### **Elective Courses**

Students must complete 12 credits among all listed electives. Electives need not be from a single emphasis category, though this may be advisable. Students who want to pursue additional electives are encouraged to consider a minor in Biology, Biochemistry, Psychology, or Cognitive Science.

#### Cellular/Molecular Emphasis

- BIO 310 - Molecular Biology
- BIO 311 - Experimental Design in Cell Biology
- BIO 324 - General Physiology
- BIO 328 - Behavioral Endocrinology
- CH 113 - Organic Chemistry I
- CH 323 - Biochemistry I

#### Behavioral Emphasis

- PSY 220 - Health Psychology
- PSY 250 - Psychopathology
- PSY 255 - Psychotherapy and Assessment
- PSY 310 - Intelligence and Creativity
- PSY 315 - Cognitive Psychology
- PSY 360 - Psychology of Stress

#### Computational Emphasis

- CS 113 - NPS The Power and Beauty of Computing
- CS 121 - Computer Science I
- CS 434 - Green Robotics, Automation, and Machine Intelligence (EGR 434)
- DS 200 - Introduction to Data Science
- CSC 315 - Cognitive Neuroscience (PH 315)

### **Capstone in Neuroscience**

Students must complete 4.00 credits via one of the following courses.

- NEU 475 - Internship in Neuroscience
- PSY 485 - Advanced Psychological Research
- NEU 490 - Research Practicum

### **First Year Suggested Courses:**

- NEU 125 - NPS Introduction to Neuroscience
- BIO 111 - Molecules, Cells, & Animal Systems
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- PSY 105 - SSC Introduction to Psychology
- Four Core/Elective courses (16 credits)

### **Minors**

#### **Biochemistry Minor**

##### **The Biochemistry minor requires:**

- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- CH 213 - Organic Chemistry II
- CH 201 - Laboratory Methods in Chemistry
- CH 323 - Biochemistry I
- CH 324 - Biochemistry II
- CH 326 - Techniques of Biochemistry  
or
- BIO 212 - Cell Biology and
- BIO 212L - Cell Biology Laboratory  
or
- BIO 310 - Molecular Biology and
- BIO 310L - Molecular Biology Laboratory

### **Accreditation**

The Chemistry and Biochemistry Programs are on the approved list of the American Chemical Society Committee on Professional Training.

#### **Biology Minor**

A Biology minor provides course options from which a student can gain an overall view of the discipline of biology. The total number of credits needed will be 18 or 20, depending on course selection.

The Biology Program has a prerequisite for entry into BIO 211 and upper-level classes contingent upon an average grade of C- or better in BIO 111 and BIO 112 or permission by the Dean and instructor.

To aid in course selection and career counseling, Dr. Diane Bridge of the School of Sciences will work with the student and the student's major advisor.

**Option 1: Take two courses from:**

- BIO 101 - NPS Biological Concepts
- BIO 102 - NPS Human Heredity and Inherited Diseases
- BIO 113 - NPS Introduction to Environmental Science

**Option 2: Take both:**

- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life

**Plus: Three additional courses in Biology (excluding 0-, 1- or 2-credit courses)**

**Chemistry Minor**

**The Chemistry minor requires:**

- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- CH 213 - Organic Chemistry II
- CH 201 - Laboratory Methods in Chemistry
- CH 214 - Chemical Instrumentation
- At least four additional credits of advanced Chemistry electives as approved by the Program faculty

**Accreditation**

The Chemistry and Biochemistry Programs are on the approved list of the American Chemical Society Committee on Professional Training.

**General Science Minor**

The **General Science minor** offers students the opportunity to study the natural sciences as a group, based on the view that the natural sciences together are the area of secondary interest for the student.

This minor is especially appropriate for, but not limited to, early childhood education majors with aptitude and interest in the natural sciences and others interested in cross-disciplinary content. Although some students may wish to complete a minor in a separate science discipline, others may want a wider curricular base and mix in the content they wish to study. The General Science minor provides this while retaining unity and focus. Further, in addition to providing breadth of study of the natural sciences as a group, it allows for a measure of investigation in depth of a selected discipline.

For further information, contact the General Science Minor Advisor, Dr. Peter Licona.

The minor in General Science requires seven courses (at least 27 credits). One required course must be selected from each of the following five disciplines:

**Mathematics:**

- MA 121 - MA Calculus I

**Earth Science:**

- ES 113 - NPS Earth in Space: Evolution of a Planet or
- ES 114 - NPS Geosystems: Landscapes, Oceans and Atmosphere or

**Physics:**

- PHY 101 - General Physics I or
- PHY 105 - NPS How Things Work or

**Chemistry:**

- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science or
- CH 109 - NPS Introduction to Forensic Science or
- CH 113 - Organic Chemistry I

**Biology:**

- BIO 101 - NPS Biological Concepts or
- BIO 102 - NPS Human Heredity and Inherited Diseases or
- BIO 113 - NPS Introduction to Environmental Science or
- BIO 111 - Molecules, Cells, & Animal Systems

**Two or more elective courses (totaling at least seven credits)**

Chosen from any biology, chemistry, earth science, physics, or engineering courses 200-level or above (or at 100-level if the elected course has a prerequisite in the same discipline that also must be completed). See Course Descriptions.

**Psychology Minor**

Students are encouraged to tailor their selection of courses to their personal and career goals in consultation with a member of the Psychology faculty.

**The Psychology minor requires the following courses:**

- PSY 105 - SSC Introduction to Psychology
- 16 credits of Psychology electives (PSY or NEU prefix); at least four credits of which must be at the 300- or 400-level

## Health Professions Advising Program

The Health Professions Advising is designed to provide each student, regardless of their major, with the information necessary to enable him or her to make an informed choice about the pursuit of a health-related career. This information is provided through both academic and practical experiences. The Health Professions Advising Committee (HPAC) works with the health profession student and the student's major advisor to ensure that a reasonable and sound course of study will enable the student to develop the skills necessary for a health-related career. The HPAC advises the student on how to best prepare for standardized exams (e.g., MCAT), get internships, and works with the student in the preparation and submission of his or her graduate school application materials. In addition, the HPAC supports each student as they select suitable programs while taking into account considerations such as career goals and experiences.

In order to take best advantage of the opportunities provided by the Health Professions Advising, students interested in pursuing a health-related profession should register with the HPAC by contacting the Department of Biological and Environmental Sciences or the Chair of the Health Professions Advising as soon as early as their first year.

The Health Professions Advising sponsors on-campus speakers and off-campus field trips designed to provide useful information to students interested in a pursuing a health profession.

For further information, check out the website or contact the Chair of the Health Professions Advisory Committee, Dr. Debra Wohl.

## Biology Courses

### **BIO 101 - NPS Biological Concepts**

4.00 credits. (**Natural and Physical Science Core Course**) Designed for the non-biology major. This course will present an overview of the major biological concepts and ideas emphasizing their relevance to our daily lives. The course is designed to stimulate discussion of current biological issues and is intended to provide an understanding of the basic mechanisms of life. \*Corequisite(s): BIO 101L. \*Students who have taken BIO 111 may not take this course. Hours: lecture 3, laboratory 3. Spring semester.

### **BIO 102 - NPS Human Heredity and Inherited Diseases**

4.00 credits. (**Natural and Physical Science Core Course**) An overview of human heredity, providing the tools needed to make informed decisions on a variety of health-related issues with information on disease, medical technology, genetic engineering and biotechnology, and environmental factors affecting human health. As part of the laboratory, each student isolates copies of a small portion of his or her own mitochondrial DNA. Students work with international DNA databases to compare their DNA sequences to those from their classmates, from people around the world, and from ancient Neanderthal DNA, allowing them to observe evolution in a very personal way. \*Corequisite(s): BIO 102L. Hours: lecture 3, laboratory 3. Spring semester.

### **BIO 111 - Molecules, Cells, & Animal Systems**

4.00 credits. The study of the chemical and cellular basis of life, human and animal anatomy and physiology, cellular reproduction, heredity and animal development. For Biology majors and those students taking additional biology courses. This course fulfills one of the Natural and Physical Sciences Core requirements for Biology majors. \*Corequisite(s): BIO 111L. \*This course may not be taken for credit after completing BIO 101 without permission of the Dean. Hours: lecture 3, laboratory 3. Students must achieve an average grade of C- or above in BIO 111 and BIO 112 to continue in the major or permission by the Dean and instructor.

**BIO 112 - Principles of Evolution, Ecology, and Diversity of Life**

4.00 credits. In this class, you will learn about major ideas from evolutionary biology and ecology, together with information about organismal diversity. The concepts and information from class will allow you to explore a wide range of interesting questions, including questions with important applications for human health and for environmental sustainability. The overall goal for this class is to provide you with a set of ideas and information that you can use in other biology classes, in your professional work and volunteer work, as a citizen, and in making every day decisions. \*Corequisite(s): BIO 112L. Hours: lecture 3, laboratory 3. Students must achieve an average grade of C- or above in BIO 111 and BIO 112 to continue in the major or permission by the Dean and instructor.

**BIO 113 - NPS Introduction to Environmental Science**

4.00 credits. (**Natural and Physical Science Core Course**) A lecture/laboratory course that provides an overview of environmental science. Principles of environmental relationships and how living organisms play a role in those relationships and respond to changes in their environment are emphasized. Current problems with pollution, hazardous wastes, energy, and population growth are examined in relation to those environmental principles.

\*Corequisite(s): BIO 103L. Hours: lecture 3, laboratory 3. Spring semester.

**BIO 200 - NPS Human Anatomy and Physiology: The Basics**

4.00 credits. (**Natural and Physical Sciences Core Course**) This course is an overview of the structure and function of the human integumentary, skeletal, muscular, digestive, cardiovascular, respiratory, nervous, and endocrine systems. Particular attention is given to dysfunction and diseases of the neuromuscular systems in populations commonly treated by music therapists. The laboratory will involve the observation of a prospected human cadaver, and small group work on experiments and a series of clinical case studies meant to reinforce anatomical and physiological principles discussed in lecture. Hours: lecture 3, laboratory 3. Spring semester, alternate years.

**BIO 201 - Human Anatomy and Physiology I**

4.00 credits. The study of structure and function of the human integumentary, skeletal, muscular, and nervous systems. Particular attention is given to structure and function as it relates to dysfunction and disease. Laboratory work includes learning from human cadavers. Enrollment limited to science and health-related majors.

\*Prerequisite(s): BIO 111, or permission of instructor. \*Corequisite(s): BIO 201L. Hours: lecture 3, laboratory 3. Fall semester.

**BIO 202 - Human Anatomy and Physiology II**

4.00 credits. A continuation of BIO 201. The study of structure and function of the human endocrine, circulatory, respiratory, excretory, digestive, and reproductive systems. Emphasis on these systems as they relate to homeostasis and disease. Laboratory work involves cat dissection and "hands-on" manipulation of instruments useful to the health profession student. Enrollment limited to science and health-related majors. \*Prerequisite(s): A grade of C- or above must be earned in BIO 201. \*Corequisite(s): BIO 202L. Hours: lecture 3, laboratory 3. Spring semester.

**BIO 211 - Genetics**

4.00 credits. An integrated and comprehensive review of Mendelian and non-Mendelian principles of heredity. Heredity will be discussed on a molecular level, including chromosomal structure and replication, gene regulation, mutation and repair, as well as modern genetics topics, such as epigenetic regulation and genetically modified organisms. Laboratory work includes demonstration of genetic principles through hands-on activities like Drosophila crosses and molecular genotyping of dihybrid crosses. Students will acquire foundational molecular biology techniques. \*Prerequisite(s): An average grade of C- or better in BIO 111 and BIO 112 or permission by the Dean and instructor. \*Corequisite(s): BIO 211L. Hours: lecture 3, laboratory 3. Fall semester.

**BIO 212 - Cell Biology**

3.00 credits. Study of the cell from a molecular perspective and integrated approach. Morphological and physiological study of cells, cell mechanisms, and cell organelles are explained through understanding the interaction of biological molecules. Laboratory involves qualitative and quantitative investigations of cellular and molecular construction of enzymatic pathways through various extraction and analysis techniques. \*Prerequisite(s): BIO 211 or permission of instructor. Hours: 3. Spring semester.

**BIO 212L - Cell Biology Laboratory**

1.00 credit. Required for the Biology Laboratory Science major. The laboratory exercises demonstrate many of the important cell biology principles covered in the lecture course (BIO 212). \*Corequisite(s): BIO 212. Hours: 3. Spring semester.

**BIO 220 - Nutrition**

3.00 credits. This course serves as an introduction to nutrition as it relates to biology and science. It focuses on the importance and role of the macro- and micronutrients and discusses how these nutrients are acquired and utilized by the body. In addition, the role of nutrition in the development, health and well-being of the individual is discussed. These concepts will be applied to personal health through nutritional assessment and dietary planning.

\*Prerequisite(s): BIO 111 or permission of instructor. Hours: lecture 3. Fall semester and online in Summer term.

**BIO 225 - Geographic Information Systems: Fundamentals and Applications**

4.00 credits. Everything that happens, happens somewhere. A geographic information system (GIS) is a tool to evaluate the importance of that "somewhere." Students will learn the fundamental scientific and technological principles underlying GIS and gain hands-on experience designing and using a GIS in real-world applications. Hours: 4. Spring semester, alternate years.

**BIO 235 - General Microbiology**

4.00 credits. An introductory study of microbiology. This course will focus on the impact of microorganisms on our world through study of microbial evolution, as well as microbial structure & function, metabolism, and genetics. Laboratory gives practice in the isolation and identification of bacteria using a range of classical and molecular techniques. \*Prerequisite(s): BIO 111, BIO 112 and CH 105 or CH 213, or permission of instructor. Hours: lecture 3, laboratory 3. Spring semester.

**BIO 274 - Biological Internship**

Variable (0.00-4.00) credits. Biological Internship 274 is a Signature Learning Experience that is intended for those students who are exploring career options in health care, and/or need observations hours for their intended post-baccalaureate programs. These experiences do not involve independent direct patient care, but instead, participation in peripheral patient care through medical shadowing of Physician Assistants, Physical Therapists, Physicians, Nurses, Nurse Practitioner, Veterinarians, etc. Administrative positions such as Health Care Management/Administration, Medical Social Work, Wildlife Management, etc. are also possible, after consultation, with the Internship director. The credits earned in BIO 274 are free electives, and do not fulfill the requirements for a Biology elective. Register by Instructor. **Signature Learning Experience: Internship.**

**BIO 305 - Applied Biostatistics**

4.00 credits. Data obtained in biological systems tend to display high variance, non-normal distributions, and often originate from relatively small sample sizes. Therefore, this course provides foundational principles in descriptive statistics and univariate frequentist inference, as well as practical analysis of biological data implemented in the open software R-Studio. This course builds up on statistical theory knowledge previously acquired by students. Some of the topics covered relate to biomedicine, molecular biology, epidemiology, quantitative genetics, and quantitative ecology. \*Prerequisite(s): MA 251.

**BIO 310 - Molecular Biology**

3.00 credits. This course provides background in bacterial and eukaryotic molecular biology, including mechanisms of DNA replication, transcription, and translation. We will discuss regulation of gene expression in bacteria and eukaryotes, current techniques used to study and manipulate molecular processes, and ethical questions raised by rapid advances in molecular biology. Students will gain experience in reading and interpreting scientific journal articles. Through case studies, we will explore applications of molecular biology in areas including infectious and heritable disease, cancer biology, crop science, and conservation biology. \*Prerequisite(s): BIO 111. Hours: 3. Fall semester.

**BIO 310L - Molecular Biology Laboratory**

1.00 credit. This course provides hands-on experience with current molecular biology techniques. Planning and trouble-shooting experiments and interpreting experimental results are emphasized. Students gain experience with basic bioinformatics, PCR, molecular cloning, and use of CRISPR/Cas9 for DNA editing. \*Corequisite(s): BIO 310. Hours: 3. Fall semester.

**BIO 311 - Experimental Design in Cell Biology**

4.00 credits. A practical and theoretical examination of current techniques employed to study cellular biology. Proficiencies in experimental design, data collection, data analysis, and critical review of current literature are developed. Mammalian and plant tissue culture techniques, immunohistochemistry, ELISA, polyacrylamide and capillary electrophoresis, western analysis, and cellular apoptosis are emphasized. \*Prerequisite(s): 15 credit hours of biology, including BIO 212, and eight credit hours of chemistry. Hours: 6. Fall semester.

**BIO 313 - General Ecology**

3.00 credits. We investigate the relationships between organisms and their environment in the context of individual behavior, population dynamics, community structure, energy flow, and nutrient cycling. \*Prerequisite(s): 16 credit hours of biology or permission of instructor. Hours: 3. Fall semester.

**BIO 313L - General Ecology Laboratory**

1.00 credit. As an inquiry-based course, we will conduct ecological studies through observational experimental, and modeling approaches. Students will learn ecological techniques to study individual behavior, population dynamics, community structure, and ecosystem processes. \*Corequisite(s): BIO 313. Hours: 3. Fall semester.

**BIO 317 - Aquatic Ecology**

4.00 credits. The study of physical, chemical, and biological relationships in freshwater aquatic ecosystems including lakes, streams, and wetlands. The course will include laboratory and field experimentation using local aquatic ecosystems. \*Prerequisite(s): BIO 112 or permission of instructor. Hours: lecture 3, laboratory 3. Fall semester.

**BIO 318 - Marine Biology**

3.00 credits. A study of the chemical and physical characteristics of marine ecosystems and the functional adaptions of marine organisms to those systems. Representative marine communities including rocky intertidal and coral reefs are examined in detail. \*Prerequisite(s): BIO 111. Hours: 3. Spring semester, alternate years.

**BIO 320 - Conservation Biology**

4.00 credits. Conservation biology is an applied scientific discipline devoted to understanding and preserving the world's biodiversity. We will examine in lecture and through a series of case studies how basic ecological principles are being applied to preserve biodiversity. The case studies will highlight conservation at the species, community, ecosystem, and biosphere levels and societal aspects of conservation. We will also experience local biodiversity via

field trips, civic engagement, and species identification sessions. \*Prerequisite(s): BIO 112 or permission of the instructor. Spring semester, alternate years.

**BIO 322 - Immunology**

3.00 credits. A study of the effector mechanisms of the innate and adaptive immune system that protect us from infectious disease. The course includes discussion of how the immune system contributes to human disease through allergy and autoimmunity, and medicine through vaccination and immunotherapy. \*Prerequisite(s): BIO 111 or permission of instructor. Hours: 3. Spring semester.

**BIO 322L - Immunology Laboratory**

1.00 credit. The immunology laboratory experiments demonstrate many of the research methods currently utilized for studying immunology. This includes ELISA, flow cytometry, Western blotting, and cell culture. \*Corequisite(s): BIO 322. Spring semester.

**BIO 324 - General Physiology**

3.00 credits. A study of vertebrate physiology. This course encompasses interactions among genes, molecules, cells, and organ systems in relation to function, with an emphasis on physiological adaptations to diverse environments.

\*Prerequisite(s): BIO 112 or permission of instructor. Hours: 3. Spring semester.

**BIO 324L - General Physiology Laboratory**

1.00 credit. This laboratory illustrates the scientific process in the field of physiology. It challenges students to formulate hypothesis, collect data using techniques such as electrography, spirometry, microscopy, and spectrometry, as well as conduct quantitative analysis to ultimately understand selected physiological mechanisms.

\*Corequisite(s): BIO 324. Hours: 3. Spring semester.

**BIO 326 - Concepts of Virology and Virus Research**

2.00 credits. An introduction to viruses and the strategies that they use to cause disease. In addition, the course will focus on four viruses, with different replication strategies including the poliovirus, influenza virus, herpes simplex virus and simian virus 40. The course will allow students to increase their understanding of experimental strategies used to investigate viruses and use the topic of viruses as a means to analyze and critically evaluate the scientific literature. \*Prerequisite(s): BIO 212 and BIO 235 or permission by instructor. Graded Pass/No Pass. Spring semester.

**BIO 328 - Behavioral Endocrinology**

3.00 credits. In this course students will learn about the complex interactions between the endocrine and nervous systems, and their combined effects on behavior. Particular emphasis will be given to the physiological mechanisms involved in behavioral regulation and the pathologies associated with the endocrine system. The overarching goal of this course is to introduce students to current theories of how animal behavior is organized and regulated through modulation of the endocrine system and its interaction with the nervous system in particular. \*Prerequisite(s): BIO 111 and BIO 211. Hours: 3.

**BIO 335 - Microbial Ecology and Diversity**

4.00 credits. The study of microorganisms from community, population, and systems ecology perspectives. This course examines fitness trade-offs in context of environmental challenges, as well as microbial diversity. Topics will include biogeochemical cycling, degradation of organic matter, and symbiosis while highlighting unique environments such as thermal vents, the gut of ruminant animals, and anoxic environments. Laboratory is used to further develop experimental design, field-based research, and molecular approaches to microbial community ecology. \*Prerequisite(s): BIO 235 or permission of instructor. Hours: lecture 3, laboratory 3. Fall semester, alternate years.

**BIO 336 - Pathogenic Microbiology**

3.00 credits. An intensive study of the disease-causing microorganisms of humans. General epidemiology and cellular processes of pathogenesis of bacteria and viruses will be examined. The human immune system also will be covered in context of how bacteria and viruses subvert host defenses to infect, survive and grow in the host.

\*Prerequisite(s): BIO 211. Hours: lecture 3. Fall semester, alternate years.

**BIO 336L - Pathogenic Microbiology Lab**

1.00 credit. Experience with a variety of techniques important in the study of pathogenesis will be covered in this course, including microbial culture techniques, extraction of DNA, PCR, cloning and use of sequence databases and DNA analysis programs to identify functional genes. This course will be used to teach research as a process and involves the development of a research proposal. \*Prerequisite(s): BIO 235. \*Corequisite(s): BIO 336. Hours: 3. Fall semester, alternate years.

**BIO 341 - Comparative Mammalian Anatomy**

4.00 credits. A comparative study of the morphology and function of selected representatives from the class Mammalia. This course addresses principles of anatomy and evolutionary forces driving morphological diversity in mammalian species. The laboratory component offers interaction with anatomical models, blunt dissection of specimens, and independent student inquiry. \*Prerequisite(s): BIO 112. Hours: lecture 2, laboratory 4. Fall semester.

**BIO 342 - Primates (AN 342)**

4.00 credits. This course is a survey of the Order Primates using current taxonomic relationships to organize the content and sequence of topics. Through an examination of the morphological characteristics, distribution, adaptation, and behaviors of non-human primates, this course will provide a context within which we can understand our unique place in the continuum of nature. Selected topics such as social organization, reproduction and development, communication, cognition, and conservation will be coupled with the taxonomic survey.

**BIO 343 - Human Origins (AN 343)**

4.00 credits. Examines the fossil, molecular, and archaeological record of human evolution, providing a comprehensive survey of our biological and behavioral changes from the earliest proposed hominins to modern Homo sapiens. Important topics include bipedalism, the changing ecology of the Plio-Pleistocene, tool use, hominin interactions with their changing environments, increased brain size and intelligence, social behaviors, symbolic behaviors such as language and art, and other significant bio-cultural adaptations.

**BIO 347 - Invertebrate Zoology**

4.00 credits. Invertebrates include species with diverse, fascinating, and sometimes bizarre structure, adaptations, and behavior. In this course, you will become familiar with the basic biology of members of most invertebrate phyla. We will explore how the structural features and behavior of the invertebrates studies relate to the critical roles different invertebrate species play in ecosystems, biomedical research, and public health. Invertebrate zoology is relevant to almost any area of biology, so this class is meant to provide you with information you will be able to use to answer questions that come up in both your professional and everyday life. \*Prerequisite(s): BIO 112 or permission of instructor. Hours: lecture 3, laboratory 3. Fall semester, alternate years.

**BIO 352 - Developmental Biology**

3.00 credits. This course addresses how differently gene expression, physical properties of cells, and signaling between cells contribute to development from a fertilized egg into a complex adult. We will explore how differences in development underlie the diversity of animal species. Medical applications are emphasized, including the role of developmental processes in cancer and diseases of aging, as well as effects of pollutants and other environmental factors on development. \*Prerequisite(s): BIO 211. Hours: 3. Fall semester, alternate years.

**BIO 352L - Developmental Biology Laboratory**

1.00 credit. Techniques such as grafting tissue and staining with vital dyes and antibodies are used. Experiments address questions about cell-cell signaling, differentiation, evolution of gene families, regeneration, and effects of UV radiation and pesticides on early vertebrate development. \**Corequisite(s)*: BIO 352. Hours: 3. Fall semester, alternate years.

**BIO 362 - Ecotoxicology**

4.00 credits. The study of the fate and transport of toxic compounds in the environment. The toxicity of individual pollutants at the organismal, species, population and community levels is discussed. Risk assessment and risk management in ecological systems also are discussed. The course includes laboratory experimentation.

\**Prerequisite(s)*: BIO 111 or permission of instructor. Hours: lecture 3, laboratory 3. Spring semester, alternate years.

**BIO 370-378 - Special Topics in Biology**

Variable credit. Courses of a specialized nature reflecting the interests of students and instructor. Courses are offered on a random basis. This course is repeatable for credit.

**BIO 473 - Advanced Internship in Biology**

12.00 credits. This specialized internship experience is conducted off campus and supervised by a professional in the area. These experiences will be typically, but not limited to, industrial or academic laboratory work, or fieldwork in medicine, public or the allied health disciplines. A maximum of twelve credit hours from Biology 473 may count as biology electives. Additional credits count as free electives. \**Prerequisite(s)*: Senior standing, majors, 2.70 cumulative grade point average with a 3.00 grade point average in the major. Must be taken for a full semester off campus for free elective credit only. **Signature Learning Experience: Internship**. Graded Pass/No Pass. Register by Instructor.

**BIO 474 - Internship in Biological Sciences**

Variable (0.00 to 4.00) credit(s). Work experience in a biological science-related field, including biotechnology, pharmaceuticals, health care, analytical laboratories and state agencies. A maximum of four credit hours from Biology 474 may count as biology electives. Additional credits count as free electives. \**Prerequisite(s)*: At least junior standing. **Signature Learning Experience: Internship**. Graded Pass/No Pass. Register by Instructor. This course is repeatable for credit.

**BIO 480-489 - Independent Study in Biology**

Variable credit. Opportunity for advanced students to engage in independent study on a topic of choice.

\**Prerequisite(s)*: Approval of the Dean and Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**BIO 491 - Research in Biology**

Variable credit. An original research investigation planned and performed by students in consultation with faculty. A paper is written and major findings are presented orally to faculty and peers. Students must obtain permission of the professor who they wish to serve as their research mentor before enrolling in the course. A maximum of four credit hours from Biology 491 and 492 combined can count as biology electives. Additional credits count as free electives. A research experience totaling four credits is required for Honors in Biology. \**Prerequisite(s)*: At least junior standing. **Signature Learning Experience: Supervised Research**. Graded Pass/No Pass. Register by Instructor. Fall semester. This course is repeatable for credit.

### **BIO 492 - Research in Biology**

Variable credit. An original research investigation planned and performed by students in consultation with faculty. Students must obtain permission of the professor who they wish to serve as their research mentor before enrolling in the course. A maximum of four credit hours from Biology 491 and 492 combined can count as biology electives. Additional credits count as free electives. A research experience totaling four credits is required for Honors in Biology. **Signature Learning Experience: Supervised Research.** Graded Pass/No Pass. Register by Instructor. Spring semester. This course is repeatable for credit.

### **BIO 495 - Seminar in Biology**

1.00 credit. Students will read and discuss articles in the biological literature dealing with major advances in biology. A paper and oral presentation on a subject related to the discussion is required. \**Prerequisite(s)*: Senior standing. **Signature Learning Experience: Capstone Experience.** Register by Instructor. Spring semester.

## **Chemistry Courses**

### **CH 101 - NPS General Chemistry: Practical Principles**

4.00 credits. (**Natural and Physical Science Core Course**) This course is a one-semester survey of chemistry intended primarily for non-science majors. The main objective is to raise the students' awareness of the chemistry in the world around them and to allow them to appreciate its importance and purpose. Chemistry is in the air, lakes, rivers, our clothes, computers, food, our bodies – in essence, it is everywhere. Chemistry is also in the news when we hear about forensic analysis, DNA sequencing, drug design, new ceramic or plastic materials, new computer chips, . . . , etc. This course presents chemistry in the context of real-world examples, be it in the area of forensics, food chemistry, chemistry of the body, and the like; the specific choice is left to the instructor. The examples presented lead to the introduction of scientific and chemical principles, which are then applied to achieve an appropriate solution or understanding. \**Prerequisite(s)*: High school algebra. \**Corequisite(s)*: CH 101L. Hours: lecture, 3; laboratory, 3. Spring semester.

### **CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science**

4.00 credits. (**Natural and Physical Science Core Course**) An introduction to the study of the material world from a conceptual, model-building viewpoint. Topics include: elements and compounds, atomic composition and electronic structure, bonding and molecular structure, physical properties, thermodynamics and reaction kinetics. \**Prerequisite(s)*: High school chemistry and algebra. \**Corequisite(s)*: CH 105L. Hours: lecture 3, laboratory 3. Fall semester.

### **CH 109 - NPS Introduction to Forensic Science**

4.00 credits. (**Natural and Physical Science Core Course**) Scientific principles are applied to the analysis of evidence found at a crime scene. Fingerprints, bloodstains, drugs, paint chips, broken glass, and strands of hair are all valuable evidence for solving crimes, but only if they are properly collected and analyzed. This course provides an overview of the field of forensic science and ties in the scientific concepts underlying the various techniques. CH 109 as a stand-alone course will satisfy Natural and Physical Non-Lab Science Core. Fall semester.

### **CH 110 - NPS Forensic Science Laboratory**

2.00 credits. (**Natural and Physical Science Core Course**) Designed to parallel the topics covered in CH 109. Analytical methods for analyzing evidence commonly found at crime scenes. Microscopic, wet bench, and instrumental techniques are covered. \**Pre/Corequisite(s)*: CH 109. This combination of CH 109 and CH 110 earns Lab Science credit and will only satisfy **one** of the required two Natural and Physical Science Core requirements. Spring semester.

**CH 113 - Organic Chemistry I**

4.00 credits. An introduction to the principles guiding the structure of organic molecules and how structure affects reactivity. Both structure and reactivity will be approached from kinetic, thermodynamic, and mechanistic viewpoints. Topics include bonding, stereochemistry, nomenclature, conformational analysis, substitutions, eliminations, addition reactions, and instrumentation applied to carbon compounds. The importance of organic compounds across disciplines and in everyday life will be emphasized. \**Prerequisite(s)*: a grade of C- or above in CH 105. \**Corequisite(s)*: CH 113L. Hours: lecture 3, laboratory 3. Spring semester.

**CH 201 - Laboratory Methods in Chemistry**

2.00 credits. This course presents a number of laboratory techniques that are used in many of the upper-level chemistry (and other science) courses. These techniques include: keeping a laboratory notebook, making careful volumetric and gravimetric measurements, performing statistical analysis and writing a report. \**Prerequisite(s)*: CH 105. Hours: lecture 1, laboratory 3. Fall semester.

**CH 207 - NPS Chemistry and Politics of Cancer and AIDS**

4.00 credits. (**Natural and Physical Science Core Course**) This interdisciplinary course seeks to rectify the science of two deadly diseases with the public policy that has been established around these diseases. Many of us have preconceived notions about how we view AIDS and cancer, but does the actual biochemical basis of these diseases correlate well with their corresponding public policies?

**CH 213 - Organic Chemistry II**

3.00 credits. A continuation of CH 113, that builds on the principles of structure and reactivity from kinetic, thermodynamic, stereochemical, and mechanistic viewpoints. An emphasis will be placed on synthesis and reaction mechanism with a focus on the chemistry of aromatic compounds and the carbonyl group. The importance of organic compounds across disciplines and in everyday life will be emphasized. \**Prerequisite(s)*: a grade of C- or above in CH 113. Hours: lecture 3. Fall semester.

**CH 214 - Chemical Instrumentation**

4.00 credits. Instrumental methods of analysis. Electrochemical, spectrophotometric, and chromatographic methods are discussed. Laboratory introduces a variety of analytical instruments and associated methods, including computer-based data analysis. \**Prerequisite(s)*: CH 213 and CH 201. \**Corequisite(s)*: CH 214L. Hours: lecture 3, laboratory 4. Spring semester.

**CH 216 - Synthesis Lab**

2.00 credits. Synthesis spans the sub-disciplines of chemistry and offers the power to build molecules for unlimited applications. This laboratory course focuses on chemical transformations with the goal of making relevant and useful products. In the course, students will build upon both knowledge and synthetic techniques learned in prior courses to perform multi-step synthesis, purification, and chemical analysis of products. There will be an emphasis on reaction optimization and a variety of chemical and spectroscopic characterization methods will be employed. \**Prerequisite(s)*: C- or higher in CH 213. Hours: Laboratory 3.

**CH 242 - Physical Inorganic Chemistry**

3.00 credits. Thermodynamic stability and bonding in ionic and covalent inorganic substances. Inorganic reactivity in acid-base and oxidation-reduction systems. Some descriptive chemistry of main group and transition metal elements. Laboratory is designed to acquaint students with synthetic methods in organic and inorganic chemistry and purification and identification. \**Prerequisite(s)*: CH 213. Hours: lecture 3. Spring semester.

**CH 291 - Independent Research in Chemistry**

Variable (1.00 to 3.00) credit(s). An independent experimental or theoretical investigation under the close supervision of a faculty member and designed specifically for students who are too early in their course work to begin CH 491, CH 490, or CH 471. \**Prerequisite(s)*: Permission of instructor. Register by Instructor. Fall semester. This course is repeatable for credit.

**CH 292 - Independent Research in Chemistry**

Variable (1.00 to 3.00) credit(s). An independent experimental or theoretical investigation under the close supervision of a faculty member and designed specifically for students who are too early in their coursework to begin CH 491, CH 490 or CH 471. \**Prerequisite(s)*: Permission of instructor. Register by Instructor. Spring semester. This course is repeatable for credit.

**CH 323 - Biochemistry I**

3.00 credits. The integration of principles introduced in previous courses, including general biology, general chemistry, and organic chemistry, applied towards an understanding of living matter. Structures, functions, and metabolism of the major classes of biomolecules are emphasized. \**Prerequisite(s)*: BIO 111, CH 213, and an additional 200-level biology or chemistry and biochemistry program course. Fall semester.

**CH 324 - Biochemistry II**

2.00 credits. A continuation of CH 323, with an emphasis on the integration and regulation of metabolism of biomolecules. \**Prerequisite(s)*: CH 323. Spring semester.

**CH 326 - Techniques of Biochemistry**

2.00 credits. Techniques used in experimental investigations in biochemistry. \**Corequisite(s)*: CH 323. Hours: laboratory 4. Fall semester.

**CH 343 - Physical Chemistry I**

4.00 credits. An investigation of the physical basis of chemistry, treating molecular properties, bulk properties, and chemical reactions by applying the laws of physics. The fundamentals of quantum mechanics are introduced and applied to atoms, molecules, and their interactions. Basic spectroscopy is covered from this perspective. Bulk level systems are treated with classical thermodynamics leading up to the treatment of chemical equilibrium. An introduction to chemical kinetics is given. The laboratory portion will illustrate these principles with experimental work. \**Prerequisite(s)*: PHY 201, MA 121, and CH 214. \**Corequisite(s)*: CH 343L. Hours: lecture 3, laboratory 3. Fall semester.

**CH 344 - Physical Chemistry II**

2.00 credits. Material presented in CH 343 is expanded upon and supplemented. Techniques for applying quantum mechanics to molecular systems are presented along with some advanced topics in spectroscopy. Thermodynamics is supplemented with a statistical treatment of matter and more advanced topics in chemical kinetics are covered. \**Prerequisite(s)*: CH 343. Hours: lecture 3. Spring semester.

**CH 370-378 - Special Topics in Chemistry**

Variable credit. Study of an advanced topic, experimental or theoretical, of interest to the student. \**Prerequisite(s)*: Dean approval. Register by Instructor. This course is repeatable for credit.

**CH 395 - Chemistry Seminar I**

1.00 credit. Part of a two-semester seminar sequence, CH 395 challenges students to critically evaluate how chemistry is communicated to a range of audiences through the written and spoken word. In addition to completing a major writing piece, students are required to deliver at least one oral presentation, as well as attend and evaluate the

oral presentations of their peers. Students must enroll in both CH 395 and CH 396 to receive a letter grade, which is awarded at the completion of CH 396. Hours: seminar 1. Fall semester.

**CH 396 - Chemistry Seminar II**

1.00 credit. Part of a two-semester seminar sequence, CH 396 challenges students to critically evaluate how chemistry is communicated to a range of audiences through the written and spoken word. In addition to completing a major writing piece, students are required to deliver at least one oral presentation, as well as attend and evaluate the oral presentations of their peers. Students must enroll in both CH 395 and CH 396 to receive a letter grade, which is awarded at the completion of CH 396. \*Prerequisite(s): CH 395. Hours: seminar 1. **Signature Learning Experience: Capstone Experience.** Spring semester.

**CH 402 - Advanced Inorganic Chemistry**

2.00 credits. A study of the elements and their compounds based upon atomic and molecular structure.

\*Prerequisite(s): CH 242. Hours: lecture 3. Fall semester.

**CH 414 - Advanced Instrumental Analysis**

2.00 credits. Modern analytical methods, applications and instrumentation. \*Prerequisite(s): CH 214. Hours: lecture 2. Fall or spring semester.

**CH 421 - Advanced Organic Chemistry**

2.00 credits. A study of organic reactions based on experimental and advanced theoretical studies. \*Prerequisite(s): CH 213. Hours: lecture 3. Fall or spring semester.

**CH 455 - Integrated Chemistry Laboratory I**

2.00 credits. Investigation of a research problem requiring integration and application of knowledge and techniques from several different areas of chemistry. The course is taught jointly by all members of the program.

\*Prerequisite(s): Senior standing or permission of instructor. Hours: laboratory 4. **Signature Learning Experience: Capstone Experience.**

**CH 471 - Internship in Forensic Science**

Variable (2.00 to 6.00) credits. Work experience in a laboratory that performs forensic science analysis. The laboratory must be an ASCLD-certified laboratory (listed at [www.ascld-lab.org/legacy/aslablegacylaboratories.html](http://www.ascld-lab.org/legacy/aslablegacylaboratories.html)). The internship is normally performed during the summer months and need not be located near the College. A maximum of six credit hours from Chemistry 471 may count as chemistry electives. Additional credits count as free electives. **Signature Learning Experience: Internship.** Register by Instructor. This course is repeatable for credit.

**CH 472 - Internship in Chemistry**

Variable credit. Students gain off-campus work experience in a chemical or biochemical laboratory. For students in the *Chemistry Laboratory Sciences* major, twelve credits of CH 472 count as requirements for the major. For other chemistry majors, this may be taken as a chemistry elective course and a maximum of six credit hours from CH 472 may count this way. Additional credits beyond these amounts count as free electives. \*Prerequisite(s): Approval of the Dean. **Signature Learning Experience: Internship.** Register by Instructor. This course is repeatable for credit.

**CH 480-489 - Independent Study in Chemistry or Biochemistry**

Variable credit. Individual study in areas of interest for students capable of conducting independent research.

\*Prerequisite(s): Approval of the Dean and the Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**CH 490 - Independent Problems in Chemistry**

Variable (1.00 to 4.00) credit(s). An independent experimental or theoretical investigation under the close supervision of a faculty member. Experimental design and a written report are required. Register by Instructor. This course is repeatable for credit.

**CH 491 - Research in Chemistry**

Variable (1.00 to 4.00) credit(s). An original experiment or theoretical investigation under the close supervision of a faculty member. Experimental design and a written report are required. **Signature Learning Experience: Supervised Research.** Register by Instructor. Fall semester. This course is repeatable for credit.

**CH 492 - Research in Chemistry**

Variable (1.00 to 4.00) credit(s). An original experiment or theoretical investigation under the close supervision of a faculty member. Experimental design and a written report are required. **Signature Learning Experience: Supervised Research.** Register by Instructor. Spring semester. This course is repeatable for credit.

**CH 495 - Chemistry Seminar III**

1.00 credit. Part of a two-semester seminar sequence, CH 495 challenges students to critically evaluate how chemistry is communicated to a range of audiences through the written and spoken word. In addition to completing a major writing piece, students are required to deliver at least one oral presentation, as well as attend and evaluate the oral presentations of their peers. Students must enroll in both CH 495 and CH 496 to receive a letter grade, which is awarded at the completion of CH 496. Hours: seminar 1. **Signature Learning Experience: Capstone Experience.** Fall semester.

**CH 496 - Chemistry Seminar IV**

1.00 credit. Part of a two-semester seminar sequence, CH 496 challenges students to critically evaluate how chemistry is communicated to a range of audiences through the written and spoken word. In addition to completing a major writing piece, students are required to deliver at least one oral presentation, as well as attend and evaluate the oral presentations of their peers. Students must enroll in both CH 495 and CH 496 to receive a letter grade, which is awarded at the completion of CH 496. \**Prerequisite(s):* CH 495. Hours: seminar 1. **Signature Learning Experience: Capstone Experience.** Spring semester.

**Honors Neuroscience Courses**

**HPC 125 - HNR NPS Introduction to Neuroscience**

4.00 credits. (**Natural and Physical Science Core Course**) A survey of the biological basis of psychological processes, including neurons and brain organization, motor control, higher cortical functions and dysfunctions in order to provide an integrated understanding of the brain and behavior. Recovery from brain damage, emotion, language, mood disorders, schizophrenia and additional related topics also are covered. Offered annually.

**Honors Psychology Courses**

**HPC 105 - HNR SSC Introduction to Psychology**

4.00 credits. (**Social Sciences Core Course**) An introduction to psychological science, including methods of inquiry, learning and motivation, abnormal behavior, developmental and social influences, cognition, sensation and perception, neuroscience and personality. Offered annually.

## Neuroscience Courses

### NEU 125 - NPS Introduction to Neuroscience

4.00 credits. (**Natural and Physical Science Core Course**) A survey of the biological basis of psychological processes, including neurons and brain organization, motor control, higher cortical functions and dysfunctions in order to provide an integrated understanding of the brain and behavior. Recovery from brain damage, emotion, language, mood disorders, schizophrenia and additional related topics also are covered. Offered every semester.

### NEU 320 - Behavioral Neuroscience

4.00 credits. In this course, students will be introduced to some common animal models and experimental techniques in the field of behavioral neuroscience. In each of three experiments, students will pharmacologically manipulate the behavior of rodent subjects. Each student will be responsible, to some degree, for the basic care and experimental contributions of a single rat. Data from all subjects will be pooled and analyzed. Students will write up each experiment in an APA-style manuscript. \**Prerequisite(s)*: NEU 125 and junior status or greater, or permission of instructor.

### NEU 325 - The Neuroscience of Drug Abuse

4.00 credits. Psychoactive substances have been in use before the birth of civilization--thus understanding why humans have sought and taken psychoactive drugs is, in a sense, understanding our history. Psychoactive substances have an immense impact in our society. Some are abused and can be incredibly disabling--losing jobs, destroying relationships, and even death. Some are used recreationally (legally and illegally) and can relieve stress, improve cognitive function, and promote overall well-being. In this course, we will talk about the state of drug use in America and its impact on our society. We will take a Bio-Psycho-Social approach (with a heavy emphasis on brain mechanisms) in understanding how drugs affect the human condition. \**Prerequisite(s)*: NEU 125 and junior status or greater, or permission of instructor. Fall semester.

### NEU 475 - Internship in Neuroscience

Variable (0.00 - 4.00) credit(s). Supervised experience in a professional setting related to neuroscience. Placement depends on student interest and goals, and availability of professional setting. A maximum of four credit hours from NEU 475 may count as Neuroscience electives. Additional credits count as free electives. \**Prerequisite(s)*: Junior status or greater and Neuroscience major. Register by Instructor. Pass/No Pass. **Signature Learning Experience: Internship.**

### NEU 490 - Research Practicum

Variable (0.00 - 4.00) credit(s). Research under the close supervision of a faculty member in a field related to Neuroscience. Topics for research are chosen in an area of interest to both persons. A maximum of four credits hours from NEU 490 may count as Neuroscience electives. Additional credits count as free electives.

\**Prerequisite(s)*: PSY 280, PSY 285, junior status or greater, and Neuroscience major. **Signature Learning Experience: Supervised Research.** Register by Instructor.

## Psychology Courses

### PSY 105 - SSC Introduction to Psychology

4.00 credits. (**Social Sciences Core Course**) An introduction to psychological science, including methods of inquiry, learning and motivation, abnormal behavior, developmental and social influences, cognition, sensation and perception, neuroscience and personality. Offered every semester.

**PSY 205 - Career Seminar**

1.00 Credits. This one-credit course orients Psychology majors to a broad range of careers available to them. Students will explore their own strengths and abilities, learn about the subfields of psychology as well as diverse career options for majors, and discern their fit in the field. In this course, students will interview professionals in the field, create a customized education plan, and develop the skills necessary for communicating their interests, abilities, and experiences to a professional audience. \*Prerequisite(s): PSY 105, declared Psychology major, and at least sophomore status. Spring semester.

**PSY 210 - Sensation and Perception**

4.00 credits. This course investigates how we construct a conception of physical reality from sensory experience. Through lectures, in-class demonstrations and discussions, we will examine how environmental information gets to humans through our visual, auditory, cutaneous, olfactory and gustatory senses and how this information is interpreted by the brain so that we have a conscious experience of our environment. \*Prerequisite(s): PSY 105 or NEU 125. Offered annually.

**PSY 211 - SSC Political Psychology (PS 211)**

4.00 credits. (**Social Science Core Course**) \*A Guided Writing and Research course. This interdisciplinary course explores the intersection between political science and psychology. It introduces students to psychological theories and research findings in order to explain what people think, feel and do about contemporary political issues. Specifically, the course draws on psychological concepts regarding motivation, personality, cognition, attribution, emotion and identity to examine mass political behavior and public opinion.

**PSY 220 - Health Psychology**

4.00 credits. This course will provide an overview of and introduction to the field of health psychology, which examines the bidirectional relationship between physical and mental health. We will use lectures, class discussions, individual and group projects, and readings to explore topics such as the impact of social support on coping with chronic illness, how best to promote healthy eating and exercise, and the effects of stress on health. \*Prerequisite(s): PBH 111. Fall semester.

**PSY 230 - Psychology of Women and Gender**

4.00 credits. This course will examine theory and research related to the psychology of women and gender. Gender will be analyzed as a system that influences lives, and the ongoing significance of gender role socialization across the lifespan will be considered. Research on gender differences and similarities will be examined, and the social contexts that produce and explain these differences and similarities will be highlighted. \*Prerequisite(s): PSY 105. Offered alternate years.

**PSY 235 - Social Psychology**

4.00 credits. Social psychology is the scientific study of how the real or imagined presence of other people affects our behaviors, thoughts, and emotions. This broad definition will include topics such as the self, social cognition, conformity, attitudes, stereotyping, attraction, aggression, and helping. \*Prerequisite(s): PSY 105. Offered annually.

**PSY 236 - NCH Social Issues in South Africa I (SW 236)**

2.00 credits. (**Non-Western Cultural Heritage Core Course**) The central goal of these two 2-credit courses is for students to understand the struggles that South Africa has gone through leading up to the institution of apartheid, during the apartheid years, and post apartheid. Students learn about the social issues related to the conflict and the different approaches used to try to resolve these conflicts within the framework provided by social work and psychology. Register by Instructor. Spring semester.

**PSY 237 - NCH Social Issues in South Africa II (SW 237)**

2.00 credits. (**Non-Western Cultural Heritage Core Course**) The central goal of these two 2-credit courses is for students to understand the struggles that South Africa has gone through leading up to the institution of apartheid, during the apartheid years, and post apartheid. Students learn about the social issues related to the conflict and the different approaches used to try to resolve these conflicts within the framework provided by social work and psychology. \**Prerequisite(s)*: PSY 236. Signature Learning Experience: Cross Cultural Experience. May term.

**PSY 240 - Child and Adolescent Development**

4.00 credits. This course examines social, emotional, cognitive, and physical development from a psychological perspective. We will take a chronological approach and examine human development from the prenatal period through adolescence. The course will explore how sociocultural context and government policies influence children's development. \**Prerequisite(s)*: PSY 105. Students who complete PSY 240 may not enroll in PSY 247, and those who complete PSY 247 may not enroll in PSY 240. Offered annually.

**PSY 245 - Adult Development and Aging**

4.00 credits. This course examines human development from emerging adulthood through old age. The fundamental principles of aging will be explored as well as more detailed information about biological, cognitive, social and emotional changes. The ever-changing nature of human experience will be considered with an emphasis on understanding cultural and environmental influences on the aging process. \**Prerequisite(s)*: PSY 105. Students who complete PSY 247 may not enroll in PSY 245. **Signature Learning Experience: Community-Based Learning**. Offered annually.

**PSY 247 - Lifespan Development**

4.00 credits. Physical, perceptual, linguistic, intellectual and social-emotional human development, covering the periods of infancy, childhood, adolescence, adulthood and old age. \**Prerequisite(s)*: PSY 105. Students who complete PSY 247 may not enroll in PSY 240 or PSY 245. Offered as an occasional summer course.

**PSY 250 - Psychopathology**

4.00 credits. An overview of diagnostic process in mental health. The course will cover the history of mental illness, models for understanding mental illness, and a broad cross-section of mental disorders as defined by the DSM (e.g., schizophrenia, depression, anxiety, PTSD). Students will have the opportunity to practice diagnostic skills on real case studies as well as critique the depiction of mental illness in the media. \**Prerequisite(s)*: PSY 105. Offered every semester.

**PSY 255 - Psychotherapy and Assessment**

4.00 credits. This course provides an introduction to basic principles of psychological assessment and psychotherapy. The first half of the course will cover theory and techniques used in various psychotherapeutic orientations (e.g., psychodynamic, cognitive, and behavioral), and the second half of the course will focus on principles of assessment for various disorders/conditions (e.g., memory problems, Attention Deficit Hyperactivity Disorder). This course will serve as a pre-requisite for the applied clinical skills course, Counseling Psychology (PSY 355). \**Prerequisite(s)*: PSY 105. Fall semester.

**PSY 280 - Psychological Statistics**

4.00 credits. Analysis of experimental and correlational research. Students will learn how to use statistical software for data analysis. \**Prerequisite(s)*: PSY 105. Students must achieve an average of a C- or better for PSY 280 and PSY 285 to continue in the major. Fall semester.

**PSY 285 - Psychological Research Methods**

4.00 credits. This course will introduce the scientific methods that researchers use to study psychological phenomena. You will learn how to develop a hypothesis, design an experiment to test the hypothesis, run the experiment, and interpret and report the results. \*Prerequisite(s): PSY 280. \*Corequisite(s): PSY 285L. Students must achieve an average of a C- or better for PSY 280 and PSY 285 to continue in the major. Hours: lecture 3, laboratory 2. Spring semester.

**PSY 310 - Intelligence and Creativity**

4.00 credits. A critical examination of issues in the study of intelligence and creativity, including multiple intelligences, bias in IQ testing, the Flynn effect, intelligence and aging, creativity measurement, the role of motivation in creativity, and the relationship between creativity and mental illness. Students will debate controversial issues in the field. \*Prerequisite(s): PSY 105 and junior status, or permission of the instructor.

**PSY 315 - Cognitive Psychology**

4.00 credits. A study of current theory and research on cognitive processes including how we perceive, attend, think, remember, make decisions, solve problems, and use language. Coverage will include applications of cognitive psychology to everyday life and to other disciplines. \*Prerequisite(s): PSY 105 and junior status, or permission of the instructor. Offered annually.

**PSY 330 - Psychology of Prejudice (WGS 330)**

4.00 credits. This course will examine stereotyping, prejudice, and discrimination. We will consider the cognitive, social, and emotional processes involved in racism, sexism, sexual prejudice, as well as other forms of prejudice. Additionally, we will explore psychological research on unconscious bias and on prejudice reduction.

\*Prerequisite(s): PSY 105 and junior status or permission of instructor. Offered annually. **Signature Learning Experience: Community-Based Learning.**

**PSY 335 - Applied Social Psychology**

4.00 credits. Applied Social Psychology combines the science of social psychology with the practical application of solving problems in the real world. Applied social psychologists focus on social problems that affect such variables as organizations, the justice system, education, the environment, sports, and consumer behavior. \*Prerequisite(s): PSY 105 and junior status or permission of instructor. Offered alternate years.

**PSY 350 - Child Psychopathology and Treatment**

4.00 credits. This course is intended to provide an introduction to the assessment, diagnosis, and treatment of psychopathology in childhood and adolescence. In this course, we will attend to developmental and sociocultural factors that influence the onset, maintenance, and treatment of mental health disorders in children and adolescents. In addition to in-depth coverage of specific disorders (e.g., Autism Spectrum Disorder, conduct problems), we will discuss ethical and legal issues pertinent to clinical work with these populations. \*Prerequisite(s): PSY 105 and junior status or permission of instructor. Offered alternate years.

**PSY 355 - Counseling Psychology**

4.00 credits. This course will provide you with an introduction to foundational counseling skills required of mental health care providers. The course will cover basic therapeutic microskills, select interventions designed to promote well-being, and issues pertaining to professional practice. In order to achieve a foundational level of skill, substantial class time is devoted to role-playing various counselor/counselee situations. \*Prerequisite(s): PSY 105, PSY 255, and junior status or permission of instructor. Spring semester.

**PSY 360 - Psychology of Stress**

4.00 credits. This course is intended to provide you with a thorough understanding of the field of stress and coping, from both theoretical and applied perspectives. Learning will take place through course lectures, readings, engagement with community-based partner organizations, clinical case conceptualization, presentations of pertinent psychological interventions, and a literature review of psychological research on a stress & coping topic of your choosing. \*Prerequisite(s): PSY 105 and junior status or permission of instructor. Offered alternate years.

**Signature Learning Experience: Community-Based Learning.**

**PSY 370-378 - Special Topics in Psychology**

4.00 credits. Topics not part of the regular curriculum, offered based on student and faculty interest. This course is repeatable for credit.

**PSY 415 - Seminar in Cognition**

4.00 credits. In this seminar, you will explore the literature in cognitive psychology. You will read original empirical papers, learn about research paradigms in the field, and develop critical and creative thinking skills in summarizing, critiquing, and synthesizing research ideas. You will explore the literature in your area of interest, develop a research question, propose novel hypotheses, design your own experiment, and write a major research proposal for a study you may conduct in Advanced Psychological Research. \*Prerequisite(s): PSY 280, PSY 285, and a 300-level course with a PSY or NEU prefix.

**PSY 435 - Seminar in Social Psychology**

4.00 credits. In this seminar, you will explore the literature in the study of social psychology. You will read original empirical papers, learn about research paradigms in the field, and develop critical and creative thinking skills in summarizing, critiquing, and synthesizing research ideas. You will explore the literature in your area of interest, develop a research question, propose novel hypotheses, design your own experiment, and write a major research proposal for a study you may conduct in Advanced Psychological Research. \*Prerequisite(s): PSY 280, PSY 285, and a 300-level course with a PSY or NEU prefix.

**PSY 440 - Seminar in Developmental Psychology**

4.00 credits. In this seminar, you will explore the literature in the study of developmental psychology. You will read original empirical papers, learn about research paradigms in the field, and develop critical and creative thinking skills in summarizing, critiquing, and synthesizing research ideas. You will explore the literature in your area of interest, develop a research question, propose novel hypotheses, design your own experiment, and write a major research proposal for a study you may conduct in Advanced Psychological Research. \*Prerequisite(s): PSY 280, PSY 285, and a 300-level course with a PSY or NEU prefix.

**PSY 455 - Clinical Practicum**

4.00 credits. This course will explore mental health practice from both an experiential and an empirical perspective. Students will complete a practicum in an approved clinical setting for 5 hours per week to get firsthand knowledge of clinical practice. Class sessions will focus on processing practicum experiences as well as critically evaluating empirical literature about both specific and common factors of psychotherapy. \*Prerequisite(s): PSY 280, PSY 285, and PSY 355. Offered Fall semester.

**PSY 475 - Internship in Psychology**

Variable (0.00 to 4.00) credits. Supervised training and experience in a professional setting related to psychology, generally for two afternoons a week, plus meetings with the instructor. Placement depends on student interest and goals, and availability of professional setting. A maximum of four credit hours from Psychology 475 may count as psychology electives. Additional credits count as free electives. \*Prerequisite(s): PSY 105, junior status, and Psychology major. **Signature Learning Experience: Internship.** Graded Pass/No Pass.

**PSY 480-489 - Independent Study in Psychology**

Variable credit. Opportunity for students to engage in independent study. \**Prerequisite(s)*: Permission of the Dean and the Independent Study Committee. Register by Instructor. This course is repeatable for credit.

**PSY 485 - Advanced Psychological Research**

4.00 credits. In this course, students will conduct an original, empirical research project. This includes revising an existing literature review and/or research proposal, writing an IRB proposal, collecting and analyzing data, writing up results, writing an APA-style research paper, preparing a poster presentation, and presenting to the school. In-class time will include mini-lectures and workshop-style sessions as well as instruction on advanced statistical techniques. Much time will also be spent in individual consultation with the instructor. \**Prerequisite(s)*: PSY 280, PSY 285, and a Seminar in Psychology (PSY 415, PSY 435, or PSY 440). Offered every semester. **Signature Learning Experience: Supervised Research.**

**PSY 490 - Research Practicum**

Variable credit. Research in psychology under the close supervision of a faculty member. Topics for research are chosen in an area of interest to both persons. \**Prerequisite(s)*: PSY 280 and PSY 285. **Signature Learning Experience: Supervised Research.** Register by Instructor.

## **Joint Degree Programs**

### **Doctor of Dental Medicine/Baccalaureate 4+4 Program with Lake Erie College of Osteopathic Medicine**

Elizabethtown College has an agreement for preferred admission to **Lake Erie College of Osteopathic Medicine's** (LECOM) following four years at Elizabethtown College. If admitted to LECOM, students must have a GPA of at least 3.2 in science courses and an overall GPA of at least 3.4 by the end of his or her junior year of college. A grade of C or higher must be earned in the courses listed below denoted by an asterisk (\*). Before beginning courses at LECOM, students must have earned a baccalaureate degree from Elizabethtown. For program information and admissions requirements, contact the Chair of HPAC.

#### **Required courses to be taken at Elizabethtown College:**

- \* BIO 111 - Molecules, Cells, & Animal Systems
- \* BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- \* CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- \* CH 113 - Organic Chemistry I
- \* CH 213 - Organic Chemistry II
- \* CH 216 - Synthesis Lab
- \* CH 242 - Physical Inorganic Chemistry
- \* CH 323 - Biochemistry I
  
- \* EN 100 - PLE Writing and Language or
- \* EN 150 - PLE Advanced Writing and Language
  
- \*Additional English elective

#### **Strongly recommended courses to be taken at Elizabethtown College:**

- BIO 211 - Genetics
- BIO 212 - Cell Biology
- BIO 235 - General Microbiology
- BIO 322 - Immunology
- BIO 322L - Immunology Laboratory
- BIO 324 - General Physiology
- BIO 324L - General Physiology Laboratory
- BIO 341 - Comparative Mammalian Anatomy
- PHY 101 - General Physics I

### **Doctor of Dental Surgery/Baccalaureate 4+4 Program with West Virginia University School of Dentistry**

Elizabethtown College has an agreement for preferred admission to West Virginia University School of Dentistry Doctor of Dental Surgery (DDS) program following four years (4+4 program) at Elizabethtown College. In order to apply to the 4+4 program, by the end of the sophomore year the student must: 1) have an overall GPA of at least 3.6

in courses taken at the college; 2) have successfully completed a minimum of 30 semester hours of the courses listed below; 3) have taken at least one Chemistry and one Biology core course per semester during their freshman year; 4) be on track to complete the Physics and Mathematics core courses by the end of their sophomore year; 5) have at least 10 hours of documented observation in one or more general dental practices; and 6) successfully complete a personal interview at the WVU School of Dentistry. A student may major in any discipline, but before beginning courses at WVU, students must have earned a baccalaureate degree from Elizabethtown. For program information and additional admissions requirements, contact the Chair of HPAC.

**Required undergraduate curriculum:**

- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- BIO 211 - Genetics
- BIO 235 - General Microbiology
- BIO 324 - General Physiology
- BIO 324L - General Physiology Laboratory
- BIO 341 - Comparative Mammalian Anatomy
  
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- CH 213 - Organic Chemistry II
- CH 216 - Synthesis Lab
- CH 242 - Physical Inorganic Chemistry
- CH 323 - Biochemistry I
  
- PHY 101 - General Physics I and
- PHY 102 - General Physics II  
or
- PHY 201 - College Physics I and
- PHY 202 - College Physics II
  
- MA 121 - MA Calculus I
- MA 251 - MA Probability and Statistics
  
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- Additional English elective
  
- PSY 105 - SSC Introduction to Psychology
- Additional Psychology elective

**Doctor of Optometry/B.S. 3+4 Program with Pennsylvania College of Optometry at Salus University**

The agreement allows students to apply to the Pennsylvania College of Optometry Doctor of Optometry Program at Salus University at the end of their second year. To apply through the program, students must have at least a 3.0 overall GPA both at the time of application and during their third year. In preparation for the OAT exam after the

second year and to be considered for the agreement,, students need to have completed their chemistry and physics requirements as well as a year of biology. A grade of C or higher must be earned in courses listed below denoted by an asterisk (\*) for Salus University. If accepted, students will enter the program following their third year. After the completion of their first year at Salus, Elizabethtown College will accept transfer credits for classes at Salus for completion of the student's undergraduate degree. Students need to complete their Core requirements during their three years at Elizabethtown before beginning their courses at Salus. For program information and admissions requirements, contact the Chair of HPAC.

**Major courses for first three years on campus:**

- \* BIO 111 - Molecules, Cells, & Animal Systems
- \* BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- BIO 211 - Genetics
- \* BIO 235 - General Microbiology
- BIO 324 - General Physiology
- BIO 324L - General Physiology Laboratory
- Additional three or four credits of 200-level or higher biology electives
  
- \* CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- \* CH 113 - Organic Chemistry I
- \* CH 213 - Organic Chemistry II
- \* CH 216 - Synthesis Lab
- \* CH 242 - Physical Inorganic Chemistry
- \* PHY 101 - General Physics I
- \* PHY 102 - General Physics II
- \* PSY 105 - SSC Introduction to Psychology
  
- MA 121 - MA Calculus I or
- \* MA 251 - MA Probability and Statistics
  
- \* EN 100 - PLE Writing and Language or
- \* EN 150 - PLE Advanced Writing and Language
  
- \*Additional English elective

**If fourth year is completed at Elizabethtown College:**

- BIO 313 - General Ecology and
- BIO 313L - General Ecology Laboratory  
or
- BIO 317 - Aquatic Ecology or
- BIO 335 - Microbial Ecology and Diversity
  
- BIO 495 - Seminar in Biology
- Additional seven or eight credits of 200-level or higher Biology electives with at least two laboratories

**Recommended courses to be taken at Elizabethtown College**

- CH 323 - Biochemistry I
- BIO 341 - Comparative Mammalian Anatomy
- BIO 212 - Cell Biology
- NEU 125 - NPS Introduction to Neuroscience
- PSY 280 - Psychological Statistics
- PSY 285 - Psychological Research Methods

**Doctor of Osteopathic Medicine/B.S. 3+4 or 4+4 Program with Lake Erie College of Osteopathic Medicine**

Elizabethtown College has an agreement for preferred admission to Lake Erie College of Osteopathic Medicine (LECOM) following either three years (3+4 program) or four years (4+4 program) at Elizabethtown College. If admitted to LECOM, students in the 3+4 program are granted a baccalaureate degree from Elizabethtown College following completion of the first year of courses at LECOM with grades of C or higher. For the 3+4 program, the student must have a GPA of at least 3.2 in science courses and an overall GPA of at least 3.4 by the end of his or her sophomore year of college. For the 4+4 program, the student must have a GPA of at least 3.2 in science courses and an overall GPA of at least 3.4 by the end of his or her junior year of college. Students in both programs must complete the courses listed below. A grade of C or higher must be earned in courses listed below denoted by an asterisk (\*) for LECOM. Students pursuing the 3+4 program need to complete their Core requirements during their three years at Elizabethtown before beginning their courses at LECOM. For program information and admissions requirements, contact the Chair of HPAC.

**Major courses for first three years on campus:**

- \* BIO 111 - Molecules, Cells, & Animal Systems
- \* BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- \* BIO 211 - Genetics
- BIO 324 - General Physiology
- BIO 324L - General Physiology Laboratory
- Additional eight credits of 200-level or higher Biology electives with at least one laboratory
- \* CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- \* CH 113 - Organic Chemistry I
- \* CH 213 - Organic Chemistry II
- \* CH 216 - Synthesis Lab
- \* CH 242 - Physical Inorganic Chemistry
- \* CH 323 - Biochemistry I
- \* PHY 101 - General Physics I
- \* PHY 102 - General Physics II
- \* PSY 105 - SSC Introduction to Psychology
- \* SO 101 - SSC Discovering Society
- \* EN 100 - PLE Writing and Language or
- \* EN 150 - PLE Advanced Writing and Language

- \*Additional English elective
- MA 121 - MA Calculus I or
- MA 251 - MA Probability and Statistics

**If fourth year is completed at Elizabethtown College:**

- BIO 313 - General Ecology and
- BIO 313L - General Ecology Laboratory  
or
- BIO 317 - Aquatic Ecology or
- BIO 335 - Microbial Ecology and Diversity
- BIO 495 - Seminar in Biology
- Additional seven or eight credits of 200-level or higher Biology electives with at least two laboratories

**Doctor of Pharmaceutical/B.S. 3+4 or 4+4 Program with Lake Erie College of Osteopathic Medicine**

Elizabethtown College has an agreement for preferred admission to **Lake Erie College of Osteopathic Medicine** (LECOM) following either three years (3+4 program) or four years (4+4 program) at Elizabethtown College. If admitted to LECOM, students in the 3+4 program are granted a baccalaureate degree from Elizabethtown College following completion of the first year of courses at LECOM with grades of C or higher. At Elizabethtown a grade of C or higher must be earned in courses listed below denoted by an asterisk (\*). For the 3+4 program, the student must have a GPA of at least 3.2 in science courses and an overall GPA of at least 3.4 by the end of his or her sophomore year of college. For the 4+4 program, the student must have a GPA of at least 3.2 in science courses and an overall GPA of at least 3.4 by the end of his or her junior year of college. Students in both programs must complete the courses listed below. For program information and admissions requirements, contact the Chair of HPAC.

**Major courses for first three years on campus:**

- \* BIO 111 - Molecules, Cells, & Animal Systems
- \* BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- BIO 211 - Genetics
- BIO 324 - General Physiology
- BIO 324L - General Physiology Laboratory
- Additional eight 200-level or higher credits of Biology electives
- \* CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- \* CH 113 - Organic Chemistry I
- \* CH 213 - Organic Chemistry II
- \* CH 216 - Synthesis Lab
- \* CH 242 - Physical Inorganic Chemistry
- \* PHY 101 - General Physics I or
- PHY 201 - College Physics I

- \* PSY 105 - SSC Introduction to Psychology
- \* SO 101 - SSC Discovering Society
  
- \* EC 101 - SSC Principles of Macroeconomics or
- \* EC 102 - SSC Principles of Microeconomics
  
- \* EN 100 - PLE Writing and Language or
- \* EN 150 - PLE Advanced Writing and Language
  
- \*Additional English elective
  
- \* MA 121 - MA Calculus I
- \* MA 251 - MA Probability and Statistics
- \*Additional 15 credits or more of General Education electives

**If fourth year is completed at Elizabethtown College:**

- BIO 313 - General Ecology and
- BIO 313L - General Ecology Laboratory  
or
- BIO 317 - Aquatic Ecology or
- BIO 335 - Microbial Ecology and Diversity
  
- BIO 495 - Seminar in Biology
- Additional 7 or 8 credits of 200-level or higher Biology electives with at least one laboratory

**Doctor of Physical Therapy/B.S. 3+3 Program with Widener University**

The **Cooperative 3+3 Program with Widener University** leads to a Bachelor of Science degree from Elizabethtown College and a Doctor of Physical Therapy (DPT) degree from Widener University. In this program, students spend three years at Elizabethtown College fulfilling general education Core, the Pre-Physical Therapy curriculum, and the requirements of the Biology major. If accepted by the cooperating institution, students spend three more years at Widener University. Students may apply for acceptance into Widener University's 3+3 DPT program during the fall semester of their junior year as an undergraduate at Elizabethtown. To be eligible for the 3+3 program, the student must have a cumulative GPA of at least 3.3 by the end of his or her fall of the junior year of college. After completing four years – three at Elizabethtown and one at Widener University – and acquiring at least 125 credits, the student is awarded a Bachelor of Science degree in Biology from Elizabethtown College. After the student fulfills the remainder of the professional upper division program of clinical experience, the cooperative institution awards the Doctor of Physical Therapy degree.

To meet eligibility requirements for admission to Widener University's Doctor of Physical Therapy, at Elizabethtown College the student must (1) earn a "B" (a "B-" will not be accepted) in all required pre-requisite course work (denoted by an asterisk (\*)), (2) maintain an overall GPA of 3.3, and (3) complete all required pre-requisite course work for Widener University at Elizabethtown College. Students need to complete their Core requirements during their three years at Elizabethtown before beginning their courses at Widener University. Interested students should consult with the Chair of HPAC before organizing their first-year fall class schedule as this program has specific additional requirements.

**Major courses for first three years on campus:**

- \* EN 100 - PLE Writing and Language or
- \* EN 150 - PLE Advanced Writing and Language
- Additional 6 credits of Humanities electives
- \* BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- \* BIO 201 - Human Anatomy and Physiology I
- \* BIO 202 - Human Anatomy and Physiology II
- BIO 211 - Genetics
- Additional 3 or 4 credits of 200-level or higher Biology elective
- \* CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- \* CH 113 - Organic Chemistry I
- \* PHY 101 - General Physics I
- \* PHY 102 - General Physics II
- \* MA 251 - MA Probability and Statistics
- \* PSY 105 - SSC Introduction to Psychology
- \* PSY 240 - Child and Adolescent Development or
- \* PSY 245 - Adult Development and Aging or
- \* PSY 250 - Psychopathology
- \*Additional 3 credits of Social Sciences

**If fourth year is completed at Elizabethtown College:**

- BIO 313 - General Ecology and
- BIO 313L - General Ecology Laboratory  
or
- BIO 317 - Aquatic Ecology  
or
- BIO 335 - Microbial Ecology and Diversity
- BIO 495 - Seminar in Biology
- Additional seven or eight credits of 200-level or higher Biology electives with at least two laboratories

**Doctor of Physical Therapy/B.S. 4+3 Program with Thomas Jefferson University**

Elizabethtown College has an interview agreement for preferred admission to Thomas Jefferson University's (TJU) Doctor of Physical Therapy (DPT) program following the successful completion of a bachelor's degree from Elizabethtown College. To be granted an interview for the Doctor of Physical Therapy program at TJU, the student must be: (1) full-time student since matriculation at Elizabethtown College, (2) rising junior or senior student , (3)

## *Joint Degree Programs*

first time applicant to the Interview Program, (4) meet the program's minimum admissions criteria for the application year the student is applying, as well as have a GPA of at least 3.0 in science courses and an overall GPA of at least 3.0 by the end of his or her junior year of college. All prerequisite coursework requirements must be fulfilled with a grade of "C" or better (a "C-" will not be accepted) in the courses listed below.

For other program information and admissions requirements, contact the Chair of HPAC.

### **Required courses at Elizabethtown College**

- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language
- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- BIO 201 - Human Anatomy and Physiology I
- BIO 202 - Human Anatomy and Physiology II
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- PHY 101 - General Physics I or
- PHY 201 - College Physics I
- PHY 102 - General Physics II or
- PHY 202 - College Physics II
- MA 251 - MA Probability and Statistics or higher
- 1 semester of psychology (PSY prefix)

### **Law Early Admission Program (LEAP) with Drexel University Thomas R. Kline School of Law**

Elizabethtown College maintains an articulation agreement with Drexel University Thomas R. Kline School of Law. Depending on a student's major and academic goals, this program may function as either a 3+3 or 4+3 B.A./B.S./J.D. program. Only high school students applying to Elizabethtown College will be admitted to the program with Drexel University. To be admitted to LEAP, students must:

1. Apply to Elizabethtown College and satisfactorily complete a mandatory LEAP admission essay by December 15 of the student's senior year in high school.
2. Achieve a minimum SAT score of 1200 (math + critical reading, with no individual section lower than 550), or a minimum ACT score of 27. Students may not waive their SAT or ACT scores when applying to LEAP.
3. Achieve a high school GPA of 3.5 or higher (or its equivalent)
4. Graduate in the top 10% of their high school class
5. Successfully complete a mandatory on-campus interview with members of the LEAP admission committee

Once admitted to LEAP, students must maintain good standing in the program by complying with all academic and character and fitness requirements established by Elizabethtown College.

LEAP students pursuing the 3+3 course of study may only apply to one law school at a time. Applications to participating law schools as part of the 3+3 program should be considered binding, early-decision applications.

To be admitted to Thomas R. Kline School of Law, LEAP students must:

1. Complete 96 or more undergraduate credits, including all major and core courses, before enrolling in law school courses.
2. Maintain Elizabethtown College residency for a minimum of three years (six semesters) before entering law school, and students must earn 30 of their last 60 undergraduate credits from Elizabethtown College.
3. Attain a minimum cumulative college GPA of 3.5 from Elizabethtown College, and a minimum cumulative GPA of 3.4 as calculated by the Law School Admission Council.
4. Take the Law School Admission Test (LSAT) no later than December of the student's junior year (for the 3+3 track), or December of the student's senior year (for the 4+3 track).
5. Score at least the median LSAT score for students who matriculate into Thomas R. Kline School of Law in the class immediately preceding the student's acceptance to LEAP.
6. Meet the character and fitness requirements of Thomas R. Kline School of Law.
7. Comply with all application, seat deposit, and other deadlines established by Thomas R. Kline School of Law. Students pursuing the 3+3 track must apply by December 1 of their third year at Elizabethtown College, and students pursuing the 4+3 track must apply by December 1 of their fourth year at Elizabethtown College.

Students pursing the 3+3 track will receive their B.A. or B.S. upon the successful completion of all first year courses at Thomas R. Kline School of Law.

For further information, contact the Pre-Law Program Director, Dr. Matthew Telleen.

### **Law Early Admission Program (LEAP) with Duquesne University School of Law**

Elizabethtown College maintains an articulation agreement with Duquesne University School of Law. Depending on the student's major and academic goals, this program may function as either a 3+3 or 4+3 BA/B.S./J.D. program. Only high school students applying to Elizabethtown College will be admitted to the program with Duquesne University. To be admitted to LEAP, students must:

1. Apply to Elizabethtown College and satisfactorily complete a mandatory LEAP admission essay by March 15 of the student's senior year in high school.
2. Achieve a minimum SAT score of 1200 (mat + critical reading, with no individual section lower than 550), or a minimum ACT score of 27.
3. Achieve a high school GPA of 3.5 or higher (or its equivalent)
4. Graduate in the top 10% of their high school class
5. Successfully complete a mandatory admissions essay
6. Successfully complete a mandatory on-campus interview

### *Joint Degree Programs*

Once admitted to LEAP, students must maintain good standing in the program by complying with all academic and character and fitness requirements established by Elizabethtown College. Students must maintain a GPA sufficient to reach at least 3.5 by the time of application to Duquesne University School of Law.

To be admitted to Duquesne University School of Law, LEAP students must:

1. Complete all major and core course requirements at Elizabethtown College, and attain senior status (96 or more credits) before enrolling in courses at Duquesne University School of Law.
2. Earn a cumulative undergraduate GPA of at least 3.5, as determined by the Law School Admission Council.
3. Meet the character and fitness requirements of Duquesne University School of Law.
4. Comply with all application, seat deposit, and other deadlines established by Duquesne University School of Law.
5. Earn a LSAT score at least in the 60th percentile on the present LSAT. It is assumed that the LEAP student will take the LSAT no later than December of his/her third year (for 3+3 students) or fourth year (4+3 students). However, by written request to Duquesne University School of Law, a student may defer taking the LSAT until the spring of his/her third or fourth year.
6. Complete a satisfactory in-person interview with the Dean of Admissions at Duquesne University School of Law. Students pursuing the 3+3 track must apply by March 1 of their third year at Elizabethtown College, and students pursuing the 4+3 track must apply by March 1 of their fourth year at Elizabethtown College.

At their sole discretion, Duquesne University School of Law may admit students who do not meet all of the above requirements.

Students pursuing the 3+3 track will receive their B.A. or B.S. upon the completion of their first year courses at Duquesne University School of Law.

For further information, contact the Pre-Law Program Director, Dr. Matthew Telleen.

### **Law Early Admission Program (LEAP) with Widener University School of Law**

Elizabethtown College maintains an articulation agreement with Widener University School of Law. Depending on a student's major and academic goals, this program may function as either a 3+3 or 4+3 B.A./B.S./J.D. program.

Only high school students applying to Elizabethtown College will be admitted to the program with Widener University. To be admitted to LEAP, students must:

1. Apply to Elizabethtown College and satisfactorily complete a mandatory LEAP admission essay by December 15 of the student's senior year in high school.
2. Achieve a minimum SAT score of 1200 (math + critical reading, with no individual section lower than 550), or a minimum ACT score of 27. Students may not waive their SAT or ACT scores when applying to LEAP.
3. Achieve a high school GPA of 3.5 or higher (or its equivalent)
4. Graduate in the top 10% of their high school class
5. Successfully complete a mandatory on-campus interview with members of the LEAP admission committee

Once admitted to LEAP, students must maintain good standing in the program by complying with all academic and character and fitness requirements established by Elizabethtown College.

LEAP students pursuing the 3+3 course of study may only apply to one law school at a time. Applications to participating law schools as part of the 3+3 program should be considered binding, early-decision applications.

To be admitted to Widener University School of Law, LEAP students must:

1. Complete 96 or more undergraduate credits, including all major and core courses, before enrolling in law school courses.
2. Maintain Elizabethtown College residency for a minimum of three years (six semesters) before entering law school, and students must earn 30 of their last 60 undergraduate credits from Elizabethtown College.
3. Earn a cumulative undergraduate GPA that ranks in the top 50th percentile of the class, as calculated by the Law School Admission Council's Credential Assembly Service.
4. Take the Law School Admission Test (LSAT) no later than December of the student's junior year (for the 3+3 track), or December of the student's senior year (for the 4+3 track).
5. Score at or above the 50th percentile on the LSAT.
6. Meet the character and fitness requirements of Widener University School of Law.
7. Comply with all application, seat deposit, and other deadlines established by Widener University School of Law. Students must apply no later than April 1 of the year in which they plan to attend Widener University School of Law.

Students pursuing the 3+3 track will receive their B.A. or B.S. upon the successful completion of all first year courses at Widener University School of Law.

For further information, contact the Pre-Law Program Director, Dr. Matthew Telleen.

## **Master of Public Health Program with Penn State University College of Medicine**

The Early Assurance Program with Penn State University College of Medicine Master of Public Health Program is an opportunity for Elizabethtown College students to gain guaranteed entry during their third undergraduate year into the Penn State College of Medicine's Master of Public Health Program.

The program was established to encourage undergraduate students to pursue careers as Public Health Professionals who focus on improvement of population health and reduce health disparities – across Pennsylvania, the nation, and the world – through excellence in education, research, and service. This program gives students the option for automatic matriculation to The Pennsylvania State University College of Medicine's Master of Public Health Program upon completing a Bachelor's degree in Biology, Chemistry, General Science, Psychology, or Social Work (other majors must be approved by the Penn State University's Public Health program), a cumulative grade point average of 3.5 or higher, and GRE Test scores as stipulated by The Pennsylvania State University College of Medicine.

For additional program information and admissions requirements, contact the Chair of HPAC.

**Required courses at Elizabethtown College:**

Students must earn at least a B in both courses.

- MA 251 - MA Probability and Statistics
  - One of the following:
    - MA 252 - Statistical Methods in Research
    - PS 230 - Research Methods
    - PSY 280 - Psychological Statistics
    - A comparable course that utilizes statistical software

**Recommended core courses for all students:**

Natural and Physical Sciences: at least one of the following:

- BIO 101 - NPS Biological Concepts
- BIO 113 - NPS Introduction to Environmental Science
- BIO 111 - Molecules, Cells, & Animal Systems

Social Sciences: one of the following:

- PS 111 - SSC American National Government
- PSY 105 - SSC Introduction to Psychology
- SO 101 - SSC Discovering Society
- SO 204 - SSC Population and Global Issues

**Recommended electives for all students:**

- PH 235 - HUM Bioethics
- PH 255B - Advanced Ethics: Medicine
- PH 275 - HUM Science and Values
- PH 355 - Public Policy Ethics
- OT 415 - Health, Wellness, and Healing: Application to Well-being

**Recommended courses for students interested Epidemiology and Biostatistics:**

At least one additional science course:

- BIO 102 - NPS Human Heredity and Inherited Diseases
- CH 101 - NPS General Chemistry: Practical Principles

**Recommended electives for students interested in Health Services Organization and Policy:**

At least one course:

- EC 101 - SSC Principles of Macroeconomics
- OT 415 - Health, Wellness, and Healing: Application to Well-being
- PS 111 - SSC American National Government
- PS 360 - Washington Institute (BA 360)

- SW 344 - Aging: Social Response and Implications

**Recommended electives or core for students interested in Community and Behavioral Health:**

At least two courses:

- PSY 105 - SSC Introduction to Psychology
- NEU 125 - NPS Introduction to Neuroscience
- PSY 250 - Psychopathology
- PSY 235 - Social Psychology
- PSY 230 - Psychology of Women and Gender
- SO 101 - SSC Discovering Society
- SO 204 - SSC Population and Global Issues
- SO 301 - Social Issues
- SW 233 - Human Behavior in the Social Environment
- SW 344 - Aging: Social Response and Implications
- SW 366 - Addiction and Society

**Master of Science in Molecular Medicine/B.S. in Biotechnology 4+1 Program with Drexel University College of Medicine**

**\*This program may not be declared after January 11, 2021.**

Through an agreement with **Drexel University College of Medicine** (DUCOM), students can earn both the **Bachelor of Science (B.S.) in Biotechnology and Masters (M.S.) in Molecular Medicine** degrees in 5 years after graduation from high school. Students will spend their first four years at Elizabethtown College fulfilling the requirements for the Biotechnology major, core curriculum, and the essential prerequisites for entry into the Drexel graduate program. During the fourth year of the program, students remain at Elizabethtown and enroll in 9 credits per semester of online or webcasted graduate classes and seminars offered by Drexel University College of Medicine; these are listed as Elizabethtown courses. To maintain their full-time student status in the fourth year, students will conduct a minimum of 2-4 credits of independent research and/or finish any undergraduate requirements while taking the Drexel courses. A BS in Biotechnology from Elizabethtown College will be awarded after successful completion of the fourth year of the program assuming all other College requirements have been met. For the fifth year, students will matriculate at Drexel University and complete the requirements for the MS degree in Molecular Medicine. For program information and admissions requirements, contact Dr. Jodi Lancaster.

**Major courses for first three years on campus:**

- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- BIO 211 - Genetics
- BIO 212 - Cell Biology
- BIO 212L - Cell Biology Laboratory
- BIO 235 - General Microbiology
- BIO 310 - Molecular Biology
- BIO 310L - Molecular Biology Laboratory
- BIO 311 - Experimental Design in Cell Biology

### *Joint Degree Programs*

- BIO 324 - General Physiology
- BIO 324L - General Physiology Laboratory
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- CH 216 - Synthesis Lab
- CH 213 - Organic Chemistry II
- PHY 101 - General Physics I
  
- MA 121 - MA Calculus I or
- MA 251 - MA Probability and Statistics

#### **At least seven credits from:**

- Upper-level Biology electives with the laboratory or
- CH 323 - Biochemistry I with or without the laboratory

#### **Fourth year at Elizabethtown College:**

- BIO 495 - Seminar in Biology
- BIO 491 - Research in Biology
- BIO 492 - Research in Biology

### **Osteopathic Medicine/B.S. 3+4 or 4+4 Program with Philadelphia College of Osteopathic Medicine (Emphasis in Biology)**

Elizabethtown College has an agreement for preferred admission to Philadelphia College of Osteopathic Medicine (PCOM) following either three years (3+4 program) or four years (4+4 program) at Elizabethtown College. If admitted to PCOM, students in the 3+4 program are granted a baccalaureate degree from Elizabethtown College following completion of the first year of courses at PCOM with grades of C or higher. For the 3+4 program, the student must have a GPA of at least 3.2 in science courses and an overall GPA of at least 3.2 by the end of his or her sophomore year of college. For the 4+4 program, the student must have a GPA of at least 3.0 in science courses and an overall GPA of at least 3.0 by the end of his or her junior year of college. Students in both programs must complete the courses listed below and must pursue a major at Elizabethtown which leads to a Bachelor of Science degree in Biology, Biochemistry (3+4 and 4+4 options), or Chemistry (4+4 option only). For program information and admissions requirements, contact the Chair of HPAC.

#### **Major courses for first three years on campus:**

- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- BIO 211 - Genetics
- BIO 324 - General Physiology
- BIO 324L - General Physiology Laboratory
- Additional 7 or 8 credits of 200-level or higher Biology electives with at least one laboratory
  
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I

- CH 213 - Organic Chemistry II
- CH 216 - Synthesis Lab
- CH 242 - Physical Inorganic Chemistry
- CH 323 - Biochemistry I
- PSY 105 - SSC Introduction to Psychology
- SO 101 - SSC Discovering Society
  
- PHY 101 - General Physics I and
- PHY 102 - General Physics II
- or
- PHY 201 - College Physics I and
- PHY 202 - College Physics II
  
- MA 121 - MA Calculus I or
- MA 251 - MA Probability and Statistics
  
- EN 100 - PLE Writing and Language or
- EN 150 - PLE Advanced Writing and Language

**If fourth year is completed at Elizabethtown College:**

- BIO 313 - General Ecology and
- BIO 313L - General Ecology Laboratory
- or
- BIO 317 - Aquatic Ecology or
- BIO 335 - Microbial Ecology and Diversity
  
- BIO 495 - Seminar in Biology
- Seven or eight credits of 200-level or higher Biology electives with at least two laboratories

**Osteopathic Medicine/B.S. 3+4 or 4+4 Program with Philadelphia College of Osteopathic Medicine (Emphasis in Chemistry/Biochemistry)**

Elizabethtown College has an agreement for preferred admission to Philadelphia College of Osteopathic Medicine (PCOM) following either three years (3+4 program) or four years (4+4 program) at Elizabethtown College. If admitted to PCOM, students in the 3+4 program are granted a baccalaureate degree from Elizabethtown College following completion of the first year of courses at PCOM with grades of C or higher. For the 3+4 program, the student must have a GPA of at least 3.1 in science courses and an overall GPA of at least 3.1 by the end of his or her sophomore year of college. For the 4+4 program, the student must have a GPA of at least 3.0 in science courses and an overall GPA of at least 3.0 by the end of his or her junior year of college. Students in both programs must pursue a major at Elizabethtown that leads to a Bachelor of Science degree in Biochemistry & Molecular Biology (3+4 and 4+4 options), Chemistry (4+4 option only), or Biology. Degree requirements for the 4+4 Chemistry and 4+4 Biochemistry & Molecular Biology Programs are found in the course catalog for those majors. In order to complete in the Biochemistry & Molecular Biology 3+4 accelerated program student are required to complete chemistry research during a summer session. Additional fees will apply. Required courses for the 3+4 Biochemistry & Molecular Biology Program are listed below. For program information and admissions requirements, contact the Chair of HPAC.

**Major courses for first three years on campus:**

- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- CH 201 - Laboratory Methods in Chemistry
- CH 213 - Organic Chemistry II
- CH 214 - Chemical Instrumentation
- CH 242 - Physical Inorganic Chemistry
- CH 323 - Biochemistry I
- CH 324 - Biochemistry II
- CH 326 - Techniques of Biochemistry
- CH 343 - Physical Chemistry I
- CH 395 - Chemistry Seminar I
- CH 396 - Chemistry Seminar II
- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- BIO 324 - General Physiology
- BIO 324L - General Physiology Laboratory
- MA 121 - MA Calculus I
- MA 122 - Calculus II
- PHY 201 - College Physics I

Four credits from among:

This requirement MUST be completed during the summer. Additional fees will apply.

- CH 491 - Research in Chemistry
- CH 492 - Research in Chemistry
- CH 490 - Independent Problems in Chemistry

**Fourth year course requirements to be satisfied during first year at PCOM:**

- CH 455 - Integrated Chemistry Laboratory I (DO140A, B, & C)
- CH 495 - Chemistry Seminar III (DO138A)
- CH 496 - Chemistry Seminar IV (DO144)
- Six credits of Biology and Biochemistry (emphasis on genetics) (DO121)

**Premedical Primary Care Program with Pennsylvania State University College of Medicine**

Through an agreement with **The Pennsylvania State University College of Medicine**, select students may be admitted to **Penn State's Premedical Primary Care Program**, allowing them to pursue careers as primary care physicians. This program gives these students the option for automatic matriculation to The Pennsylvania State University College of Medicine upon completing the Bachelor of Science degree requirements. For acceptance criteria, contact the Health Professions Advisory Committee of Elizabethtown College.

Elizabethtown College is one of a select group of colleges that participates in **The Pennsylvania State University College of Medicine's Primary Care Pre-Admissions Program** at the Milton S. Hershey Medical Center. The

program was established to encourage undergraduate students to pursue careers in internal medicine, family practice and pediatrics by providing students with mentoring, primary care and pre-clinical experience. Through an agreement with The Pennsylvania State University College of Medicine, select students may be admitted to Penn State's Premedical Primary Care Program, allowing them to pursue careers as primary care physicians. This program gives these students the option for automatic matriculation to The Pennsylvania State University College of Medicine upon completing a Bachelor's degree and maintaining competitive grade point average and Medical College Admissions Test scores as stipulated by The Pennsylvania State University College of Medicine.

Students in this program may pursue any major but must complete the required courses listed below. The student must accumulate a minimum GPA of 3.5 in biology, chemistry, and physics courses and a minimum overall GPA of 3.5 by the end of his or her junior year of college. Students must complete two Family Practice Practicum coordinated by the Health Professions Advisor Committee of Elizabethtown College and/or the Pennsylvania State University College of Medicine.

The Pennsylvania State University College of Medicine also offers the following: a) a Primary Scholars Program, in which students spend two weeks at Hershey participating in lectures, seminars and clinical experiences; b) a Primary Care Summer Academic Program for minority students and students from rural and medically underserved areas; and c) a Primary Care Mentoring Program, through which students are assigned a mentor, a preceptor or faculty affiliate of The Pennsylvania State University College of Medicine, who is located in the same town or region as the student. To apply for acceptance into programs, students must meet criteria established by The Pennsylvania State University College of Medicine and apply through the Health Professions Advisory Committee of Elizabethtown College. For program information and admissions requirements, contact the Chair of HPAC.

**Required courses at Elizabethtown College:**

- BIO 111 - Molecules, Cells, & Animal Systems
- BIO 112 - Principles of Evolution, Ecology, and Diversity of Life
- CH 105 - NPS Fundamentals of Chemistry: Introduction to Molecular Science
- CH 113 - Organic Chemistry I
- CH 213 - Organic Chemistry II
- CH 216 - Synthesis Lab
- CH 323 - Biochemistry I
- MA 121 - MA Calculus I
- MA 251 - MA Probability and Statistics
- PSY 105 - SSC Introduction to Psychology
- SO 101 - SSC Discovering Society
  
- CH 214 - Chemical Instrumentation or
- CH 242 - Physical Inorganic Chemistry
  
- PHY 101 - General Physics I and
- PHY 102 - General Physics II  
OR
- PHY 201 - College Physics I and
- PHY 202 - College Physics II

## **Academic Policies**

### **The Academic Program**

Each student enrolled in a degree program is required to complete a major. In addition, students have the option of pursuing a second major and/or one or more minors outside their major discipline. Students also complete course work to fulfill the requirements of the Core Program, which provides a broad and liberal education.

### **Academic Advising**

Advisors are assigned for majors, second majors, and minors. Non-degree students also are assigned advisors.

The First-Year Advising Program is designed to touch on all aspects of the first-year experience, assisting new students to better understand themselves, and to learn to use the College's resources to meet their educational needs and aspirations.

Upperclass advisors work closely with students during the registration period for course selection for the coming semester. For those upperclass students who have declared a major, advisors in the major program also provide assistance in regard to graduate or professional school and/or career planning.

See the Student Life section of this Catalog for more information about the First-Year Advising Program and upperclass student advising.

### **Student Responsibilities**

Students are required to consult with their major advisor as to course selection, course sequences, graduation requirements, etc. Consultation with the second major or minor advisor is an expectation, but not a requirement. **It is the student's responsibility to ensure that all graduation requirements have been met and that other requirements, regulations and deadlines have been observed.**

### **Degree Planners and Degree Audits**

Degree Planners for academic majors and minors list the requirements for each program and can be used by students to track their progress.

In addition, electronic degree audits (aka, Grad Reports) are available 24/7 to students and their academic advisors through the College Web system, Jayweb. The degree audit matches the student's course work against the requirements for a degree and notes which requirements are met and which still are required. The degree audit is not the same as the transcript. The degree audit is an advising tool and as such, is an unofficial document, whereas the transcript is the official record of course history and degree completion. Students are encouraged to review their degree audits and transcripts at the start/end of every semester. While the degree audit is usually accurate, at times the complicated nature of a program or the unique circumstances of a student's course completions may lead to inaccuracies. If there are inaccuracies, students are responsible for reporting these to the Office of Registration and Records. An error in the degree audit does not change the actual requirements for graduation; in particular, unfulfilled requirements are not waived because of degree audit errors. **The responsibility for understanding and meeting degree requirements rests with the student.**

## **Declaration and Change of Major/Minor**

Declarations and changes of majors and minors are initiated by the student and facilitated by the Registration and Records Office. When a change of major or minor occurs, a student's advising record is transferred from one Academic program to another.

## **Change of Personal Information**

Any change of name, address, telephone number, or marital status must be reported to the Office of Registration and Records immediately either as a request through the College Web system or in written form. E-mailed and telephoned changes cannot be accepted. This information must be kept current so that there will be no delay in receipt of information from the College. Changes of name, gender, social security number, etc., require legal documentation.

## **Academic Load and Progress**

Since the completion of at least 125 credits is required for a bachelor's degree, a student who plans to graduate in four years must satisfactorily complete an average of 16 credits in each of eight semesters. However, some students wisely elect to take a lighter academic load in order to do better work and choose to complete one or more summer courses or attend a partial fifth year. Some programs require a highly sequenced set of courses and any deviations from the sequence may delay program completion. Students should review the requirements for any intended major or minor programs to ensure full understanding of program expectations.

## **Credit**

A semester credit hour represents a unit of curricular material that normally can be taught in a minimum of 15 hours of classroom instruction plus a minimum of two hours of out-of-class student work for approximately 15 weeks or the equivalent as determined by the faculty. Each of the following four requirements must be met for any equivalent learning experience activity:

1. Be directly related to the objectives of the course/program,
2. Be measurable for grading purposes,
3. Have the direct oversight or supervision of the faculty member teaching the course, and
4. In some form be the equivalent of an activity conducted in the classroom.

## **Full-time/Part-time Status**

An undergraduate student taking 12 or more credits per semester at Elizabethtown College is considered a full-time student and pays full tuition and fees.

An undergraduate student taking fewer than 12 credits per semester is considered part time. Part-time students pay the regular semester credit rate plus applicable fees and receive a library card and full use of the library facilities.

National Collegiate Athletic Association (NCAA) regulations stipulate that a student must carry a minimum of 12 credits per semester to be eligible for intercollegiate athletic competition.

## **Overload Credits**

Undergraduate students may carry up to 18 credits in a semester or 12 credits in a combination of course work during May term and the online summer term. A student who achieves a cumulative grade point average of 3.20 or above, or who has the approval of the Registrar, may carry up to 20 credits in a semester. An additional tuition fee is charged for credits in excess of 18 credits in a semester. A petition form for overload credit is available in the Office of Registration and Records or on the office's website.

## **Class Standing**

The student's class standing is determined on the basis of the number of credits earned. After earning 30 credits, a student is considered a sophomore; with 60 credits, a junior; with 90 credits, a senior.

## **Transfer of Credits**

Students can transfer courses from institutions that are judged by the Registrar and the appropriate program (in the case of courses for a major/minor/certificate) to be high quality, involve active delivery methods (ongoing exchange of ideas with an instructor), and are consistent with the mission and program goals of Elizabethtown College. Elizabethtown College transfers credits – but not grades or quality points. The course must be letter-graded with an earned grade of C- or better. The College does not accept courses taken Pass/No Pass (or Satisfactory/Unsatisfactory) at other institutions. Facsimiled, emailed, and student-delivered transcripts are not be accepted.

1. **Transfer Credit for college courses taken during high school.** The practice of a student being enrolled at two schools simultaneously (high school and post-secondary) is known as **Dual enrollment**. Please remember to have an official transcript, from the credit-granting institution, sent directly to the Office of Registration and Records at Elizabethtown College. A student will not receive duplicate credit through examination, or any other college courses taken before or after enrolling at Elizabethtown College.
2. **Currently enrolled students** who wish to transfer credits to Elizabethtown College must obtain permission in advance from the Office of Registration and Records. If a student elects to take a course without obtaining prior written permission, the College is not obligated to accept course for transfer.

Courses that are eligible to be repeated must be taken at Elizabethtown College and not at another institution as a transfer course. Please refer to the college's "repeating courses" policy for more information.

Students, who have achieved junior status (60 credits) through either work at Elizabethtown College or a combination of work at the College and another institution, are not permitted to transfer additional credits from two-year institutions to Elizabethtown College. Such students may transfer credits from four-year institutions, but only with the prior approval of a Registrar.

Students must request that the registrar's office of the transferring institution send an official transcript to the Office of Registration and Records at Elizabethtown College.

For more information regarding transcripts and course transfer, contact the Office of Registration and Records at (717) 361-1409 or visit the office's website.

## **Students with Earned Associates Degrees**

Transfer of Associate Degrees Candidates approved through Admissions with an earned associate's degree, consisting of at least 40 corresponding general education credits from a regionally accredited college or university will be recognized as meeting all of the requirements of the Elizabethtown College Core Curriculum with full junior standing. The foregoing provision does not supersede curricular prerequisites or departmental program requirements established in the College catalog. Nor does it exclude the student from completing the signature learning requirement, or residency requirements, for completion of a bachelor's degree.

For more information, please contact the Office of Admissions or the Office of Registration and Records.

## **Transcripts**

Transcript requests must be sent to the Office of Registration and Records and should be received at least one week prior to the date needed. Federal law requires that all requests be made in writing by the student. Telephone requests and e-mail requests cannot be honored. Transcripts also cannot be requested by parents, friends, spouses or potential employers.

No transcripts of record are furnished to students whose account is not paid in full. There is no charge for transcripts.

Transcript request forms are available in the Office of Registration and Records or by printing a copy from the office's website. Letters are accepted instead of the form. The following information must be included in all requests: 1) name(s) and address(es) to whom the transcript should be sent, include specific names/ offices when possible; 2) dates of Elizabethtown College attendance; 3) student's full name, including maiden name if applicable; and 4) student's signature.

Students may print unofficial transcripts via the College web system. Unofficial transcripts might not be acceptable to other institutions or potential employers. Elizabethtown College does not send or accept facsimile copies of transcripts.

## **Registration**

Students register for classes on those days designated on the College calendar. No registrations are accepted after the first week of a semester. Students register for the fall semester in April. Spring semester registration takes place in November. Winter and Summer registration opens in November with the Spring. A student may register either as a degree or a non-degree student and as a full-time or part-time student. Degree-seeking candidates must have a major declaration.

Many courses have prerequisites, and students are reminded of their responsibility for meeting all prerequisites and for taking courses in proper sequence.

To register for the next semester, a student must have met all financial obligations. Students who do not register during the registration period cannot be guaranteed space in the residence facilities or classes. Students must meet with their advisor prior to registration, and the advisor must remove the "registration clearance" before students can register online through the College Web system.

The Office of Registration and Records will publish all registration related materials to their website - [www.etown.edu/offices/registration-records](http://www.etown.edu/offices/registration-records).

## Registration Holds

A student's registration may be delayed as a result of unpaid account balances, incomplete academic records, disciplinary sanctions, failure to meet with the advisor, failure to provide current off-campus address information, or incomplete health records. For full-time students, the Student Health Record must include a recent physical and evidence that all required immunizations are complete.

## Schedule Changes

Enrolled students may make course schedule changes via the College Web system, on a space-available basis. **A student is not dropped or withdrawn from a course simply because they discontinue attendance or by notifying the professor. The completion of any course registration addition or change is the responsibility of the student, not the faculty member.** Students can review their registration status in the CampusWeb system 24/7. Seniors should keep in mind that dropping or withdrawing from a course could delay their anticipated date of graduation.

### Adding Courses

Students may add a course to their schedule up until the 5th day of the fall, spring, or summer semester.

#### *15-week Semester*

Students may add courses to their schedule up until 4:30 p.m. on the fifth class day of the semester, overall semester as well as sub-terms, via the College Web system.

#### *7-week Sub-Term*

Students may add a course in a later sub-term via the Campus Web system up until the 3rd day of the published 7-week sub-term.

### Waitlisting Courses

Enrolled students may make course schedule changes via the College Web system, on a space-available basis, up until the fifth class day of the semester. If a course is full, students may waitlist. If a seat becomes available, a member of the Office of Registration and Records will email the student using their etown.edu email account. Please be sure you are monitoring your email; Registration and Records will hold the seat for three days. After the third day of the notification of seat availability, the Office of Registration and records reserves the right to return the student to the waitlist and the seat given to the subsequent student.

### Dropping Courses

Students DROP from classes through the Office of Registration and Records. The course will not appear on the permanent record if the student DROPS the course registration on or before the end of the fourth week of the 15-week semester, or second week of a 7-week sub-term.

*15-week Standard Term*

Week One. Students may elect to DROP a course up until 4:30 p.m. on the fifth class day of the semester via the College Web system.

Week Two – Week Four. Courses dropped from a student's schedule during the first four weeks of a semester do not appear on the student's academic record.

Course dropped up until the end of the second week of the semester requires the completion of an official DROP from located in the Office of Registration and Records. A student must obtain the signature of their academic advisor then submit the form directly to the Office of Registration and Records for processing.

*7-week Sub-Term*

Week One. Students may elect to DROP a course up until 4:30 p.m. on the fifth class day of the semester via the College Web system.

Week Two. Courses dropped from a student's schedule during the first two weeks of a semester do not appear on the student's academic record.

Course dropped up until the end of the fourth week of the semester requires the completion of an official DROP from located in the Office of Registration and Records. A student must obtain the signature of their academic advisor then submit the form directly to the Office of Registration and Records for processing.

**Withdrawal from a Course**

At the conclusion of the DROP period, a student has the option of exercising a course withdrawal. The decision to withdraw from a course is part of a student's academic record and transcribed based on the date of the form submission to the Office of Registration and Records.

When withdrawing from the College for medical reasons, the students' academic record will reflect a grade of W for each course and transcribed to their permanent record. A student may not withdraw from individual courses for medical reasons.

**A student is not dropped or withdrawn from a course simply because they discontinue attendance or by notifying the professor. The completion of any course registration addition or change is the responsibility of the student, not the faculty member.**

Seniors should keep in mind that dropping or withdrawing from a course could delay their anticipated date of graduation.

*15-week Standard Term*

From the fifth week to the end of the eleventh week, a course withdrawal will result in a grade of "W", which will appear on the student's permanent record but it will not affect the student's grade point average.

**All course withdrawals after the end of the eleventh week of the semester will result in a grade of "WF", which is calculated into the student's grade point average as an earned "F".**

*7-week Sub-Term*

From the third week to the end of the fifth week, a course withdrawal will result in a grade of "W", which will appear on the student's permanent record but it will not affect the student's grade point average.

**All course withdrawals after the end of the fifth week of the semester will result in a grade of "WF", which is calculated into the student's grade point average as an earned "F".**

## **Repeating Courses**

A few courses are repeatable for credit if so designated in the Catalog and provided that the content is not duplicated. Other courses may be eligible to be repeated in an attempt to improve the grade. Courses that are eligible to be repeated must be taken at Elizabethtown College and not at another institution as a transfer course. Only an alternative study registration (independent studies, directed studies, and tutorials) can only be repeated as an alternative study registration (i.e. a course cannot be repeated as a directed study unless it was originally registered as a directed study). All other course formats (e.g. traditional classroom, hybrid, and fully online) may be repeated interchangeably.

Students may repeat any course in which they earned an F or NP and may attempt failed courses as many times as needed until the course is passed. Under certain conditions, students may be able to repeat a course in which they earned a C- or a grade in the D range. To do so, the following conditions must be met:

The course to be repeated must be in their major/minor or be a course that is a prerequisite to a Core Program requirement.

The student must have the approval of their advisor and the major/minor Program Director.

The student must file a repeat registration form in the Office of Registration and Records.

Under federal financial aid (Title IV) guidelines, a previously passed course that meets these conditions may be repeated only one time. This includes courses in which a program requires a minimum grade in the course (i.e., students who have previously passed a course have one opportunity to repeat the course for a better grade). When repeating a course to earn a different grade, the original grade remains on the transcript but is removed from calculation of the grade point average, course credits are counted only once toward degree and program requirements, and only the last (i.e., most recent) grade earned for the course is counted in the grade point average.

## **Auditing Courses**

Students in good academic standing (2.00 or better) may elect to audit courses provided they do not preempt regularly enrolled students and they have the permission of the professor teaching the course.

The requirements for the audit are determined by the professor. Upon completion of all such requirements, the audit is posted on the student's permanent record card. Audit courses carry neither academic credit nor grade.

Audit credits are included in the total credits to determine full-time status and overload charges. A fee is charged on a per-credit basis for part-time students who wish to audit courses. Auditors – both full-time and part-time – also must pay any additional fees for labs, studio supplies and other direct costs. Students may add a course for audit or change a course registration from audit to credit during the first week of class only. Change of course registration from credit to audit cannot be made after completion of the fourth week of the semester. Once a course has been

audited, it may not be taken for credit. Likewise, a course that has been completed for credit may not be repeated and recorded as an audit course.

## Class Absences

### Class Attendance

Class attendance policy is determined individually by faculty members.

Each faculty member announces his or her attendance policy at the start of each semester. **A professor or the College may dismiss a student from a course for excessive absences.** Such a dismissal in the first through fourth weeks of the semester results in removal of the course from the student's record; **after the fourth week, a grade of WF is recorded for the course.** A student may appeal to the Academic Standing Committee for reinstatement to the course.

Students are responsible for knowing the attendance policy for each course and consulting with professors in the case of absences due to illness or other personal problems.

### Long-Term Absences

A long-term absence from classes or from campus may result in mandatory withdrawal from the College. After 15 consecutive class days of absence from all classes, a student is considered to have withdrawn from the College. Students absent for verified medical reasons will be granted a Medical Withdrawal.

## Withdrawal Policy

### Withdrawal from College (Voluntary)

Students who withdraw from the College during a semester also withdraw from all of their classes for that semester. Full-time students withdraw from the College through the Center for Student Success; part-time students withdraw through the Office of Registration and Records. Students who withdraw during the semester are expected to leave the campus as of the effective date of their withdrawal.

For purposes of billing, room reservation, academic responsibility, etc., the effective date of withdrawal is the date on which the completed official notice is returned to the Center for Student Success or the Office of Registration and Records. A student who withdraws without notification receives no refunds and may incur the full room penalty. Failure to comply with the withdrawal procedures may result in loss of the privilege of readmission to the College and the right to the release of a transcript of credits earned. See the Institutional Refund Policy for information about pro-rated refunds.

For more information about the voluntary withdrawal process, contact Stephanie Rankin, Associate Dean of Students.

### Medical Withdrawal (Voluntary)

A medical withdrawal for a physical health or mental health reason is defined as a withdrawal from the College for at least the remainder of the semester in which it is initiated. The withdrawal may extend through subsequent

semesters depending on the nature and course of the health concerns. The transcript will indicate "W" for all current courses.

A medical withdrawal for physical or mental health reasons is requested voluntarily by the student or his/her parent or guardian and may be approved if, in the judgment of a licensed medical or mental health provider, it is determined to be in the best interest of the student. A **Medical Withdrawal Documentation Form** must be signed by the student and completed by the student's treatment provider. The Form must be submitted to the Director of Student Wellness who also speaks with the student, before the withdrawal can be authorized.

During a medical withdrawal, the College expects the student to participate in professional healthcare treatment with a licensed medical or mental health provider as the primary method of resolving or managing the health concerns which led to the medical withdrawal. Prior to being considered for readmission by the College, the student must have his/her treatment provider submit the **Medical Withdrawal Re-Entry Documentation Form** to the Director of Student Wellness. Consulting with the Director of Student Wellness is necessary as part of the readmission process following a medical withdrawal. See the **Re-Entry Requirements after a Medical Withdrawal** document for details on the re-entry process.

Students are also encouraged to:

1. Contact Residence Life at (717) 361-1197 as soon as possible for information about the procedures for moving out of the Residence Hall, and to inquire about the housing registration process. Housing is guaranteed for residential students upon re-entry within the two semesters following the medical withdrawal.
2. Contact Disability Services at (717) 361-1227 to discuss accommodations during the re-entry process. It may be necessary to provide documentation from your health care provider in order to support requests for accommodations.
3. Consult with Financial Aid and the Business Office regarding implications for individual financial aid and the Institutional Refund Policy.

For more information about a voluntary medical withdrawal, contact Dr. Bruce Lynch, Director of Student Wellness.

## **Involuntary Withdrawal**

An Involuntary Withdrawal may be imposed by the Vice President of Student Life when a student exhibits behavior that has not been appropriately resolved through the Student Conduct process or is threatening to the safety and well-being of the college community.

Each situation will be reviewed on a case-by-case basis through an individualized assessment of the student's ability to safely participate in college programs. The Vice President of Student Life will consult with the Director of Student Wellness, Director of Campus Security, Associate Dean of Students/Director of Academic Advising, Associate Dean of Students/Director of Residence Life, Director of Student Rights & Responsibilities, the Director of Disability Services, and college legal counsel as necessary to fully consider available medical knowledge and the observed, documented behavior which prompted the review in order to determine if a reasonable accommodation can be made or if a withdrawal is recommended.

If a withdrawal is recommended, the Vice President of Student Life will confer with the student and/or parent/guardian to explain the advantages of a voluntary withdrawal or voluntary medical withdrawal and the conditions for re-entry which may include a medical clearance from a licensed physician or psychologist. If the student declines to take a voluntary withdrawal or voluntary medical withdrawal, the Dean may impose an

involuntary withdrawal. The Dean will explain the implications for the student including the conditions for re-entry which may include a medical clearance from a licensed physician or psychologist. During an Involuntary Withdrawal, the student is immediately administratively withdrawn from all classes and from college housing if applicable. The transcript will indicate "W" for all currently enrolled courses. The student may be eligible for a refund according to the [Institutional Refund Policy](#).

In an emergency situation, the College will take immediate steps to protect the health, safety, and welfare of students, employees, and the campus community including the imposition of an Interim Separation by the Vice President of Student Life. The subsequent individual assessment may result in an Involuntary Withdrawal.

### **Appeal of an Involuntary Withdrawal**

A decision to impose an Involuntary Withdrawal may be appealed by the student to the President within five (5) business days of the decision. Appeals should be in writing and include specific reasons for the appeal. The President has five (5) business days to review the information presented and inform the student in writing of a final decision. The President may uphold the decision of the Vice President of Student Life, adjust the finding, refer the matter back to the Vice President of Student Life for additional consideration or reverse the decision and reinstate the student. The President's decision is final.

Students who believe they may have been discriminated against on the basis of a disability can follow the grievance procedure at [www.etown.edu/offices/disability/Grievance\\_Procedure.aspx](http://www.etown.edu/offices/disability/Grievance_Procedure.aspx).

### **Leave of Absence**

Students in good academic standing may take a leave of absence from the College for a period of time not to extend beyond the academic year in which the leave is taken. Leaves of absence must be approved by the Director of the Center for Student Success. In order to return to the College following a leave of absence, students must submit a readmit request to the Office of Registration and Records. For more information about the Leave of Absence process, contact Stephanie Rankin, Associate Dean of Students.

### **Readmission**

Students who leave the College in good academic standing (minimum 2.00 cumulative grade point average) gain readmission by written request to the Office of Registration and Records. Students who leave the College in academic difficulty (below 2.00 cumulative grade point average) must petition the Academic Standing Committee for readmission. A student who is readmitted to the College after an absence of five successive years may petition to have previous grades of F removed from his/her cumulative grade point average. In order to be eligible to petition for this, students must have completed 16 consecutive credits at Elizabethtown and earned a grade of C or better in each class. If the petition is approved, the old F grades remain on the transcript but are removed from the student's overall grade point average. For further information, students should consult with the Office of Registration and Records.

For more information, please visit [www.etown.edu/offices/registration-records/readmit](http://www.etown.edu/offices/registration-records/readmit).

### **Grades and Quality Points**

Grades are reported as A, B, C, D, and F. Plus and minus distinctions are made. Designations of I, W, WF, P, NP, and AUD are used in appropriate situations.

Grade definitions are:

- A Distinguished
- B Above Average
- C Average
- D Poor
- F Failure
- I Work Incomplete
- W Withdrawal from Course
- WF Withdrawal Failing from Course
- P Pass
- NP No Pass (Failure)
- AUD Audit

Grades submitted to the Office of Registration and Records are considered official at the time submitted. Official grades can be changed only by successful appeal under the College's Grade Appeal Policy or by an instructor's petition to the Dean for Academic Affairs to correct a documented grading error.

**Grade appeals and evidence of grading errors must be submitted within 30 days of the date on which the grade was formally issued from the Office of Registration and Records.** Exceptions to the 30-day time limit require formal petition to and approval by the Academic Standing Committee.

## **Incomplete Grades**

A grade of Incomplete (I) may be obtained by making a formal request to the professor of the course in question. The student and the professor must sign a written agreement that specifies the nature and the quantity of work to be completed and the projected date of completion. A grade of Incomplete is assigned for extenuating circumstances only. It is not simply given to allow additional time to complete required course work or to improve a course grade. In addition, a professor may use a grade of Incomplete in cases of suspected academic dishonesty.

All incomplete grades received in the fall semester must be removed by April 1. Those received in the spring semester or summer session must be removed by October 1. Failure to do so results in a grade of F.

## Quality Points

A 4.00 quality point system is used. Quality points are assigned as follows:

<b>Letter Grade</b>	<b>Quality Points per Semester Hour of Credit</b>
A	4.00
A-	3.70
B+	3.30
B	3.00
B-	2.70
C+	2.30
C	2.00
C-	1.70
D+	1.30
D	1.00
D-	0.70
F, WF	0.00

## Grade Point Average Calculation

The grade point average is dependent upon the credits attempted and the quality points earned. To determine the quality points earned for a semester, multiply the credits for each course by the quality points for the grade earned in the course, sum the results, and divide by the total credits attempted in the semester. Courses in which a grade F or WF is received are included in the calculation. Courses in which a grade of W or I is recorded are excluded, as are Pass/No Pass and Audit courses.

The cumulative grade point average and the grade point average in majors and minors are calculated in the same manner as the semester grade point average. All courses that could fulfill a requirement for the majors or minors – whether in excess or not – are used for the grade point average calculation.

## Pass/No Pass Grading

The Pass/No Pass grading option is intended to encourage students to explore areas of study beyond those of their major or minor. Courses registered on Pass/No Pass basis earn credits (for grades of P) but are not included in the calculation of the grade point average. Students may select one course per semester to be graded in this manner under these conditions:

A student currently must have junior or senior standing (60 or more credits).

The student must have a cumulative average of 2.75 or higher.

The selected course may carry no more than four credits and must be a free elective. It may not satisfy a Core Program requirement (**no Core courses can be taken Pass/No Pass**) and may not be a course that could fulfill a requirement for the student's major or minor. However, if major/minor requirements are already met (i.e., completed, not in progress), then an additional course in the major/minor Program can be taken Pass/No Pass.

No more than four courses in total (excluding Physical Education activity courses) may be taken under this grading option.

All students may elect to take Physical Education courses Pass/No Pass. Pass/No Pass registration opens at the end of the second week of classes and must be completed by the end of the fourth week of the semester. Forms are available on JayWeb and in the Office of Registration and Records. Once a course is registered under the Pass/No Pass option, it may not be changed. Grades of D- or higher are recorded Pass; grades of F are recorded No Pass. Students should be aware that courses taken Pass/No Pass may not be transferrable to other institutions.

## **Early Warning System**

Mid-term grade reports are not issued. However, an early warning system is used. Students carrying D or F grades in 100- or 200-level courses at the end of the fifth week of the semester are notified of their deficient performance. These students are encouraged to consult with their instructors and to make use of Learning Services' resources in order to improve their performance.

## **Final Examination Policy**

All academic courses are expected to conclude with a final examination administered during the assigned time of the examination period. Within the last three meeting days for classes (not for any individual course) prior to final examinations, no unit tests or quizzes of any type may be administered. Due to the structure of courses involving laboratory examinations/practica, a laboratory examination/practicum can be given during these final three days prior to final examinations. In addition, major papers and projects can be assigned due dates that fall within the last three meeting days for classes, providing the due dates are specified in the syllabus.

The following may or may not have final examinations, depending upon the judgment of the instructor:

- laboratory sections
- advanced seminar in which an assigned paper or project is the major activity
- a performance class in which a recital or similar artistic performance is required
- an internship
- a practicum

Any faculty member seeking an exception to the final examination rule for an academic course shall first secure the approval of the Dean and then that of the Chair of Academic Standing Committee.

Students, as well as faculty members, are expected to abide by the published examination schedule. However, students with three examinations in one day may request of a professor that one examination be rescheduled during examination period. There is no obligation on the part of the faculty member to reschedule the examination. All

requests for rescheduling an examination must be made at least five class days before the start of the final examination period. Students with four examinations in one day may request that one or two of the examinations be rescheduled, following the same procedure. When a scheduling conflict cannot be resolved between faculty member(s) and student, the student may take her or his case to the Dean for Academic Affairs.

## **Academic Standing**

Students in academic good standing maintain a minimum 2.00 cumulative grade point average.

## **Academic Probation**

Academic probation means that a student is in danger of being dismissed from the College for academic reasons. Students who fall into the following categories are placed on academic probation and also may be required to sign an academic contract:

Semester Hours Attempted	with	Cumulative Grade Point Average Below:
1 - 18		1.70
19 - 34		1.90
35 or more		2.00

Students on academic probation or contract normally should limit their academic load to three courses – or a maximum of 13 or 14 credits – in any semester in which the probation exists. The summer maximum should be two courses or eight credits.

## **Academic Dismissal**

**At any time, the College – upon recommendation of the Academic Standing Committee – may dismiss a student who is experiencing academic difficulty and/or lack of progress toward degree completion.** A student should be aware that all cases are decided individually and that poor academic performance may result in dismissal at the end of any semester, whether or not a student was previously on an academic contract. Further, violations of the conditions of an academic contract may result in dismissal at any time of the semester.

A student who is in academic difficulty (below 2.00 cumulative grade point average) may be requested by the Academic Standing Committee – in consultation with the student – to enroll in a special or particular set of courses and to become involved in testing, counseling, or other developmental activities. A student's satisfactory performance in such assignments may be interpreted by the Academic Standing Committee as satisfactory progress and may make it unnecessary to recommend dismissal.

## **Individual Program Adjustments**

Academic Schools reserve the right to counsel any student out of a major or minor for academically related reasons. A student has the right to appeal such School action to the Chair of Academic Standing Committee, who will direct warranted appeals to the Academic Standing Committee.

## **Academic Honors**

### **Dean's List**

A full-time undergraduate student who earns a semester grade point average of 3.60 or better in 14 or more credit hours, of which at least 12 credits are letter-graded course work, is regarded by the College as having performed with distinction. The student is placed on the Dean's List of Honor Students for the semester.

### **Emergent Scholars Program**

Awarded to those undergraduate students who demonstrate strong academic achievement at the end of three semesters of full-time study at Elizabethtown College. Such early academic achievement is indicative of habits of mind that embody the Elizabethtown Educational Philosophy and Learning Goals. Recognition at this point in a student's college career seeks to encourage deeper academic engagement on the path to achieving the promise of a transformative Elizabethtown College education.

Qualifying students are full-time students who have not previously attended another college or university for full-time study and have earned at least 42 credits in three consecutive semesters of study at Elizabethtown College or one of its affiliated programs (or, by petition, a non-affiliated program). Students must have attained at least a 3.75 cumulative grade point average at the end of their first three semesters. Students will be identified after their third semesters at Elizabethtown and recognized in a ceremony.

### **Graduation with Honors**

At the time of graduation, an undergraduate student who has achieved a cumulative grade point average of 3.60 is graduated *cum laude*; of 3.75, *magna cum laude*; of 3.90, *summa cum laude*.

A transfer student is eligible for and receives these same honors if the student earns a minimum of 60 credits at Elizabethtown College and is recommended for honors by the major School.

### **Honors in the Discipline**

Honors in the Discipline is awarded at graduation to outstanding undergraduates majoring in the various disciplines. To receive this designation, the student must prepare a research or creative project, and the completed project must be judged outstanding by the faculty of the School. An invitation from the major Program and a grade point average of at least 3.50 in the major are required for a student to begin an honors project.

Honors in the Discipline is noted in the graduation program and on the academic transcript. A student may receive recognition in more than one discipline. Schools may recognize more than one graduate in a year. Each School determines the specific criteria used to judge its students' projects.

### **Scholar's Privilege**

With the permission of the instructor, a full-time undergraduate student who appeared on the Dean's List of Honor Students for the preceding semester may attend any class at the College on a space-available basis as a scholar's privilege without registration or credit.

## **Programmatic Student Privilege**

With the permission of the instructor, a full-time or part-time junior or senior student may attend any class within the student's major or minor Program on a space-available basis without registration or credit.

## **Credit by Examination**

Students, accepted for enrollment through our Admissions Office, may receive academic credit or advanced placement through examination. Credits earned through examination are transcribed, but not the grade, thus credits earned through examination are not calculated into the students grade point average (GPA). Students can earn up to a maximum of 32 credits through examination. A student will not receive duplicate credit through examination, or any other college courses taken before or after enrolling at Elizabethtown College.

## **College Board's Advanced Placement Examinations**

Advanced Placement (AP) is a program created by College Board, which offers nationally recognized college-level curricula and examinations to high school students. Students who perform satisfactorily on a College Board AP Examination, earning a score of four or better, earn academic credit. School approved AP Examinations and their Elizabethtown College equivalent are outlined on the Office of Registration and Records' website.

## **CLEP Examinations**

Elizabethtown College participates in the CLEP program of the College Board accepting a score of 50 or higher in subject areas upon matriculation to the college.

All CLEP examinations must be completed prior to the achievement of sophomore status (30 or more completed credits). In addition, any currently enrolled student must receive written approval from the Registrar, and their academic advisor, before completing the examination. Any student with advanced knowledge in the CLEP subject, earned at Elizabethtown College or another credit-granting institution, will be prohibited from earning transfer credit through CLEP examination.

A complete list of CLEP Examinations and the Elizabethtown equivalent is available on the Office of Registration and Records' website.

## **International Baccalaureate (IB)**

Elizabethtown College recognizes International Baccalaureate (IB) for the purpose of admission, course credit, advanced standing or placement. Students do not have to earn an IB Diploma to receive academic credit. The college does not award credit for standard level (SL) examinations.

- IB Diploma recipients, earning a total score of 30 or higher, will earn 32 credits (equivalent to sophomore status).
- IB Certificate recipients receive credit (depending on the subject) for scores of five or better on higher level (HL) examinations.

Other course credits from institutions outside of the United States are evaluated on a case-by-case basis. For example, Cambridge International (Advanced Level or A-Level) examinations.

Students are required to request the organization to submit official transcripts and/or scores directly to the Office of Registration and Records. For precise placement determinations, we may request a review of the course syllabus or examples of written work. If an accurate evaluation of foreign credentials is not possible, the student may be requested to secure, at their expense, a professional evaluation from a nationally recognized organization like World Education Services (WES), [www.wes.org](http://www.wes.org).

## **DSST Examination**

DSST, formally Defense Activity for Non-traditional Education Support (DANTES), exams are college subject tests taken to earn college credit for knowledge acquired outside of a traditional classroom. In accordance with the American Council on Education (ACE) recommendations, students taking DANTES - DSST exams earn credit by earning the ACE recommended minimum score of 400, or higher as determined by the program governing the course discipline.

## **Challenge Testing**

Challenge Testing is a comprehensive term encompassing all tests prepared and/or administrated by Elizabethtown College faculty. Students must obtain written approval through the Office of Registration and Records and the Dean of the School governing the course discipline. Students must submit the Challenge by Examination approval form PRIOR to the administration of the challenge test. Student may not complete Challenge Examinations for practicums, internships, research courses, or the First-Year Seminar within the Core Program.

There is a per-test fee for Challenge Examinations given at the request of the student. The fee is for the test itself and is charged regardless of the test results. In addition, 50 percent of the appropriate part-time tuition rate in effect at the time the test is administered is charged for academic credit awarded as a result of performance on Challenge Tests.

- **Challenge Examinations for Academic Credit.** A currently enrolled Elizabethtown College student may request a Challenge Examination in hopes of earning credit for a particular course in the College Catalog. All challenge examinations are graded Pass/No Pass. A grade of Pass indicates that the credit and/or advanced placement is to be awarded.
- **Challenge Examinations for Placement and/or Waiver by the Student.** A currently enrolled student, or a School governing a course discipline, may request examination for proper placement in a course sequence such as modern languages and mathematics. Upon successful completion of the examination, the Office of Registration and Records will place a notation on the students graduation audit for clearance and registration purposes. No academic credit is awarded for placement.
- **Challenge Examinations for Placement and/or Waiver by the School.** Challenge Tests given at the initiative of the College are administered without fee to the student.

## **Placement Testing**

A student enrolling at Elizabethtown College may have their high school transcript as well as college credits earned through examination or dual enrollment evaluated for proper placement into English and Modern Language courses at Elizabethtown College.

## **English Placement**

English writing course placement is based on a combination of SAT critical reading and writing scores (or the ACT equivalent). Most students are placed in EN 100 - PLE Writing and Language, whereas other students, such as honors students, may be placed in EN 150 - PLE Advanced Writing and Language. Both satisfy the Power of Language – English requirement in the Core Program.

## **Mathematic Placement**

Students are required to complete MA 251 - MA Probability and Statistics or MA 121 - MA Calculus I. All incoming students are eligible for MA 251 and MA 121, but certain majors require MA 121. Please consult the Degree Planners for more information in this regard. Students who have not taken a pre-calculus or higher level course in the previous year should take MA 120 Foundations for Calculus before taking MA 121.

## **Modern Language Placement**

A modern language placement is based on language background and an online modern language placement examination. Students planning to study Spanish, French, or German need to complete the ML Placement Exam for that language. The examination information is found on the Modern Languages Program webpage. Students, having completed high school level 3 or higher, no matter what the placement examination results dictate, are prohibited from enrolling in a language at the 111 level.

Students interested in studying Chinese, Japanese, or Latin, MUST meet with their First-Year Seminar advisor during summer orientation for instructions on how to proceed. Several ancient languages (i.e., Sanskrit, Biblical Hebrew, Classical Greek) are offered through other programs. For details, students should consult with their First-Year Seminar advisor.

## **Graduation**

### **The Ceremony**

Graduation from Elizabethtown College is celebrated once each year in May. The ceremony is typically held on the morning of the second or third Saturday in May, outdoors in The Dell, except in cases of severely inclement weather when the ceremony is held in Thompson Gymnasium. Students who complete all graduation requirements in the previous summer or fall or in the current spring semester are recognized at this ceremony. Undergraduate students majoring in Music Therapy who have completed all course work, except their professional internship in Music therapy may participate in the May graduation ceremony, but do not receive their diplomas until their internship is successfully completed.

### **Early Participation**

Senior students who are not actually graduating may petition to indicate their desire to participate in Commencement and for verification of their status as a "member of the class."

Undergraduate students, to be eligible for early participant ("EP") status, students must have a 2.00 grade point average in both the major and overall at the time of the ceremony and have no more than eight credit hours of course work remaining, regardless of total number of credits completed. In addition, students are not eligible for Latin honors until all coursework has been completed. Students in an education program who have not yet completed their

student teaching are not eligible for EP status. Honors are listed in the Commencement program only for those students who actually have graduated and those whose only remaining requirement is a non-credit clinical experience.

Graduate students, to be eligible for early participation status, must have a 3.00 grade point average at the time of the ceremony and must be enrolled in all remaining graduate level courses in the summer in which early participant status is granted. The number of outstanding credits may not exceed 6 credits, regardless of total number of credits completed. Latin honors and the Dean's List are not awarded to Graduate Students.

Students approved as "early participants" take part in Commencement with their class, have their name listed in the official program, and are called to the platform for recognition as members of the graduating class. They are not graduates and do not receive a diploma until they have successfully completed all requirements. Early participation applications are due to the Office of Registration and Records by February 1st and must include what, when, and where the remaining requirements will be completed. Following approval, students have two years from when they participate in commencement to complete the requirements and earn their degree and cannot change their major(s) declaration during this time from what was approved for EP status. Students not completing their degree during this grace period or as specified on the EP application will need to follow the Catalog requirements in effect during the year they complete their degree (see "Other Requirements").

## **Credit Requirements**

### **Undergraduate**

To receive a Bachelor of Arts, Bachelor of Science, Bachelor of Social Work, or Bachelor of Music degree from Elizabethtown College, the student must earn a minimum of 125 credits. Some programs may require more than this minimum to complete all program requirements (See the program requirements for specific information).

No more than one bachelor's degree is ever awarded to an individual by Elizabethtown College; however, students may complete a second major, a minor, or teacher certification subsequent to graduation.

### **Graduate**

To receive a Master's degree from Elizabethtown College, the student must earn a minimum of 30 credits (Undergraduate courses are not counted towards these credits). Some programs may require more than this minimum to complete all program requirements (See the program requirements for specific information).

## **Program Requirements**

### **Undergraduate**

Students are required to successfully complete all requirements of the major and the Core Program. The College does not guarantee graduation to any student who is unable to complete requirements of a specific program or academic major.

In addition to their major, students have the option of pursuing a second major and/or one or more minors or certificates. Second majors must include at least 16 credits not included in the first major. For each minor, the student must complete at least eight credits that are not used to fulfill the requirements of the major(s) or another minor. For each certificate, the student must complete at least four credits that are not used to fulfill the requirements

of the major(s) or minor(s) programs. Certificates are embedded with a bachelor's degree program. They are not standalone programs. Only a notation of certificate completion will appear on the student's transcript.

Second majors and minors represent additional knowledge and interest in areas outside the first major. Therefore, second majors and minors must be selected in disciplines outside the first major, and additional minors must be selected in disciplines outside the first minor. Major and minor disciplines are determined by the predominant course prefix of the major/minor course requirements. For secondary education majors, the major subject area is considered to be the discipline of the major. Students seeking to double major in related disciplines (as defined by the predominant course prefix) would appeal to School Dean of the major and then the Chair of Academic Standing Committee.

## **Grade Point Average**

### **Undergraduate**

To be eligible for graduation, a student must have a cumulative grade point average of at least 2.00, with a minimum average of 2.00 in a major (and a 2.00 in a minor, if the minor is to be recorded on the student's transcript). A student who transferred from another college to Elizabethtown College must have an average of at least 2.00 in courses pursued in residence at Elizabethtown. Any student whose primary major or overall GPA is below 2.00 will not be included on pre-graduation correspondence or lists.

### **Graduate**

To be eligible for graduation, a student must have a cumulative grade point average of at least 3.00. Any student whose major or overall GPA is below 3.00 will not be included on pre-graduation correspondence or lists.

## **Residency Requirement**

### **Undergraduate**

To meet graduation requirements, the student must earn on-campus credits as follows: 1) a minimum of 16 credits in the major, at least eight of which are at the upper level (normally 300 and 400 level) and 2) at least 30 of the last 60 credits. To recognize completion of a minor on the transcript, a student must have completed at least eight credits of the requirements on the Elizabethtown College campus and must have earned a bachelor's degree at Elizabethtown College.

**Note:** While a student is matriculated at Elizabethtown College, credits earned through the BCA Study Abroad program or another study-abroad program formally affiliated with Elizabethtown are considered on-campus credits for residency purposes.

### **Graduate**

To meet graduation requirements, the student must complete the minimum residency requirement of 27 credit hours in the graduate program.

## Other Requirements

Graduation requirements are governed by the College Catalog dated four years prior to graduation or, for major or minor requirements, by the College Catalog in effect at the time of graduation, if the student so chooses. For most students, this means they will follow the requirements of the Catalog in effect when they begin their studies at Elizabethtown College. Students who choose to change Catalog years for their major or minor to the one in effect at the time of graduation must inform their academic advisor and the Office of Registration and Records by the end of the fall semester of their senior year. Students may **not** use a **combination** of College Catalogs to complete a major or minor. Transfer students are subject to the requirements of the College Catalog in effect when they begin studies at Elizabethtown College or, for major requirements, the one in effect at the time of graduation.

Students may not normally use a College Catalog dated more than four years prior to graduation to determine requirements for a degree. The only exception to this is for students who have been continuously enrolled for more than four years.

Elizabethtown College will graduate only those students who meet the moral and financial obligations incurred in pursuit of their studies. The completion of the required number of credits does not in itself constitute eligibility for graduation. It is the responsibility of the candidate for a degree to make formal written application for the degree to the Office of Registration and Records by the stated deadline. Only students in good academic standing may apply for candidacy for degree conferral.

The Office of the President must be notified by any student who plans to graduate *in absentia*.

## Graduate Program

Many components of the graduate program at Elizabethtown College are facilitated the same way as the undergraduate program. The Office of Registration and Records manages course registration, graduation clearance, and the award of credit transfer in consultation with our Faculty.

The following policies apply only to graduate students: 1) The minimum number of credits required to be full-time is six. 2) Students may not take more than 16 credits without following the Petition for Overload procedure; 3) The maximum number of courses allowed for transfer is three; 4) Pass/No Pass does not apply unless the course is offered Pass/No Pass; 5) Latin honors and the Dean's List do not apply; and 6) Only courses graded F may be repeated.

All graduate students must maintain a minimum of a 3.00 cumulative GPA to remain in good academic standing in all Elizabethtown College graduate programs, unless otherwise stated in the catalog. At any time, the College – upon recommendation of the relevant Dean and/or program director – may dismiss a student who is experiencing academic difficulty and/or lack of progress toward degree completion and/or is failing to meet professional standards specific to the student's program. At the discretion of the Dean and/or program director, students who fail to maintain the defined minimum cumulative GPA at the end of any semester may, in lieu of immediate dismissal, be placed on academic probation. Students on academic probation will have one semester in which they are registered to return to good academic standing. Students who fail to meet the conditions of their academic probation can expect dismissal from Elizabethtown College. Students who are dismissed for academic reasons must be out for two full years before they are eligible to apply for readmission. Students may direct appeals of probationary and/or dismissal decisions to the relevant Dean and/or program director. The decision of the Dean and/or program director shall be final.

Students who have withdrawn from the College must petition for readmission to the College. In addition, the student must petition the graduate program School for readmission to a particular program. To be eligible for readmission, applicants must be in good standing, and the academic program must have the capacity to accept additional students. Additional conditions of readmission may be imposed by the specific graduate program for which the applicant seeks readmission.

It is at the discretion of the School Dean and/or program director to determine if undergraduate and graduate courses may be taken concurrently. Graduate courses may count toward undergraduate programs; however, undergraduate courses may not count toward graduate programs. Undergraduate program courses taken by graduate students to complete credit deficiencies are free elective credits only and do not fulfill any major requirements. Graduate courses may not be met via Challenge Tests.

## **Academic Judicial System**

Responsibility for judicial matters of an academic nature is assumed by the Academic Standing Committee. The Academic Standing Committee handles matters pertaining to academic dishonesty, grade appeals, academic probation, academic dismissal, readmission and deviations from the academic curriculum of the College.

## **Academic Due Process**

At Elizabethtown College, academic due process is understood to include the following student rights:

### **With Regard to Grading:**

To receive a specific explanation of the manner in which a course grade was determined.

To appeal a course grade if the student believes that a grade was influenced by matters other than academic performance, class attendance and punctuality in submitting assignments.

### **With Regard to Academic Dishonesty:**

When penalized for academic dishonesty, to receive a written notification specifying the nature of the infraction and the recommended penalty.

To request a hearing before the Academic Standing Committee when found by a faculty member to be in violation of the standards of academic integrity and to receive a written statement from that board summarizing the findings of the board and its disposition of the matter.

To request a hearing before the Academic Standing Committee when recommended for academic dismissal due to cheating, plagiarism or other violations of the standards of academic integrity.

To inspect any information on file in the Office of the Senior Vice President for Academic Affairs (or its proxy) dealing with incidents of academic dishonesty attributed to that student.

## **Standards of Academic Integrity**

Elizabethtown College assumes that students will act honorably. Students are expected to adhere to the Pledge of Integrity adopted by both the students and the faculty in 1995 and revised in 2014:

*I pledge to respect all members of the Elizabethtown College community, and to act as a responsible member of the College community. I pledge to respect the free exchange of ideas both inside and outside the classroom. I pledge to represent as my work only that which is indeed my own, refraining from all forms of lying, plagiarizing, cheating, and academic dishonesty.*

*As members of the Elizabethtown College community, we hold each other responsible in the maintaining of these values.*

Reflecting commitment to the pledge, new students are expected to sign a pledge stating, "I pledge to be honest and to uphold integrity."

Academic dishonesty – including cheating and plagiarism – constitutes a serious breach of academic integrity. Academic work is expected unequivocally to be the honest product of the student's own endeavor.

Cheating is defined as the giving or receiving of unauthorized information as part of an examination or other academic exercise. What constitutes "unauthorized information" may vary depending upon the type of examination or exercise involved, and the student must be careful to understand in advance what a particular instructor considers to be "unauthorized information." Faculty members are encouraged to make this definition clear to their students.

Plagiarism is defined as taking and using the writings or ideas of another without acknowledging the source. Plagiarism occurs most frequently in the preparation of a paper, but is found in other types of course assignments as well.

Other forms of academic dishonesty include (but are not limited to) fabrication, falsification, or invention of information when such information is not appropriate. To knowingly help or attempt to help another student to commit an act of academic dishonesty is considered to be an equivalent breach of academic integrity and is treated as such.

Cases of academic dishonesty are reviewed individually and according to the circumstances of the violation; however, students who violate the standards of academic integrity can normally expect a grade of F in the course and/or possible dismissal from the College.

## **Procedures for Dealing with Cases of Academic Dishonesty**

**Instances Involving Course Work.** The following steps are to be followed when dealing with instances of academic dishonesty involving course work:

**Initial Conference.** When an instructor discovers evidence of academic dishonesty, an informal conference is scheduled promptly with the student or students involved. If a face-to-face meeting is not possible, this conference can take place via e-mail. If an instructor is unable to schedule a conference before grades are due, a grade of Incomplete for the course may be assigned in the interim. If the student confirms his or her academic dishonesty in the initial conference, then the procedure continues with the written notification step that follows.

**Second Conference.** If, in the informal conference, the student denies academic dishonesty but the instructor is satisfied that there is evidence of academic dishonesty, a second conference is scheduled with the student involved. In cases involving more than one student, either individual or group conferences may be appropriate depending on the particular circumstances of the case. This conference should include the School Dean or another faculty member in the School in instances involving the School Dean. The student also has the right to have a faculty member, another student, or a member of the Center for Student Success present as an observer. Due to the nature of this second conference, it should be scheduled as a face-to-face meeting.

**Written Notification.** If, following either the first or second conference, the initiating faculty member is satisfied that there is proof of academic dishonesty, the faculty member with the approval of the School Dean or equivalent will give the accused student(s) written notification specifying the infraction and the recommended penalty. Copies of this notification are sent to the School Dean (or equivalent) and the Chair of the Academic Standing Committee. Should the School Dean (or equivalent) not be in agreement with the faculty member, both the faculty member and the School Dean (or equivalent) will give written notification with rationale to the Chair of the Academic Standing Committee. The Chair of the Academic Standing Committee will review the matter and recommend action and will inform the student in writing of the recommended action.

**Reported Cases.** Cases of alleged academic dishonesty reported by a student or students or College staff and not resolved by the instructor and School Dean (or equivalent) may also be referred to the Chair of the Academic Standing Committee. The Chair of the Academic Standing Committee will review the matter and recommend action and will inform the student(s) in writing of the recommended action.

**Academic Standing Committee.** The accused student(s) will have the alternative of (1) accepting the penalty recommended by the faculty member or the Chair of Academic Standing Committee [in the case of a difference between the faculty member and the Chair of Academic Standing Committee], or (2) requesting a hearing before the Academic Standing Committee. The request for a hearing must be presented in writing to the Chair of Academic Standing Committee within five business days of receipt of the notice of information. In no case may the Academic Standing Committee impose a penalty more severe than the one imposed by the faculty member, or the Chair of Academic Standing Committee, as the case may be.

**Dismissal.** Beyond the penalty imposed for the individual course, the Chair of the Academic Standing Committee will review each case of academic dishonesty and exercise judgment as to whether a student found to be in violation of the standards of academic integrity should be recommended for dismissal from the College. If it is the Chair of the Academic Standing Committee's judgment that academic dismissal is appropriate, the Chair of the Academic Standing Committee will notify in writing both the student and the Academic Standing Committee of his or her decision and the factors that influenced that decision.

**Academic Standing Committee.** In the event of dismissal, the student will have the option of (1) accepting the Chair of the Academic Standing Committee's decision, or (2) requesting a hearing before the Academic Standing Committee. The request for a hearing must be presented in writing to the Chair of the Academic Standing Committee within five business days of receipt for the Chair of the Academic Standing Committee's decision. The Academic Standing Committee's decision is final.

**Note:** If the School Dean is serving as the Chair of the Academic Standing Committee, then the Dean for Academic Affairs and Faculty Development will participate in the processes, as described, in place of the Chair of the Academic Standing Committee.

## Other Instances

All forms of dishonesty in academic matters are violations of the Standards of Academic Integrity and are the concern of the Academic Review Committee. Inappropriate actions – for example, lying to College officials or forgery of an advisor's signature – are violations equivalent to cheating and plagiarism in course work. Such dishonesty will be dealt with following the general procedures set forth above. Cases are reviewed individually and according to the circumstances of the violation; possible penalties include suspension or dismissal from the College.

Grades are considered to be official at the time they are submitted by the faculty. Questions concerning grades must be called to the attention of the instructor immediately after the official grade report is received. **Formal grade**

**appeals must be submitted within 30 working days of the date on which the grade was issued from the Office of Registration and Records.** An exception to the 30-day time limit requires formal petition to and approval of the Academic Standing Committee.

## **Procedures for Grade Appeals**

If a student believes that a final grade has been influenced by matters **other than** academic performance, class attendance and punctuality in submitting assignments, then the following steps are to be followed.

**Initial Conference.** The student may request an informal conference with the instructor to discuss the matter. If the student and the faculty member reach consensus on a grade change, then the procedure continues with the written notification step that follows.

**Second Conference.** If the student is unsatisfied with the outcomes of the informal conference, then the student may submit a request in writing for a meeting on the matter to the Dean or another faculty member in the School in instances involving the Chair. For the meeting, the student will prepare a written statement outlining the basis for the appeal. The student also has the right to have a faculty member, another student, or a member of the Center for Student Success present as an observer. Due to the nature of this second conference, it should be scheduled as a face-to-face meeting. The decision regarding the course grade in question will be made by the faculty member in consultation with the Dean (or equivalent).

**Written Notification.** Following either the initial conference or the second conference, as appropriate, the faculty member will provide the student written notification of the decision. A copy of this notification is sent to the Dean(or equivalent) and the Dean for Academic Affairs. Should the faculty member and the Dean (or equivalent) not be in agreement, both the faculty member and the Dean (or equivalent) will give written statements to the Chair of Academic Standing Committee explaining the reasons for upholding or altering the grade. The Dean of the appropriate School will then review the matter and recommend action, and will inform the student in writing of the recommended action.

**Academic Standing Committee.** The student will have the alternative of (1) accepting the grade recommended by the faculty member or the Dean for Academic Affairs [in the case of a difference between the faculty member and the Dean (or equivalent)], or (2) requesting a hearing before the Academic Standing Committee. The request for a hearing must be presented in writing to the Dean for Academic Affairs within ten business days of receipt of the notice of information. In no case may the Academic Standing Committee impose a grade lower than the one originally accorded by the faculty member or the Dean for Academic Affairs as the case may be. The Academic Standing Committee's decision is final.

## **Petition of Exception to Academic Policy**

Students have the right to appeal to the Academic Standing Committee if they believe they have a unique set of circumstances that warrants an exception of written policy established by Faculty for Elizabethtown College students. Petition forms may be found online or for pickup in the Office of Registration and Records.

## **Official Electronic Correspondence**

All students are provided with a college e-mail account (@etown.edu). These accounts are considered the college's official method of electronic correspondence and students are required to check this e-mail account on a regular basis. Students will be provided with their account information (username and password) prior to matriculation. This address is used for official correspondence, so students should check their email regularly at <http://mail.etown.edu>.